Laboratoire Interdisciplinaire Carnot de Bourgogne

ICB UMR 6303 CNRS/UBFC

VOLUME 2

PART II
APPENDICES 1 - 7

2010-MID 2015

Membre UBFC

Membre UBFC

II. APPENDICES

II.1. APPENDIX: EXECUTIVE SUMMARY

The guidelines requiring an extremely brief executive summary are particularly unfair for a large size laboratory like ICB. Therefore, the HCERES officer in charge of the ICB evaluation agreed that an executive summary be provided for each ICB scientific department after summarizing the global striking facts of ICB that were discussed in section I.1-4.

Table A1.1: 2015 Restructuring of ICB research (see also organisation diagram in Appendix II.4).
Permanent staff includes Faculty members, CNRS researchers and CNRS/UB research engineers only.
Data in blue italic describe the planned evolution in 2017 after integration of UTBM researchers.

Acronym	ICB Department (in French)	Coord.	Permanent staff	Research fields
ICQ	Interaction et Contrôle Quantique	Prof. H.R. Jauslin	9	Molecular physics: quantum & non-linear dynamics, spectroscopy and collisions applied to astrophysics
PHOTONIQUE	Photonique	Prof. Ph. Grelu	29	Photonics: non-linear optics, nanophotonics, plasmonics, optical communications, optical fibres, solid-state & fibre lasers, fs phenomena in intense laser fields;
NANO	Nanosciences	Prof. P. Senet	16	Nanosciences: nanosensors, synthesis of nanomaterials, biophysics, biomedical applications of nanotechnologies
PMDM	Procédés-Matériaux-Durabilité-Métallurgie	Prof. S. Chevalier	30 *+13*	Material sciences: nanostructured materials, metallurgy, corrosion, assembly, durability, surface treatments
INTERFACES	Interfaces	Prof. B. Domenichini	21	Chemical physics at interfaces, adsorption, crystal growth, electrochemistry, durable development: sensors, fuel cells, new cements.
COMM	*Conception-Optimisation & Modélisation en Mécanique*	*Prof. S. Gomes*	*14*	*Mechanical design, digital simulation and optimization, design methods and tools, knowledge-based engineering, biocomposites*

Table A1.2: Major ICB research projects *started* since 2010 and their distributions among ICB departments
A duplicated acronym means that several ICB departments are involved in the said project.
The "TOTAL ICB" column counts each project only once.

Type	TOTAL ICB	ICQ	PHOTONIQUE	NANO	PMDM	INTERFACES
ERC grants	2		PETAL, SWIFT			
European projects	8	IPERA, QUAINT	PLATON, PHOXTROT, PLASMOFAB	SPEDOC, PLATON, PHOXTROT, PLASMOFAB		CHIPCAT, TRANSCEND
PIA projects	2	LABEX ACTION	LABEX ACTION	EQUIPEX IMAPPI, LABEX ACTION	LABEX ACTION	LABEX ACTION
ANR projects	25	COCONICS, EXPLOSYS	HYNNA, SO-FAST, MASSTOR, PLASTIPS, CONTINUUM, SOLICRISTAL, FIPLANT, QDOTICS, OPTIROC, PLACORE, HOLIGRALE, COCONICS	FENOPTIX, BIOSOUND-IR	SILICARBITUBE, MF2, FLAMME, ASSISTENSE, TESAMI, SISHYFE	BRIDGE, CAPBTX, SOFT-CRYSTAB, IMAGINOXE-CHEMINOX, M-SCOT, LIMA
FUI projects	4				HIPPI, ATHENA, DEQUALC, FRY'IN	
Regional projects	6	PROLA	PHOTCOM	NANO2BIO, Lab. Mixte Public privé NANOSENSE	Matériaux et procédés	ONOV, Matériaux pour l'énergie
TOTAL	47	7	19	10	9	9

Table A1.3: Department breakdown of project research fundings during the 2010-2015 period (in €).
Data in blue italic describe the 2011-2015 data related to UTBM researchers integrating ICB in 2017.

ICB Dpt	Europe	ANR	FUI	CPER/ Region/ FEDER/UB	CNRS	Other Public Agencies	Industries	TOTAL
ICQ	233 788	208 720	0	511 560	166 984	19 270	0	1 140 322
PHOTONIQUE	2 783 625	2 067 591	0	3 891 330	16 744	261 248	563 038	9 583 576
NANO	1 412 922	243 396	0	3 870 308	7 147	307 644	773 480	6 614 897
PMDM	0	1 378 113	605 176	1 435 586	42 250	1 561 954	2 226 910	7 249 989
INTERFACES	580 027	910 212	0	2 265 926	47 500	287 301	1 281 103	5 372 069
DTAI	0	0	0	1 154 165	1 548	0	306 971	1 462 684
TOTAL ICB	5 010 362	4 808 032	605 176	13 128 875	282 173	2 437 417	5 151 502	31 423 537
UTBM	*1 009 000*	*234 500*	*1 159 000*	*1 600 000*	*0*	*160 000*	*4 442 000*	*8 604 500*

Table A1.4: Estimate of the renewal value of the ICB technological platforms
Data in blue italic describe the planned evolution in 2017 after integration of UTBM researchers.

Platform	Approximated renewal value
ARCEN-CARNOT	11 267 750 €
PICASSO	3 040 000 €
FLAIR	4 077 000 €
TOTAL	18 384 750 €
UTBM	*15 300 000 €*

Table A1.5: Business turn-over of contracts managed by "SATT GE / Welience™" and using ICB infrastructure, equipments & know-hows.

Welience™ Dpt	Related ICB Dept	2010	2011	2012	2013	2014	Total
Laser processing (Le Creusot)	PMDM	590 476 €	359 095 €	415 624 €	147 886 €	71 066 €	1 584 147 €
Sintering	PMDM	72 900 €	470 950 €	118 037 €	218 335 €	251 310 €	1 131 532 €
Characterization of materials	DTAI	319 753 €	399 400 €	356 657 €	378 314 €	351 747 €	1 805 871 €
Optics	PHOTONIQUE					32 600 €	32 600 €
Other ICB	All		87 808 €	109 428 €	116 155 €	88 608 €	401 999 €
	Total	**983 129 €**	**1 317 253 €**	**999 746 €**	**860 690 €**	**795 331 €**	**4 956 149 €**

Web of Sciences counts 1088 items published by ICB researchers during 2010-June 2015 (974 articles + 114 conference proceedings). They include **223 cross-department items** (196 articles + 27 conf. Proc.). Parallel to these papers, ICB was represented by more than **1300 representations in conferences, summer schools, workshops and seminars worldwide.**

Table A1.6: ICB bibliometry survey

Web of Science data as of June 2015 based on permanent staff records							*2010-June 2015 period*			
ICB Dpt	Permanent staff [S]	Total articles [A]	A/S	H-index	Citations without self-citations [C]	C/A	Total articles [A']	A'/S	Citations without self citations [C']	C'/A'
ICQ	9	584	64	45	9003	15.42	205	23	1992	9.72
PHOTONIQUE	29	1317	45	72	20894	15.86	395	14	4091	10.36
NANO	16	642	40	58	16786	26.15	187	12	1305	6.98
PMDM	30	684	22	44	8427	12.32	163	6	832	5.10
INTERFACES	21	781	37	46	9177	11.75	209	10	1446	6.92

Table A1.7: ICB representations by speakers and posters during the 2010-2015 period.
Detailed list in appendix section II.6.B.

ICB Dpt	Permanent staff	Plenary talks	Key lectures	Invited lectures	Invited talks	Oral contributions	Posters	TOTAL representations
ICQ	9	4	1	18	69	45	132	269
PHOTONIQUE	29	5	1	32	169	194	84	485
NANO	16	5	3	18	23	66	64	179
PMDM	30	1	4	8	17	98	33	161
INTERFACES	21	6	6	9	41	146	87	295
TOTAL ICB	105	21	15	85	319	549	400	1 389

Table A1.8: Distribution of ICB representations by speakers & posters among main countries hosting scientific & technological events (2010-2015 period).

ICB Dpt	USA Canada	UK	France	Be ne lux	Germany	CH	Italy	Spain	Russia	China	Korea Japan	Taiwan Singa-pore	Other	TOTAL
ICQ	26	6	109	3	7	5	13	9	6	6	2	0	77	**269**
PHOTONIQUE	86	31	156	20	55	10	16	34	8	11	5	8	45	**485**
NANO	25	9	88	5	12	1	9	6	4	1	5	3	11	**179**
PMDM	16	19	96	3	6	1	6	2	1	1	8	0	2	**161**
INTERFACES	25	18	128	12	23	11	12	19	1	2	11	0	33	**295**
TOTAL ICB	**178**	**83**	**577**	**43**	**103**	**28**	**56**	**70**	**20**	**21**	**31**	**11**	**168**	**1389**

Table A1.9: Main recognitions honouring ICB researchers during the 2010-2015 period.

Type	ICB member	Grade	ICB Dpt	Year
Fellow of the Optical Society of America	Guy MILLOT	Prof. UB	PHOTONIQUE	2012
Fellow of the European Optical Society	Frédérique DE FORNEL	DR CNRS	PHOTONIQUE	2011
CNRS Bronze Medal	Bertrand KIBLER	CR CNRS	PHOTONIQUE	2012
ERC Consolidator Grant	Julien FATOME	IR CNRS	PHOTONIQUE	2013
ERC Consolidator Grant	Alexandre BOUHELIER	DR CNRS	PHOTONIQUE	2013
CNRS Silver Medal	Alain DEREUX	Prof. UB	NANO	2015
Hans Fischer Fellowship (TU-München)	Dominique SUGNY	Prof. UB	ICQ	2015

II.1.1. Department ICQ – Interaction et Contrôle Quantique

Permanent staff on 10/10/2010: 2 Directeurs de Recherche CNRS (V.Boudon, B.Bussery-Honvault); 5 Professors (S.Guérin, P. Honvault, H.R.Jauslin, M. Loëte, F. Michelot); 1 Emeritus professors (J.P.Champion); 4 Maitres de Conférences (MCF) (T.Gabard, C.Leroy, Y.Scribano, D.Sugny); 1 Ingénieur de Recherche (C.Wenger).

Non-permanent staff on 10/01/2010: 1 Ingénieur de Recherche (CDD) and 1 administrative secretary for the FASTQUAST ITN network. 8 PhD students

Permanent staff on 30/6/2015: 2 Directeurs de Recherche CNRS (V.Boudon, B.Bussery-Honvault); 5 Professors (S.Guérin, P. Honvault, H.R.Jauslin, C.Leroy, D.Sugny); 3 Emeritus professors (J.P.Champion, M.Loëte, F.Michelot); 2 Maitres de Conférences (T.Gabard, G.Guillon)

Staff who have left during the current contract (and number of total months spent in the unit during this period).

1 MCF (36); 13 doctoral students (257 months);

5 post-docs: David Dzsotjan (18 months), Ghassen Dridi (12 months), Mamadou Ndong (24 months), Badr Amyay (12 months), Tammineni Rajagopala Rao (20 months).

Number of recruitments carried out during the reporting period and where the staff come from

1 maître de conferences (Grégoire Guillou) (post-doc at University of Waterloo, Canada).

1 Ingénieur de Recherche CNRS (Cyril Richard) (hired on 1.9.2015, post-doc at Harvard-Smithsonian Observatory).

2 maîtres de conferences were promoted to professor positions (C. Leroy, D. Sugny)

Research products and achievements over the reporting period

- A framework to use quantum plasmons and adiabatic control; optimization of adiabatic transfer by robust shortcuts.
- Development of geometric optimal control tools for the enhancement of contrast in medical Magnetic Resonance Imaging (MRI).
- Explanation of the phenomena of polarization attractions in terms of Hamiltonian singularities and monodromy.
- First global analysis of the absorption spectrum of methane in the 0-6300 cm-1.
- A huge quantum symmetry effect found in the O + O_2 exchange reaction, unknown before.

Quantitative overview of the unit's publications:

- Publications referenced in Web of Science (1.1.2010 – June 2015): 198 articles and 6 proceedings.

5 major publications:

(1) The high-resolution far-infrared spectrum of methane at the SOLEIL synchrotron; V. Boudon, O. Pirali, P. Roy, J. -B. Brubach, L. Manceron, J. Vander Auwera;J. Quant. Spectrosc. Radiat. Transf. 111, 1117-1129 (2010).

(2) Revealing Atom-Radical Reactivity at Low Temperature Through the N plus OH Reaction;J.Daranlot, M.Jorfi, C.Xie, A.Bergeat, M.Costes, P.Caubet, D.Xie, H.Guo, P.Honvault, K.M.Hickson; Science, 334, 1538-1541 (2011).

(3) High contrast D-1 line electromagnetically induced transparency in nanometric-thin rubidium vapor cell; A. Sargsyan, C. Leroy, Y. Pashayan-Leroy, R. Mirzoyan, A. Papoyan, D. Sarkisyan; Appl. Phys. B-Lasers Opt., 105, 767-774 (2011).

(4) Robust Quantum Control by a Single-Shot Shaped Pulse; D. Daems, A. Ruschhaupt, D. Sugny, S. Guérin; Phys. Rev. Lett., 111, 050404 (2013).

(5) Polarization control in spun and telecommunication optical fibers; E. Assemat, D. Dargent, A. Picozzi, H.R. Jauslin, D. Sugny;Opt. Lett., 36, 4038-4040 (2011).

4 other major documents

- The HITRAN2012 molecular spectroscopic database
- Reports for the Kinetic Database for Astrochemistry (KIDA)
- D2hTDS-ST software for Stark spectrum simulation of X2Y4 asymmetric-top molecules, M. Sanzharov, M. Rotger, Ch. Wenger, M. Loete, V. Boudon, A. Rouzé, J. Quant. Spectrosc. Radiat. Transf., 112, 41-52 (2011).
- Virtual Atomic and Molecular Data Centre (http://www.vamdc.org) et J. Quant. Spectrosc. Radiat. Transf., 111, 2151-2159 (2010).

5 facts illustrating the academic appeal or reputation

- S. Guérin and H.R. Jauslin coordinated the ITN Marie Curie Network « FASTQUAST » (2008-12, 5 M€)
- D. Sugny was awarded the Hans Fisher Prize and Fellowship from TU München (2015-2017, 30k€ +250 k€)
- V. Boudon is member of the Scientific Committee and local Chairman of the Conference series on High Resolution Molecular Spectroscopy (HRMS).
- C. Leroy is the founder and the head of the French branch of the international laboratory CNRS- Armenian Research Council LIA IRMAS. He has been twice awarded a Diploma of Honour by the National Academy of Science of Armenia

- P. Honvault, Workshop: Approches théoriques en dynamique moléculaire collisionnelle, PAMO-JSM 2014, Reims (France), July 7-10, 2014. Co-organiser.

5 facts illustrating the department's interactions with its socioeconomic or cultural environment

- The members of the team participate regularly in audiovisual events (Radio programs for the international year of light), and general public events, like “La Nuit des Chercheurs” and “Fête de la Science”.
- V. Boudon has established a close partnership with the “ Société Astronomique de Bourgogne” and organizes regular cycles of general public conferences with great success.
- V. Boudon is the local representative for Bourgogne at the French national committee of the International Year of Light 2015.
- V. Boudon is the local representative for Bourgogne of the FRIPON (Fireball Recovery Interplanetary Observation Network) project (installation of a network of automatic cameras to follow meteor trajectories).
- S. Guérin is organizer of the “Faites de la Science” contest for Highschool students.

Department's main contributions to training actions

- S. Guérin, created with C. Leroy and Y. Pashayan an international masters program (M2), taught in English and geared for foreign students.
- H.R. Jauslin as head of the Doctoral School Carnot-Pasteur, is in charge of the training program for PhD students in Physics, Chemistry and Mathematics.
- D. Sugny is responsible for the master program for education and teaching. He participated in the setup of the new curriculum after the recent reforms of the CAPES system.
- H.R. Jauslin and V. Boudon have produced several courses for the continuing education (Université pour Tous de Bourgogne).

II.1.2. DEPARTMENT PHOTONIQUE

Permanent staff on 01/01/2010: 6 professors (PR); 11 assistant professors (MCF); 3 CNRS directors of research (DR); 5 CNRS researchers (CR); 4 CNRS research engineers (IR) and 1 assistant engineer (AI) CNRS; 2 technicians UB & CNRS, post-doctoral and doctoral students.

Staff who have left the unit during the current contract (total months spent in the unit during this period).

Permanent staff: 1 DR retirement (J. Mangin), 1 MCF retirement (J.M. Crettez), 1 CR reconversion (S. Pitois), 1 MCF reconversion (X. Chen-Perdereau), 1 TCH promotion at another University (V. Tissot), 1 Emeritus (H. Berger)

Temporary staff : 39 PhD students (1092 months), 14 postdocs (224 months)

Number of recruitments carried out during the eporting period and where the staff come from

2 MCF: K. Hammani (thesis in Dijon, postdoc at ORC Southampton), A. Coillet (thesis in Dijon, postdocs at FEMTO-ST Besançon, NIST Boulder USA) – 2 CR: P. Béjot (thesis Lyon, postdocs at Genève and Dijon), O. Demichel (PhD CEA Grenoble, Post-DOC, Inst. Néel Grenoble, EPFL, ICB) 1 IE: M. Petit – 1 TCH: J. Marot.

Promotions: 2 DR promotions from CR (A. Bouhelier, A. Picozzi), 2 PR promotions from MCF (C. Finot, O. Musset) and 1 PR promotion from CR (G. Colas-des Francs).

5 research products and achievements over the previous period (1 January 2010 – 30 June 2015):

- Controlled generation in optical fibers of the prototypical extreme-wave event (rogue wave), known as the Peregrine soliton. This lead to an article in Nature Physics (B. Kibler et al. Nat. Phys. 6, 790 (2010)), and was decisive in the attribution of the CNRS Bronze medal award to B. Kibler in 2012.
- Major contribution in the establishment of the *dissipative soliton paradigm* into the area of mode-locked laser dynamics. This leads to a review article in Nature Photonics (Ph. Grelu and N. Akhmediev, Nat. Photonics 6, 84 (2012)) and to an Invited tutorial (Ph. Grelu) at CLEO:US 2013, 9-14 June, San Jose.
- Highlight in the interplay of mechanisms leading to laser filamentation is gases, with the possibility to achieve ionization-free filaments (P. Béjot et al. PRL 104, 103903 (2010)). P. Béjot was awarded the 2011 Vacheron-Constantin prize.
- Innovative use of a plasmonic waveguide as an electrode of a thermo-couple, leading to a device that can be used as an integrated in-line powermeter (patented).
- Major report on Optical wave turbulence: *Picozzi et al*, Optical wave turbulence: Toward a unified non-equilibrium thermodynamic formulation of statistical nonlinear optics, *Physics Reports **542**, 1-132 (2014)*.

Quantitative overview of the department's publications.

- **324 articles** (including 3 Nat. Photonics, 2 Nat. Physics, 4 Nano Letters, 1 Phys. Rep., 16 Phys. Rev. Lett., 5 Sci. Rep., 1 PRX, 1 Optica, 1 Nat. Commun.) – **441 conference proceedings and abstracts** (52 referenced proceedings) – 8 patents issued, 4 patents pending

5 major publications

(1) B. Kibler, J. Fatome, C. Finot, G. Millot, F. Dias, G. Genty, N. Akhmediev, J.M. Dudley, *The Peregrine soliton in nonlinear fibre optics*, **Nat. Phys. 6**, 790 (2010). **260 citations**

(2) Ph. Grelu, N. Akhmediev, *Dissipative solitons for mode-locked lasers*, **Nat. Photonics 6**, 84 (2012). **231 citations**

(3) P. Béjot, J. Kasparian, S. Henin, V. Loriot, T. Vieillard, E. Hertz, O. Faucher, B. Lavorel, and J. P. Wolf, *Higher-order Kerr terms allowing ionization-free filamentation in air,* **Phys. Rev. Lett. 104**, 103903 (2010). **140 citations**.

(4) J. Lin, J. Dellinger, P. Genevet, B. Cluzel, F. de Fornel, F. Capasso, *Cosine-Gauss Plasmon Beam: A Localized Long-Range Nondiffracting Surface Wave*, **Phys. Rev. Lett. 109**, 093904 (2012). **44 citations**.

(5) P. Rai, N. Hartmann, J. Berthelot, J. Arocas, G. Colas des Francs, A. Hartschuh, and A. Bouhelier, *Electrical Excitation of Surface Plasmons by an Individual Carbon Nanotube Transistor*, **Phys. Rev. Lett. 111**, 026804 (2013).

5 major documents

- Development of a single-shot autocorrelator for femtosecond pulses in the 1.2-2.3 microns range: Soleau envelope No. 505746 (dated 4/14/14), invention declaration CNRS No. 7048-01 and patent pending application n° FR1552704.
- « Dispositif de génération de plasmons commandé électriquement à base de transistor à effet de champ à nanotube de carbone » Brevet FR 12 60525 CNRS Uni. Bourgogne 2012. A. Bouhelier, P. Rai, A. Hartschuh, N. Hartmann
- « Composants themo-électriques plasmoniques intégrant un système de mesure de la puissance guidée » Brevet en co-propriété CNRS/uB N° 67490 (2011). J-C Weeber, A. Dereux

- "Procédé et dispositif pour le contrôle d'un paramètre physique d'un signal optique", Brevet FR n° 11/02472 (2011) S. Pitois, J. Fatome, P. Morin, G. Millot
- "Procédé de caractérisation d'un champ électromagnétique généré par l'interaction d'une onde électromagnétique avec une structure photonique et/ou plasmonique". N°Dépôt 1459774, (2014). C. Pin, B. Cluzel, E. Picard, E. Hadji.

5 facts illustrating the academic appeal or reputation of the Photonics Department

- B. Kibler, CNRS Bronze medal award 2012
- ERC Starting Grant SWIFT 2012 (A. Bouhelier)
- ERC Starting Grant PETAL 2012 (J. Fatome)
- F. de Fornel, EOS Fellowship 2011
- G. Millot, OSA Fellowship 2012

5 facts illustrating the department's interactions with its socioeconomic or cultural environment

- Contract with VALTIMET on multiscale surface texturing of titanium plates with femtosecond laser pulses (2012-2013, F. Billard and B. Lavorel) &
- Contract with PRYNEL on high-rate optical transmission for high-definition video monitoring (2012-2015, C. Finot)
- Contract with URGO on laser diode characterization and expertise (2014-2015, O. Musset)
- Exhibitions on Sadi Carnot and Henri Navier in collaboration with the CCSTI Bourgogne (2013)
- Conferences hold in the frame of the "2015, Year of the Light" at various schools in Burgundy.

Department main contributions to training actions

- 53 PhD students trained in the period 2010-2015, and 5 *Habilitation diploma* (HDR) were obtained
- Management of the Master degree "Physique-Laser-Matériaux" (Master PLM, O. Faucher, O. Musset, F. Chaussard)
- Establishment and management of a joined teaching program between the University and the ELITHIS group, on Energy Efficiency Management (D.U. MPE started 2012, Ph. Grelu, S.Salaün)
- Direction of the Center of Chinese Studies at Uni. Bourgogne (X. Chen-Perdereau, 2008-2014)
- Direction of the Physics teaching Department (C. Finot) and the MDD ESIREM teaching Department (F. Smektala).

II.1.3. DEPARTMENT NANO

Permanent staff on 01/01/2010

5 professors (PR); 7 assistant professors (MCF); 1 director of research CNRS (DR); 1 engineer and 1 assistant engineer; 5 postdocts, 10 PhD students

Staff who have left during the current contract (total months spent in the unit during this period).

11 doctoral students (264 months); 16 postdocs (192 months).

Number of recruitments carried out during the reporting period and where the staff come from

2 assistant professors (MCFs): J. Boudon (thesis in Switzerland, postdoc at ICMCB, Bordeaux and Université de Bourgogne, hired in 09/2011); A. Nicolaï (thesis in Dijon, postdoc at RPI, USA and at EPFL, Switzerland, hired in 09/2015); 1 CNRS researcher A. Leray (CNRS researcher at Université de Lille, moved to ICB on 01/01/20154; 11 postdocs ; 12 PhD students

Research products and achievements over the previous period (1 January 2010 – 30 June 2015):

- Application of Surface-Enhanced Raman Scattering to the detection of biomolecules using nanoparticles (PI E. Finot)
- Investigations of the vibrations of nanoparticles in contact thanks to original measurements (in particular in-situ high-pressure low-frequency Raman scattering) and modelizations. (PI L. Saviot)
- Development of a multi-dimensional AFM imaging technique. (PI E. lesniewska)
- First model of hHsp110s proteins and possible microscopic mechanism explaining the better prognosis of patients with colorectal cancer cells expressing hHsp110DE9 (INSERM collaboration). (PIs: C. Garrido (INSERM) and P. Senet (ICB)) and development of a new theoretical methodology to decipher the allosteric mechanism in large proteins as Hsp70s.
- Demonstration of plasmonic switching device performances in true optical data processing conditions.

Quantitative overview of the department's publications.

157 articles and 30 Conference Proceedings referenced in Web of Sciences (as in June 2015)

5 major publications

(1) *Titanate nanotubes: towards a novel and safer nanovector for cardiomyocytes*. A.L. Papa, L. Dumont, D. Vandroux, N. Millot, Nanotoxicology 7 (6), 1131-1142 **(2013)**. (collaboration with NVH Medicinal company)

(2) *Anomalous diffusion and dynamical correlation between the side chains and the main chain of proteins in their native state*. Y. Cote, P. Senet, P. Delarue, G. G. Maisuradze, H. A. Scheraga, Proc. Natl. Acad. Sci. U. S. A., 109, 10346-10351 **(2012)**. (collaboration with Cornell University, USA)

(3) *Influence of the Number of Nanoparticles on the Enhancement Properties of Surface-Enhanced Raman Scattering Active Area: Sensitivity versus Repeatability.* J. Margueritat, H. Gehan, J. Grand, G. Levi, J. Aubard, N. Felidj, A. Bouhelier, G. Colas-Des-Francs, L. Markey, C. Marco De Lucas, A. Dereux, E. Finot, ACS Nano, 5, 1630-1638 (2011). (collaboration between three ICB departments)

(4) *Quasi-Free Nanoparticle Vibrations in a Highly Compressed ZrO2 Nanopowder.* L. Saviot, D. Machon, A. Mermet, D. B. Murray, S. Adichtchev, J. Margueritat, F. Demoisson, M. Ariane, M. del C. Marco de Lucas, J. Phys. Chem. C, 116, 22043-22050 (2012). (collaboration between three ICB departments)

(5) *Three-dimensional reconstruction of low-density dielectric nanostructures by Mode Synthesizing Atomic Force Microscopy.* P.Vitry, E.Bourillot, C.Plassard, Y.Lacroute, E.Calkins, L.Tétard, E.Lesniewska, Nano Research, 8 (2015). (collaboration with University of Central Florida, USA)

4 major documents

- ISITE project of the federal Université Bourgogne Franche Comté, A.Dereux (2015).
- French and international patent "Nanostructure à base de titanate pour la régénération et l'ingénierie tissulaire", WO 2014/079890 A1, N. Millot, D. Vandroux, V. Bellat
- Textbook: "Cristallographie Géométrique – Cours, Exercices et Problèmes corrigés" N. Millot & J.C. Nièpce Editions Lavoisier, Paris (2014), 266 pages
- Co-author of the expert appraisal report as member of the AERES committee for the expertise of the Laboratoire de Biochimie Théorique, UPR9080 CNRS, Université Paris-Diderot in 2012 [P. Senet]

5 facts illustrating the academic appeal or reputation

- Scientific prize: CNRS silver medal (2015) awarded to A. Dereux.
- Organization of ISPM 2013 – 15th International Scanning probe microscopy Conference – Dijon – June 30 to July 3, 2013 [E. Bourillot, E. Lesniewska, E. Finot]

- FP7 STREP SPEDOC (PIs A. Dereux, E. Finot), FP7 STREP PLATON (PI A.Dereux, J.C. Weeber), FP7 IP Phoxtrot (PI's A.Dereux, JC. Weeber), H2020 PLASMOFAB (PI's A. Dereux, J.C. Weeber). NB:J.C. Weeber is in Dpt Photonique.
- The Dept is member of the LABEX NANO (E. Lesniewska, E. Finot, E. Bourillot)
- The NANO Dept is the ICB member of the Equipex IMAPPI (development of new bimodal contrast agents based on nanoparticles. [PI N. Millot, scientist in charge of a workpackage "Nanoparticles"]

5 facts illustrating the department's interactions with its socioeconomic or cultural environment

- Nanostructures and (Hybrid) nanoparticles for cancer research and for cardiovascular deseases (PI N. Millot) funded by Ligue Contre Le Cancer, Canceropole Grand Est, CGFL (2012/2013/2015) and NVH Medicinal/UB/CNRS agreement
- Creation of the platform "Nanocare Bourgogne" in collaboration with INSERM U866 and Satt Grand-Est: evaluation of the toxicity of nanoparticles (PI N. Millot)
- Numerical simulations of proteins as a support to cancer research in collaboration with INSERM U866 (PI P. Senet)
- A mixed public / private laboratory must be created with a local company (ARDPI) in relation with the Pole Nucléaire Bourguignon for the non-destructive control of manufacturing processes of the components of nuclear power plants (PI E. Bourillot, E. Lesniewska)
- Characterisation of phase transition for nanostructured materials with CEA and Areva company (PI E. Finot)

Department's main contributions to training actions

- In 2012, E. Bourillot and A. Dereux negotiated with AREVA-NP the creation of a new industry certified master PC2M (Processes, Controls, Metallic Materials: Nuclear Industry). In 2013, E. Bourillot coordinated the design of this master sponsorized by AREVA-NP before transferring the organization to J.P. Chateau-Cornu who was recruite din 2014 for this purpose
- E. Finot and E. Bourillot are the coordinators of the master NANO at the UB
- P. Senet coordinated the bachelor in physics (2002-2014) and initiated and organized a short research training for students at the bachelor level at ICB and ICMUB laboratories of ICB
- N. Millot is responsible for the 4th year students at the engineering school (ESIREM) in material science
- As coordinator of the ISITE-BFC project (preselected at PIA2 stage), A. Dereux contributed to in depth structuring of higher education & research in Bourgogne Franche-Comté.
- The Dept. organized the training on different research equipments (AFM, SEM, UV lithography, e-beam lithography, coating and reactive ion etching techniques) for students of three Masters at UB (NANO, CDM, and PLM)
- The Dept. organized a training on computer simulations of biomolecules and nanostructures for students of the Master NANO.

II.1.4. Department PMDM – Prcocédés Matériaux Durabilité Métallurgie

Workforce on 01/01/2010

9 professors (PR); 13 assistant professors (MCF); 2 researchers CNRS (CR); 1 research engineer and 1 assistant engineer (uB), 1 technician and 1assistant engineer (CNRS), 7 invited professors; 3 ATER; 13 post-doctoral and 32 PhD students.

Staff who have left during the current contract (total months spent in the unit during this period)

Permanent staff: 2 PR (D. Grevey became DRRT (48 months) and JP Larpin retired in 2013 (30 months); 1 technician CNRS (C Dirand- 7 months) and 1 technician uB (M. Herbst hired in 2013, 6 months) moved to interface dpt; 1 Research engineer (H Andrzejewski) retired in 2014 (48 months), 34 doctoral students (1224 months); 10 post-doctoral students (120 months).

Number of recruitments carried out during the reporting period and where the staff come from

1 professor (Pr): JP Chateau-Cornu (previously MCF at Institut Jean Lamour, UMR 7198 hired in 09/2014)

3 assistant professors (MCF): I. Tomashchuk (thesis uB hired in 09/2011); E. Cicala (thesis EC Lyon-U.Timisoara hired in 2012); M.R. Ardigo (thesis uB hired in 09/2015); Christelle Bousquet Berthelin (MCF) from Nano Dpt in 09/2013; 1 engineer (M. Duband U. Bourgogne-IUT Creusot hired in 09/2014).

Research products and achievements over the previous period (1 January 2010 – 30 June 2015):

The creation of this research axis called "Process of Metallurgy, Durability and Materials" (PMDM) was motivated by a wish of better scientific coherency in ICB laboratory. For the period 2010-2015, the research groups composing this axis were not all involved in the same scientific department before this new organisation. Because of the complementarities of several researches, collaborative actions are implemented as for example: (i) the co-management of a Ph-D thesis on the understanding of multi-scale nano-layers formation using molecular dynamics, (ii) the fusion of the Laser technical hall at Le Creusot with the technical Sintering hall at Dijon in order to create an unique platform named FLAIR devoted to metallurgy processes.

A second step for the structuration of PMDM consists in the creation of COMUE BFC in April 2015, which leads to new collaboration opportunities at the scale of the two regions Bourgogne and Franche-Comté. Moreover, the competencies of LERMPS laboratory from UTBM (Sévenans) in powder elaboration, additive manufacturing and thermal spray coatings complete PMDM scientific skills; as a matter of fact, LERMPS will join PMDM axis by 1st January 2017.

Key scientific & technical results:

- High thickness welding (online control and multiphysical modelling involving numerical experimental design) (ANR MATETPRO SISHYFE),
- Use of electrochemical tools at a low scale (LRC)
- Use of isotopic markers to understand the oxide scale growth mechanism (ANR ICARE),
- Understanding of SPS mechanisms (ANR MF2) and emergence of HIP technology (FUI EnerPoudre),
- Phenomena at interfaces and the microscopic modeling

Quantitative overview of the unit's publications.

- **134 articles and 28 conference proceedings** referenced in Web of Sciences

5 major publications

(1) I. Tomashchuk, P. Sallamand, H. Andrzejewski, D. Grevey, The formation of intermetallics in dissimilar Ti6Al4V/copper/AISI 316 L electron beam and Nd:YAG laser joints, **Intermetallics**, 19, 1466-1473 (2011)

(2) M.R. Ardigo, I. Popa, S. Chevalier, P. Girardon, F. Perry, R. Laucournet, A. Brevet, C. Desgranges, Effect of coatings on long term behaviour of a commercial stainless steel for solid oxide electrolyser cell interconnect application in H2/H2O atmosphere, **International Journal of Hydrogen and Energy**, 39, 21673-21677, (2014).

(3) V. Optasanu, E. Bourillot, P. Vitry, C. Plassard, L. Beaurenaut, P. Jacquinot, F. Herbst, P. Berger, E. Lesniewska & T. Montesin, High-resolution characterization of the diffusion of light chemical elements in metallic components by scanning microwave microscopy, **Nanoscale,** 6 (2014) 14932-14938

(4) F. Demoisson, R. Piolet, F. Bernard. « Hydrothermal Synthesis of ZnO crystals from Zn(OH)2 metastable phases at room to supercritical conditions » Crystal Growth and Design. 14 (2014) p.5388-5396.

(5) M. Cirisan, J. M. Jouvard, L. Lavisse, L. Hallo, R. Oltra,Laser plasma plume structure and dynamics in the ambient air: The early stage of expansion, J. Appl. Phys., 109, 103301 (2011)

5 other major documents

- S. Chevalier, J. Favergeon, *French activity on high temperature corrosion in water vapor*, **Materials Science Foundations**, ed. Trans Tech Publication, Zurich, Switzerland, 2014.
- P. Peyre et V. Vignal, *Les traitements de surface par laser contre la corrosion aqueuse*, **Techniques de L'ingénieur**, Référence COR1580, Date de publication : 10 déc. 2012 (23 pages).
- Diffusion in Materials, Edited by I. Igor Bezverkhyy, O. Politano and S. Chevalier, TransTech Publication, (2012).

- Science et Technologies Céramiques , Publication du GFC , Ed. G. Fantozzi, S. Le Gallet, J.-C. Nièpce , EDP Sciences 2011 , ISBN EDP Sciences: 978-2-7598-0428-3.
- 4 Patents

5 facts illustrating the academic appeal or reputation

- CNRS seminar "Laser Ap7" with 80 attendees in 2012 in the field of laser application in collaboration with LERMPS (UTBM) and PIM (Arts et Métiers Paristech)
- S. Le Gallet organized the "Journées du GFC" on March 2015 with more than 150 researchers welcomed for 3 days at the Faculty of Science at Dijon.
- PMDM axis is involved in the cluster "Pôle de l'Industrie Nucléaire en Bourgogne" (PNB) in which F. Bernard and T. Montesin are active members of the scientific council. S. Chevalier was member of the PNB board between 2009 and 2012.
- Organization of the international conference on Diffusion in Materials (DIMAT 2011), held in Dijon with 250 attendees (S. Chevalier and O. Politano)
- 23 invited conferences

5 facts illustrating the department's interactions with its socioeconomic or cultural environment

- **Strong interaction between academics and industrial partners corresponding to a total amount of 7.25 M €** among which 2.2 M€ with industrial partners, more than 1 M€ with CEA and 0.6 M€ as FUI grants. Numerous projects during the reporting period : ANR (6, 4 ongoing), FUI programs (4 ongoing), DGA (5, 3 ongoing), ADEME (2), CNES (1 ongoing).
- Joint Research Laboratory with CEA Valduc (**LRC**) coordinated by V. Vignal who is also scientific advisor for the director of CEA Valduc_ and a common laboratory (**LabCom**) between uB and Laser Rhônes Alpes.
- Coordination for the university of all activities in direct connection with metallurgy such as the "Maison de la métallurgie" and the Institute of Research and Technology (IRT M2P) located in Lorraine
- **FLAIR platform**, certified ***(ISO 9001 v-2000),*** is composed of two technological halls, the hall "lasers" in Le Creusot and the hall "Sintering" in Dijon in direct link with SATT Grand-Est (Welience pole).
- AREVA NP (Le Creusot) decided supporting an "**Industrial Chair**" position filled by Professor J.P. Chateau-Cornu, in the field of powder metallurgy (HIP) and assembly.

Department's main contributions to training actions

- S. Chevalier is scientific leader of a program labelled in the case of the "Investments for the Future" launched by the French Government in 2012: IDEFI TalentCampus (ANR-11-IDFI-0035) in the field of soft skill development,
- G. Caboche is head of ESIREM engineering school
- 10 PhD students participated to the Experimentarium and the Night of Researchers that contribute to expose high level scientific results to citizen during a week-end or an evening.
- Most of the members of PMDM axis are invested in several curricula as in "Research" Masters, in IUT, ESIREM and ITII (alternate training) engineering schools
- J.P Chateau-Cornu started to organize the new industry certified Master PC2M (Processes, Controls, Metallic Materials: Nuclear Industry), a task for which he was recruited in 2014.

II.1.5. DEPARTMENT INTERFACES

Workforce on 01/01/2010

4 DR CNRS, 5 CR CNRS, 8 PU, 7 MCF, 1 IR (UB), 1 Tech. (CNRS & UB)

Staff who have left during the current contract (total months spent in the unit during this period)

PhD: 972 months; Postdoc: 420 months;

Permanent staff J.C. Mutin (DR1) sept. 2010, P. Braconni (CR1) dec. 2010, D. Perret (AI-CNRS) dec. 2012, P. Krüger (MCF) May 2013, I. Pochard (MCF) sept. 2014, S. Pourchet (MCF) sept. 2014, C. Paulin (Tech. UB) July 2015.

Number of recruitments carried out during the reporting period and where the staff come from

DUPONT Céline (CR2 CNRS): sept. 2012; HERBST Michaële (Tech. UB): sept. 2013; BORKOWSKI Céline (AI CNRS) dec. 2014

Research products and achievements over the reporting period

- Contribution to the birth and development of the start-up I-TEN in the field of microtechnology (15 employees, capitalization amounting to € 3.2 million early 2014) through 6 patents
- The mechanism of water interaction in large pore and narrow pore forms of flexible (Ga or Al)MIL-53 MOFs has been elucidated. The water vapour pressure-temperature phase diagram was determined from thermodynamic modelling and experiments revealing the presence of four type of water differently hydrogen bonded to the host structure.
- For the first time a value of the diffusion coefficient of oxygen in cork has been given with a statistical distribution. It has been shown that the oxygen transfer in cork is not controlled by the Knudsen diffusion in lenticels as claimed in the literature but is governed by the Fick diffusion through the cell walls of cork.
- Cement hydration: **determination of** the free energy of dissolution of alite and showed that growth of the main cement hydrate is not limited. We further show from these results that alite dissolution governs the cement hydration kinetics and not the nucleation/growth of hydrates as was commonly accepted so far.
- Development of microwave sensing concept through the possibilities opened by microwave transduction allowing gas or liquid sensing, damage detection, microscopy, etc.

Quantitative overview of the department publications.

- 202 articles in peer reviewed journals, 27 proceedings, 5 (at least) chapters, 35 invited talks

5 major publications

(1) V. Potin, S. Bruyère, M. Gillet, B. Domenichini, S. Bourgeois, *Growth, Structure, and Stability of K_xWO_3 Nanorods on Mica Substrate*, J. Phys. Chem. C, 116 (2012) 1921-1929

(2) M. Delhorme, C. Labbez, B. Jönsson, *Liquid Crystal Phases in Suspensions of Charged Plate-Like Particles*, J. of Phys. Chem. Lett., 3 (2012) 1315-20

(3) P. Krüger, J. Jupille, S. Bourgeois, B. Domenichini, A. Verdini, L. Floreano, A. Morgante, Intrinsic Nature of the *Excess Electron Distribution at the TiO2(110) Surface*, Phys. Rev. Lett. 108 (2012)126803-6

(4) F.X. Coudert, A.U. Ortiz, V. Haigis, D. Bousquet, A.H. Fuchs, A. Ballandras, G. Weber, I. Bezverkhyy, N. Geoffroy, J.P. Bellat, G. Ortiz, G. Chaplais, J. Patarin and A. Boutin, *Water adsorption in flexible gallium-based MIL-53 metal organic framework*, J. Phys. Chem. C 118 (2014) 5397-405

(5) M. Salazar, G. Weber, J.-M. Simon, I. Bezverkhyy, J.-P. Bellat, *Characterization of adsorbed water in MIL-53(Al) by FTIR spectroscopy and ab-initio calculations*, J. Chem. Phys. 142 (2015) 124702-11

5 other major documents

(1) A home-made molecular dynamics software has been developed for the simulation of adsorption equilibria and mass transfers of gases hydrogen isotopes (or others) in nanoporous solids by taking into account the quantum effects taking place at very low temperature (T < 100 K)

(2) C. Labbez is a contributor to the free software FAUNUS, a C++ framework for Metropolis Monte Carlo simulations of molecular systems

(3) A chapter entitled "*Excess electrons at oxide surfaces*" by S. Bourgeois, B. Domenichini and J. Jupille in Defect at Oxide Surfaces, Spinger Series in Surface Science, 2015, ISSN 0931-5195

(4) Two chapters about cement science by S. Gaufinet

5 facts illustrating the academic appeal or reputation of the department

- **Many international projects** such as 'Stable phase composition in novel cementitious systems: C-A-S-H", financed by the Swiss National Foundation (SNF) and involving the EPFL, EMPA, PSI & - FP7-NMP-2012-SMALL-6 ChipCAT (2012-2016)
- Participation to several national and international **networks**

- **Nominations** of S. Bourgeois as member of the **board of the French Vacuum Society** (SFV) & J.P. Bellat as member of the **board of the International Adsorption Society** (IAS)
- **Organization of several meetings or workshops**
- **Large number of invitations** to give **talks or seminars**

5 facts illustrating the department interactions with its socioeconomic or cultural environment

- **Industrial contracts**, for instance involving in European consortium NANOCEM, (10 years of active participation, 4 financed projects)
- **Numerous seminars towards industrial partners** (LAFARGE, BASF, Saint Gobain, HEALTIS MRI safety, etc.)
- Consolidation of the collaboration with **ANDRA** (started in 2000) in the field of corrosion prediction models applied to deep geological storage of nuclear waste
- Important involvement in **disseminating scientific culture** (European and American researcher's night, Bar des sciences, interviews, Fête de la science, conferences, Experimentarium, …)
- **Numerous partnerships with high schools** (un chercheur-une classe, visits of classes, entrepreneuriales, Olympiades of Ingenior Science, etc.)

Department's main contributions to training actions

- Creation of the **Master "Control and Durability of Materials",** headed by an INTERFACES professor and involving numerous teachers of axis who coordinate training modules
- Participation at Master **"Physical Chemistry of Construction Materials"** at Polytechnique/Ecole des Ponts
- INTERFACES offers internships at all levels: for the past period: 4 BTS/DUT, 15 engineers, 14 M1, 24 M2 and 1 ERASMUS
- 27 PhD defenses for the period and 11 current PhD. **45 % of them catch a permanent position in industrial research just after PhD defense**

II.2. APPENDIX: CONTRACTUAL MISSION STATEMENT

No mission statement was sent to the research unit director at the start of the contract.

II.3. Appendix: Equipment, platforms

The following equipment tables have been extracted from ICB management files maintained in French by the DTAI department, O. Heintz acting as main editor. Except for the headers, no effort was made to translate into English.

In some cases, the purchase year is the year of last upgrade.

Absence of estimated value are related to items whose renewal value was not yet identified at the time of finalizing the document.

Table A3.0: Estimate of the renewal value of the ICB technological platforms
(not including impact of adaptation of rooms in hosting buildings)

Platform	Approximated renewal value	Details in
ARCEN-CARNOT	11 267 750 €	Table A3.1
PICASSO	3 040 000 €	Table A3.2
FLAIR	4 077 000 €	Table A3.3
TOTAL	18 384 750 €	
UTBM	*15 300 000 €*	*Table A3.4*

Table A3.1: Plateforme ARCEN CARNOT

Equipment	Contact	Description	Purchase year	Approximated renewal value
Equipement	**Contact**	**Description**	**Année d'acquisition**	**Valeur approximative de remplacement**
Matériel du DTAI - Taux de mutualisation 100%				
Sorptomèrre Belsorp Mini	M.Guérineau	Mesure de surface spécifique, volume poreux, taille de pore (mesopore)	2004	40 000 €
Granulomètre Saturn	M.Guérineau	Mesure de taille de particule par voie humide	2004	60 000 €
Porosimètre Hg Autopore IV	M.Guérineau	Mesure de volume poreux, taille de pore (meso et macropores), densité vraie, densité d'enveloppe.	2004	60 000 €
Pycnomètre AccuPyc	M.Guérineau	Mesure de densité vraie	2004	10 000 €
Sorptomètre Tristar	M.Guérineau	Mesure de surface spécifique, volume poreux, taille de pore (mesopore)	2004	35 000 €
MEB JSM 7600F	F.Herbst	microscope électronique équipé EDS-WDS-EBSD	2004	800 000 €
Evaporateur Carbone Cressington	F.Herbst	Dépôt de carbone pour rendre la surface de l'échantillon conductrice	2004	50 000 €
Polisseuse vibrante	F.Herbst	Super finition de la surface de l'échantillon pour l'EBSD	2004	10 000 €
MET JEM 2100F	R.Chassagnon	Microscope Electronique en Transmission équipé d'un canon FEG, d'une unité STEM avec détecteurs BF & DF, de dispositifs d'analyse chimique EDS et EELS	2004	1 800 000 €

Table A3.1: Plateforme ARCEN CARNOT

Equipment	Contact	Description	Purchase year	Approximated renewal value
MET JEM 2100 LaB6	R.Chassagnon	Microscope Electronique en Transmission équipé d'un système d'analyse chimique EDS	2004	500 000 €
DRX D8 Advance	N.Geoffroy	Diffractomètre de rayons x	2004	230 000 €
DRX D8 Discover	N.Geoffroy	Diffractomètre de rayons x	2004	230 000 €
DRX Inel CPS 120Co	N.Geoffroy	Diffractomètre de rayons x	2004	180 000 €
DRX D8-A25 Discover	N.Geoffroy	Diffractomètre de rayons x	2004	235 000 €
DRX Inel CPS 120Cu	N.Geoffroy	Diffractomètre de rayons x	2004	180 000 €
XPS/Auger	O. Heintz	Analyse XPS locale, Auger, Profilométrie basse énergie, traitement thermique	2004	1 000 000 €
Profilo Dektak	O. Heintz	Mesure rugosité et hauteur de marche Résolution en z 5 nm	2004	50 000 €
Centre d'usinage Numérique 5 axes DMU	J.-M. Muller		2004	159 000 €
Fraiseuse Numérique 3 axes Maho	J.-M. Muller		2004	20.000
Fraiseuse Perceuse Cincinnati	J.-M. Muller		2004	
Tour conv. Emco	J.-M. Muller		2004	6 000 €
Tour NV Mondial	J.-M. Muller		2004	
Perceuse d'établi Cincinnati variat élect.	J.-M. Muller		2004	
Perceuse à colonne sur pied Cincinnati	J.-M. Muller		2004	
Perceuse d'établi Sydéric S115	J.-M. Muller		2004	
Perceuse d'établi Sydéric S20	J.-M. Muller		2004	
Affuteuse Rectif. Trumel	J.-M. Muller		2004	
Taraudeuse Rascamat Mosquito	J.-M. Muller		2004	5 900 €
Scie à ruban Joubert Tiersot	J.-M. Muller		2004	
Scie à ruban Syderic SSC -18-35	J.-M. Muller		2004	
Scie Tronconneuse Eismo	J.-M. Muller		2004	1 400 €
Poste à souder Tig/Arc Sarazin	J.-M. Muller		2004	1 300 €
Decoupe Plasma Saf Nerta Zip	J.-M. Muller		2004	1 000 €
Tanck d'ebavurage à bande Grit	J.-M. Muller		2004	1 950 €
Sableuse Manut'Air	J.-M. Muller		2004	3 000 €
Transpalette Gerbeur éléctrique	J.-M. Muller		2004	8 000 €

Table A3.1: Plateforme ARCEN CARNOT

Equipment	Contact	Description	Purchase year	Approximated renewal value
Fraiseuse conventionelle Lagun	E. Couqueberg		2004	10 000 €
Tour conventionelle Emco	E. Couqueberg		2004	5 000 €
Tour conventionelle Pinacho	E. Couqueberg		2004	8 000 €
Tour conventionelle Torrent	E. Couqueberg		2004	
Perceuse a colonne cincinati X2	E. Couqueberg		2004	
Perceuse a colonne grande capacité	E. Couqueberg		2004	
Perceuse a colonne Sermac	E. Couqueberg		2004	1 000 €
Tanck a bande Mape	E. Couqueberg		2004	
Affuteuse aceti	E. Couqueberg		2004	800 €
Scie a ruban Ultra	E. Couqueberg		2004	
Scie a ruban FMB	E. Couqueberg		2004	1 200 €
Scie radial Eisele	E. Couqueberg		2004	
Chanfreineuse Aceti	E. Couqueberg		2004	
soudeuse par point	E. Couqueberg		2004	
Poste a souder TIG Saf	E. Couqueberg		2004	3 000 €
Poste a souder MIG-MAG Saf	E. Couqueberg		2004	8 000 €
Machine de passivation inox Celinox	E. Couqueberg		2004	700 €
Station reparation WR3	S. Pernot	station permettant la conception ou la réparation de cartes electroniques	2004	3 000 €
Perceuse colonne	S. Pernot	perceuse montée sur établis équpée des système de sécurité permettant d'effectuer des perçage de qualités	2004	1 500 €
Station placement Precitec	S. Pernot	Station permettant le placment de composants miniatures de surfaces sur les cartes electroniques conçues au laboratoire	2004	3 200 €
Four refusion FT05	S. Pernot	Four permettant le soudage par refusion de tous les composants d'une carte electronique	2004	4 800 €
Logiciel Labview	S. Pernot	Logiciel contrôle/ commande et d'acquisition de données	2004	22 000 €
CAO Altium Designer	S. Pernot	Logiciel de conception assisté par ordianteur de cartes electroniques	2004	5 000 €
Matériel dans les équipes de recherche de l'ICB - Taux de mutualisation 5 à 10 %				
RAITH Pioneer	J.C.Weeber	Dispositif de lithographie électronique à base d'un	2004	700 000 €

Table A3.1: Plateforme ARCEN CARNOT

Equipment	Contact	Description	Purchase year	Approximated renewal value
		microscope électronique à effetde champ. Dispositif équipé d'une platine interférométrique permettant une lithographie sur une surface maximale de 25x25mm2.		
AFM Nanoscope	E.Lesniewska		2004	
High-Speed AFM	E.Lesniewska		2004	
Langmuir-Blodgett	E.Lesniewska		2004	
Agilent SMM	E.Lesniewska		2004	
Confocal FS06	A. Bouhelier	Plateforme de microscopie confocale linéaire et nonlineaire couplée avec des mesures de spectroscopie tunnel inélastique	2004	350 000 €
Confocal FS07	A. Bouhelier	Plateforme de microscopie confocale Raman	2004	200 000 €
MEB 6500F Raith	A. Bouhelier	Microscope électronique à balayage couplé à un système de nanolithographie électronique	2004	320 000 €
Ellipsomètre	L.Markey	Mesure d'indices optiques et d'épaisseur de films minces	2004	160 000 €
RIE Oxford	L.Markey	Gravure de structures métalliques ou diélectriques après masquage par lithographie	2004	300 000 €
Mask Aligner	L.Markey	Lithographie UV permettant une résolution de 500nm et un réalignement à 200nm entre niveaux de lithographie	2004	150 000 €
équipements de préparation d'échantillons en salle blanche	L.Markey	L'ensemble des petits équipements de salle blanche (tournettes, plaques chauffantes, bacs à ultrasons, bacs de gravure, nettoyeur plasma et mégasonic, générateur d'eau DI) est indispensable à la préparation des échantillons en nanofabrication	2004	130 000 €
Four sous vide	J.Arocas	four de recuit sous vide ou sous atmosphère contrôlée	2004	20 000 €
ME 300	J.Arocas	dépôts de couches minces d'oxydes ou métaliques	2004	250 000 €
MEB 400	J.Arocas	dépôts de couches minces metalliques	2004	350 000 €
Pulvé catho	J.Arocas	dépôts de couches minces suivant cibles(Ti,TiO2,Sio2,ITO,Si3N4...)	2004	400 000 €
MEP 300	Y.Lacroute	Dépôts de couches minces Au	2004	60 000 €
Calorimètre	A.Nonat		2004	36 000 €
DRX CPS 120Cu	A.Nonat		2004	150 000 €
Presse auto	A.Nonat		2004	12 000 €
Chromato Ionique	C. Borkowski		2004	50 000 €
TOC-V TN	C. Borkowski		2004	65 000 €

Table A3.1: Plateforme ARCEN CARNOT

Equipment	Contact	Description	Purchase year	Approximated renewal value
ICP OES	C. Borkowski		2004	100 000 €
Titrateur auto	C. Borkowski		2004	20 000 €
Rhéomètre	S.Gauffinet		2004	160 000 €
Raman T64000	C.Marco de Lucas	Spectromètre Raman HORIBA T64000, Laser Ar-Kr Spectra-Physics	2004	300 000 €
Raman InVia	C.Marco de Lucas	Spectromètre Raman RENISHAW InVia + accessoires. Cellules thermiques LINKAM	2004	350 000 €
XPS/PVD/Traitement	B.Domenichini	appareil de traitement de matériaux massifs et d'élaboration de films et revêtements (PVD et CVD) permettant une analyse chimique in situ (150 élaborations/an et 400 analyses/an)	2004	450 000 €
STM/XPS	M.Petukhov	L'installation expérimentale a' ultra vide contenant le microscope à effet tunnel (STM, utilisée avec la résolution atomique); le spectromètre des photoélectrons (XPS); et l'appareil de diffraction d'électrons lents (LEED).	2004	200 000 €
Dépôt CVD	L.Imhoff	dispositif de dépôt CVD/ALD équipé de deux têtes d'injections liquides	2004	220 000 €
Infra Rouge	J.P.Bellat	BRUKER EQUINOX 55	2004	70 000 €
			TOTAL	**11 267 750 €**

Table A3.2: Plateforme PICASSO

Equipment	Contact	Description	Purchase year	Approximated renewal value
Equipement	**Contact**	**Description**	**Année d'acquisition**	**Valeur approximative de remplacement**
Tour de Fibrage	F. Smektala	Equipement d'étirage de fibres optiques à base de verres à Tg modérées; Adapté à l'étirage de fibres saut d'indice ou microstructurées (fibres à cristaux photoniques); Contrôle de l'atmopshère de fibrage; Régulation de la pression	2012	200 000 €
Plateforme Télécom	J. Fatome	Emission réception 40Gbit/s, oscilloscope temps réel 50GHz, Oscilloscope à échantillonnage optique 500GHz, Oscilloscope à échantillonnage électrique 70 GHz, diverses sources lasers IR CW, fs dont TiSa/OPO, ps et ns, 15 amplificateurs optiques. 8 Analyseurs de spectre optique et 2 éléctriques, soudeuse Vitran.	>2005	800 000 €
Sources laser innovantes	O. Musset	Equipements de contrôle et d'analyse optique et électronique, sources lasers, logiciels de conception optique et laser	> 2000	200 000 €
Systèmes laser femtosecondes amplifiés	B. Lavorel	Thalès alpha 1000/100, Newport Solstice, Amplificateur paramétrique optique, cadence 100 à 1000 Hz, durée d'impulsion 100 femtosecondes, intensité pouvant atteindre 1015 W/cm²	>1997	770 000 €
Matériels connexes de caractérisation et mise en oeuvre des échantillons	B. Lavorel	Moyens de mise en forme et de caractérisation des impulsions femtosecondes, Jets moléculaires pulsés et continus	>1997	270 000 €
Plateforme Optique de Champ Proche	B. Cluzel & F. de Fornel	3 Microscopes en champ proche optique avec asservissement shear-force, Diverses Sources laser dont IR CW, Supercontinuum visible-IR, fs dont TiSa/OPO , 1 spectroscope équipé camera iCCD visible et caméra refroidie InGaAs, 1 Spectroscope équipé PM visible et IR, 1 étireuse de fibre, soudeuse de fibre, oscilloscope numérique 400MhZ, 1 pince optique holographique	>2005	800 000 €
			TOTAL	**3 040 000 €**

Table A3.3: Plateforme FLAIR

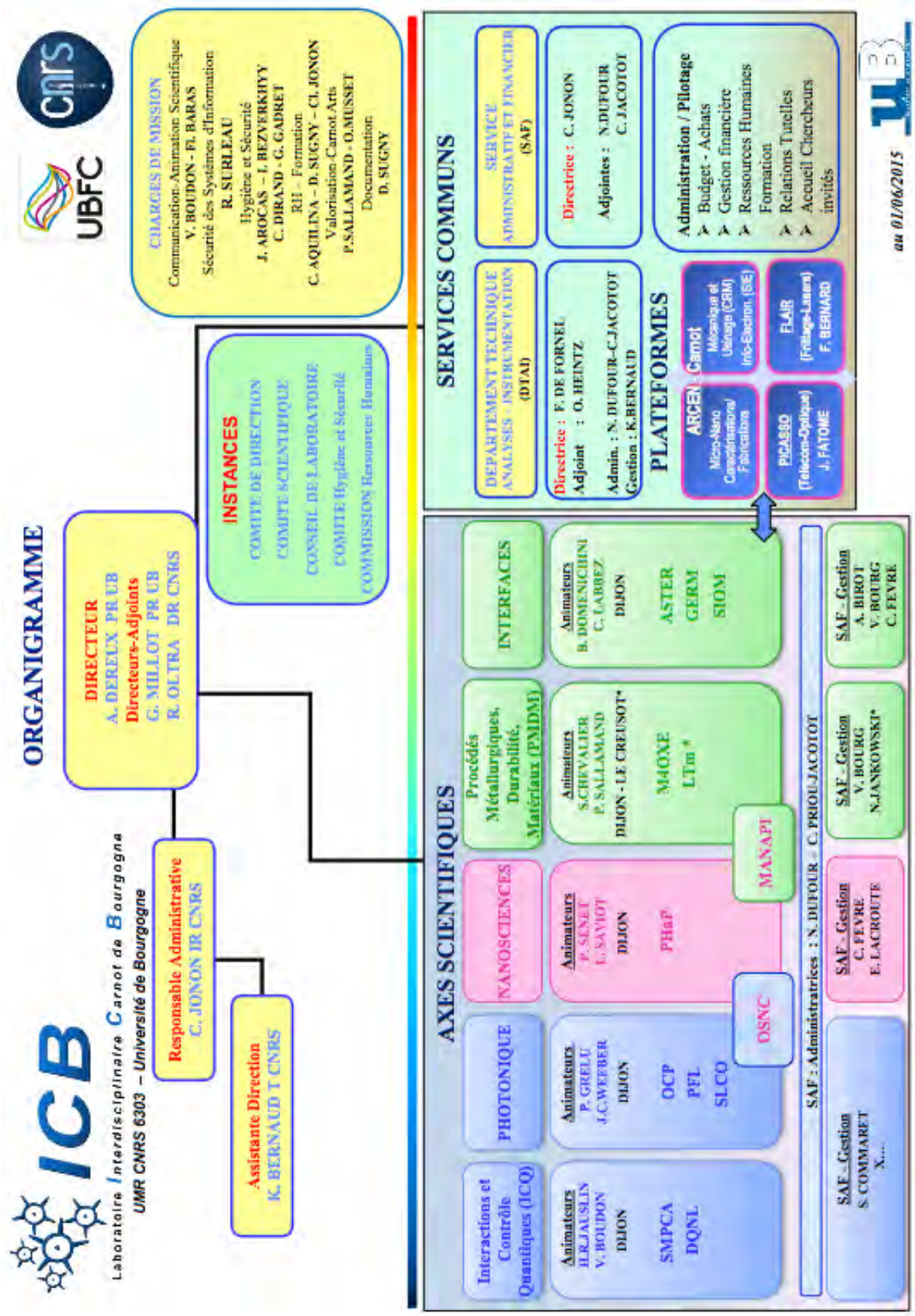
Equipment	Contact	Description	Purchase year	Approximated renewal value
Equipement	**Contact**	**Description**	**Année d'acquisition**	**Valeur de remplacement**
PRESSE DE FRITTAGE SPS HPD 125 FCT	F. Bernard	Machine de frittage rapide (2300°C/1250 KN) - Echantillon diamètre max. 150mm	2010	660 000 €
PRESSE DE FRITTAGE SPS HPD 10 FCT	F. Bernard	Machine de frittage rapide (2300°C/100 KN) - Echantillon diamètre max. 40mm	2013	240 000 €
Broyeur Planétaire Haute Energie	I. Gallet	Pulverisette 4 - Découplage vitesses de rotation du disque et des jarres	2005	35 000 €
Boite à Gants	I. Gallet	Boite sous Ar - stockage et chargement poudre	2009	30 000 €
Dispositif synthèse Eau supercritique Continu	F. Demoisson	Synthèse d'oxydes métalliques de dimension nanométrique (500°C - 300b)	2005	500 000 €
Réacteur synthèse Eau supercritique Batch	F. Demoisson	Synthèse d'oxydes métalliques de dimension nanométrique (500°C - 300b)	2013	40 000 €
Laser Yb:YAG disque 6kW CW	M. Duband (Le Creusot)	Laser Continu de 6kW avec fibres 200, 400, 600µm associées à deux tables de déplacement ou un robot polyarticulé	2006	550 000 €
Laser Nd:YAG pompée lampe 3kW CW	M. Duband (Le Creusot)	Laser Continu de 3kW avec fibre 600µm associée à deux tables de déplacement ou un robot polyarticulé	1992	220 000 €
Laser Nd:YAG impulsionnel 300W moyen	M. Duband (Le Creusot)	Laser pulsé de 300W avec fibre 400µm associée à une table de déplacement	1992	110 000 €
Laser Nd:YAG impulsionnel 50W moyen	M. Duband (Le Creusot)	Laser pulsé de 300W avec fibre 600µm associée à une table de déplacement	1992	550 000 €
Laser de marquage Nd:YAG	M. Duband (Le Creusot)	Laser de gravage Q-Switché	1992	50 000 €
CMT	M. Duband (Le Creusot)	Cold Metal transfer (Mig "Froid") associé à nrobot polyarticulé	2007	24 000 €
MIG-MAG	M. Duband (Le Creusot)	MIG-MAG pouvant être associé à un laser via une tête hybride	2005	45 000 €
MEB	M. Duband (Le Creusot)	Microscope environnemental avec mission par filament W -équipé en contrastes topo (SEI) et chimique(BSE double) et analyse chimique (EDS rapide JEOL)	2010	178 000 €
Camera CCD rapide avec éclairage laser synchronisée	M. Duband (Le Creusot)	Visulisation dephénomènes rapides sous forte pertubation lumineuse	2011	75 000 €

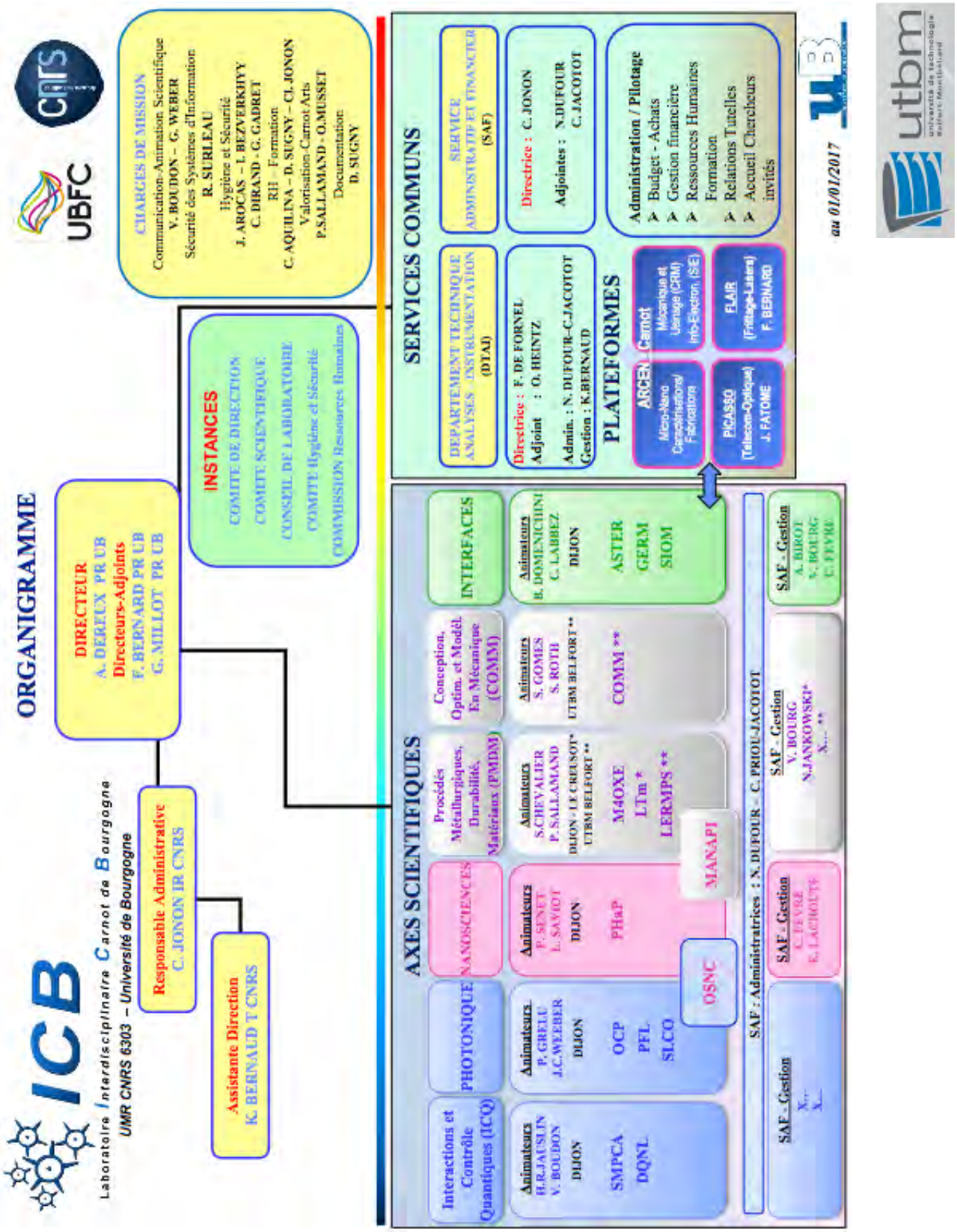
Table A3.3: Plateforme FLAIR

Equipment	Contact	Description	Purchase year	Approximated renewal value
Corrélation d'image 3D	M. Duband (Le Creusot)	Acquisition et mesure des déplacements (déformations et contraintes) de pièces soumises à des sollicitations	2005	25 000 €
Machine de traction hydraulique 500 kN	M. Duband (Le Creusot)	Traction/fatigue	1985	100 000 €
Machine de déplacement cartésienne LASER techno	M. Duband (Le Creusot)	Déplacement des pièces sous le faisceau laser en XYZ	1990	
Robot Polyarticulé KR6	M. Duband (Le Creusot)	Déplacement des sources d'énergie	2005	15 000 €
Robot Polyarticulé KR60	M. Duband (Le Creusot)	Déplacement des sources d'énergie	2005	30 000 €
Labo de métallographie	M. Duband (Le Creusot)	Caractérisation des échantillons : scie à ruban tronconneuse, micro-tronconneuse, enrobeuses à chaud et à froid sous vide, Polisseuses semi-automatiques, sorbonne,binoculaire, microscope optique, microdureté	[1985, 2005]	200 000 €
Appareils connexes	M. Duband (Le Creusot)	Têtes optiques avec mise en forme de faisceau Analyseur de faisceau laser (répartition de l'énergie et caustique), mesureurs de puissance 2 Projecteurs de poudre type plasmateckhnik double-réservoirs, dévidoir de fil froid/chaud,	[1985, 2005]	400 000 €
			TOTAL	**4 077 000 €**

Table A3.4: Plateforme UTBM	
Equipment	**Approximated renewal value**
Equipement	**Valeur de remplacement (M€)**
Cabine "PSA"	0,800
Cabine Cold Spray	1,000
Cabine 1 (multitorche + suspension)	1,500
Cabine hybride (multitorche + hybride Lasers)	2,000
enceinte VPS	2,000
enceinte LVPPS	2,500
Tour atomisation:	2,000
Zone SLM	1,000
Autres poudres (tours séchage, salle tamisage)	0,500
Caractérisation matériaux	0,500
Authre méthodes de diagnostic	1,000
Atelier mécanique	0,500
TOTAL	**15,300**

II.4. APPENDIX: FUNCTIONAL ORGANISATION CHART




ORGANIGRAMME
ICB
Laboratoire Interdisciplinaire Carnot de Bourgogne
UMR CNRS 6303 – Université de Bourgogne
UBFC
DIRECTEUR
A. DEREUX PR UB
Directeurs-Adjoints
F. BERNARD PR UB
G. MILLOT PR UB
Responsable Administrative
C. JONON IR CNRS
Assistante Direction
K. BERNAUD T CNRS
CHARGES DE MISSION
Communication-Animation Scientifique
V. BOUDON – G. WEBER
Sécurité des Systèmes d'Information
R. SURLEAU
Hygiène et Sécurité
J. AROCAS – L. BEZVERKHYY
C. DIRAND - G. GADRET
RH - Formation
C. AQUILINA – D. SUGNY – CL JONON
Valorisation-Carnot Arts
P.SALLAMAND - O.MUSSET
Documentation
D. SUGNY
INSTANCES
COMITE DE DIRECTION
COMITE SCIENTIFIQUE
CONSEIL DE LABORATOIRE
COMITE Hygiène et Sécurité
COMMISSION Ressources Humaines
SERVICES COMMUNS
DEPARTEMENT TECHNIQUE ANALYSES - INSTRUMENTATION (DTAI)
Directrice : F. DE FORNEL
Adjoint : O. HEINTZ
SERVICE ADMINISTRATIF ET FINANCIER (SAF)
Directrice : C. JONON
Adjointes : N.DUFOUR C.JACOTOT
Admin. : N. DUFOUR-CJACOTOT
Gestion : K.BERNAUD
PLATEFORMES
ARCEN Carnot
Micro-Nano Caractérisations/ Fabrications
Mécanique et Usinage (CRM)
Info-Electron. (S3E)
PICASSO (Tolescon-Optique)
J. FATOME
FLAIR (Fritsch-Lasers)
F. BERNARD
Administration / Pilotage
Budget - Achats
Gestion financière
Ressources Humaines
Formation
Relations Tutelles
Accueil Chercheurs invités
au 01/01/2017
AXES SCIENTIFIQUES
Interactions et Contrôle Quantiques (ICQ)
PHOTONIQUE
NANOSCIENCES
Procédés Métallurgiques, Durabilité, Matériaux (PMDM)
Conception, Optim. et Modél En Mécanique (COMM)
INTERFACES
Animateurs
H.R.JAUSLIN
V. BOUDON
DIJON
SMPCA
DQNL
Animateurs
P. GRELU
J.C.WEEBER
DIJON
OCP
PFL
SLCO
Animateurs
P. SENET
L.SAVIOT
DIJON
PHaP
Animateurs
S.CHEVALIER
P.SALLAMAND
DIJON - LE CREUSOT*
UTBM BELFORT**
M4OXE
LTm *
LERMPS **
Animateurs
S. GOMES
S. ROTH
UTBM BELFORT **
COMM **
Animateurs
B. DOMENICHINI
C. LABBEZ
DIJON
ASTER
GERM
SIOM
OSNC
MANAPI
SAF : Administratrices : N. DUFOUR - C. PRIOU-JACOTOT
SAF - Gestion
Xxx
Xxx
SAF - Gestion
C. LEVRE
E. LACHOUTE
SAF - Gestion
V. BOURG
N.JANKOWSKI*
Xxx **
SAF - Gestion
A. BIROT
V. BOURG
C. LEVRE

II.5. APPENDIX: RULES OF PROCEDURE (IN FRENCH)

The research unit rules of procedure are practical guidelines for every day life inside ICB. Each person working in ICB laboratory has to comply with these rules ranging from opening hours of the laboratory to ethical guidelines.

The rules of procedure have been edited by Claudine Jonon, head of ICB management office. They have been reviewed by both CNRS and University of Bourgogne legal departments. Recommendations from these two legal departments have been taken into account before being approved by a vote of the elected members of the ICB Council (Conseil de Laboratoire).

In this appendix, the “rules of procedure” are provided in French as imposed by legal constraints. The signatures of the legal representatives of both CNRS and Université de Bourgogne are found on the original document but are not reproduced here.

Laboratoire Interdisciplinaire Carnot de Bourgogne
ICB UMR 6303 CNRS/UB
Règlement Intérieur

II.5.1. PRÉAMBULE

L'Unité Mixte de recherche n° 6303, ICB, (ci-après désignée l'« Unité ») est une *UMR* implantée dans les locaux de l'Université de Bourgogne.

Le présent règlement intérieur a été soumis à l'avis du Conseil de laboratoire et approuvé en séance le 08/10/2014.

Il a pour objet de préciser notamment l'application dans l'Unité :

- de son organisation générale,
- des règles générales et permanentes relatives au temps de travail (horaires, congés …), à l'utilisation des locaux et du matériel,
- de la règlementation en matière de santé et de sécurité au travail,
- de la réglementation en matière de sécurité de l'information et des systèmes d'information,
- des dispositions relatives à la protection du potentiel scientifique et technique (PPST).

  A ce titre,

  l'Unité Mixte de recherche n° 6303, a fait l'objet d'une création de 5 zones à régime restrictif (ZRR[10]) dont le périmètre recouvre 4 sites (2 situés sur le campus Montmuzard DIJON : bâtiment Sciences MIRANDE (Correspondants PPST : F.BERNARD et C.JONON), 1 situé sur le site du CREUSOT (Hall laser) (CPPST : P.SALLAMAND), le dernier situé sur le site de Chalon sur Saône (IUT) (CPPST : J.M.JOUVARD). Elles bénéficient à ce titre d'une protection renforcée, garantie par le respect des dispositions relatives à l'accès aux locaux, à la confidentialité, aux publications et à la communication, à la propriété intellectuelle et à l'utilisation des ressources informatiques.

Le présent règlement intérieur est complémentaire à celui de l'Université de Bourgogne. En cas de contradiction, les dispositions les plus restrictives prévaudront.

Toute modification sera soumise à l'avis du Conseil de laboratoire *(ou de l'Assemblée Générale)* et devra faire l'objet le cas échéant d'un avenant ou d'un nouveau règlement intérieur.

Il s'applique à l'ensemble du personnel affecté à l'Unité, y compris les agents non titulaires et les stagiaires.

Toute évolution de la réglementation applicable dans les établissements tutelles de l'Unité s'applique de fait à l'Unité, même si le présent règlement intérieur n'en fait pas état.

II.5.2. ORGANISATION GÉNÉRALE DE L'UNITÉ

Les domaines d'activités de l'unité sont tournés principalement vers la Physique et la Chimie. L'unité est organisée en départements : 3 départements scientifiques recouvrant 3 thématiques (Nanosciences (NANO), Interface et Réactivité dans les Matériaux (IRM), Optique interaction Matière-Rayonnement (OMR), et 1 département technique d'appui à la recherche Analyses et Instrumentation (DTAI). Chacun d'eux est dirigé par un(e) directeur (trice) élu(e) ou nommé(e), et reconnu(e) par la direction et les tutelles, au sein desquels, sont réparties les forces vives de la recherche : les équipes, dirigées elles-mêmes par un responsable scientifique. Elles sont de tailles variables en termes d'effectifs, l'important est que leurs activités scientifiques et leur visibilité soient reconnues par les instances d'évaluation.

II.5.2.1. CONSEIL D'UNITÉ – ASSEMBLÉE GÉNÉRALE

Le conseil de l'Unité est l'instance consultative permettant de réguler la vie de l'unité de recherche. Il est présidé par le directeur de l'Unité. Il a un rôle consultatif et émet un avis sur toutes les questions relatives à la stratégie scientifique, la gestion des ressources, l'organisation et le fonctionnement de l'unité. La durée de son mandat est identique à la durée du mandat de l'unité.

Sa composition et ses modalités de fonctionnement sont prévues en application de la décision CNRS du 28/10/1992 annexée au présent règlement intérieur.

Lors du départ ou de l'accueil d'un enseignant-chercheur permanent **en cours de contrat** (et en dehors des procédures officielles de recrutement, mutation ou retraite par les tutelles), le conseil de laboratoire émet un avis, qui doit être soumis au conseil scientifique de l'Université.

L'assemblée générale comprend tous les personnels permanents et non permanents ayant plus d'un an d'ancienneté dans l'unité. Elle est réunie par le directeur de l'Unité, sur son initiative ou sur proposition du conseil de laboratoire,

[10]L'arrêté du Ministère de l'Enseignement Supérieur et de la Recherche, signé le 07 Février 2014, a classé l'ICB en 5 Zones à Régime Restrictif. Une ZRR est, aux termes de l'article 413.7 du code pénal, constitué de locaux et de terrains clos dans lesquels l'accès et la circulation sont réglementés afin d'assurer la protection des installations, du matériel ou du secret des recherches, études ou fabrications.

dans les conditions suivantes : une fois l'an pour dresser le bilan annuel de l'Unité ou à titre exceptionnel pour consulter l'ensemble des personnels.

II.5.2.2. Comité de Direction

L'unité est dotée d'un comité de direction composé du directeur d'unité, des directeurs adjoints, des directeurs de département de recherche, du représentant du site du CREUSOT (suppléant(e) au directeur du département IRM), du directeur du DTAI, de la responsable administrative, et d'un représentant ITA/IATSS (parmi les membres élus ou nommés ITA/IATSS du Conseil de laboratoire), soit 10 membres.

Ce comité se réunit au moins deux fois par mois (sauf cas de force majeure : congé, mission, défaut de quorum,…) et aborde toutes les questions relatives à la bonne marche de l'unité : politique scientifique de l'unité, répartition des moyens au sein de l'unité et entre les départements, politique et gestion de ressources humaines, hygiène et sécurité. Il émet des avis écrits qui sont transmis au conseil d'unité.

Un bureau est constitué du Directeur, des Directeurs-adjoints, de la Responsable administrative et de l'Assistante de direction. Il se réunit chaque semaine, sauf cas de force majeure.

II.5.2.3. Comité Scientifique - organisation

Un comité scientifique est constitué d'un Président (un directeur-adjoint) et de 6 membres désignés par les départements (2 par département : 1 relevant du Collège A, 1 du Collège B, hors Comité de direction). Ses missions seront les suivantes :

Discuter d'une stratégie scientifique et exploiter l'ensemble des résultats soumis et/ou obtenus par le laboratoire aux appels d'offre ANR, Europe, bilatéraux, etc.., en vue de proposer au Comité de Direction et au Conseil de Laboratoire des pistes de projets pluridisciplinaires, exploratoires ou intégratifs, de favoriser l'émergence de nouvelles thématiques et d'étudier d'éventuelles reconfigurations sous formes d'équipes-projets, par exemple:

- Préparer des Journées Scientifiques et organiser une réunion annuelle du Comité Scientifique élargi avec mini-colloque et une autre réunion destinée aux collectivités et opérateurs économiques ayant des coopérations avec ICB.
- -Se charger de la communication scientifique avec notamment la publication de News, de plaquettes et d'autres articles de vulgarisation pour les médias scientifiques (CNRS, UB, …). Les correspondants communication du laboratoire seront associés à cette activité.
- Emettre un avis scientifique en vue de priorités à partir des propositions des départements en termes d'allocations de recherche, de moyens en équipements et personnels (permanents, invités, associés).
- De définir et suivre les indicateurs de performance.

Le comité scientifique élargi est composé de membres extérieurs en vue de la tenue d'une réunion annuelle : 1 représentant PRES, 1 représentant CEA Valduc, le Vice-Président du conseil scientifique et/ou Délégué à la Recherche de l'Université, les Directeurs Adjoints Scientifiques ou chargés de missions CNRS de l'INP, de l'INC, et personnalités extérieures, chaque département scientifique de l'ICB en proposant une.

II.5.2.4. Commissions

Diverses instances de concertation et de proposition sont mises en place, incluant des membres du Conseil de Laboratoire et des représentants des départements et services, notamment :

- Comité Local Hygiène, de Sécurité et des Conditions de Travail (CLHSCT)
- Commission Ressources Humaines
- Commission Animation Scientifique, Communication
- Commission Sécurité des Systèmes d'information (CSSI)
- Commission Documentation, Abonnements

Elles se réunissent au moins 2 fois par an, en fonction de l'actualité, des besoins et des échéances. Leurs compositions sont données en annexe.

II.5.3. Ressources humaines

II.5.3.1. Principes généraux

Le personnel nécessaire au fonctionnement de l'unité est affecté par décision de son employeur.

Chaque agent affecté à l'unité reste régi, pour ce qui concerne sa situation individuelle, par les dispositions statutaires de son cadre, et de l'organisme d'origine qui verse sa rémunération.

A compter de leur date d'affectation dans l'unité, les agents sont tenus de se présenter à la direction, de remplir une fiche signalétique destinée aux bases de données[11] d'ICB, de l'UB et du CNRS. Ils devront également se conformer aux instructions qui leur sont données par le directeur de l'unité ou leur responsable hiérarchique que celui-ci aura désigné. Ils devront respecter le règlement intérieur, et les consignes et prescriptions portées à leur connaissance par circulaires, notes, ou affichage, courriers électroniques. Ces consignes et prescriptions incluent les recommandations qui leur sont signifiées par les Assistants de Prévention, de Sécurité et d'Hygiène.

[11]Respectant la loi informatique et libertés et les recommandations de la CNIL

L'affectation des personnels aux départements et aux équipes est faite par décision de son directeur. Le tableau des affectations et des responsables hiérarchiques est mis à jour périodiquement. (cf tableau en annexe).

L'accueil au laboratoire de certains personnels entraîne le respect des règles suivantes :

- Personnes extérieures :
  - l'accueil de personnes extérieures, de nationalité étrangère ou non, impose que préalablement à leur accueil dans l'unité, une demande d'avis soit formulée par le directeur d'unité d'accueil auprès du service du Fonctionnaire de Sécurité et Défense de l'Université de Bourgogne.
- Personnels émérites :
  - L'activité d'un émérite a pour vocation de terminer des engagements contractuels à durée déterminée (thèses, projets ANR ou autres) initiés avant son départ à la retraite. Dans ce cas, la responsabilité des crédits associés à la réalisation de ces engagements est transférée à un personnel en capacité réglementaire de gérer des crédits de recherche.
  - Les projets qu'un émérite termine ne peuvent justifier des allocations de ressources qui s'ajouteraient à celles prévues dans les engagements contractuels initiés avant son départ à la retraite.
  - Il n'est pas autorisé réglementairement qu'un émérite initie/endosse des engagements contractuels.
  - Un émérite peut donner son appui à des projets du laboratoire initiés après son départ à la retraite, dans la mesure où il était affecté administrativement au laboratoire ICB avant son départ à la retraite, et si ces projets sont portés par des personnels en capacité réglementaire de les gérer.
  - Un émérite ne peut apparaître dans une liste de personnels renseignée lors d'une demande de subvention pour justifier des allocations de ressources de tout type (équipement, personnel, fonctionnement, voyages,...).

II.5.3.2. Durée annuelle du travail, Horaires, congés, absences

Le personnel est tenu au respect de l'horaire et de la durée de travail fixés en fonction des dispositions statutaires et réglementaires relatives à la durée du travail et aux congés, et également compte tenu des nécessités de service.

En application de la loi 2004-626 du 30/06/2004 instituant une journée de solidarité pour les personnes âgées et handicapées, la durée annuelle du travail effectif est fixée à 1607 heures, à compter du 1er Janvier 2005, au lieu de 1600 h. Les modalités de mise en œuvre de l'ARTT dans l'Unité prennent en compte les dispositions figurant dans le décret du 25/08/00 modifié par le décret 2004-1307 du 27 novembre 2004 ainsi que celles énoncées d'une part dans l'arrêté du 31/08/01 et d'autre part dans le cadrage national du CNRS, modifié le 15 mars 2005 *et les dispositions prises par l'Université de Bourgogne*.

II.5.3.3. Horaires de travail

A. Durée hebdomadaire :

La durée hebdomadaire du travail effectif pour chaque agent de l'Unité travaillant à plein temps, est répartie sur cinq jours : les personnels CNRS doivent accomplir **38H30** hebdomadaires ; les personnels de l'Université : **37H30**.

Les personnels autorisés à accomplir un service à temps partiel d'une durée inférieure ou égale à 80 % peuvent travailler selon un cycle hebdomadaire inférieur à 5 jours.

Le temps de travail correspond à un temps de travail « effectif ». Il ne prend pas en compte la pause méridienne obligatoire qui ne peut être, ni inférieure à 45 minutes, ni supérieure à 2 heures.

B. Horaires journaliers, ouverture du laboratoire, accès aux locaux, travail isolé

La plage horaire de travail de référence commence à **7 heures** et se termine à **20 heures les jours ouvrés**. **Les situations de travail isolé doivent rester exceptionnelles.**

Après accord du directeur d'Unité et sous conditions des nécessités de service, certains personnels peuvent pratiquer un horaire décalé par rapport à la plage horaire de référence indiquée ci-dessus.

L'accès aux locaux en dehors de cette plage de référence (avant 7H le matin – après 20H le soir) (nuit, week-end et jour férié) doit être expressément et nommément autorisé par le directeur de laboratoire.

L'accès au laboratoire est possible en dehors de la plage de travail de référence, **sous réserve de déclaration préalable, de travail non isolé et d'autorisation explicite du directeur**, à tout personnel muni d'une carte magnétique d'accès.

Les personnels dont les travaux nécessitent d'être exécutés en dehors des horaires normaux de travail et/ou sur des lieux ou locaux éloignés, **doivent impérativement être accompagnés par un autre membre d'ICB.** Cette obligation est levée s'il existe un service de garde à qui les personnels doivent impérativement signaler leur présence. Dans tous les cas, ces personnels doivent respecter les consignes d'hygiène et de sécurité affichées dans les locaux mis à leur disposition. **Les stagiaires doivent être accompagnés d'un personnel expérimenté en toutes circonstances**.

C. Fermeture de l'Unité et arrêt de ressources techniques

L'ensemble des ressources techniques du laboratoire pourra être arrêté certains jours de l'année, soit par souci d'efficacité du service dans le cadre de l'aménagement et de la réduction du temps de travail, soit pour des raisons de sécurité.

Excepté pour les motifs de sécurité, les journées sans ressources techniques sont décidées en début d'année civile par le directeur d'Unité après avis du conseil de laboratoire. Toutefois, la réalisation d'une expérience en laboratoire est toujours possible pendant ces périodes, mais sur demande du responsable scientifique et justification des conditions de sécurité.

L'arrêt de ressources techniques pour raison de sécurité peut intervenir sans préavis du directeur d'Unité, ni consultation du conseil de laboratoire. Dans ce cas, aucun travail n'est autorisé dans les zones précisées aux personnels par tout moyen jugé opportun par la direction du laboratoire.

II.5.3.4. CONGÉS ANNUELS

Le nombre de jours de congés est fixé par application des dispositions en vigueur au CNRS d'une part, et à l'Université de Bourgogne d'autre part. Le décompte des jours se fait par année civile pour le CNRS, par année universitaire (01/09-31/08) pour l'Université.

- ➔ **Pour les personnels CNRS**, le nombre de jours de congés est de **44 jours ouvrés** (c'est-à-dire du lundi au vendredi) par année civile. Il prend en compte le nombre de jours de congés annuels (32) et les jours de congés accordés au titre de l'Aménagement de la Réduction du Temps de Travail (12 jours RTT), compte tenu de la durée hebdomadaire du travail adoptée dans l'Unité : **38H30**. L'agent a droit à des jours de congés supplémentaires, appelés **jours de « fractionnement »**, dans les cas suivants :
  - **1 jour** si le nombre de jours de congés pris **en dehors** de la période **du 1er mai au 31 octobre** est de **5, 6 ou 7 jours**.
  - **2 jours** si le nombre de jours de congés pris **en dehors** de la période **du 1er mai au 31 octobre** est au moins égal à **8 jours**.

  L'agent CNRS peut donc bénéficier au **maximum de 46 jours de congés**.
- ➔ **Pour les personnels BIATSS de l'Université**, le nombre de jours de congés est de **49 jours ouvrés entre le 1er septembre et le 31 août de l'année suivante**.

Les jours de congés sont accordés par le directeur de l'Unité, après avis du responsable hiérarchique, sous réserve des nécessités de service.

Le report des jours de congés annuels ainsi que les jours RTT non utilisés, est autorisé **pour les personnels CNRS, jusqu'au 28 février de l'année suivante, et pour les personnels BIATSS de l'Université, jusqu'au 31 décembre de l'année en cours**. Les jours qui n'auront pas été utilisés à ces dates seront définitivement perdus, sauf s'ils ont été déclarés dans un **Compte épargne temps.**

Cas des agents à temps partiel : Les agents exerçant leurs fonctions à temps partiel bénéficient d'un nombre de jours de congés annuels et de jours RTT calculés en fonction de leurs obligations hebdomadaires de service. Par exemple, un agent travaillant selon une quotité de temps de travail de 80% sur 4 jours bénéficie de 26 jours de congés annuels (32x4/5). En revanche, l'agent travaillant selon une quotité de temps de travail de 80% sur 5 jours bénéficie du même nombre de jours de congés annuels qu'un agent exerçant ses fonctions à temps plein soit 32 jours.

Les jours RTT sont, quant à eux, proratisés en fonction de la quotité de temps de travail de l'agent. Par exemple, le nombre de jours de congés annuels et RTT d'un agent exerçant ses fonctions à temps partiel selon une quotité de temps de travail de 80% sur 4 jours est calculé au prorata de la quotité travaillée. En revanche, l'agent travaillant à temps partiel selon une quotité de temps de travail de 80% sur 5 jours bénéficie du même nombre de jours de congés annuels et RTT qu'un agent exerçant ses fonctions à temps plein.

Les jours de fractionnement auxquels les agents à temps partiel ont droit, le cas échéant, ne sont pas proratisés.

A. Durée des absences de service pour congés

L'absence de service ne peut excéder **31 jours consécutifs**[12] (la durée des congés est calculée du premier au dernier jour sans déduction des samedis, dimanches et jours fériés).

B. Suivi des congés

Afin de pouvoir adapter l'organisation du travail, chacun doit effectuer ses demandes de congé auprès de son responsable avec un délai de prévenance de **8 jours**.

Le suivi des congés (annuels et RTT) est réalisé dans l'Unité sous la responsabilité du directeur par la responsable administrative, via l'application AGATE, obligatoire pour les personnels CNRS, notamment pour la mise en œuvre du CET, et facultative pour les personnels BIATSS de l'Université, pour lesquels un tableau récapitulatif doit être transmis au service de ressources humaines.

II.5.3.5. COMPTE-EPARGNE TEMPS

Tout agent titulaire ou non titulaire de droit public, justifiant d'une ancienneté de service continue d'au moins une année, peut bénéficier d'un compte-épargne temps (CET), alimenté par le report de congés annuels et de jours RTT, **dans les conditions fixées** par le décret n° 2002-634 du 29 avril 2002 modifié portant création du compte épargne temps dans la Fonction Publique d'Etat et dans la magistrature, et par son arrêté d'application du 20 janvier 2004 modifié.

A. Ouverture du CET

[12]Sauf en cas de disposition spécifique liée à la fermeture de certains sites partagés avec les partenaires.

La demande d'ouverture de CET peut se faire tout au long de l'année et doit être transmise au Service Ressources Humaines, de l'établissement concerné, sous couvert du directeur d'unité.

Pour les personnels CNRS : La gestion du CET se fait par l'application AGATE-congés. L'ensemble de la réglementation et des formulaires sont accessibles sur le site PRAGMA : <http://www.dgdr.cnrs.fr/mpr/pratique/RH/CET/cet.htm>

B. Alimentation et utilisation du CET :

Pour les agents du CNRS : L'alimentation et l'utilisation du CET sont gérées par l'application AGATE-congés.

(Cf réglementation disponible sur le site du CNRS-PRAGMA)

Les demandes d'alimentation sont possibles entre le 1er novembre et au plus tard le 31 décembre de l'année. Les possibilités d'utilisation des jours épargnés varient selon le nombre de jours inscrits au CET de l'agent.

Concernant les personnels BIATSS de l'Université, les demandes sont transmises par le directeur d'unité aux services de ressources humaines de l'Université de Bourgogne, qui en vérifieront la recevabilité, et en assureront le suivi.

II.5.3.6. AUTORISATIONS EXCEPTIONNELLES

Des autorisations d'absences exceptionnelles peuvent être accordées pour des motifs d'ordre familial (déménagement, mariage, naissance, décès…) dans la limite de la règlementation en vigueur.

II.5.3.7. ABSENCE

A. Absence pour raison médicale :

Toute indisponibilité consécutive à la maladie doit, sauf cas de force majeure, dûment être justifiée et signalée au responsable de l'Unité dans les 24 heures. Sous les 48 heures qui suivent l'arrêt de travail le salarié doit produire un certificat médical indiquant la durée prévisible de l'indisponibilité.

Tout accident corporel survenant dans le cadre de l'activité professionnelle sera immédiatement déclaré auprès du secrétariat de l'unité et transmis pour information aux Assistants de Prévention (agent chargé de la mise en œuvre des règles d'hygiène et de sécurité).

B. Missions

Tout agent se déplaçant dans l'exercice de ses fonctions, doit être en possession d'un ordre de mission **(avec ou sans frais)** délivré **préalablement au déroulement de la mission** par le Directeur d'unité.

Ce document assure notamment la couverture de l'agent au regard de la réglementation sur les accidents de service.

Dans l'hypothèse où l'agent utilise un véhicule administratif ou son véhicule personnel, le Directeur de l'Unité doit avoir donné préalablement son autorisation.

L'agent amené à se rendre directement de son domicile sur un lieu de travail occasionnel sans passer par sa résidence administrative habituelle, doit nécessairement être en possession d'un ordre de mission.

Les personnels enseignants sont tenus pour leur déplacement de respecter un seuil maximum, par année universitaire, ne dépassant pas **45 jours ouvrés (cf Service Personnel Enseignant UB)**.

Pour une mission en France dans le cadre des activités du laboratoire, le directeur d'unité signe et autorise le déplacement. Une copie est transmise pour information au directeur de composante dont dépend le personnel universitaire.

Pour une mission à l'Etranger, la règlementation impose l'autorisation préalable du Fonctionnaire Sécurité Défense (FSD) pour les missions des agents dans certains pays à risques :

L'autorisation d'absence doit être **transmise 1 mois à l'avance**, et obligatoirement signée, pour les personnels UB et les missions prises en charge par l'Université, par le Président de l'UB, avec avis préalable du FSD de l'Université, ou avec avis préalable du FSD du CNRS pour les personnels CNRS, dans le cas de missions prises en charge par le CNRS.

Dans tous les cas, une fois l'ordre de mission établi, afin que les autorités françaises soient informées, Il est vivement conseillé aux agents de se déclarer individuellement :

- sur le portail SAME pour les missions CNRS, en cliquant sur « Missions à l'étranger » :
  https://federation.ulyssetravel.com/app/Menu_A
- ou sur le portail ARIANE du Ministère des Affaires Etrangères :
  https://pastel.diplomatie.gouv.fr/fildariane/dyn/public/login.html

II.5.3.8. FORMATION

Le plan de formation de l'Unité est soumis pour avis au conseil d'Unité. Il est transmis aux services Formation des établissements de tutelle.

Le correspondant de formation de l'Unité contribue auprès du Directeur de l'Unité au recueil et à l'analyse des besoins de formation et à la définition des objectifs.

Il prépare les différentes étapes de la conception du plan de formation de l'entité, de son déroulement et de son évaluation, en liaison avec le conseiller RH/formation chargé au sein de la Délégation régionale du CNRS du suivi des agents.

Le plan de formation est transmis au service des ressources humaines de la Délégation régionale du CNRS ainsi qu'au service formation de l'autre (ou autres tutelles) de l'unité, service formation qui peut aussi financer des actions de formation pour les personnels du laboratoire.

Le correspondant de formation informe les personnels des actions de formation susceptibles de les intéresser, les assiste et les conseille dans leurs démarches en lien avec le responsable hiérarchique de chaque agent.

II.5.3.9. Formation par la recherche

L'encadrement des stagiaires par un membre permanent de l'unité est soumis à l'autorisation préalable du directeur de l'unité. Tout stage effectué au laboratoire doit faire l'objet d'une convention de stage signée notamment par le Président de l'Université, et/ou le délégué régional du CNRS, avant le début du stage.

Les doctorants doivent signer la charte des thèses prévues par l'Ecole doctorale de rattachement.

II.5.4. Santé, Sécurité, et organisation de la Prévention

II.5.4.1. Principes généraux

Compte tenu de certaines de ses activités dites « sensibles », l'unité est classée sous Régime Restrictif (ZRR) depuis le 12 Mars 2007. Afin de se conformer au décret 2011-1425 du 2 novembre 2011 relatif à la refonte du dispositif de protection du potentiel scientifique et technique national, à l'arrêté interministériel publié le 05 Juillet 2012, et à l'arrêté du MESR du 07 Février 2014, où sont définies pour l'ICB, 5 zones à régime restrictif (ZRR), globalisant l'ensemble des locaux de l'unité, et nécessitant un contrôle d'accès très strict, ces zones sont clairement identifiées, et font l'objet d'une procédure de sécurité renforcée.

A. Modalités d'accès aux bâtiments ZRR :

Par accès aux bâtiments ZRR on entend aussi bien l'accès physique que l'accès à distance ou virtuel (l'accès virtuel concerne l'accès interne ou externe via les réseaux informatiques de la ZRR à partir de l'extérieur ou par voie postale).

Pour les personnes qui participent directement aux activités scientifiques et techniques de l'Unité (personnels permanents, stagiaires, doctorants, personnes participant à une activité de recherche, en formation, effectuant une prestation de service).

L'accès de ces personnes à la ZRR est soumis, par délégation du Président de l'Université de Bourgogne, à l'autorisation du Directeur d'unité après avis favorable du Haut Fonctionnaire de Sécurité et de Défense (FSD) du Ministère de l'Enseignement Supérieur et de la Recherche. En cas d'absence de réponse formelle du Ministère dans un délai de 2 mois suivant la réception de la demande d'avis, cet avis est réputé favorable.

L'intéressé devra formaliser sa demande d'accès au moyen d'un formulaire (modèle joint en annexe) et des pièces justificatives suivantes (passeport, carte d'identité, cv détaillé, projet scientifique, source de financement), sans possibilité de mandater un tiers. Le refus d'autorisation d'accès n'est pas motivé. La décision de refus est notifiée, le cas échéant, par lettre recommandée avec avis de réception ou équivalent, à l'intéressé.

La possession d'un badge est obligatoire pour accéder à l'Unité. Ce badge est attribué aux personnels non-permanents après avis du Directeur d'Unité.

Les nouveaux entrants en attente de badge doivent signer le cahier d'entrée et de sortie situé à l'accueil de l'Unité.

L'accès aux locaux en dehors des heures ouvrables est expressément et nommément soumis à l'autorisation du Directeur de l'Unité.

Pour les visiteurs :

Les visites au sein d'une Unité ZRR, qui se caractérisent par leur aspect temporaire (5 jours maximum) et leur absence de participation directe aux activités scientifiques et techniques de l'Unité, sont soumises à l'autorisation de son Directeur. Ce dernier doit alerter le FSD de l'Université de Bourgogne, compétent de tout projet de visite jugé sensible. Le FSD de l'UB prendra si nécessaire l'attache des services territoriaux compétents.

Font partie des visiteurs les personnes qui viennent exercer une activité d'enseignement ou suivre un enseignement dans la ZRR, lorsque cet enseignement ne prépare pas à une thèse ou à un doctorat.

Les interventions justifiées par un risque imminent pour la vie, la sécurité des personnes et des biens ne sont pas soumises aux dispositions relatives à l'accès des visiteurs aux locaux.

Au moins 8 jours avant la visite, une demande devra être adressée au Directeur d'Unité. L'autorisation accordée par le Directeur d'Unité ne pourra excéder 5 jours. Lorsque l'autorisation d'accès concerne un étudiant, elle précise que, en plus d'être limitée dans sa durée, elle est strictement limitée dans la journée au temps de présence exigé par l'enseignement suivi.

Le visiteur ne peut accéder aux locaux que muni d'un badge temporaire ou doit être accompagné par un personnel permanent, nommément désigné.

Le Directeur d'Unité doit veiller à la mise à jour du répertoire des visites, qui pourra lui être demandé à tout moment.

A leur arrivée, les visiteurs indiquent dans un répertoire leur nom, prénom, date et lieu de naissance, pays de naissance, nationalité, organisme d'appartenance, ainsi que la date et le motif de la visite. Ils fournissent également

la preuve qu'ils sont bien la personne qui a fait l'objet de l'autorisation en produisant une copie d'un document officiel d'identité.

Ce répertoire doit faire l'objet d'une déclaration au Correspondant informatiques et Libertés (CIL).

Les visites se font toujours en la présence d'un personnel permanent nommément désigné à cet effet (préciser son identité) chargé de contrôler, accompagner et surveiller les visiteurs.

Elles respectent nécessairement le circuit de notoriété ou les autres itinéraires, indiqués en annexe.

Au préalable, les sujets qui ne doivent pas être abordés en présence des visiteurs auront été définis (prévoir les modalités internes à l'Unité qui permettent de définir les sujets abordés et les actualiser).

Les mesures de sécurité de l'Unité sont portées à la connaissance des visiteurs par l'accompagnateur.

En cas d'incident au cours de la visite (sortie du circuit, prise de clichés…), l'accompagnateur doit en avertir immédiatement le Directeur d'Unité, qui informera le FSD de l'UB.

Les visites ne peuvent avoir lieu que pendant les heures ouvrables.

B. En cas d'existence de locaux sensibles

L'accès aux locaux sensibles est condamné par une serrure de sécurité. Son accès est strictement réglementé avec la tenue d'un registre.

Les données relatives aux visiteurs sont consignées dans un registre qui, outre les mentions obligatoires pour l'accès à une ZRR, doit comporter les mentions suivantes : numéro d'une pièce d'identité, domicile, documents éventuellement transmis au visiteur, identité de l'accompagnateur.

II.5.4.2. Conditions d'accès aux locaux et à l'utilisation du matériel

Chaque personne accueillie dans l'unité, doit remplir une fiche « nouvel entrant », prendre connaissance du règlement intérieur, suivre la formation hygiène et sécurité, y compris sécurité des systèmes d'information. L'accès aux locaux est règlementé et soumis à autorisation du directeur. Un badge est délivré à chacun des personnels pour la durée de son affectation ou de son séjour (supérieure à 8 jours). Les personnes non concernées par les activités de l'unité ne peuvent avoir accès aux sites et aux bâtiments sans l'autorisation du directeur d'unité, en dehors des cas prévus par la législation ou la règlementation relative aux droits syndicaux dans la fonction publique.

L'octroi d'un badge pour accéder aux plateformes techniques ainsi qu'aux salles d'expériences **est strictement réservé au personnel dûment autorisé par le directeur d'unité. Sur les sites du Creusot et de Chalon sur Saône, les autorisations sont octroyées par les directeurs d'IUT. Tout accès non autorisé aux ZRR pourra être sanctionné au titre du code pénal (article 413.7).**

Toute personne autorisée, présente sur le site, est tenue de respecter le matériel qui lui est confié, de garder en bon état les locaux, et de s'assurer que les mesures de prévention contre le vol ont été prises. Le matériel ne doit en aucun cas servir à des fins personnelles.

Toute personne quittant l'unité (démission, mutation, départ à la retraite, fin de stage, fin de contrat, fin de travaux de recherche…) doit libérer les locaux de l'unité qui lui étaient attribués et, avant son départ, doit restituer tous matériels et documents mis à sa disposition et appartenant à l'unité, ainsi que toutes les données acquises par l'exécution de son travail, quel que soit le support d'archivage de ces données. **Elle doit s'assurer que tous les produits et matériels dangereux qu'elle a utilisés sont bien identifiés ou éliminés dans les conditions règlementaires.**

Les accès, les abords des locaux ainsi que les couloirs doivent impérativement rester libres de tout encombrement.

Tous les locaux présentant un risque particulier (chimique, biologique, rayonnement…) doivent faire l'objet d'une signalétique spécifique. L'accès aux zones définies règlementairement comme "contrôlées" ou "surveillées" qui existent dans l'unité **est règlementé**, et **seules les personnes autorisées** par le PCR (Personne compétente en radioprotection) peuvent y pénétrer.

II.5.4.3. Prévention-Sécurité

VU le décret n° 82-453 du 28 Mai 1982 modifié relatif à l'hygiène et à la sécurité du travail ainsi qu'à la prévention médicale dans la Fonction publique.

VU le décret nº 2012-571 du 24 avril 2012 relatif aux comités d'hygiène, de sécurité et des conditions de travail dans les établissements publics d'enseignement supérieur relevant du ministre chargé de l'enseignement supérieur

VU l'instruction générale n° INS12294DAJ du 01er Décembre 2012 relative à la santé et à la sécurité au travail au CNRS, il a été décidé de mettre en place un comité local d'hygiène, de sécurité et des conditions de travail (CLHSCT) pour l'unité (voir annexes). Le directeur de l'unité en est le président, les Assistants de Prévention sont membres de droit.

Ses missions sont de contribuer à la protection de la santé et à la sécurité des agents dans leur travail, et analyser les risques professionnels. A cette fin, ils délibèrent chaque année d'un rapport sur l'évolution des risques professionnels, présenté par leur président.

Chaque comité d'hygiène et sécurité élabore son règlement intérieur selon un règlement type. Il se réunit au moins une fois par semestre sur convocation de son président.

S'il incombe au directeur de veiller à la sécurité et à la protection des personnels et d'assurer la sauvegarde des biens de l'unité, la prévention des risques d'accident du travail et des maladies professionnelles requiert de chaque personne travaillant dans l'unité **le strict respect des prescriptions** applicables en matière d'hygiène et sécurité, et

l'application, dans les meilleurs délais, des consignes et recommandations des Assistants de Prévention. Le directeur d'unité doit transcrire les résultats de l'évaluation des risques aux postes de travail dans le document unique. Ce document est mis à jour au moins annuellement et est consultable par les personnels au secrétariat général de l'unité.

A. Rôle des Assistants de Prévention

Chaque agent doit être informé des risques auxquels il peut être exposé, des mesures de prévention qu'il doit prendre et des consignes de sécurité à respecter.

L'Assistant de Prévention nommé par le directeur d'unité, après avis du conseil d'unité, assiste et conseille le directeur dans la démarche d'évaluation des risques et dans la mise en place d'une politique de prévention des risques ainsi que dans la mise en œuvre des règles de sécurité et d'hygiène au travail.

Il doit recevoir les informations nécessaires à l'exercice de ses missions notamment celles concernant :

- les mouvements de personnels dont les nouveaux entrants ;
- l'acquisition de nouveau matériel ;
- la mise en place de nouvelles techniques ou manipulations ;
- les accidents et incidents ;
- les créations ou modifications de locaux et les interventions d'entreprises extérieures.

L'identité de l'Assistant de Prévention et la composition nominale du comité spécial d'hygiène et sécurité sont affichés en bout de couloir des ailes C, D, E et F du bâtiment Sciences Mirande et sur les sites du Creusot et de Chalon sur Saône.

Au moins un Assistant de Prévention est affecté par site géographique principal (Ailes C et D, sites du Creusot et Chalon sur Saône). Il participe à la formation des personnels de tous statuts (titulaires, CDD, doctorants, etc…) dès leur arrivée, et fournit les informations nécessaires à l'accomplissement de leur travail et au respect des consignes générales de sécurité.

Chaque nouvel arrivant doit obligatoirement participer aux journées d'information de type "formation nouveaux entrants" dispensées par l'unité. Les dates et heures sont communiquées par la direction de l'unité. L'absence à ces journées doit être motivée.

B. Organisation des secours

Les dispositions à prendre en cas d'accident et d'incendie font l'objet d'un document spécifique et sont affichées en bout de couloir des ailes C, D, E et F du bâtiment Sciences Mirande et sur les sites du Creusot et de Chalon sur Saône. On y trouve également les numéros d'urgence, la liste des sauveteurs secouristes du travail, la composition de l'équipe d'intervention, et la liste des personnes habilitées électrique. Chaque agent doit prendre connaissance des plans et consignes d'évacuation.

L'unité dispose de cahiers d'enregistrement de santé et sécurité dans lesquels sont consignés tout événement, incident ou accident, ainsi que les observations ou suggestions relatives à la prévention des risques et à l'amélioration des conditions de travail. Ces cahiers d'enregistrement sont consultables et localisés :

Aile C : en salle C223, sur le présentoir de l'espace bibliothèque au 2e étage.

Aile D : en salle D223A, sur le présentoir de l'espace courrier

Sites du Creusot et de Chalon sur Saône : bloc central de l'IUT

C. Surveillance médicale

Tout agent doit se présenter aux visites médicales et examens complémentaires prévus par la réglementation.

Tout personnel féminin d'ICB doit aviser le médecin de prévention aussitôt qu'elle a connaissance de son état, si elle est enceinte.

Le directeur doit veiller à ce que chaque agent de son unité se présente aux convocations du service de médecine de prévention. Tout accident du travail doit être déclaré par le biais d'un formulaire disponible au secrétariat du laboratoire et dans toutes les pharmacies situées à chaque étage et adressé au service ressources humaines de l'établissement employeur de l'agent.

D. Protection contre les rayonnements ionisants

La détention et l'utilisation des sources de rayonnements ionisants sont règlementées. **Nul ne peut détenir, utiliser de telles sources**, notamment les radionucléides, sources scellées, générateurs électriques de rayons X, accélérateurs de particules, **sans déclaration** à l'ASN (Autorité de Sûreté Nucléaire).

Toute infraction à la législation en vigueur peut faire l'objet de sanctions pénales.

La détention et l'utilisation doit se faire dans les règles établies avec l'ASN (Autorité de Sûreté Nucléaire) et sous le contrôle de la PCR (personne compétente en radioprotection) habilitée et désignée par le directeur d'unité.

Toute personne circulant ou travaillant dans l'unité est tenue de se conformer aux consignes générales de radioprotection et aux consignes particulières en vigueur dans les installations.

E. Consignes de protection contre les incendies

- Les interdictions liées aux risques d'incendie sont définies par affichage dans les locaux où l'interdiction s'applique.
- Les extincteurs (eau, poudre, CO_2) sont répartis dans toute l'unité et signalés.
- L'usage des ascenseurs et monte-charges est interdit à toute personne en cas d'incendie.

F. Hygiène générale

Par ailleurs, les prescriptions réglementaires en matière d'hygiène générale doivent être observées dans l'unité (propreté et aménagement des locaux et des installations sanitaires):

- Il est interdit aux personnels de fumer à l'intérieur des bâtiments. Les bureaux individuels ne constituent pas une exception à cette interdiction. Les espaces fumeurs sont prévus à l'extérieur.
- il est interdit de pénétrer ou de demeurer dans l'unité en état d'ébriété. La consommation de boissons alcoolisées dans les locaux de travail est interdite sauf autorisation exceptionnelle du directeur de l'unité.
- Il est interdit d'introduire des animaux dans les locaux.
- Il est interdit de prendre ses repas (hors salles de pauses) dans les laboratoires ou salles d'expérimentation.
- Il est interdit de stocker dans un même réfrigérateur ou chambre froide des produits alimentaires et des produits de laboratoire.
- Les appareils électroménagers mis à disposition des personnels dans les salles de pauses, sont exclusivement réservés à l'usage alimentaire. Ils ne peuvent être en aucun cas utilisés pour des activités expérimentales.

II.5.5. Confidentialité, Publications et Communication, Propriété Intellectuelle

En préalable, la direction d'ICB met en place une politique de sécurité des systèmes d'information (PSSI) et crée à cet effet un comité de sécurité des systèmes d'information (CSSI).

Ce comité est composé de membres nommés par le directeur. La liste est donnée en annexe. Son rôle est de proposer des procédures pour renforcer les mesures de sécurité des systèmes d'information.

Un correspondant « sécurité des systèmes d'information » (CSSI) est nommé par le directeur de l'unité. Son rôle est d'assister et conseiller le directeur dans l'élaboration de la politique de sécurité des systèmes d'information et de sa mise en œuvre. Il informe et sensibilise les personnels travaillant dans l'unité pour la mise en œuvre des consignes de sécurité des systèmes d'information.

II.5.5.1. Confidentialité

Les travaux de l'unité sont par définition des activités confidentielles. Chacun est tenu de respecter la confidentialité des travaux de l'unité ainsi que les résultats scientifiques liés à ceux-ci.

Par conséquent, les personnels de l'unité s'engagent à garder secrètes les informations de toute nature qui leur ont été signalées comme confidentielles, qu'ils auraient pu recueillir à l'occasion des contacts avec les différentes équipes de l'unité, à l'exception de celles :

- Qui sont dans le domaine public ou qui y tombent autrement que par le fait du personnel de l'unité destinataire de l'information,
- Qui sont déjà en la possession ou sont communiquées au personnel de l'unité destinataire par des tiers non tenus au secret.

Les personnels non statutaires accueillis dans l'unité doivent impérativement signer un accord de confidentialité à leur arrivée.

En cas de présentation des travaux et résultats à l'extérieur, l'autorisation du directeur d'unité et du responsable scientifique est obligatoire.

Pour toutes présentations et échanges sur les travaux et résultats de recherche de l'unité avec des partenaires institutionnels et/ou socio-économiques la signature d'un accord de secret entre les parties concernées est fortement recommandée. Les services du partenariat et de la valorisation de la délégation régionale du CNRS et de l'Université de Bourgogne doivent être contactés à cet effet.

L'obligation de secret ne peut faire obstacle à l'obligation qui incombe aux chercheurs affectés à l'unité, d'établir leur rapport annuel d'activité pour l'organisme dont ils relèvent, cette communication à usage interne ne constituant pas une divulgation au sens des lois sur la propriété industrielle.

Les dispositions du présent article ne peuvent pas faire non plus obstacle à la soutenance d'une thèse par un chercheur, un boursier ou un stagiaire affecté à l'unité qui pourra se faire le cas échéant à huis clos.

II.5.5.2. Publications scientifiques

L'autorisation de publier doit être demandée de manière expresse à l'autorité hiérarchique.

Toute publication ou communication du bénéficiaire doit explicitement mentionner le nom de l'unité, de l'Université et du CNRS.

L'intitulé **exact** à faire figurer sur les publications est le suivant :

Laboratoire Interdisciplinaire Carnot de Bourgogne, UMR 6303 CNRS-Université de Bourgogne,
9 Av. A. Savary, BP 47 870, F-21078 DIJON Cedex, France

Cette mention pourra évoluer en fonction des dispositions convenues lors de la négociation de la convention quinquennale.

Un exemplaire de toutes les publications (articles, revues, thèses…) dont tout ou partie du travail a été effectuée à l'Unité doit être remis sous forme électronique dès parution à la gestionnaire de l'équipe ou du département.

Ces dispositions demeurent en vigueur pendant la durée du contrat de l'agent et après son expiration.

A l'issue de sa soutenance de thèse, chaque doctorand est tenu de remettre son ou ses cahiers de laboratoire, une version électronique de son mémoire, et des données de recherche à la gestionnaire de l'équipe ou du département.

II.5.5.3. Diffusion et communication

Toute diffusion et communication des travaux, des résultats scientifiques, d'images, de photos, de films et de toute information sur l'unité doivent faire l'objet d'une autorisation du directeur de l'unité.

Toute diffusion et communication doit respecter les lois sur la presse et tous les moyens de diffusion plus classiques. Il faut notamment faire très attention :

- Aux informations nominatives (déclaration à la CNIL)
- Aux contrats comportant des clauses de confidentialité
- Aux droits d'auteurs (copyright) sur les textes, images, sons, vidéos.

Le directeur d'unité pourra faire appel au service partenariat et valorisation des tutelles CNRS et Université afin d'étudier la confidentialité, les questions sur le droit d'auteur, la brevetabilité ou les possibilités de valorisation des travaux et résultats scientifiques avant leur divulgation.

Le directeur d'unité pourra également faire appel au service communication des tutelles CNRS et Université afin d'obtenir expertise et soutien dans la valorisation de travaux et résultats scientifiques, d'opérations événementielles ou scientifiques (colloques, nouveaux équipements, manifestations grand public..). Le service communication peut aider à définir la (les) meilleure(s) action(s) à mettre en œuvre en fonction des cibles choisies. Il est également à la disposition de l'unité pour transmettre les logos CNRS et Université adaptés à la communication en cours, ceci dans le respect des chartes graphiques en vigueur.

Par ailleurs, le directeur d'unité devra faire appel au service communication des tutelles CNRS et Université afin de valider l'autorisation de diffusion des informations liées à la communication sur les établissements CNRS et Université (logo, charte graphique, site internet, photos, films..).

Toute diffusion d'informations sur support soit papier, soit informatique, soit page web émanant des unités CNRS doit respecter les chartes graphiques du CNRS et de l'Université de Bourgogne qui précisent les règles de communication à respecter par les personnels : quel que soit le support de communication utilisé, la mention de l'appartenance de l'unité aux tutelles CNRS et Université de Bourgogne doit apparaître sous forme de logo ou sous forme de texte.

L'utilisation du logo des tutelles et de l'unité ne peut se faire sans l'autorisation du directeur de l'unité et des représentants dûment habilités des tutelles de l'unité concernées.

La création de sites internet, de blogs et autres diffusions sur internet concernant les travaux d'un ou plusieurs personnels de l'unité doit faire l'objet d'une autorisation du directeur d'unité ainsi qu'aux représentants des tutelles de l'unité.

La diffusion d'informations sur les travaux de l'unité est autorisée seulement sur le site internet officiel de l'unité après demande auprès du directeur de l'unité.

Il est rappelé dans l'installation et la gestion d'un serveur www que le directeur de l'unité est responsable de l'information délivrée par le serveur de son laboratoire (cf. http://www.urec.cnrs.fr/article408.html). De manière analogue à une publication traditionnelle, un serveur doit avoir « un directeur de publication » qui assure la responsabilité de l'information qui est accessible sur le serveur. Cette fonction ne peut être assurée que par le directeur d'unité. Un serveur doit respecter les lois sur la presse et tous les moyens de diffusion plus classiques.

II.5.5.4. Cahiers de laboratoire

Il est demandé à tous les personnels de recherche de l'unité de tenir un cahier de laboratoire afin de garantir le suivi et la protection des résultats de leurs travaux.

Le cahier garantit la traçabilité et la transmission des connaissances, c'est également un outil juridique en cas de litige. Différents modèles sont disponibles auprès des services partenariat et valorisation de la délégation régionale du CNRS et de l'Université de Bourgogne.

Les cahiers de laboratoire appartiennent aux tutelles de l'unité et sont conservés en permanence au laboratoire même après le départ d'un personnel.

Un cahier sera remis à chaque nouvel arrivant personnel de recherche dans l'unité, et devra être stocké en lieu sûr sous la responsabilité du chef d'équipe ou du directeur de thèse.

II.5.5.5. Propriété intellectuelle

Les résultats et notamment les inventions obtenus au sein de l'unité appartiennent aux tutelles de l'unité en application de l'article L.611-7 du code de la propriété intellectuelle.

Les résultats obtenus par les personnels accueillis au sein de l'unité sans lien juridique avec les tutelles, appartiennent aux tutelles en vertu de l'accord de cession de droits qu'ils devront signer à l'obtention de tous les résultats valorisables. Le service partenariat et valorisation de la délégation régionale du CNRS ou les services valorisation des autres tutelles établiront l'accord de cession de droits.

Les droits patrimoniaux sur les logiciels et leur documentation réalisés au sein de l'unité sont dévolus aux tutelles en application de l'article L.113-9 du code de la propriété intellectuelle.

Les tutelles de l'unité disposent seules du droit de protéger les résultats des travaux de l'unité en déposant des titres de propriété intellectuelle auprès des organismes de protection (INPI, APP).

Le personnel de l'unité doit prêter son entier concours aux procédures de protection des résultats issus des travaux auxquels il a participé, et notamment au dépôt éventuel d'une demande de brevet, au maintien en vigueur d'un brevet et à sa défense, tant en France qu'à l'étranger.

Les tutelles s'engagent à ce que le nom des inventeurs soit mentionné dans les demandes de brevets à moins que ceux-ci ne s'y opposent.

II.5.5.6. Contrats, décisions de subvention et ressources propres

Le personnel doit informer le directeur de l'unité de toute collaboration et de toute demande de subvention de l'unité avec des partenaires publics et/ou privés.

Un exemplaire de tout contrat doit être remis au directeur de l'unité après sa signature.

Tout d'achat d'équipement et tout recrutement de personnel doit faire l'objet d'une demande officielle auprès du directeur d'unité.

II.5.6. Dispositions Générales

II.5.6.1. Discipline

Tout manquement aux droits et obligations des agents publics peut faire l'objet d'une sanction disciplinaire.

Pour les personnels CNRS, cette sanction est notifiée par le Délégué régional pour les sanctions du premier groupe (avertissement, blâme) et par le Président du CNRS pour tous les autres groupes de sanctions.

Pour l'Université de Bourgogne, les sanctions disciplinaires sont prises en application des règles régissant chaque corps de personnels.

II.5.6.2. Utilisation des Moyens Informatiques et Sécurité des Systèmes d'Information (SI)

Les SI de l'unité sont soumis aux règles de la politique de sécurité des systèmes d'information de l'état (PSSIE).

Les conditions d'accès aux SI de l'Unité, y compris les SI sensibles relevant de secteurs scientifiques protégés, et de restitution des moyens d'accès aux SI sont définies de façon détaillée par la PSSI opérationnelle applicable à l'Unité **(cf annexe)**. En tout état de cause les personnes non concernées par les activités de l'Unité ne peuvent avoir accès aux systèmes d'information de l'Unité sans l'autorisation du Directeur de l'unité et l'avis du FSD de l'UB.

Le CSSI (chargé de la sécurité des systèmes d'information) assiste et conseille le Directeur d'Unité dans l'élaboration du plan d'action de mise en œuvre de la PSSI opérationnelle de l'Unité et du suivi de sa mise en œuvre. Il informe et sensibilise les personnels travaillant dans l'Unité pour la mise en œuvre des consignes de sécurité des systèmes d'information. Il est le point de contact pour la signalisation des incidents de sécurité des SI qui concernent le personnel et les systèmes d'information de l'Unité et remonte les incidents à la chaîne fonctionnelle SSI décrite par la PSSI opérationnelle de l'Unité. (Romain SURLEAU)

Les personnes qui ont accès aux SI de l'Unité doivent, au préalable, avoir pris connaissance de la Charte de la Sécurité des Systèmes d'Information en vigueur dans l'Unité.

Ces chartes informatiques sont accessibles aux adresses URL suivantes :

http://www.cnrs.fr/Infosecu/Charte.html

http://www.u-bourgogne.fr/CRI-CCUB/charte.html

L'utilisation des réseaux sociaux (par exemple : facebook, twitter,…) requiert la prudence et est soumise aux restrictions suivantes :

1. Interdiction de communiquer ou divulguer des informations liées à toutes les activités (scientifiques, administratives, y compris « conviviales »…) du laboratoire.
2. Interdiction de mentionner ou de référencer le nom des personnels d'ICB et de personnes interagissant avec l'ICB.

Suivant la législation en vigueur, les données professionnelles des établissements publics de recherche doivent être sauvegardées. Pour cette raison, le laboratoire a construit un plan de sauvegarde des données professionnelles conservées dans les ordinateurs mis à disposition des personnels. Ces derniers doivent faciliter la mise en œuvre des procédures de sauvegarde des données professionnelles. Ces procédures sont susceptibles d'actualisations régulières qui seront communiquées par tout moyen jugé opportun dont circulaire, courriel ou intranet.

II.5.6.3. UTILISATION DES RESSOURCES TECHNIQUES COLLECTIVES

L'utilisation des ressources techniques collectives est soumise à des règles explicitées via des fiches de liaison signées par le responsable d'équipe ou l'encadrant, et via l'utilisation de l'application en ligne.

II.5.6.4. DURÉE DE VALIDITÉ DU RÈGLEMENT INTÉRIEUR

Le règlement intérieur entre en vigueur à la date de signature par le Délégué régional du CNRS et des représentants dûment habilités des autres tutelles. Il peut être modifié lors du changement de Directeur de l'Unité, à son initiative ou à la demande des tutelles suite à une évolution réglementaire importante et toujours dans le respect des consultations requises au niveau réglementaire.

Dans tous les cas, à la nomination d'un nouveau Directeur d'Unité, le présent règlement intérieur et ses annexes lui sont remis par le Délégué Régional du CNRS ou le Président de l'Université de Bourgogne.

II.5.6.5. PUBLICITÉ DU RÈGLEMENT INTÉRIEUR

Le présent règlement intérieur et ses annexes (mises à jour) sont portés à la connaissance des personnels, et consultables sur le site Intranet de l'unité : http://icb.u-bourgogne.fr/fr/intranet.html

Il annule et remplace le précédent règlement intérieur approuvé par le Conseil du Laboratoire le 27/09/2012.

Fait à DIJON le 15/12/2014.

Pour le Président du CNRS
Et par délégation
Le Délégué Régional
P. PIERI
(Signature et sceau sur l'original)

Pour l'Université de Bourgogne
Le Président
A. BONNIN

(Signature et sceau sur l'original)

Le Directeur de l'Unité
A. Dereux
(Signature et sceau sur l'original)

II.6. Appendix: List of research products and achievements

II.6.1. Scientific output: Publications

This section provides the list of papers referenced in Web of Sciences that were published in the period 2010-June 2015. The provides citation counts were also extracted in June 2015 in Web of Sciences. When possible, clicking on the title of a publication activates the paper DOI, thereby linking to the webpage of the paper as maintained by the journal publisher. The list of conference proceedings is limited to the proceedings referenced in Web of Sciences. Proceedings not referenced in Web of Sciences appear in the list of contributions to conferences. Books and chapters of books are reported in section I.2.2 (Academic appeal & reputation) because Web of Sciences does not enable their comprehensive monitoring.

The underlined authors are names of ICB permanent personnels only limited to professors (PR) & assistant professors (MC), CNRS Researchers (CR) & CNRS Directors of Research (DR) and to Research Engineers (IR, both CNRS and UB) . Names of non-permanent personnels, including PhD students and post-docs, were not underlined because the many ambiguities that may result of their other affiliations (preceding and following their period with ICB) and of the possibilities of homonyms make that the design of any consistent treatment represents a non pertinent challenge.

In order to allow referencing in the text of part I, the numbering is going through all five ICB departments according to the table below. In the text of part I, a number between brackets refers to an article while a number preceded by the letter C points to a conference proceeding.

A cross-department paper is referenced in the lists of each department that contributed to the paper. In the table below, i=1,2 corresponds to articles and conference proceedings respectively so that the totals of ICB publications (T_i) are obtained from the sums (D_i) of papers of each department and by managing consistently the effect of multiple counting cross department papers. Except for two articles and one conference proceeding involving three departments, the latter occurred pairwise and lead to the sums C_i. For each type of papers, the totals not including cross-department papers are therefore $T_1=D_1-(C_1-2)/2$ and $T_2=D_2-(C_2-1)/2$.

Table II.6.1	Articles referenced in Web of Sciences			Conference proceedings referenced in Web of Sciences		
ICB Department	Number	Range in list of section II.6.1.1.	Cross-department	Number	Range in list of section II.6.1.1.	Cross-department
ICQ	198	1-198	25	6	1-6	1
PHOTONIQUE	323	199-521	55	52	7-58	6
NANO	157	522-678	57	30	59-78	14
PMDM	134	679-812	16	28	79-106	1
INTERFACES	202	813-1014	23	11	107-117	5
DTAI	57	1015-1071	20	0	-	0
Sums	**1071**	-	**196**	**127**	-	**27**
	(D_1)	-	(C_1)	(D_2)	-	(C_2)
Total discarding multiple counting of cross-department papers		**974** (T_1)			**114** (T_2)	

II.6.1.1. Department ICQ

1. *Geometric versus numerical optimal control of a dissipative spin-1/2 particle*
   M. Lapert, Y. Zhang, M. Braun, S. J. Glaser, D. Sugny
   Phys. Rev. A, 82, 063418 (2010). Citations : 9.

2. *On the "expanded local mode" approach applied to the methane molecule*
   O. N. Ulenikov, E. S. Bekhtereva, C. Leroy, A. L. Fomchenko
   J. Mol. Spectrosc., 264, 61-65 (2010). Citations : 3.

3. *Two frequency oscillation of a photorefractive oscillator as a perturbation of the mirrorless oscillation*
   Riadh Rebhi, Pierre Mathey, Hans-Rudolf Jauslin
   J. Opt. Soc. Am. B-Opt. Phys., 27, 2378-2383 (2010). Citations : 1.

4. *Virtual atomic and molecular data centre*
M. L. Dubernet, V. Boudon, J. L. Culhane, M. S. Dimitrijevic, A. Z. Fazliev, C. Joblin, F. Kupka, G. Leto, P. Le Sidaner, P. A. Loboda, H. E. Mason, N. J. Mason, C. Mendoza, G. Mulas, T. J. Millar, L. A. Nunez, V. I. Perevalov, N. Piskunov, Y. Ralchenko, G. Rixon, L. S. Rothman, E. Roueff, T. A. Ryabchikova, A. Ryabtsev, S. Sahal-Brechot, B. Schmitt, S. Schlemmer, J. Tennyson, V. G. Tyuterev, N. A. Walton, V. Wakelam, C. J. Zeippen
J. Quant. Spectrosc. Radiat. Transf., 111, 2151-2159 (2010). Citations : 74.

5. *The energy minimization problem for two-level dissipative quantum systems*
B. Bonnard, O. Cots, N. Shcherbakova, D. Sugny
J. Math. Phys., 51, 092705 (2010). Citations : 10.

6. *Adiabatic approximation for quantum dissipative systems: Formulation, topology, and superadiabatic tracking*
G. Dridi, S. Guerin, H. R. Jauslin, D. Viennot, G. Jolicard
Phys. Rev. A, 82, 022109 (2010). Citations : 10.

7. *Strong-field two-photon transition by phase shaping*
Sangkyung Lee, Jongseok Lim, Jaewook Ahn, Vahe Hakobyan, Stephane Guerin
Phys. Rev. A, 82, 023408 (2010). Citations : 8.

8. *Theoretical Sensitivity of the C(P-3) + OH(X-2 Pi) -> CO(X-1 Sigma(+)) + H(S-2) Rate Constant: The Role of the Long-Range Potential*
Mohamed Jorfi, Beatrice Bussery-Honvault, Pascal Honvault, Thierry Stoecklin, Pascal Larregaray, Philippe Halvick
J. Phys. Chem. A, 114, 7494-7499 (2010). Citations : 7.

9. *Simultaneous time-optimal control of the inversion of two spin-1/2 particles*
E. Assemat, M. Lapert, Y. Zhang, M. Braun, S. J. Glaser, D. Sugny
Phys. Rev. A, 82, 013415 (2010). Citations : 26.

10. *Influence of third-order dispersion on the propagation of incoherent light in optical fibers*
C. Michel, P. Suret, S. Randoux, H. R. Jauslin, A. Picozzi
Opt. Lett., 35, 2367-2369 (2010). Citations : 18.

11. *Essential features of optical processes in neon-buffered submicron-thin Rb vapor cell*
Grant Hakhumyan, Armen Sargsyan, Claude Leroy, Yevgenya Pashayan-Leroy, Aram Papoyan, David Sarkisyan
Opt. Express, 18, 14577-14585 (2010). Citations : 7.

12. *Absolute instability in backward wave four-wave mixing: spatial effects*
Pierre Mathey, Hans-Rudolf Jauslin, Gregory Gadret, Gary Cook, Dean R. Evans, Serguey Odoulov
J. Opt. Soc. Am. B-Opt. Phys., 27, 1481-1486 (2010). Citations : 1.

13. *Line broadening coefficient calculations for methane perturbed by nitrogen*
Tony Gabard, Vincent Boudon
J. Quant. Spectrosc. Radiat. Transf., 111, 1328-1343 (2010). Citations : 9.

14. *C-3 nu Top Data System (C3 nu TDS) software for spectrum simulation of XY(3)Z symmetric-top molecules using the O(3) superset of C-infinity nu superset of C-3 nu group chain*
A. El Hilali, Ch. Wenger, V. Boudon, M. Loete
J. Quant. Spectrosc. Radiat. Transf., 111, 1305-1315 (2010). Citations : 0.

15. *The high-resolution far-infrared spectrum of methane at the SOLEIL synchrotron*
V. Boudon, O. Pirali, P. Roy, J. -B. Brubach, L. Manceron, J. Vander Auwera
J. Quant. Spectrosc. Radiat. Transf., 111, 1117-1129 (2010). Citations : 30.

16. *Static polarizability surfaces of the van der Waals complex CH4-N-2*
Mikhail A. Buldakov, Victor N. Cherepanov, Yulia N. Kalugina, Natalia Zvereva-Loete, Vincent Boudon
J. Chem. Phys., 132, 164304 (2010). Citations : 4.

17. *Effects of angular pump mismatch for the semi-linear oscillator*
R. Rebhi, P. Mathey, H. R. Jauslin, B. Sturman
Appl. Phys. B-Lasers Opt., 99, 163-172 (2010). Citations : 2.

18. *Fractional Bidromy in the Vibrational Spectrum of HOCl*
E. Assemat, K. Efstathiou, M. Joyeux, D. Sugny
Phys. Rev. Lett., 104, 113002 (2010). Citations : 5.

19. *Quantum dynamics of the C(D-1)+HD and C(D-1)+n-D-2 reactions on the a approximate to (1)A(') and b approximate to (1)A(') surfaces*
Paolo Defazio, Pablo Gamallo, Miguel Gonzalez, Sinan Akpinar, Beatrice Bussery-Honvault, Pascal Honvault, Carlo Petrongolo
J. Chem. Phys., 132, 104306 (2010). Citations : 11.

20. *Shaping coherent excitation of atoms and molecules by a train of ultrashort laser pulses*
A. Gogyan, S. Guerin, Yu. Malakyan
Phys. Rev. A, 81, 033401 (2010). Citations : 3.

21. *Singular Extremals for the Time-Optimal Control of Dissipative Spin 1/2 Particles*
M. Lapert, Y. Zhang, M. Braun, S. J. Glaser, D. Sugny
Phys. Rev. Lett., 104, 083001 (2010). Citations : 54.

22. *Integrable Hamiltonian systems with swallowtails*
K. Efstathiou, D. Sugny
J. Phys. A-Math. Theor., 43, 085216 (2010). Citations : 5.

23. *Creation of atomic W state in a cavity by adiabatic passage*
M. Amniat-Talab, R. Nader-Ali, S. Guerin, M. Saadati Niari
Opt. Commun., 283, 622-627 (2010). Citations : 6.

24. *Anomalous Thermalization of Nonlinear Wave Systems*
Pierre Suret, Stephane Randoux, Hans R. Jauslin, Antonio Picozzi
Phys. Rev. Lett., 104, 054101 (2010). Citations : 27.

25. *Quadratic-nonlinear Landau-Zener transition for association of an atomic Bose-Einstein condensate with inter-particle elastic interactions included*
A. Ishkhanyan, R. Sokhoyan, K. A. Suominen, C. Leroy, H. R. Jauslin
Eur. Phys. J. D, 56, 421-429 (2010). Citations : 2.

26. *Dynamics of the C(D-1)+H-2 reaction: A comparison of crossed molecular beam experiments with quantum mechanical and quasiclassical trajectory calculations on the first two singlet (1(1)A ' and 1(1)A ") potential energy surfaces*
Nadia Balucani, Piergiorgio Casavecchia, F. J. Aoiz, Luis Banares, Jean-Michel Launay, Beatrice Bussery-Honvault, Pascal Honvault
Mol. Phys., 108, 373-380 (2010). Citations : 12.

27. *Analysis of highly excited 'hot' bands in the SO2 molecule: v(2)+3v(3)-v(2) and 2v(1)+v(2)+v(3)-v(2)*
O. N. Ulenikov, E. S. Bekhtereva, O. V. Gromova, S. Alanko, V-M Horneman, C. Leroy
Mol. Phys., 108, 1253-1261 (2010). Citations : 9.

28. *Singular tori as attractors of four-wave-interaction systems*
S. Lagrange, D. Sugny, A. Picozzi, H. R. Jauslin
Phys. Rev. E, 81, 016202 (2010). Citations : 18.

29. *Dipole moment surface of the van der Waals complex CH4-N-2*
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Mathieu Artus, Lotfi Ben Tahar, Frederic Herbst, Leila Smiri, Francoise Villain, Nader Yaacoub, Jean-Marc Greneche, Souad Ammar, Fernand Fievet
J. Phys. Cond. Matter, 23, 506001 (2011).

1020. *Ferromagnetic resonance behavior of spark plasma sintered Ni-Zn ferrite nanoparticles produced by a chemical route*
R. Valenzuela, Z. Beji, F. Herbst, S. Ammar
J. Appl. Phys., 109, (2011).

1021. *Surface functionalisation of cellulose with noble metals nanoparticles through a selective nucleation*
Sami Boufi, Ana Maria Ferraria, Ana Maria Botelho do Rego, Nicolas Battaglini, Frederic Herbst, Manuel Rei Vilar
Carbohydr. Polym., 86, 1586-1594 (2011).

1022. *Structure and chemical bonds in reactively sputtered black Ti-C-N-O thin films*
J. M. Chappe, M. C. Marco de Lucas, L. Cunha, C. Moura, J. F. Pierson, L. Imhoff, O. Heintz, V. Potin, S. Bourgeois, F. Vaz
Thin Solid Films, 520, 144-151 (2011).

1023. *Interface reactivity study between La0 6Sr0 4Co0 2Fe0 8O3-delta (LSCF) cathode material and metallic interconnect for fuel cell*
M. R. Ardigo, A. Perron, L. Combemale, O. Heintz, G. Caboche, S. Chevalier
J. Power Sources, 196, 2037-2045 (2011).

1024. *Passivity and resistance to localised corrosion of duplex stainless steels after ageing in solution containing chloride ions: local study using SIMS, high-resolution Auger and microcapillary techniques*
H. Zhang, V. Vignal, O. Heintz, J. Peultier
Rev. Metall.-Cah. Inf. Techn., 108, 9-15 (2011).

1025. *Low Temperature H2S Removal with Metal-Doped Nanostructure ZnO Sorbents: Study of the Origin of Enhanced Reactivity in Cu-Containing Materials*
Jonathan Skrzypski, Igor Bezverkhyy, Olivier Heintz, Jean-Pierre Bellat
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1026. *Electroactive polymeric material with condensed structure on the basis of magnesium(II) polyporphine*

Mikhail A. Vorotyntsev, Dmitry V. Konev, Charles H. Devillers, Igor Bezverkhyy, Olivier Heintz
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1027. *Scale composition and oxidation mechanism of the Ti-46Al-8Nb alloy in air at 700 and 800 degrees C*
M. Mitoraj, E. Godlewska, O. Heintz, N. Geoffroy, S. Fontana, S. ChevalierIntermetallics, 19, 39-47 (2011).

1028. *Influence of long-term ageing in solution containing chloride ions on the passivity and the corrosion resistance of duplex stainless steels*
V. Vignal, H. Zhang, O. Delrue, O. Heintz, I. Popa, J. PeultierCorrosion Sci., 53, 894-903 (2011).

1029. *Synergistic effects of multiwalled carbon nanotubes and Al on the electrochemical hydrogen storage properties of Mg2Ni-type alloy prepared by mechanical alloying*
L. W. Huang, O. Elkedim, M. Nowak, M. Jurczyk, R. Chassagnon, D. W. Meng
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1030. *Mg2-xTixNi (x=0, 0.5) alloys prepared by mechanical alloying for electrochemical hydrogen storage: Experiments and first-principles calculations*
L. W. Huang, O. Elkedim, M. Nowak, R. Chassagnon, M. Jurczyk
Int. J. Hydrog. Energy, 37, 14248-14256 (2012).

1031. *Effect of Yb3+ concentration on optical properties of Yb:CaF2 transparent ceramics*
Andreas Lyberis, Adam J. Stevenson, Akiko Suganuma, Sandrine Ricaud, Frederic Druon, Frederic Herbst, Daniel Vivien, Patrick Gredin, Michel Mortier
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1032. *Synthesis of highly soluble polymer-coated magnetic nanoparticles using a combination of diazonium salt chemistry and the iniferter method*
Nebewia Griffete, Aazdine Lamouri, Frederic Herbst, Nordin Felidj, Souad Ammar, Claire Mangeney
RSC Adv., 2, 826-830 (2012).

1033. *K-10 montmorillonite: An efficient and reusable catalyst for the aerobic C-C bond cleavage of alpha-substituted ketones*
Iman El Younssi, Tarik Rhadfi, Ahmed Atlamsani, Jean-Paul Quisefit, Frederic Herbst, Khalid Draoui
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1034. *Ferromagnetic resonance in Ni-Zn ferrite nanoparticles in different aggregation states*
Raul Valenzuela, Frederic Herbst, Souad Ammar
J. Magn. Magn. Mater., 324, 3398-3401 (2012).

1035. *Co1-xZnxFe2O4 (0 <= x <= 1) nanocrystalline solid solution prepared by the polyol method: Characterization and magnetic properties*
L. Ben Tahar, H. Basti, F. Herbst, L. S. Smiri, J. P. Quisefit, N. Yaacoub, J. M. Greneche, S. Ammar
Mater. Res. Bull., 47, 2590-2598 (2012).

1036. *Structure and magnetocaloric properties of La0.8Ag0.2-xKxMnO3 perovskite manganites*
Y. Regaieg, M. Koubaa, W. Cheikhrouhou Koubaa, A. Cheikhrouhou, L. Sicard, S. Ammar-Merah, F. Herbst
Mater. Chem. Phys., 132, 839-845 (2012).

1037. *Rapid solid state synthesis by spark plasma sintering and magnetic properties of LaMnO3 perovskite manganite*
Y. Regaieg, G. Delaizir, F. Herbst, L. Sicard, J. Monnier, D. Montero, B. Villeroy, S. Ammar-Merah, A. Cheikhrouhou, C. Godart, M. Koubaa
Mater. Lett., 80, 195-198 (2012).

1038. *Electrochemistry of methylene blue at an alkanethiol modified electrode*
Emilie Barou, Marcel Bouvet, Olivier Heintz, Rita Meunier-PrestElectrochim. Acta, 75, 387-392 (2012).

1039. *Experimental study of the stability and phase relations of clays at high temperature in a thermal gradient*
O. Vidal, A. Baldeyrou, D. Beaufort, B. Fritz, N. Geoffroy, B. Lanson
Clay and Clay Minerals, 60-2, 200-225 (2012).

1040. *Structural characterization and electrochemical hydrogen storage properties of Ti2-xZrxNi (x=0, 0.1, 0.2) alloys prepared by mechanical alloying*
X. D. Li, O. Elkedim, M. Nowak, M. Jurczyk, R. ChassagnonInt. J. Hydrog. Energy, 38, 12126-12132 (2013).

1041. *Growth of semiconducting heterostructures by MOCVD*
Nathalia P. S. M. Rios, Paulo J. P. dos Santos, Reza Dabirian, Anderson S. L. Gomes, Marco A. Sacilotti, Yvon Lacroute, Remi Chassagnon, Eduardo H. L. Falcao
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1042. *Genesis of amorphous calcium carbonate containing alveolar plates in the ciliate Coleps hirtus (Ciliophora, Prostomatea)*
Marie-Louise Lemloh, Frederic Marin, Frederic Herbst, Laurent Plasseraud, Michael Schweikert, Johannes Baier, Joachim Bill, Franz Bruemmer
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1043. *Effect of Air Annealing on the Structural and Magnetic Properties of LaMnO3 Perovskite Produced by Reactive Spark Plasma Sintering Route*

Y. Regaieg, G. Delaizir, L. Sicard, J. Monnier, F. Herbst, B. Villeroy, C. Godart, M. Koubaa, A. Cheikhrouhou, S. Ammar-Merah
J. Supercond. Nov. Magn, 26, 1467-1471 (2013).

1044. *Influence of the grain orientation spread on the pitting corrosion resistance of duplex stainless steels using electron backscatter diffraction and critical pitting temperature test at the microscale*
V. Vignal, D. Ba, H. Zhang, F. Herbst, S. Le Manchet
Corrosion Sci., 68, 275-278 (2013).

1045. *Grafting and characterization of dodecylphosphonic acid on copper: Macro-tribological behavior and surface properties*
Mohamed Moustapha Moine, Xavier Roizard, Jean-Marie Melot, Luc Carpentier, Pierre-Henri Cornuault, Fabrice Lallemand, Jean-Marie Rauch, Olivier Heintz, Severine LallemandSurf. Coat. Technol., 232, 567-574 (2013).

1046. *Electrochemical behaviour of copper-nickel alloys as immobilisation matrices for the storage of fission products in CO2-enriched synthetic groundwater*
N. Mary, C. Alemany-Dumont, B. Normand, O. Heintz, V. Broudic, C. Jegou
Electrochim. Acta, 98, 11-19 (2013).

1047. *Effect of Water Vapor on the Oxidation Mechanisms of a Commercial Stainless Steel for Interconnect Application in High Temperature Water Vapor Electrolysis*
Maria Rosa Ardigo, Ioana Popa, Sebastien Chevalier, Sylvain Weber, Olivier Heintz, Michel Vilasi
Oxid. Met., 79, 495-505 (2013).

1048. *Passive properties of lean duplex stainless steels after long-term ageing in air studied using EBSD, AES, XPS and local electrochemical impedance spectroscopy*
V. Vignal, H. Krawiec, O. Heintz, D. Mainy
Corrosion Sci., 67, 109-117 (2013).

1049. *Fast and continuous synthesis of nanostructured iron spinel in supercritical water: influence of cations and citrates*
L. Maurizi, F. Bouyer, M. Ariane, R. Chassagnon, N. Millot
RSC Adv., 4, 45673-45678 (2014).

1050. *Subphthalocyanines: addressing water-solubility, nano-encapsulation, and activation for optical imaging of B16 melanoma cells*
Yann Bernhard, Pascale Winckler, Remi Chassagnon, Philippe Richard, Elodie Gigot, Jean-Marie Perrier-Cornet, Richard A. Decreau
Chem. Commun., 50, 13975-13978 (2014).

1051. *Influence of the microstructure on the corrosion behaviour of low-carbon martensitic stainless steel after tempering treatment*
V. Vignal, S. Ringeval, S. Thiebaut, K. Tabalaiev, C. Dessolin, O. Heintz, F. Herbst, R. Chassagnon
Corrosion Sci., 85, 42-51 (2014).

1052. *The Skeleton of the Staghorn Coral Acropora millepora: Molecular and Structural Characterization*
Paula Ramos-Silva, Jaap Kaandorp, Frederic Herbst, Laurent Plasseraud, Gerard Alcaraz, Christine Stern, Marion Corneillat, Nathalie Guichard, Christophe Durlet, Gilles Luquet, Frederic MarinPLoS One 9, (2014).

1053. *High-resolution characterization of the diffusion of light chemical elements in metallic components by scanning microwave microscopy*
Virgil Optasanu, Eric Bourillot, Pauline Vitry, Cedric Plassard, Laure Beaurenaut, Pierre Jacquinot, Frederic Herbst, Pascal Berger, Eric Lesniewska, Tony Montessin
Nanoscale, 6, 14932-14938 (2014).

1054. *On the microstructural and magnetic properties of fine-grained CoFe2O4 ceramics produced by combining polyol process and spark plasma sintering*
T. Gaudisson, M. Artus, U. Acevedo, F. Herbst, S. Nowak, R. Valenzuela, S. Ammar
J. Magn. Magn. Mater., 370, 87-95 (2014).

1055. *One pot microwave assisted synthesis of bisphosphonate alkene capped gold nanoparticles*
Romain Aufaure, Yoann Lalatonne, Nicole Lievre, Olivier Heintz, Laurence Motte, Erwann Guenin
RSC Adv., 4, 59315-59322 (2014).

1056. *Impact of optical and structural aging in As2S3 microstructured optical fibers on mid-infrared supercontinuum generation*
O. Mouawad, F. Amrani, B. Kibler, J. Picot-Clemente, C. Strutynski, J. Fatome, F. Desevedavy, G. Gadret, J-C Jules, O. Heintz, E. Lesniewska, F. Smektala
Opt. Express, 22, 23912-23919 (2014).

1057. *Non Thermal Plasma Functionalized 2D Carbon-Carbon Composites as Supports for Co Nanoparticles*
Julien Souquet-Grumey, Philippe Ayrault, Olivier Heintz, Joel Barrault, Jean-Michel Tatibouet, Herve Plaisantin, Jacques Thebault, Sabine Valange, Elodie FourrePlasma Chem. Plasma Process., 34, 287-300 (2014).

1058. *Surface modifications induced by pulsed-laser texturing-Influence of laser impact on the surface properties*
S. Costil, A. Lamraoui, C. Langlade, O. Heintz, R. Oltra
Appl. Surf. Sci., 288, 542-549 (2014).

1059. *Flash annealing influence on structural and electrical properties of TiO2/TiO/Ti periodic multilayers*

Arnaud Cacucci, Olivier Heintz, Ioannis Tsiaoussis, Ludovic Avril, Valerie Potin, Luc Imhoff, Nicolas Martin
Thin Solid Films, 553, 47-51 (2014).

1060. *Adsorption of gelatin during electrodeposition of copper and tin-copper alloys from acid sulfate electrolyte*
Charline Meudre, Laurence Ricq, Jean-Yves Hihn, Virginie Moutarlier, Alexandra Monnin, Olivier Heintz
Surf. Coat. Technol., 252, 93-101 (2014).

1061. *Water Adsorption in Flexible Gallium-Based MIL-53 Metal-Organic Framework*
F-X Coudert, A.U. Ortiz, V. Haigis, D. Bousquet, A.H. Fuchs, A. Ballandras, G. Weber, I. Bezverkhy, N. Geoffroy, J.-P. Bellat, G. Ortiz, G. Chaplais, J. Patarin, A. Boutin
J. Phys. Chem. C, 118 (10), 5397-5405 (2014).

1062. *Structural and hydrogenation study on the ball milled TiH2-Mg-Ni*
X. D. Li, O. Elizedim, F. Cuevas, R. Chassagnon
Int. J. Hydrog. Energy, 40, 4212-4218 (2015).

1063. *Dispersion of titanate nanotubes for nanomedicine: comparison of PEI and PEG nanohybrids*
Anne-Laure Papa, Julien Boudon, Vanessa Bellat, Alexis Loiseau, Harender Bisht, Fadoua Sallem, Remi Chassagnon, Veronique Berard, Nadine Millot
Dalton Trans., 44, 739-746 (2015).

1064. *A multi-step mechanism and integrity of titanate nanoribbons*
Vanessa Bellat, Remi Chassagnon, Olivier Heintz, Lucien Saviot, David Vandroux, Nadine Millot
Dalton Trans., 44, 1150-1160 (2015).

1065. *Nanovectorization of TRAIL with Single Wall Carbon Nanotubes Enhances Tumor Cell Killing*
Al Batoul Zakaria, Fabien Picaud, Thibault Rattier, Marc Pudlo, Lucien Saviot, Remi Chassagnon, Jeannine Lherminier, Tijani Gharbi, Olivier Micheau, Guillaume HerlemNano Lett., 15, 891-895 (2015).

1066. *Dual atmosphere study of the K41X stainless steel for interconnect application in high temperature water vapour electrolysis*
M. R. Ardigo, I. Popa, L. Combemale, S. Chevalier, F. Herbst, P. Girardon
Int. J. Hydrog. Energy, 40, 5305-5312 (2015).

1067. *Ultrafine grained high density manganese zinc ferrite produced using polyol process assisted by Spark Plasma Sintering*
T. Gaudisson, Z. Beji, F. Herbst, S. Nowak, S. Ammar, R. Valenzuela
J. Magn. Magn. Mater., 387, 90-95 (2015).

1068. *Polyol synthesis of non-stoichiometric Mn-Zn ferrite nanocrystals: structural /microstructural characterization and catalytic application*
Z. Beji, M. Sun, L. S. Smiri, F. Herbst, C. Mangeney, S. Ammar
RSC Adv., 5, 65010-65022 (2015).

1069. *Influence of magnesium content on the corrosion resistance of the cut-edges of Zn-Mg-coated steel*
F. Thebault, B. Vuillemin, R. Oltra, C. Allely, K. Ogle, O. Heintz
Corrosion Sci., 97, 100-106 (2015).

1070. *Phthalocyanine-titanate nanotubes: a promising nanocarrier detectable by optical imaging in the so-called imaging window*
J. Paris, Y. Bernhard, J. Boudon, O. Heintz, N. Millot, R. A. DecreauRSC Adv., 5, 6315-6322 (2015).

1071. *Nanostructured Pt-TiO_2 composite thin films obtained by direct liquid injection metal organic chemical vapor deposition: Control of chemical state by X-ray photoelectron spectroscopy*
L. Avril, S. Bourgeois, P. Simon, B. Domenichini, N. Zanfoni, F. Herbst, L. Imhoff
Thin Solid Films (to be published, 2015)

II.6.2. Scientififc output: Talks & Posters in Conferences

Department breakdown of ICB representations by speakers and posters during the 2010-2015 period								
ICB Dpt	*Permanent staff*	Plenary talks	Key lectures	Invited lectures	Invited talks	Oral contributions	Posters	TOTAL representations
ICQ	*9*	4	1	18	69	45	132	269
PHOTONIQUE	*29*	5	1	32	169	194	84	485
NANO	*16*	5	3	18	23	66	64	179
PMDM	*30*	1	4	8	17	98	33	161
INTERFACES	*21*	6	6	9	41	146	87	295
TOTAL ICB	*105*	21	15	85	319	549	400	1 389

II.6.2.1. Department ICQ

A. Plenary talks

1. *Monodromie Hamiltonienne: de la spectroscopie à l'optique non-linéaire*
   D. Sugny, M. Joyeux and D. Sadovskii
   PAMO 2010
   Orsay, France. (02/07/2010)
2. *Molecular processes driven by laser*
   S. Guerin
   Journées Nationales Nanosciences et Nanotechnologies 2011
   Strasbourg, France. (07/11/2011)
2. *Hamiltonian singularities for the polarization control in optical fibers*
   E. Assémat, A. Picozzi and D. Sugny
   SIAM conference on Nonlinear Waves and Coherent structure
   Seattle, USA. (15/06/2012)
4. *Optimal control of spin systems*
   D. Sugny
   27 th IFIP TC7 Conference 2015 on System Modelling and Optimization
   Sophia Antipolis, France. (02/07/2015)

B. Key lecture

1. *Optimal control of spin systems with applicatios in MRI*
   D. Sugny
   International conference on Magnetic Resonance Microscopy
   Munich, Germany. (02/08/2015)

C. Invited lectures

1. *Optimal control of quantum systems*
   D. Sugny
   Séminaire, Laboratoire de physique de la matière condensée
   Grenoble, France. (10/04/2010)
2. *Atomic and Molecular Spectroscopy : Bose-Einstein Condensates and Nanocells*
   Leroy C.
   Lectures at Tomsk State University as Invited Professor
   Tomsk, Russie. (24/04/2010)
3. *Optimal control of quantum systems*
   D. Sugny
   Séminaire, LASIM
   Lyon, France. (10/03/2011)
4. *Strong-field quantum control by designed pulses*
   S. Guerin
   Summer School Fastquast "Ultrafast Coherent and Quantum Control"
   Oxford, UK. (29/09/2011)

5. *Optimal control of spin systems with applications in medical imaging*
D. Sugny
Séminaire, CREATIS
Lyon, France. (15/12/2011)

6. *Singularities in the spatiotemporal dynamics of nonlinear wave systems*
D. Sugny
Séminaire, Laboratoire de la matière condensée
Nice, France. (05/02/2012)

7. *Optimal control of spin systems*
D. Sugny
Séminaire, Université Technique de Munich
Munich, Allemagne. (20/03/2012)

8. *Optimal control of quantum systems*
D. Sugny
Séminaire, Université de Kassel
Kassel, Allemagne. (05/04/2012)

9. *Optimal control of quantum systems*
D. Sugny
Séminaire, UTINAM
Besancon, France. (20/04/2012)

10. *Lie algebras and their applications to the problems of atoms, molecules, and nanoparticles*
Leroy C.
Lectures at Tomsk State University as Invited Professor
Tomsk, Russie. (24/04/2012)

11. *Optimal control of spin systems*
D. Sugny
Séminaire, University of Wurzburg
Wurzburg, Allemagne. (20/05/2012)

12. *Optimal control of spin systems*
D. Sugny
Séminaire, University of Aarhus
Aarhus, Danemark. (20/06/2012)

13. *Quantum optimal control theory*
D. Sugny
Summer school on quantum dynamics and chemistry
Orsay, France. (25/06/2013)

14. *3 series of 5 lectures in Quantum Mechanics*
Leroy C.
Lectures at Tomsk Polytechnic University as Invited Professor
Tomsk, Russie. (26/02/2014)

15. *Optimal control of quantum systems*
D. Sugny
Séminaire, UTINAM
Besancon, France. (20/04/2014)

16. *Arbitrary qudit gates by adiabatic passage*
B. Rousseau and S. Guerin
QPCS Summer school
Sevre, France. (25/06/2014)

17. *6 lectures in Quantum Mechanics*
Leroy C.
Lectures at Tomsk Polytechnic University as Invited Professor
Tomsk, Russie. (19/09/2014)

18. *Optimal control of spin systems with applications in medical imaging*
D. Sugny
Séminaire, CREATIS
Lyon, France. (15/03/2015)

D. Invited talks

1. *Algebraic study of pyramidal XY 3 molecules in vibrationally high excited states.*
Sanzharov N., Leroy C., Pluchart L., Michelot F.
Metamorphose : FRS-FNRS contact group for HRMS
Bruxelles, Belgique. (08/02/2010)

2. *The energy minimization problem for the optimal control of dissipative two-level systems*
D. Sugny and B. Bonnard
MTNS 2010
Budapest, Hungary. (05/07/2010)

3. *State-of-the Art of Theoretical Modelling of the Absorption Spectrum of Methane for Planetary Applications*
V. BOUDON T. GABARD, Ch. WENGER, A. NIKITIN, Vl. G. TYUTEREV
International Workshop : Spectroscopy of Methane and Planetary Applications
Dijon, France. (8/11/2010)

4. *Quantum control by parallel adiabatic passage: From quantum information processing to laser-driven quantum machines*
S. Guerin
Seminar at Aarhus University
Aarhus, Denmark. (07/04/2011)

5. *Quantum- mechanical calculations of the nuclear spin conversion of molecular hydrogen through reaction with H+ ions*
P. Honvault
Ion chemistry in space, COST Astrochemistry meeting,
Prague, Czech Republic. (17/05/2011)

6. *Accurate quantum mechanical calculations for the ortho-para H2 conversion by proton exchange at low temperature*
P. Honvault
11th International Workshop on Quantum Reactive Scattering, QRS 2011
Santa Fe, USA. (17/07/2011)

7. *Quantum control by designed laser pulses*
S. Guerin
Seminar at UTT Troyes
Troyes, France. (14/10/2011)

8. *Theoretical study of the ortho-para H2 conversion by proton exchange at low temperature*
P. Honvault
3rd International Conference on Current Developments in Atomic, Molecular, Optical and Nano Physics, CDAMOP 2011
Delhi, India. (14/12/2011)

9. *Nuclear magnetic resonance: the contrast imaging problem*
J. Marriott, M. Chyba, S. J. Glaser, B. Bonnard and D. Sugny
IEEE cdc
Orlando, USA. (15/12/2011)

10. *Dynamics and control of quantum systems by designed fields*
S. Guerin
Seminar at University Paris Diderot
Paris, France. (30/01/2012)

11. *Quantum control by designed laser pulses*
S. Guerin
Seminar at Montpellier University
Montpellier, France. (02/03/2012)

12. *An accurate study of the dynamics of the N + OH reaction: from reaction probabilities to rate constants*
P. Honvault
Workshop: Anharmonicity in medium-sized molecules and clusters
Marne la vallée, France. (18/04/2012)

13. *Quantum control by designed laser pulses*
S. Guerin
Korean Physical Society Meeting
Daejeon, South Korea. (25/04/2012)

14. *Time-parallelization and Optimal control for NMR*
J. Salomon, K. Riahi and D. Sugny
International conference on domain decomposition methods
Rennes, France. (20/06/2012)

15. *Accurate theoretical calculations of the rate constant for the N + OH reaction*
P. Honvault
VIII Voevodsky Conference "Physics and Chemistry of Elementary Chemical Processes"
Novosibirsk, Russia. (15/07/2012)

16. *NO + H: New theoretical results and comparison with experiment,*
P. Honvault
MOLEC 2012, European Conference on the Dynamics of Molecular Systems
Oxford, UK. (09/11/2012)

17. *On the role of Hamiltonian singularities in physical systems*

E. Assémat, D. Sugny
Workshop on Integrability in dynamical systems and control
Rouen, France. (10/11/2012)

18. *Time-independent quantum-mechanical method for the study of atom-diatom reactions*
P. Honvault
4eme CFWTC (Chinese French Workshop in Theoretical Chemitry)
Nanjing, China. (02/06/2013)

19. *Quantum reaction dynamics at low temperatures for astrochemistry*
P. Honvault
ECAMP 11 (11th European Conference on Atoms, Molecules, and Photons)
Aarhus, Denmark. (24/06/2013)

20. *Quantum reaction dynamics studies of astrophysical interest below 100 K*
P. Honvault
Dynamics of Molecular Collisions conference, DMC 2013
Granlibakken, USA. (07/07/2013)

21. *Quantum reactive scattering calculations for systems of astrophysical interest*
P. Honvault
Chemical Reactivity 2014: from accurate theories to simple models
Bordeaux, France. (21/01/2014)

22. *The Kummer and Tricomi confluent hypergeometric expansions of the solutions to the confluent and double-confluent Heun equations*
Ishkhanyan A., Leroy C.
MathParCA "Mathematical partnership, PARallel computing and Computer Algebra"
Crête, Grèce. (29/07/2014)

23. *Quantum time-dependent level crossing models described by the Heun functions.*
Ishkhanyan A., Leroy C.
MathParCA "Mathematical partnership, PARallel computing and Computer Algebra"
Crête, Grèce. (29/07/2014)

24. *Solutions of the double- bi- and tri-confluent Heun equations in series of incomplete gamma functions.*
A.M. Manukyan, A. M. Ishkhanyan, M.V. Hakobyan and C. Leroy
MathParCA "Mathematical partnership, PARallel computing and Computer Algebra"
Crête, Grèce. (29/07/2014)

25. *N ano-cell filled with Potassium vapor: applications in atomic spectroscopy*
D. Sarkisyan, A. Sargsyan, C. Leroy, Y. Pashayan-Leroy
European Seventh Framework Programme QuantArm2014
Tsaghkadzor, Armenia. (24/09/2014)

26. *Preparation of Two- and Three-Qubit Entangled States in Systems of Mutually Coupled Qubits*
L. Chakhmakhchyan, S. Guérin, C. Leroy, N. Ananikian
European Seventh Framework Programme QuantArm2014
Tsaghkadzor, Armenia. (24/09/2014)

27. *Single Photon and Multi-Photon State Generation in a Single Atom-Cavity QED System*
A. Gogyan, S. Guérin, C. Leroy, Yu. Malakyan
European Seventh Framework Programme QuantArm2014
Tsaghkadzor, Armenia. (24/09/2014)

28. *Robust control design for quantum systems*
S. Guerin
Seminar MODANT at Grenoble
Grenoble, France. (17/12/2014)

29. *Optimal control of spin systems*
D. Sugny
Journées Bisontines sur le contrôle quantique
Besançon, France. (10/03/2015)

30. *Single-shot shaped pulses for robust quantum control*
S. Guerin
Seminar at Darmstadt University
Darmstadt, Germany. (23/06/2015)

31. *Quantum dynamics study of the O + O2 reaction*
P. Honvault
13th International Workshop on Quantum Reactive Scattering, QRS 2015
Salamanca, Spain. (06/07/2015)

32. *Optimal control of spin systems*

D. Sugny
Optimal control: theory and experiment
Munich, Germany. (02/05/2010)

33. *Control by fast parallel adiabatic passage. Application to quantum machines*
S. Guerin
Control of Atoms, Molecules and Ensembles by Light (CAMEL 6)
Varna, Bulgaria. (29/06/2010)

34. *Strong-field quantum control by designed pulses*
S. Guerin
Mid-Term Meeting ITN Fastquast "Ultrafast control of quantum systems by strong laser fields"
Kassel, Germany. (09/09/2010)

35. *Control by Fast Parallel Adiabatic Passage. Application to Quantum Machines*
S. Guerin
Laser Physics 2010
Ashtarak, Armenia. (12/10/2010)

36. *Monodromy Hamiltonienne des spectres moléculaires*
D. Sugny
Workshop Approximation semi-classique des collisions moléculaires
Bordeaux, France. (20/10/2010)

37. *Attractors and singular tori in hyperbolic systems of nonlinear optics*
H.R. Jauslin
Journées Nonlinéaires en honneur de S. Venakides
Paris, France. (23/10/2010)

38. *Adiabatic techniques for robust quantum control : geometric and topologial properties*
H.R. Jauslin
Workshop on quantum control, Institut Henri Poincaré
Paris, France. (08/12/2010)

39. *The energy minimization problem in the control of two-level dissipative quantum systems*
B. Bonnard and D. Sugny
Workshop on quantum control (Institut Henri Poincaré)
Paris, France. (10/12/2010)

40. *Geometric optimal control of spin systems*
D. Sugny
Workshop on quantum control (Institut Henri Poincaré)
Paris, France. (10/12/2010)

41. *Fast high-fidelity adiabatic passage for quantum information processing*
S. Guerin
COST European Network meeting "Ion Traps for Tomorrow's Applications"
Heidelberg, Germany. (23/03/2011)

42. *Control of atomic and molecular processes by electromagnetic fields - classical and quantum aspects*
H.R. Jauslin
symposium << Iluminyating >>
Marseille, France. (30/05/2011)

43. *Entanglement in mixed classical-quantum systems*
H.R. Jauslin
Workshop "Control of Quantum Dynamics of Atoms, Molecules and Ensembles by Light"
Nessebar, Bulgaria. (03/07/2011)

44. *Optimal control of spin systems in Nuclear Magnetic Resonance Imaging*
D. Sugny
Gordon conference on quantum control of light and matter
Boston, USA. (05/08/2011)

45. *Geometric optimal control of spin systems in Nuclear Magnetic Resonance*
D. Sugny
Workshop Optimization and control of nanosystems
Berlin, Germany. (15/09/2011)

46. *Hamiltonian tools for the control of polarization in optical fibers*
E. Assémat, A. Picozzi and D. Sugny

Nonlinear optics and complexity
Erice, Italia. (15/11/2011)

47. *Wave attractors in counter-propagating wave systems*
H.R. Jauslin
"Novel Laser Sources for Biomedical Applications"
Brescia, Italy. (29/05/2012)

48. *Quantum control by designed laser pulses*
S. Guerin
Frontiers of Quantum Control
Chicheley, UK. (04/06/2012)

49. *Quantum control by designed laser pulses*
S. Guerin
Control of Atoms, Molecules and Ensembles by Light (CAMEL 8)
Nessebar, Bulgaria. (25/06/2012)

50. *Geometric optimal control in Nuclear Magnetic Resonance*
D. Sugny
IFAC Workshop on Lagrangian and Hamiltonian methods in nonlinear control
Bertinoro, Italy. (27/08/2012)

51. *Geometric optimal control in Nuclear Magnetic Resonance*
D. Sugny
Workshop on the optimal control of quantum systems
Southampton, England. (03/09/2012)

52. *Wave attraction and singular Liouville-Arnold tori'*
H.R. Jauslin
109 Statistical Mechanics Conference
Rutgers, New Brunswick, USA. (15/05/2013)

53. Geometric optimal control of open quantum systems
D. Sugny
Workshop on Mathematical Aspects of Quantum Modeling, Estimation and Control
Padua, Italy. (10/06/2013)

54. *Geometric optimal control in Nuclear Magnetic Resonance*
D. Sugny
W.E. Heraeus seminar Optimal Control in Quantum Systems
Bad Honnef, Germany. (17/06/2013)

55. *Arbitrary qudit gates by adiabatic passage*
B. Rousseau and S. Guerin
Control of Atoms, Molecules and Ensembles by Light (CAMEL 9)
Nessebar, Bulgaria. (28/06/2013)

56. *Robust dynamics of linear and non-linear quantum by systems shaped pulses*
S. Guerin
Control of Atoms, Molecules and Ensembles by Light (CAMEL 9)
Nessebar, Bulgaria. (28/06/2013)

57. *Entanglement Properties of a Spin-1/2 Ising-Heisenberg Diamond Chain*
L. Chakhmakhchyan and S. Guerin
Control of Atoms, Molecules and Ensembles by Light (CAMEL 9)
Nessebar, Bulgaria. (29/06/2013)

58. *Geometric optimal control in Nuclear Magnetic Resonance and Magnetic Resonance Imaging*
D. Sugny
Workshop Quantum Mechanics and its Applications
Honolulu, USA (Hawaï. (17/08/2013)

59. *The role of the Au(n pi *) state on the photophysics of pyrazine, a quantum dynamics study.*
M. Sala and S. Guerin
HRMS 2013, High Resolution Molecular Spectroscopy Meeting
Budapest, Hungary. (25/08/2013)

60. *Geometric optimal control in Nuclear Magnetic Resonance and Magnetic Resonance Imaging*
D. Sugny
Control of PDEs, Conservatoire National des Arts et Métiers

Paris, France. (05/03/2014)

61. *Geometric optimal control in Nuclear Magnetic Resonance and Magnetic Resonance Imaging*
D. Sugny
Workshop on the optimal control of quantum systems
Aarhus, Denmark. (07/04/2014)

62. *Robust control of quantum systems by single-shot shaped pulses*
S. Guerin
Control of Atoms, Molecules and Ensembles by Light (CAMEL 10)
Nessebar, Bulgaria. (23/06/2014)

63. *Adiabatic control of nonlinear quantum systems; applications to molecular Bose-Einstein condensates*
H.R. Jauslin
Workshop "Control of Quantum Dynamics of Atoms, Molecules and Ensembles by Light"
Nessebar, Bulgaria. (23/06/2014)

64. *Production of photon states using Lambda-atoms in a cavity*
B. Rousseau and S. Guerin
Control of Atoms, Molecules and Ensembles by Light (CAMEL 10)
Nessebar, Bulgaria. (24/06/2014)

65. *Robust control of linear and non-linear quantum systems by single-shot shaped pulses*
S. Guerin
Shortcut to adiabaticity 2014
Shanghai, China. (01/07/2014)

66. *Geometric optimal control in Nuclear Magnetic Resonance and Magnetic Resonance Imaging*
D. Sugny
MTNS
Groningen, Holland. (07/07/2014)

67. *Geometric Optimal control of spin systems*
D. Sugny
Quantum cybernetics and control workshop
Nottingham, England. (17/01/2015)

68. *Single-shot shaped pulses for robust rephasing of atomic coherences*
D. Schraft, G. Genov , S. Guérin and T. Halfmann
Control of Atoms, Molecules and Ensembles by Light (CAMEL 11)
Nessebar, Bulgaria. (14/06/2015)

69. *Optimal control of spin systems*
D. Sugny
Workshop on Quantum Control, Devices and Applications
Swansea, England. (06/07/2015)

E. Oral contributions

1. *The High Resolution Far-Infrared Spectrum of Methane at the SOLEIL Synchrotron*
V. BOUDON, O. PIRALI, P. ROY, L. MANCERON, J. VANDER AUWERA
SOLEIL Users' Meeting 2010
Palaiseau, France. (20/01/2010)

2. *Spectroscopy of XY3Z (C3v) Molecules with an Even or Odd Number of Electrons: A Tensorial Formalism Adapted to the SU(2) ⊗ CI ⊃ C∞vS ⊃ C3vS Group Chain*
A. EL HILALI, V. BOUDON
65th Ohio State University International Symposium on Molecular Spectroscopy
Columbus OH, USA. (21/06/2010)

3. *N2 Collosional Broadening of Methane int the THz Region Measured at the SOLEIL Synchrotron*
V. BOUDON, T. GABARD, O. PIRALI, P. ROY, J.-B. BRUBACH, L. MANCERON, J. VANDER AUWERA
65th Ohio State University International Symposium on Molecular Spectroscopy
Columbus OH, USA. (21/06/2010)

4. *High-Resolution Spectroscopy of the Carbon Cage Adamantane C10H16*
V. BOUDON, O. PIRALI, D. BALCON, M. VERVLOET, J. OOMENS
65th Ohio State University International Symposium on Molecular Spectroscopy
Columbus OH, USA. (21/06/2010)

5. *Etude quantique de réactions d'intérêt astrophysique*
M. Jorfi, P. Honvault
PAMO-JSM 2010, colloque de la division de Physique Atomique, Moléculaire et Optique de la S.F.P

Orsay, France. (29/06/2010)

6. *Simulations of Titan Observations in the 1.58 Micron Transparency Window with High-Resolution, Low Temperature CRDS Spectra*
C. DE BERGH, B. BEZARD, R. COURTIN, A. CAMPARGUE, A. COUSTENIS, P. DROSSART, M. HIRTZIG, S. M. HU, S. KASSI, E. LELLOUCH, A. W. LIU, L. WANG, V. BOUDON, V. G. TYUTEREV
European Planetary Science Congress 2010
Rome, Italie. (19/09/2010)

7. *Constraints on the Volatile Enrichments in HD189733b from Internal Structure Models*
O. MOUSIS, J. LUNINE, K. ZAHNIE, L. BIENNIER, S. PICAUD, T. V. JOHNSON, J.-M. PETIT, J. B. A. MITCHELL, J.-P. BEAULIEU, V. BOUDON, D. CORDIER, M. DEVEL, R. GEORGES, C. GRIFFITH, N. IRO, M. S. MARLEY, U. MARBOEUF G. TINETTI
42nd Annual Meeting of the Division for Planetary Sciences of the American Astronomical Society
Pasadena CA, USA. (3/10/2010)

8. *Calculated line broadening parameters for methane perturbed by nitrogen*
T. GABARD
International Workshop : Spectroscopy of Methane and Planetary Applications
Dijon, France. (08/11/2010)

9. *Spectroscopic factors Influencing on the Atmospheric Radiative Transfer Modeling for the Methane Total Amount Retrieval*
T. CHESNOKOVA, V. BOUDON, Ch. WENGER
Earth Observation for Land-Atmosphere Interaction Science - ESA, iLEAPS, EGU joint Conference
Frascati, Italie. (3/11/2010)

10. *Dipole Moment Surface of the van der Waals Complex CH4-N2*
N. ZVEREVA-LOËTE, Yu. KALUGINA, V. BOUDON, M. BULDAKOV, V. CHEREPANOV
International Workshop : Spectroscopy of Methane and Planetary Applications
Dijon, France. (8/11/2010)

11. *Analysis of the High-Resolution FTIR Spectrum of Methane 12CH4 and 13CH4 in the 0-4800 cm-1 Spectral Region*
H.-M. NIEDERER, S. ALBERT, S. BAUERECKER, V. BOUDON, M. QUACK
International Workshop : Spectroscopy of Methane and Planetary Applications
Dijon, France. (8/11/2010)

12. *First Applications of New Methane Linelists to the Modelling of Titan's Spectrum in the 1.58 and 1.28 Micron Windows*
C. DE BERGH, R. COURTIN, B. B&ÉZARD, A. COUSTENIS, E. LELLOUCH, M. HIRTZIG, P. DROSSART, A. CAMPARGUE, S. KASSI, L. WANG, V. BOUDON, A. NIKITIN, Vl. G TYUTEREV
International Workshop : Spectroscopy of Methane and Planetary Applications
Dijon, France. (8/11/2010)

13. *High-Resolution Spectroscopy and Preliminary Global Analysis of C-H Stretching Vibrations of C2H4 in the 3000 and 6000 cm-1 Regions*
M. A. LOROÑO GONZALEZ, V. BOUDON, M. LOËTE, M. ROTGER, M.-T. BOURGEOIS, K. DIDRICHE, M. HERMAN, V. A. KAPITANOV, YU. N. PONOMAREV, A. A. SOLODOV, A. M. SOLODOV, T. M. PETROVA
66th Ohio State University International Symposium on Molecular Spectroscopy
Columbus OH, USA. (20/06/2011)

14. *High-Resolution Spectroscopy and Global Analysis of the Tetradecad Region of Methane 12CH4*
A. NIKITIN, V. BOUDON, C. WENGER, L. R. BROWN, S. BAUERECKER, S. ALBERT, M. QUACK
66th Ohio State University International Symposium on Molecular Spectroscopy
Columbus OH, USA. (20/06/2011)

15. *Atmospheric solar absorption spectra modeling with different CH4 spectroscopic databases*
T. YU. CHESNOKOVA, V . BOUDON, T. GABARD, K. G. GRIBANOV, V. I. ZAKHAROV, K. M. FIRSOV
XVIIth International Symposium, Atmospheric and Ocean Optics, Atmospheric Physics
Tomsk, Russie. (28/06/2011)

16. *Application of new methane linelists to Cassini and Earth-based data of Titan*
M. HIRTZIG, C. DE BERGH, R. COURTIN, B. BEZARD, A. COUSTENIS, E. LELLOUCH, P. RANNOU, P. DROSSART, A. CAMPARGUE, S. KASSI, L. WANG, V. BOUDON, A. NIKITIN, V. TYUTEREV, A. SOLOMONIDOU
EPSC-DPS Joint Meeting 2011
Nantes, France. (02/10/2011)

17. *Theoretical Modelling of the Methane Absorption Spectrum for Planetary Applications*
V. BOUDON, A. NIKITIN, T. GABARD, CH. WENGER, M. REY, V. G. TYUTEREV
EPSC-DPS Joint Meeting 2011
Nantes, France. (02/10/2011)

18. *Etude théorique du processus de conversion ortho-para de H2 par réaction avec l'ion H+*
P. Honvault, M. Jorfi, T. Gonzalez-Lezana, A. Faure, L. Pagani
Atelier KIDA 2011
Bordeaux, France. (18/10/2011)

19. *High-Resolution Spectroscopy of Hexaméthylènetétramine (HMT) C6N4H12*
V. BOUDON, O. PIRALI

67th Ohio State University International Symposium on Molecular Spectroscopy
Columbus OH, USA. (18/06/2012)

20. *High-Resolution Stimulated Raman Spectroscopy of Carbon Tetrafluoride CF4*
V. BOUDON, D. BERMEJO, R. Z. MARTINEZ
67th Ohio State University International Symposium on Molecular Spectroscopy
Columbus OH, USA. (18/06/2012)

21. *Titan's Surface and Atmosphere from Cassini/VIMS Data with Updated Methane Opacity*
M. HIRTZIG, A. COUSTENIS, B. BEZARD, E. LELLOUCH, P. DROSSART, C. DE BERGH, A. CAMPARGUE, V. BOUDON, B. SCHMITT, S. RODRIGUEZ
39th COSPAR Scientific Assembly
Mysore, Inde. (14/07/2012)

22. *High-Resolution Spectroscopy of Hexaméthylènetétramine (HMT) C6N4H12*
V. BOUDON, O. PIRALI
SOLEIL Users' Meeting 2013
Palaiseau, France. (23/01/2013)

23. *High-Resolution Infrared and Raman Spectroscopy of the Fundamental Bands of Osmium Tetroxide*
M. LOUVIOT, V. BOUDON, L. MANCERON, D. BERMEJO, R. Z. MARTINEZ
FRS-FNRS contact group for High Resolution Molecular Spectroscopy
Aachen, Allemagne. (08/03/2013)

24. *Robust quantum control: From adiabatic to ultrafast processes*
S. Guerin
QUAINT workshop
Dijon, France. (09/04/2013)

25. *SF : The Forbidden Band Unveiled*
V. BOUDON, L. MANCERON, F. KWABIA-TCHANA, P. ROY
68th Ohio State University International Symposium on Molecular Spectroscopy
Columbus OH, USA. (17/06/2013)

26. *A Combined Synchrotron-Based High Resolution FTIR and Diode Laser Jet Infrared Spectroscopy Study of the Chiral Molecule CDBrClF*
S. ALBERT, K. KEPPLER ALBERT, M. QUACK, Ph. LERCH, V. BOUDON
68th Ohio State University International Symposium on Molecular Spectroscopy
Columbus OH, USA. (17/06/2013)

27. *Frequency Analysis of the 10 µm Region of the Ethylene Spectrum Using the D2hTop Data System*
M.-T. BOURGEOIS, M. ROTGER, M. TUDORIE. J. VANDER AUWERA, V. BOUDON
68th Ohio State University International Symposium on Molecular Spectroscopy
Columbus OH, USA. (17/06/2013)

28. *A post-quantization constrained propagator for path integral simulations*
G. Guillon, T. Zeng, P.-N. Roy
29th Symposium on Chemical Physics SCP2013
Waterloo, Canada. (01/11/2013)

29. *Contrôle optimal: Un défi pour les technologies quantiques*
D. Sugny
Workshop GDR THEMS
Orsay, France. (17/12/2013)

30. *Méthane Hypersonique Sondé par Spectroscopie CRD*
M. LOUVIOT, V. BOUDON, N. SUAS-DAVID, R. GEORGES, S. KASSI, M. REY
Réunion plénière du GdR CNRS n° 3152 SpecMo de Spectroscopie Moléculaire - Forum Jeunes Chercheurs
Dijon, France. (22/05/2014)

31. *Modélisation du Spectre de l'Ethylène dans la Région de 10 µm en Utilisant D2hTDS : Analyse en Fréquence*
A. ALKADROU, M.-T. BOURGEOIS, M. ROTGER, M. TUDORIE, J. VANDER-AUWERA, V. BOUDON
Réunion plénière du GdR CNRS n° 3152 SpecMo de Spectroscopie Moléculaire - Forum Jeunes Chercheurs
Dijon, France. (22/05/2014)

32. *CH4, C2H4, SF6 and CF4 Calculated Spectroscopic Databases for the Virtual Atomic and Molecular Data Centre*
V. BOUDON, Ch. WENGER, R. SURLEAU, M. LOUVIOT, M. FAYE, M. ROTGER, L. DAUMONT, D. A. BONHOMMEAU, Vl. G. TYUTEREV, Y. A. BA, M.-L. DUBERNET
2014 GEISA Workshop : Towards a New Vision of Spectroscopic Databases
Paris, France. (03/06/2014)

33. *Ortho-para-H2 conversion processes in astrophysical media*
F. Lique, P. Honvault, A. Faure
Nuclear Spin Effects in Astrochemistry,
Gothenburg, Sweden. (09/06/2014)

34. *High-Resolution Infrared Spectroscopy of Cubane, C8H8 "*
M. LAMY, F. DUGUE-BOYER, V. BOUDON, O. PIRALI, S. GRUET, L. D'ACCOLTI, E. ALIKHANI
69th International Symposium on Molecular Spectroscopy
Champaign-Urbana IL, USA. (16/06/2014)

35. *CH4, C2H4, SF6 and CF4 Calculated Spectroscopic Databases for the Virtual Atomic and Molecular Data Centre*
V. BOUDON, Ch. WENGER, R. SURLEAU, M. LOUVIOT, M. FAYE, M. ROTGER, L. DAUMONT, D. A. BONHOMMEAU, Vl. G. TYUTEREV, Y. A. BA, M.-L. DUBERNET
69th International Symposium on Molecular Spectroscopy
Champaign-Urbana IL, USA. (16/06/2014)

36. *CH4, C2H4, SF6 and CF4 Calculated Spectroscopic Databases for the Virtual Atomic and Molecular Data Centre*
V. BOUDON, Ch. WENGER, R. SURLEAU, M. LOUVIOT, M. FAYE, M. ROTGER, L. DAUMONT, D. A. BONHOMMEAU, Vl. G. TYUTEREV, Y. A. BA, M.-L. DUBERNET
13th International HITRAN Conference
Cambridge MA, USA. (23/06/2014)

37. *Multi-emitter stimulated Raman adiabatic passage mediated by plasmons*
B. Rousseaux, D. Dzsotjan, G. Colas des Francs, H. Jauslin, and S. Guérin,
Conference on Quantum Plasmonics
Benasque, Espagne. (05/03/2015)

38. *Etat de l'art de l'analyse raie par raie du spectre du méthane*
V. BOUDON, T. GABARD, A. V. NIKITIN, L. DAUMONT, M. REY, VL. G. TYUTEREV
Les Journées Nationales Méthane 2015
Paris, France. (10/03/2015)

39. *Accurate quantum-mechanical calculations for the O + O2 exchange reaction*
T. Rajagopala Rao, G. Guillon, S. Mahapatra, P. Honvault
4th International Conference on Current Developments in Atomic, Molecular, Nano and Optical Physics with applications, CDAMOP 2015
Delhi, India. (11/03/2015)

40. *Multi-emitter stimulated Raman adiabatic passage mediated by plasmons*
B. Rousseau, D. Dzsotjan, G. Colas des Francs, H.R. Jauslin, and S. Guerin
Quantum Plasmonics 2015
Benasque, Spain. (12/03/2015)

41. *On-Line Measurements of RuO4 During a PWR Severe Accident*
S. REYMOND-LARUINAZ, D. DOIZI, L. MANCERON, V. BOUDON, G. DUCROS
ANIMMA 2015: Advancements in Nuclear Instrumentation Measurements Methods and their Applications
Lisbonne, Portugal. (20/04/2015)

42. *Theoretical calculations of the H + CH+ quantum rate on a new potential energy surface*
G. Werfelli, B. Kerkeni, P. Halvick, T. Stoecklin, P. Honvault
Workshop "Processus physico-chimiques d'intérêt astrophysique : Chimie et excitation des hydrures"
Saint Florent, Corsica. (15/06/2015)

43. *Strong Thermal Nonequilibrium in Hypersonic CO and CH4 Probed by CRDS*
M. LOUVIOT, N. SUAS-DAVIS, V. BOUDON, R. GEORGES, M. REY, S. KASSI
70th International Symposium on Molecular Spectroscopy
Champaign-Urbana IL, USA. (22/06/2015)

44. *Low-Temperature Collisionnal Broadening in the Far-Infrared Cendrifugal Distorsion Spectrum of CH4*
V. BOUDON, J. VANDER AUWERA, L. MANCERON, F. KWABIA TCHANA, T. GABARD, B. AMYAY; M. FAYE
70th International Symposium on Molecular Spectroscopy
Champaign-Urbana IL, USA. (22/06/2015)

45. *Huge quantum symmetry effect in the O + O2 exchange reaction*
G. Guillon, T. Rajagopala Rao, S. Mahapatra, B. Bussery-Honvault, P. Honvault
The XIII Iberian Joint Meeting on Atomic and Molecular Physics, IBER 2015
Aveiro, Portugal. (06/09/2015)

F. Posters

1. *Weakly Bound van der Waals Complex CH4-N2: Structure, Stability, Static Polarisability*
N. ZVEREVA-LOËTE, M. A. BULDAKOV, V. N. CHEREPANOV Y. N. KALUGINA, V. BOUDON
Solvay Workshop - Molecular Complexes in our Atmosphere and Beyond
Bruxelles, Belgique. (20/04/010)

2. *Etude théorique des réactions en phase gazeuse d'intérêt astrophysique :*
application à O(1D) + H2O et O(1D) + CH4
PAMO-JSM 2010, colloque de la division de Physique Atomique, Moléculaire et Optique de la S.F.P
Orsay, France. (29/06/2010)

3. *Theoretical study of radical-radical reactions of atmospheric and astrophysical interest: OH + atom*

M. Jorfi, P. Honvault
PAMO-JSM 2010, colloque de la division de Physique Atomique, Moléculaire et Optique de la S.F.P
Orsay, France. (29/06/2010)

4. *Simulation du Spectre Stark des Molécules X2Y4 : Application à l'Ethylène dans les Zéolithes*
M. SANZHAROV, M. ROTGER, V. BOUDON, M. LOËTE, N. ZVEREVA-LOËTE, A. BALLANDRAS, G. WEBER
PAMO-JSM Orsay 2010 : Colloque de la division Physique Atomique, Moléculaire et Optique de la Société Française de Physique. Journées de Spectroscopie Moléculaire
Orsay, France. (29/06/2010)

5. *Spectroscopie des Molécules Symétriques de Type XY3Z avec un Nombre Pair ou Impair d'Electrons : Formalisme Tensoriel Adapté à la Chaîne de Groupes SU(2) ⊗ Cl ⊃ C∞vS ⊃ C3vS*
A. EL HILALI, V. BOUDON
PAMO-JSM Orsay 2010 : Colloque de la division Physique Atomique, Moléculaire et Optique de la Société Française de Physique. Journées de Spectroscopie Moléculaire
Orsay, France. (29/06/2010)

6. *High-Resolution Spectroscopy and Preliminary Global Analysis of C-H Stretching Vibrations of C2H4 in the 3000 and 6000 cm-1 Regions*
M. A. LOROÑO GONZALEZ, V. BOUDON, M. LOËTE, M. ROTGER, M.-T. BOURGEOIS, K. DIDRICHE, M. HERMAN, V. A. KAPITANOV, YU. N. PONOMAREV, A. A. SOLODOV, A. M. SOLODOV, T. M. PETROVA
PAMO-JSM Orsay 2010 : Colloque de la division Physique Atomique, Moléculaire et Optique de la Société Française de Physique. Journées de Spectroscopie Moléculaire
Orsay, France. (29/06/2010)

7. *Elargissement Collisionnel du Méthane par N2 dans la Région THz Mesuré au Synchrotron SOLEIL*
V. BOUDON, T. GABARD, O. PIRALI, P. ROY, J.-B. BRUBACH, L. MANCERON, J. VANDER AUWERA
PAMO-JSM Orsay 2010 : Colloque de la division Physique Atomique, Moléculaire et Optique de la Société Française de Physique. Journées de Spectroscopie Moléculaire
Orsay, France. (29/06/2010)

8. *Spectroscopie à Haute Résolution de l'Adamantane C10H16*
V. BOUDON, O. PIRALI, D. BALCON, M. VERVLOET, J. OOMENS
PAMO-JSM Orsay 2010 : Colloque de la division Physique Atomique, Moléculaire et Optique de la Société Française de Physique. Journées de Spectroscopie Moléculaire
Orsay, France. (29/06/2010)

9. *Peculiarities of resonant absorption and fluorescence in extremely thin cell filled with Rb and buffer gas*
Hakhumyan H., Sarkisyan D., Sargsyan A., Pashayan-Leroy Y., Leroy C.
10th European Conference on Atoms Molecules and Photons
Salamanca, Espagne. (07/07/2010)

10. *Quantitative spectroscopy of Rb atoms in a strong magnetic field based on submicron thin vapor cell*
Hakhumyan H., Sarkisyan D., Sargsyan A., Pashayan-Leroy Y., Leroy C, Auzinsh M.
10th European Conference on Atoms Molecules and Photons
Salamanca, Espagne. (07/07/2010)

11. *Atom-Wall collisions influence on dark-line atomic resonances in submicron thin vapor cells*
Sargsyan A., Hakhumyan H, Mirzoyan R., Pashayan-Leroy Y., Leroy C., Sarkisyan D.
10th European Conference on Atoms Molecules and Photons
Salamanca, Espagne. (07/07/2010)

12. *Infrared Spectroscopy of Small Diamondoids. Analysis of the High Rsolution Spectrum of Adamantane C10H16*
O. PIRALI, D. BALCON, M. VERVLOET, V. BOUDON, J. OOMENS
Poznan 2010 : 21th Conference on High Resolution Molecular Spectroscopy
Poznan, Pologne. (07/09/2010)

13. *From atomic to molecular Bose-Einstein condensates: a physically realizable term-crossing model for cold atom association*
Sokhoyan R., Ishkhanyan A., Leroy C., Jauslin H.R.
The 21st International Conf. on HRMS
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14. *High Resolution Study of the v1+2v2-v2 and 2v2+v3-v2 "Hot" Bands and Ro-Vibrational Re-Analysis of the v1+v2/v2+v3/3v2 Polyad of the SO2 Molecule*
Ulenikov O.N., Gromova O.V., Bekhtereva E.S., Leroy C., Bolotova I.V., Gorbach A. V., Horneman V. M., and S. Alanko S.
The 21st International Conf. on HRMS
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15. *"Expanded" Local Mode Approach and Isotopic Effect (CH2D2/CH3D/CHD3) in the methane molecule*
Ulenikov O.N., Bekhtereva E.S., Leroy C., Fomchenko A.L., and Raspopova N.I.
The 21st International Conf. on HRMS
Poznan, Pologne. (09/09/2010)

16. *Mesures et Analyses du Spectre d'Absorption à Haute Résolution de l'Ethylène vers 1.6 Micron*

M. A. LOROÑO GONZALEZ, V. BOUDON, M. LOËTE, M. ROTGER, M.-T. BOURGEOIS, K. DIDRICHE, M. HERMAN, V. A. KAPITANOV, YU. N. PONOMAREV, A. A. SOLODOV, A. M. SOLODOV, T. M. PETROVA
Programme National de Planétologie : Colloque Quadriennal de Bilan et Prospective
Plouzané, France. (13/09/2010)

17. *Analyse en Fréquence et en Intensité des Bandes de l'Ethylène à 10 Microns*
M. ROTGER, L. REGALIA, M.-T. BOURGEOIS, V. BOUDON, J. VANDER AUWERA
Programme National de Planétologie : Colloque Quadriennal de Bilan et Prospective
Plouzané, France. (13/09/2010)

18. *Etat de l'Art de la Modélisation Théorique du Spectre d'Absorption du Méthane, pour les Applications en Planétologie*
V. BOUDON, T. GABARD, CH. WENGER, A. NIKITIN, M. REY, V. TYUTEREV
Programme National de Planétologie : Colloque Quadriennal de Bilan et Prospective
Plouzané, France. (13/09/2010)

19. *Elargissement Collisionnel du Méthane par N2 dans la Région THz Mesuré au Synchrotron SOLEIL*
V. BOUDON, T. GABARD, O. PIRALI, P. ROY, J.-B. BRUBACH, L. MANCERON, J. VANDER AUWERA.
Programme National de Planétologie : Colloque Quadriennal de Bilan et Prospective
Plouzané, France. (13/09/2010)

20. *N2 Collosional Broadening of Methane int the THz Region Measured at the SOLEIL Synchrotron,*
V. BOUDON, T. GABARD, O. PIRALI, P. ROY, J.-B. BRUBACH, L. MANCERON, J. VANDER AUWERA
SpecMo Workshop - New experimental and theoretical developments in molecular spectroscopy : Atmospheric and astrophysical applications
Palaiseau, France. (22/11/2010)

21. *Near-Infrared Radiative Transfer Modeling with Different CH4 Databases to Retrieve Atmospheric Methane Total Amount*
T. Yu. CHESNOKOVA, V. BOUDON, T. GABARD, K. G. GRIBANOV, K. FIRSOV, V. I ZAKHAROV
International Workshop: Spectroscopy of Methane and Planetary Applications
Dijon, France. (8/11/2010)

22. *High resolution FTIR spectroscopy of methane 12CH4 and 13CH4: the analysis of the 0 - 4800 cm-1 spectral region*
H.-M. NIEDERER, S. ALBERT, S. BAUERECKER, V. BOUDON,d M. QUACK
Bunsentagung 2011 - Analysis and Control of Ultrafast Photoinduced Reactions
Berlin, Allemgne. (02/05/2011)

23. *Modélisation et Base de Données du Spectre Infrarouge de l'Ethylène,*
M. ROTGER, V. BOUDON, M.-T. BOURGEOIS, Y. A. BA, C. WENGER
ICSA 2011 : Les Interfaces Chimie-Spectroscopie Atmosphérique, 3ème Edition
Lille, France. (31/05/2011)

24. *High Contrast Sub-Natural Resonances of Increased Absorption Formed in a Cell Filled with Rb and Buffer Gas*
D. Sarkisyan, Y. Pashayan-Leroy, A. Sargsyan, C. Leroy, R. Mirzoyan
43 rd Conference of the European Group for Atomic Systems (EGAS)
Fribourg, Suisse. (01/07/2011)

25. *High Contrast Dark line Atomic Resonance of D1 Excitation in Nanometric-Thin Cell filled with Rubidium*
Y. Pashayan-Leroy, A. Sargsyan, C. Leroy, R. Mirzoyan, D. Sarkisyan
43 rd Conference of the European Group for Atomic Systems (EGAS)
Fribourg, Suisse. (01/07/2011)

26. *Study of Electromagnetically Induced Transparency in Strong Magnetic Field using Rb Nanometric-Thin Cell*
A. Sargsyan, R. Mirzoyan, A. Papoyan, D. Sarkisyan, Y. Pashayan-Leroy, C. Leroy
43 rd Conference of the European Group for Atomic Systems (EGAS)
Fribourg, Suisse. (01/07/2011)

27. *High-Spatial Resolution Monitoring of Strong Magnetic Field using Rb Nano-Thin Cell*
A. Papoyan, D. Sarkisyan, G. Hakhumyan, C. Leroy, Y. Pashayan-Leroy
43 rd Conference of the European Group for Atomic Systems (EGAS)
Fribourg, Suisse. (01/07/2011)

28. *Laser control of the tunneling dynamics in NHD 2 . A full dimensional quantum dynamics study using MCTDH*
M. Sala and S. Guerin
FEMTO10, the Madrid Conference on Femtochemistry
Madrid, Spain. (11/07/2011)

29. *VAMDC: Databases of Calculated Spectral Lines of Ethylene and Methane,*
M. ROTGER, M.-T. BOURGEOIS, Y. A. BA, V. BOUDON, CH. WENGER, D. BONHOMMEAU, L. DAUMONT, VL. G. TYUTEREV, M.-L. DUBERNET
22th Colloquium on High Resolution Molecular Spectroscopy
Dijon, France. (29/08/2011)

30. *Stark Calculations Baser on Tensorial Formalism and Ab Initio Methods: Application to Ethylene in Silicalite-1 Zeolite,*
M. SANZHAROV, M. ROTGER, V. BOUDON, N. ZVEREVA-LOËTE, A. BALLANDRAS, G. WEBER
22th Colloquium on High Resolution Molecular Spectroscopy

Dijon, France. (29/08/2011)

31. *High-Resolution Spectroscopy and Analysis of the Stretching Dyad of Osmium Tetroxide,*
M. LOUVIOT, V. BOUDON, L. MANCERON, P. ROY, D. BALCON
22th Colloquium on High Resolution Molecular Spectroscopy
Dijon, France. (29/08/2011)

32. *Theoretical Investigation of the Etylene Dimer: Interaction Energy and Dipole Moment,*
Yu. N. KALUGINA, N. ZVEREVA-L=C3=96ETE, V. BOUDON, V. CHEREPANOV, M. BULDAKOV
22th Colloquium on High Resolution Molecular Spectroscopy
Dijon, France. (29/08/2011)

33. *Self and N2 Collisional Broadening of Methane in the THz Region Measured at the SOLEIL Synchrotron,*
M. SANZHAROV, J. VANDER AUWERA, O. PIRALI, J.-B. BRUBACH, L. MANCERON, V. BOUDON, T. GABARD
22th Colloquium on High Resolution Molecular Spectroscopy
Dijon, France. (29/08/2011)

34. *Ab Initio Molecular Orbital Calculations of the Electronic Structure for the CH4 + N(2D) Reaction and Their Implications in Titan's Atmosphere,*
C.-M. OUK, B. HONVAULT, N. ZVEREVA-L=C3=96ETE, V. BOUDON
22th Colloquium on High Resolution Molecular Spectroscopy
Dijon, France. (29/08/2011)

35. *High-Resolution Spectroscopy and Global Analysis of the Tetradecad Region of Methane 12CH4,*
A. NIKITIN, V. BOUDON, C. WENGER, L. R. BROWN, S. BAUERECKER, S. ALBERT, M. QUACK
22th Colloquium on High Resolution Molecular Spectroscopy
Dijon, France. (29/08/2011)

36. *High-Resolution Stimulated Raman Spectroscopy and Analysis of the v5 (C-H) Stretching Mode of C2H4,*
H. AOUIDIDI, M. ROTGER, D. BERMEJO, V. BOUDON
22th Colloquium on High Resolution Molecular Spectroscopy
Dijon, France. (29/08/2011)

37. *Rotationally Resolved IR Spectroscopy and Analysis of Adamantane,*
O. PIRALI, V. BOUDON, J. OOMENS, M. VERVLOET
22th Colloquium on High Resolution Molecular Spectroscopy
Dijon, France. (29/08/2011)

38. *Monitoring of strong magnetic field using Rb or Cs thin cells*
G. Hakhumyan, D. Sarkisyan, C. Leroy Y. Pashayan-Leroy
22 nd Colloquium on High-Resolution Molecular Spectroscopy
Dijon, France. (01/09/2011)

39. *On the "Expanded" Local Mode Approach and Isotopic Effect: Approach applied to the methane molecule*
Fomchenko A.I., Gromova O.V., Ulenikov O.N., Bekhtereva E.S., Leroy C.
22 nd Colloquium on High-Resolution Molecular Spectroscopy
Dijon, France. (01/09/2011)

40. *High Resolution Analysis of the SO 2 Spectra in the Region of 2600-2900 cm -1 : 2 v 3, v 2+2 v 2- v 2 and 2 v 1+ v 2 Bands*
Gromova O.V., Konov I.A., Horneman V.-M., Alanko S., Bolotova I.B., Leroy C., Ulenikov O.N., Bekhtereva E.S.
22 nd Colloquium on High-Resolution Molecular Spectroscopy
Dijon, France. (01/09/2011)

41. *Passing Q-Switching and frequency stabilization by dense molecular alkaline vapor for laser operation in the range 500-1100 nm*
G. Hakhumyan, A. Sargsyan, D. Sarkisyan, C. Leroy Y. Pashayan-Leroy
22 nd Colloquium on High-Resolution Molecular Spectroscopy
Dijon, France. (01/09/2011)

42. *Sealed-off thin optical cell containing dense molecular vapor of CS 2 , Rb 2 , K 2*
A. Sargsyan, R. Mirzoyan, A. Papoyan, D. Sarkisyan, C. Leroy Y. Pashayan-Leroy
22 nd Colloquium on High-Resolution Molecular Spectroscopy
Dijon, France. (01/09/2011)

43. *Influence of unequal oscillator strengths on stimulated Raman adiabatic passage through bright state*
L. Chakhmakhchyan, G. Grigoryan, C. Leroy, Y. Pashayan-Leroy, S. Guerin, and H.R. Jauslin
Conference Laser Physics
Ashtarak, Armenia. (11/10/2011)

44. *High-Resolution Spectroscopy and Analysis of the Stretching Dyad of Osmium Tetroxide,*
M. LOUVIOT, V. BOUDON, L. MANCERON, P. ROY, D. BALCON
SOLEIL Users' Meeting 2012
Palaiseau, France. (18/01/2012)

45. *Self and N2 Collisional Broadening of Methane in the THz Region Measured at the SOLEIL Synchrotron,*
M. SANZHAROV, J. VANDER AUWERA, O. PIRALI, J.-B. BRUBACH, L. MANCERON, V. BOUDON, T. GABARD

SOLEIL Users' Meeting 2012
Palaiseau, France. (18/01/2012)

46. *Rotationally Resolved Infrared Spectroscopy of Adamantane C10H16 and Hexmethylenetetramine C6H12N4,*
O. PIRALI, V. BOUDON, J. OOMENS,d M. VERVLOET
SOLEIL Users' Meeting 2012
Palaiseau, France. (18/01/2012)

47. *Laser control of the tunneling dynamics in NHD 2 . A full dimensional quantum dynamics study using MCTDH*
M. Sala and S. Guerin
Frontiers of Quantum Control
Chicheley, UK. (04/06/2012)

48. *Modèles numériques et analytiques du potentiel CH4-N2 pour les applications spectroscopiques*
N. ZVEREVA-LOETE, T. GABARD
PAMO-JSM Metz 2012 : Colloque de la division Physique Atomique, Moléculaire et Optique de la Société Française de
Metz, France. (03/07/2012)

49. *Etude théorique des reactions atome + CH4*
R. Corsi, Y. Scribano, B. Bussery-Honvault, P. Honvault
PAMO-JSM 2012, colloque de la division de Physique Atomique, Moléculaire et Optique de la S.F.P
Metz, France. (03/07/2012)

50. *Databases of Infrared Spectra of Ethylene, Methane and Water Vapor for the VAMDC european e-infrastructure*
G. REKIK, L. DAUMONT, D. BONHOMMEAU, M. ROTGER, Vl. G. TYUTEREV, V. BOUDON, Ch. WENGER, M.-L.. DUBERNET
PAMO-JSM Metz 2012 : Colloque de la division Physique Atomique, Moléculaire et Optique de la Société Française de Physique. Journées de Spectroscopie Moléculaire
Metz, France. (03/07/2012)

51. *Spectroscopie à Haute Résolution de l'Hexaméthylènetétramine (HMT) C6N4H12*
V. BOUDON, O. PIRALI
PAMO-JSM Metz 2012 : Colloque de la division Physique Atomique, Moléculaire et Optique de la Société Française de Physique. Journées de Spectroscopie Moléculaire
Metz, France. (03/07/2012)

52. *Spectroscopie Infrarouge et Raman Haute Résolution de 192OsO4*
M. LOUVIOT, V. BOUDON, L. MANCERON, D. BERMEJO, R. Z. MARTINEZ
PAMO-JSM Metz 2012 : Colloque de la division Physique Atomique, Moléculaire et Optique de la Société Française de Physique. Journées de Spectroscopie Moléculaire
Metz, France. (03/07/2012)

53. *High-Resolution Stimulated Raman Spectroscopy and Analysis of the v1 and v5 Bands of C2H4*
H. AOUIDIDI, M. ROTGER, D. BERMEJO, R. Z. MARTINEZ, V. BOUDON
PAMO-JSM Metz 2012 : Colloque de la division Physique Atomique, Moléculaire et Optique de la Société Française de Physique. Journées de Spectroscopie Moléculaire
Metz, France. (03/07/2012)

54. *Frequency Analysis of the 10 and 3 µm Regions of the Ethylene Spectrum Using the D2h Top Data System*
M.-T. BOURGEOIS, M. ROTGER, V. BOUDON, J. VANDER AUWERA
PAMO-JSM Metz 2012 : Colloque de la division Physique Atomique, Moléculaire et Optique de la Société Française de Physique. Journées de Spectroscopie Moléculaire
Metz, France. (03/07/2012)

55. *New Assignments in the 2 µm transparency Wondow of the 12CH4 Octad Band System*
L. DAUMONT, A. NIKITIN, X. THOMAS, L. REGALIA, P. VON DER HEYDEN, Vl. G. TYUTEREV, M. REY, V. BOUDON, Ch. WENGER, M. LOËTE, L. R. BROWN
PAMO-JSM Metz 2012 : Colloque de la division Physique Atomique, Moléculaire et Optique de la Société Française de Physique. Journées de Spectroscopie Moléculaire
Metz, France. (03/07/2012)

56. *Modification of Initially Forbidden Atomic Transitions of Rb D2 line in Magnetic Field*
R. Mirzoyan, G. Hakhumyan, C. Leroy, Y. Pashayan-Leroy and D. Sarkisyan
44th Conference of the European Group for Atomic Systems (EGAS)
Gothenburg, Suède. (10/07/2012)

57. *N-Resonance Formation in Micr ometric- Thin Cell Filled with Rubidium and Buffer Gas*
A. Sargsyan, R. Mirzoyan, C. Leroy, Y. Pashayan-Leroy, D. Sarkisyan
44th Conference of the European Group for Atomic Systems (EGAS)
Gothenburg, Suède. (10/07/2012)

58. *Hyperfine Paschen-Back regime study using Rb Nano-Thin Cell*
A. Sargsyan, G. Hakhumyan, C. Leroy, Y. Pashayan-Leroy, A. Papoyan, D. Sarkisyan
44th Conference of the European Group for Atomic Systems (EGAS)
Gothenburg, Suède. (10/07/2012)

59. *Databases of Infrared Spectra of Ethylene, Methane and Water Vapor for the VAMDC european e-infrastructure*
G. REKIK, L. DAUMONT, D. BONHOMMEAU, M. ROTGER, Vl. G. TYUTEREV, V. BOUDON, Ch. WENGER, M.-L.. DUBERNET
The 11th Atmospheric Spectroscopy Applications (ASA) Conference and The 12th International HITRAN Conference
Reims, France. (29/08/2012)

60. *Self and N2 Collisional Broadening of Far-Infrared Methane Lines Measures at the SOLEIL Synchrotron*
M. SANZHAROV, J. VANDER AUWERA, O. PIRALI, P. ROY, J.-B. BRUBACH, L. MANCERON, T. GABARD, V. BOUDON
The 11th Atmospheric Spectroscopy Applications (ASA) Conference and The 12th International HITRAN Conference
Reims, France. (29/08/2012)

61. *Present Status and Perspectives of Line-by-Line Analyses of the 12CH4 Absorption Spectrum*
V. BOUDON, T. GABARD, A. NIKITIN
The 11th Atmospheric Spectroscopy Applications (ASA) Conference and The 12th International HITRAN Conference
Reims, France. (29/08/2012)

62. *High-Resolution Stimulated Raman Spectroscopy and Analysis of the v1 and v5 Bands of C2H4*
H. AOUIDIDI, M. ROTGER, D. BERMEJO, R. Z. MARTINEZ, V. BOUDON
The 11th Atmospheric Spectroscopy Applications (ASA) Conference and The 12th International HITRAN Conference
Reims, France. (29/08/2012)

63. *Frequency Analysis of the 10 and 3 µm Regions of the Ethylene Spectrum Using the D2h Top Data System*
M.-T. BOURGEOIS, M. ROTGER, V. BOUDON, J. VANDER AUWERA
The 11th Atmospheric Spectroscopy Applications (ASA) Conference and The 12th International HITRAN Conference
Reims, France. (29/08/2012)

64. *Databases of Infrared Spectra of Ethylene, Methane and Water Vapor for the VAMDC european e-infrastructure*
G. REKIK, L. DAUMONT, D. BONHOMMEAU, M. ROTGER, Vl. G. TYUTEREV, V. BOUDON, Ch. WENGER, M.-L.. DUBERNET
Praha 2012 : 22th Conference on High Resolution Molecular Spectroscopy
Prague, Rép. (04/09/2012)

65. *New Assignments in the 2 µm transparency Wondow of the 12CH4 Octad Band System*
L. DAUMONT, A. NIKITIN, X. THOMAS, L. REGALIA, P. VON DER HEYDEN, Vl. G. TYUTEREV, M. REY, V. BOUDON, Ch. WENGER, M. LOËTE, L. R. BROWN
Praha 2012 : 22th Conference on High Resolution Molecular Spectroscopy
Prague, Rép. (04/09/2012)

66. *High-Resolution Spectroscopy of Hexaméthylènetétramine (HMT) C6N4H12*
V. BOUDON, O. PIRALI
Praha 2012 : 22th Conference on High Resolution Molecular Spectroscopy
Prague, Rép. (04/09/2012)

67. *High-Resolution Infrared and Raman Spectroscopy of 192OsO4*
M. LOUVIOT, V. BOUDON, L. MANCERON, D. BERMEJO, R. Z. MARTINEZ
Praha 2012 : 22th Conference on High Resolution Molecular Spectroscopy
Prague, Rép. (04/09/2012)

68. *High-Resolution Stimulated Raman Spectroscopy of Carbon Tetroxyde CF4*
V. BOUDON, D. BERMEJO, R. Z. MARTINEZ
Praha 2012 : 22th Conference on High Resolution Molecular Spectroscopy
Prague, Rép. (04/09/2012)

69. *High-Resolution Stimulated Raman Spectroscopy and Analysis of the v1 and v5 Bands of C2H4*
H. AOUIDIDI, M. ROTGER, D. BERMEJO, R. Z. MARTINEZ, V. BOUDON
Praha 2012 : 22th Conference on High Resolution Molecular Spectroscopy
Prague, Rép. (04/09/2012)

70. *Frequency Analysis of the 10 and 3 µm Regions of the Ethylene Spectrum Using the D2h Top Data System*
M.-T. BOURGEOIS, M. ROTGER, V. BOUDON, J. VANDER AUWERA
Praha 2012 : 22th Conference on High Resolution Molecular Spectroscopy
Prague, Rép. (04/09/2012)

71. *Study of Molecular Transitions of Rb and Cs Dimmers in Strong Magnetic Fields up to 7 kG*
Y. Pashayan-Leroy, C. Leroy, G. Hakhumyan, D. Sarkisyan
24th Colloquium on High-Resolution Molecular Spectroscopy
Prague, République Tchèque. (05/09/2012)

72. *Splitting of the EIT-resonance in a strong magnetic field using a micrometric-thin cell filled with Rb and buffer gas*
R. Mirzoyan, A. Sargsyan, C. Leroy, Y. Pashayan-Leroy and D. Sarkisyan
Conference Laser Physics
Ashtarak, Armenia. (10/10/2012)

73. *Entanglement and Thermodynamic Properties of Three Coupled Atoms*
L. Chakhmakhchyan, S. Guérin, C. Leroy, N. Ananikian
Conference Laser Physics
Ashtarak, Armenia. (10/10/2012)

74. *Hyperfine Pashen-Back regime realized in Rb and Cs nanocells*
A. Sargsyan, G. Hakhumyan, C. Leroy, Y. Pashayan-Leroy, A. Papoyan and D. Sarkisyan
Conference Laser Physics
Ashtarak, Armenia. (10/10/2012)

75. *Dynamics of the ortho/para H2 conversion by proton exchange and the age of prestellar cores*
L. Pagani, P. Lesaffre, E. Roueff, M. Jorfi, P. Honvault, T. Gonzalez-Lezana, A. Faure
2nd National Conference on Laboratory and Molecular Astrophysics
Sevilla, Spain. (14/11/2012)

76. *Databases of Infrared Spectra of Ethylene, Methane and Water Vapor for the VAMDC european e-infrastructure*
G. REKIK, L. DAUMONT, D. BONHOMMEAU, M. ROTGER, Vl. G. TYUTEREV, V. BOUDON, Ch. WENGER, M.-L. DUBERNET
VAMDC Final Projet Meeting
Meudon, France. (14/11/2012)

77. *High-Resolution IR Spectroscopy of 13CH4: The Pentad and the Octad*
S. ALBERT, S. BAUERECKER, V. BOUDON, J.-P. CHAMPION, H.-M.. NIEDERER, M.-M. QUACK
EUMETRISPEC Stakeholder Workshop
Wolfenbuettel, Allemagne. (15/11/2012)

78. *Ortho-para conversion of molecular hydrogen by proton and hydrogen exchange*
A. Faure, P. Honvault, F. Lique
Colloque général 2012 PCMI (Physique et Chimie du Milieu Interstellaire),
Paris, France. (19/11/2012)

79. *High-Resolution Infrared and Raman Spectroscopy of 192OsO4*
M. LOUVIOT, V. BOUDON, L. MANCERON, D. BERMEJO, R. Z. MARTINEZ
SOLEIL Users' Meeting 2013
Palaiseau, France. (23/01/2013)

80. *Frequency Analysis of the 10 µm Region of the Ethylene Spectrum Using the D2h Top Data System*
M.-T. BOURGEOIS, M. ROTGER, M. TUDORIE, J. VANDER AUWERA, V. BOUDON
Atelier CNRS 2013 : Evolution de la matière organique dans les milieux interplanétaire et interstellaire
Paris, France. (26/01/2013)

81. *Superstable Cycles of Antiferromagnetic Potts and Ising Models on Recursive Lattices*
L. Chakhmakhchyan, N. Ananikian, S. Guérin, C. Leroy
38th Conference of the Middle European Cooperation in Statistical Physics, MECO38
Trieste, Italie. (26/03/2013)

82. *Quantum dynamics study of the D+ + H2 reaction at low temperature*
Y. Scribano, P. Honvault, T. Gonzalez-Lezana
The 12th workshop on Quantum Reactive Scattering, QRS 2013
Bordeaux, France. (10/06/2013)

83. *Time-dependent quantum wave packet dynamics of the S + OH reaction on the ground electronic state*
S. Goswami, T. Rajagopala Rao, S. Mahapatra, P. Honvault
The 12th workshop on Quantum Reactive Scattering, QRS 2013
Bordeaux, France. (10/06/2013)

84. *A High Resolution FTIR Spectroscopic Study of 13CH4 up to 3300 cm-1,*
O. V. GROMOVA, O. N. ULENIKOV, E. S. BEKHTEREVA, S. ALBERT, V.BOUDON, S. BAUERECKER, H.-M. NIEDERER, M. QUACK
23th Colloquium on High Resolution Molecular Spectroscopy
Budapest, Hongrie. (25/08/2013)

85. *Line intensity measurements and electric dipole moment fit of the v2/v4 dyad of CH4 through high resolution and high temperature infrared emission spectra*
M. LOUVIOT, S. GRUET, O. PIRALI, J. VANDER AUWERA, V. BOUDON, R. GEORGES
23th Colloquium on High Resolution Molecular Spectroscopy
Budapest, Hongrie. (25/08/2013)

86. *High-Resolution Stimulated Raman Spectroscopy and Analysis of the v1/v5, v2 and v3 Bands of C2H4,*
H. AOUIDIDI, A. BALLANDRAS, M. CIRTOG, M. ROTGER, D. BERMEJO, R. Z. MART=C3=8DNEZ, J. L. DOM&ÉNECH, V. BOUDON
23th Colloquium on High Resolution Molecular Spectroscopy
Budapest, Hongrie. (25/08/2013)

87. *Frequency Analysis of the 10 µm Region of the Ethylene Spectrum Using the D2h Top Data System,*
M.-T. BOURGEOIS, M. ROTGER, M. TUDORIE, J. VANDER AUWERA, V. BOUDON
23th Colloquium on High Resolution Molecular Spectroscopy
Budapest, Hongrie. (25/08/2013)

88. *High-resolution Spectroscopy of Difference and Combination Bands of SF6 to Elucidate Hot Band Structures in the v3 Region*
A. LE VEN, M. FAYE, V. BOUDON, L. MANCERON, P. ASSELIN, P. SOULARD, F. KWABIA-TCHANA, P. ROY
23th Colloquium on High Resolution Molecular Spectroscopy
Budapest, Hongrie. (25/08/2013)

89. *SF6: The forbidden band unveiled,*
V. BOUDON, L. MANCERON,, F. KWABIA-TCHANA, P. ROY
23th Colloquium on High Resolution Molecular Spectroscopy
Budapest, Hongrie. (25/08/2013)

90. *Use of EIT- and N-resonances to study decoupling of electronic J and nuclear I momentums of 85 Rb*
R. Mirzoyan, C. Leroy, Y. Pashayan-Leroy, A. Sargsyan and D. Sarkisyan
23rd Colloquium on High-Resolution Molecular Spectroscopy
Budapest, Hongrie. (26/08/2013)

91. *On the "expanded local mode" approach applied to the methane molecule: isotopic substitution CH 3 D =E2=86=90CH 4 and CHD 3 =E2=86=90CH 4*
O. Ulenikov, E. Bekhtereva, A. Fomchenko, A. Litvinovskaya, C. Leroy, M. Quack
23rd Colloquium on High-Resolution Molecular Spectroscopy
Budapest, Hongrie. (26/08/2013)

92. *Solvable Model for Ultrastrong QED Regime*
L. Chakhmakhchyan, S. Guérin, C. Leroy
IOTA Worshop on Cold Molecular Ions
Arosa, Suisse. (03/09/2013)

93. *Hyperfine Paschen-Back regime in Rb atoms, D2 line: experiment and theory*
A. Sargsyan, A. Tonoyan, G. Hakhumyan, C. Leroy, A.S. Sarkisyan, D. Sarkisyan
Conference Laser Physics
Ashtarak, Armenia. (09/10/2013)

94. *Efficient adiabatic passage for driven quantum non-linear systems*
S. Guérin, M. Gevorgyan, A. Grigoryan, C. Leroy, H.R. Jauslin, A. Ishkhanyan
Conference Laser Physics
Ashtarak, Armenia. (09/10/2013)

95. *Hyperfine Paschen-Back regime in Rb atoms, D1 line: consistency of two theoretical considerations and experiment*
A. Sargsyan, G. Hakhumyan, C. Leroy, Y. Pashayan-Leroy, A. Amiryan, A. Papoyan and D. Sarkisyan
Conference Laser Physics
Ashtarak, Armenia. (09/10/2013)

96. *Use of EIT- and N-resonances to study the Hyperfine Paschen-Back regime in atomic vapor of 85 Rb*
R. Mirzoyan, C. Leroy, Y. Pashayan-Leroy, A. Sargsyan and D. Sarkisyan
Conference Laser Physics
Ashtarak, Armenia. (09/10/2013)

97. *Simulated retrievals of methane total columns in support of future satellite missions: an error sources analysis*
R. CHECA-GARCIA, F. ALKEMADE, V. BOUDON, C. FISCHERKELLER, P. HAHNE, H. TRAN, J. LANDGRAF, A. BUTZ
European Geosciences Union General Assembly 2014
Vienne, Autriche. (27/04/2014)

98. *Modeling the 10 µm Region of the Ethylene Spectrum Using the D2h Top Data System: Frequency analysis*
A. ALKADROU, M.-T. BOURGEOIS, M. ROTGER, M. TUDORIE, J. VANDER-AUWERA, V. BOUDON
ICSA 2014 : International Conference of Spectroscopy and Applications
Hammamet, Tunisie. (02/05/2014)

99. *Atomic transitions of Rb D2 line in strong magnetic fields*
A. Tonoyan, A. Sargsyan, H. Hakhumyan, Y. Pashayan-Leroy, D. Sarkisyan
GDR SPECMO
Dijon, France. (22/05/2014)

100. *Calculation of spectroscopic line-shape parameters for methane-derived molecules: example of CH3D perturbed by N2 and*
T. SINYAKOVA, J. BULDYREVA, T. GABARD
Réunion plénière du GdR CNRS n° 3152 SpecMo de Spectroscopie Moléculaire - Forum Jeunes Chercheurs
Dijon, France. (22/05/2014)

101. *Première Analyse à Très Haute Résolution de la Bande v3 de 36SF6 et Nouvel Ajustement Global des Paramètres de 32SF6 Incluant de Nouvelles Données de la Bande 3v3*
M. FAYE, V. BOUDON, L. MANCERON, F. KWABIA-TCHANA
Réunion plénière du GdR CNRS n° 3152 SpecMo de Spectroscopie Moléculaire - Forum Jeunes Chercheurs
Dijon, France. (22/05/2014)

102. *Modeling the 10 µm Region of the Ethylene Spectrum Using the D2h Top Data System: Frequency Analysis*
A. ALKADROU, M.-T. BOURGEOIS, M. ROTGER, M. TUDORIE, J. VANDER-AUWERA, V. BOUDON
2014 GEISA Workshop : Towards a New Vision of Spectroscopic Databases
Paris, France. (03/06/2014)

103. *High-Resolution Spectroscopy and Analysis of the v3 Band of 36SF6 and New Global Fit of 32SF6 Parameters Including New 3v3 Band Data*
M. FAYE, V. BOUDON, L. MANCERON, F. KWABIA-TCHANA
13th International HITRAN Conference

Cambridge MA, USA. (23/06/2014)

104. *Hypersonic Methane Probed by CRDS*
M. LOUVIOT, V. BOUDON, N. SUAS-DAVID, R. GEORGES, S. KASSI, M. REY
13th International HITRAN Conference
Cambridge MA, USA. (23/06/2014)

105. *Compact Continuous Variable Entanglement Distillation Using Realistic Quantum Memories*
L. Chakhmakhchyan , S. Guérin, J. Nunn, A. Datta
21st Central European Workshop on Quantum Optics CEWQO 2014
Brussels, Belgium. (24/06/2014)

106. *Behaviour of atomic transitions of Rb D2 line in strong magnetic fields*
A. Tonoyan, A. Sargsyan, H. Hakhumyan, Y. Pashayan-Leroy, D. Sarkisyan
46th Conference of the European Group for Atomic Systems (EGAS)
Lille, France. (02/07/2014)

107. *Première Analyse à Très Haute Résolution de la Bande v3 de 36SF6 et Nouvel Ajustement Global des Paramètres de 32SF6 Incluant de Nouvelles Données de la Bande 3v3*
M. FAYE, V. BOUDON, L. MANCERON, F. KWABIA-TCHANA
PAMO-JSM Reims 2014 : Colloque de la division Physique Atomique, Moléculaire et Optique de la Société Française de Physique. Journées de Spectroscopie Moléculaire
Reims, France. (07/07/2014)

108. *Self-Broadening Coefficients and Improved Line Intensities for the v7 Band of Ethylene Near 10.5 µm, and Impact on Ethylene Retrievals from Jungfraujoch Solar Spectra*
J. VANDER AUWERA, A. FAYT, M. TUDORIE, M. ROTGER, V. BOUDON, B. FRANCO, E. MAHIEU
PAMO-JSM Reims 2014 : Colloque de la division Physique Atomique, Moléculaire et Optique de la Société Française de Physique. Journées de Spectroscopie Moléculaire
Reims, France. (07/07/2014)

109. *Modeling the 10 µm Region of the Ethylene Spectrum Using the D2h Top Data System: Frequency and Intensity Analysis*
A. ALKADROU, M.-T. BOURGEOIS, M. ROTGER, M. TUDORIE, J. VANDER-AUWERA, V. BOUDON
PAMO-JSM Reims 2014 : Colloque de la division Physique Atomique, Moléculaire et Optique de la Société Française de Physique. Journées de Spectroscopie Moléculaire
Reims, France. (07/07/2014)

110. *Contrôle optimal d'une chaine de 3 spins inégalement couplés*
L. Van Damme, D. Sugny
PAMO
Reims, France. (10/07/2014)

111. *Full quantum reaction rates for the O + O2 exchange process*
G. Guillon, T. Rajagopala Rao, S. Mahapatra, B. Bussery-Honvault, P. Honvault
20th European Conference on the Dynamics of Molecular Systems, MOLEC 2014
Gothenburg, Sweden. (24/08/2014)

112. *Ortho-para-H2 conversion by proton exchange in astrophysical media*
T. Rajagopala Rao, S. Mahapatra, P. Honvault
20th European Conference on the Dynamics of Molecular Systems, MOLEC 2014
Gothenburg, Sweden. (24/08/2014)

113. *High-Resolution Infrared Spectroscopy of Cubane, C8H8*
M. LAMY, F. DUGUE-BOYER, V. BOUDON, O. PIRALI, S. GRUET, L. D'ACCOLTI, E. ALIKHAN.
Bologna 2013 : 232th Conference on High Resolution Molecular Spectroscopy
Bologne, Italie. (02/09/2014)

114. *Hypersonic Methane Probed by CRDS,*
M. LOUVIOT, V. BOUDON, N. SUAS-DAVID, R. GEORGES, S. KASSI, M. REY
Bologna 2013 : 232th Conference on High Resolution Molecular Spectroscopy
Bologne, Italie. (02/09/2014)

115. *High-Resolution Spectroscopy and Analysis of the v3 Band of 36SF6 and New Global Fit of 32SF6 Parameters Including New 3v3 Band Data*
M. FAYE, V. BOUDON, L. MANCERON, F. KWABIA-TCHANA
Bologna 2013 : 232th Conference on High Resolution Molecular Spectroscopy
Bologne, Italie. (02/09/2014)

116. *Self-Broadening Coefficients and Improved Line Intensities for the v7 Band of Ethylene Near 10.5 µm, and Impact on Ethylene Retrievals from Jungfraujoch Solar Spectra*
J. VANDER AUWERA, A. FAYT, M. TUDORIE, M. ROTGER, V. BOUDON, B. FRANCO, E. MAHIEU
Bologna 2013 : 232th Conference on High Resolution Molecular Spectroscopy
Bologne, Italie. (02/09/2014)

117. *Modeling the 10 µm Region of the Ethylene Spectrum Using the D2h Top Data System: Frequency and Intensity Analysis*
A. ALKADROU, M.-T. BOURGEOIS, M. ROTGER, M. TUDORIE, J. VANDER-AUWERA, V. BOUDON

Bologna 2013 : 232th Conference on High Resolution Molecular Spectroscopy
Bologne, Italie. (02/09/2014)

118. *H igh contrast electromagnetically induced transparency of Cs D 1 line in nanometric-thin vapor cell*
Y. Pashayan-Leroy, A. Sargsyan, C. Leroy, D. Sarkisyan
23rd International Conference on High Resolution Molecular Spectroscopy
Bologne, Italie. (03/09/2014)

119. *On the 'expanded local mode' approach applied to the ethylene molecule*
O. N. Ulenikov, E. S. Bekhtereva , A. L. Fomchenko, O. V. Gromova, C. Leroy
23rd International Conference on High Resolution Molecular Spectroscopy
Bologne, Italie. (03/09/2014)

120. *Non-Linear Stimulated Raman Exact Tracking*
M. Gevorgyan, C. Leroy, H.R. Jauslin, S. Guérin, A. Ishkhanyan
European Seventh Framework Programme QuantArm2014
Tsaghkadzor, Armenia. (24/09/2014)

121. *Spectroscopie haute température du méthane pour la modélisation de l'opacité des jupiters chauds,*
M. LOUVIOT, V. BOUDON, S. GRUET, O. PIRALI, N. SUAS-DAVID, R. GEORGES, J. VANDER AUWERA, S. KASSI, M. REY
PNP Paris 2014 : Colloque du Programme National de Planétologie
Paris, France. (1/10/2014)

122. *Production of photon states using Lambda-atoms in a cavity*
B. Rousseau and S. Guerin
5th Colloquium GDR Quantum Information, Foundations & Applications (IQFA)
Lyon, France. (17/11/2014)

123. *Compact Continuous Variable Entanglement Distillation Using Realistic Quantum Memories*
Levon Chakhmakhchyan, Stéphane Guérin, Joshua Nunn, and Animesh Datta
5th Colloquium GDR Quantum Information, Foundations & Applications (IQFA)
Lyon, France. (17/11/2014)

124. *Application of the Pontryagin Maximum Principle to the time-optimal control in a chain of three spins with unequal couplings*
L. Van Damme, D. Sugny
Quantum control workshop
Nottingham, Angleterre. (10/01/2015)

125. *Effective models for quantum plasmonics - applications for laser-driven nanospheres*
D. Dzsotjan, B. Rousseau, G. Colas des Francs, H.R. Jauslin, and S. Guerin
Quantum Plasmonics 2015
Benasque, Spain. (12/03/2015)

126. *Synchrotron Radiation and Long Path Cryogenic Cells: New Tools and Results for Modelling SF6 Absorption in the 10 µm Atmospheric Window*
M. FAYE, V. BOUDON, M. LOËTE, P. ROY, L. MANCERON
European Geosciences Union General Assembly 2015
Vienne, Autriche. (12/04/2015)

127. *Accurate quantum rate constants for the O + O2 exchange reaction*
G. Guillon, T. Rajagopala Rao, S. Mahapatra, B. Bussery-Honvault, P. Honvault
Atelier KIDA 2015
Paris, France. (05/05/2015)

128. *Ro-vibrational excitation of H2 by H: Towards a revision of the ortho-para- H2 conversion and of the cooling mechanism in astrophysical media*
F. Lique, P. Honvault, A. Faure
First general meeting of COST Action Our Astrochemical History
Prague, Czech Republic. (26/05/2015)

129. *EIT resonance inverted in magnetic field by influence of the alignment effect*
A. Sargsyan, D. Sarkisyan, Y. Pashayan-Leroy, C. Leroy, S. Cartaleva, A. D. Wilson-Gordon, and M. Auzinsh
47th Conference of the European Group on Atomic Systems
Riga, Latvia. (15/07/2015)

130. *Study of atomic transitions of 39K Atom isotope on D1 line in strong magnetic fields*
Tonoyan, A. Sargsyan, G. Hakhumyan, C. Leroy, Y. Pashayan-Leroy , and D. Sarkisyan
47th Conference of the European Group on Atomic Systems
Riga, Latvia. (15/07/2015)

131. *Study of Atomic Transitions of Rb D 2 line in Strong Transverse Magnetic Fields by an Optical Half-Wavelength Cell*
A. Amiryan, A. Sargsyan, A. Tonoyan, Y. Pashayan-Leroy, C. Leroy, and D. Sarkisyan
47th Conference of the European Group on Atomic Systems
Riga, Latvia. (15/07/2015)

132. *Accurate quantum rates for the O + O2 exchange process*
G. Guillon, T. Rajagopala Rao, S. Mahapatra, B. Bussery-Honvault, P. Honvault
The 24th Colloquium on High Resolution Molecular Spectroscopy, HRMS 2015
Dijon, France. (24/08/2015)

II.6.2.2. Department Photonique

A. Plenary talks

1. *An electrical tuner to command optical antennas*
A. Bouhelier
Gordon research conference in The Science and Engineering of Nanoscale Optics
Waterville, USA. (13/06/2010)
2. *Optical antenna: a paradigm shift for nanoscale wireless telecommunication*
A. Bouhelier
GDR Plasmonique Moléculaire
Porquerolles, France. (01/10/2012)
3. *Nano-plasmonique pour l'électronique*
A. Bouhelier
Journée de la société française d'optique
Villetaneuse, France. (10/08/2013)
4. *Nanoplasmonics: an interface technology for optoelectronics devices?*
A. Bouhelier
US French nano optics workshop
Troyes, France. (04/10/2013)
5. *Nano-plasmonique pour l'électronique*
A. Bouhelier
Journée Plasmonique Chaire PSA
Orsay, France. (25/10/2013)

B. Key lectures

1. *Dissipative solitons, a novel paradigm for mode-locked lasers*
Ph. Grelu
CLEO
San Jose, USA. (09/06/2013)

C. Invited lectures

1. *Chalcogenide Microstructured Optical Fibers for Broadband Sources in the Mid Infrared*
F. Smektala, M. El-Amraoui, J. Fatome, J. C. Jules, G. Gadret, B. Kibler, C. Fortier, F. Désévédavy, I.Skripatchev, C. Polacchini, Y. Messaddeq
8ième Journées de la Société Chimique de France section BFC
Dijon, France. (26/02/2010)
2. *Caractérisation des impulsions optiques courtes et ultracourtes*
Ph. Grelu
Première école thématique Sources Laser et Photonique SLP 2010 Réseau Micro et Nano Technologies Photoniques Nour 21
Oran, Algeria. (28/04/2010)
3. *Conical diffraction of surface plasmon: a one dimensional evanescent wave*
A. Bouhelier
Séminaire USTC Hefei
Hefei, Chine. (06/09/2010)
4. *Electrical control of Optical Nano-antennas*
A. Bouhelier
Séminaire LPN
Marcoussi, France. (02/11/2010)
5. *Plasmonics nanostructures : modelling and numerical simulations*
G. Colas des Francs
Plasmonics short courses
Lausanne, Suisse. (22/01/2011)
6. *Microstructured Optical Fibres from As2S3 Glass for Fibre Optics Sources in the MIR range*
F. Smektala, M. El-Amraoui, J. Fatome, B. Kibler, J. C. Jules, G. Gadret, F. Désévédavy, G. Renversez, J. Troles, L. Brilland, M. Duhant, G. Canat
Australian-Italian-French Workshop Nanophotonics for sensing & nonlinear optics-next generation photonic materials, structures and devices
Adelaide, Australia. (23/08/2011)

7. *Bilateral electron-photon transduction by optical gap antennas operating in the tunneling regime*
A. Bouhelier
DPG Physics Schools NanoAntenna and Hybrid Quantum Systems
Bad Honnef, Allemagne. (25/09/2011)

8. *Surface plasmon in gain media*
G. Colas des Francs, J. Plain
Summer schools on plasmonics
Porquerolles, France. (05/10/2011)

9. *Extreme Dynamics in Dissipative Optical Cavities*
Ph. Grelu
ROGUE WAVES 2011, Workshop at Max Planck Institute for Complex Systems
Dresden, Germany. (07/11/2011)

10. *Valorisation transfert de compétences et technologies application à un système d'analyse LIBS portable,*
O. Musset, C. Aquilina
Rencontre nationale trans-réseaux: Réseau des mécaniciens - Réseau haute pression
Mittelwihr, France. (16/11/2011)

11. *Optical wave turbulence (1h30)*
A. Picozzi, J. Garnier, C. Michel, P. Suret, S. Randoux, P. Aschieri, B. Kibler, S. Rica
Wave Turbulence
Les Houches, France. (25/03/2012)

12. *Microstructured Optical Fibres from Soft Glasses for Broadband Fibered Laser Sources in the NIR and IR ranges*
F. Smektala
Congrès de la Société Chimique de France - Grand Est
Reims, France. (29/03/2012)

13. *Soft glasses and infrared microstructured fibres for supercontinuum sources above 2 µm*
F. Smektala
International Workshop on Novel Laser Sources and Biomedical Applications
Brescia, Italy. (29/05/2012)

14. *Keenote address, Raman beam cleanup, supercontinuum, and optical rogue events in fiber-based systems (1h30)*
G. Millot, B. Kibler, J. Fatome, K. Hammani, A. Picozzi, C. Finot, F. Billard, M. Claudon, J. Goujon, M. Delqué, O. Musset
International workshop on novel laser sources and biomedical applications
Brescia, Italy. (29/05/2012)

15. *Microstructured optical fibres from nonlinear glasses for infrared broadband fibered laser,*
F. Smektala
Indo-French Workshop on Glasses and Glass-ceramics (IFWGGC12), organized under auspices of IFCPAR-CEFIPRA
University of Lille 1, Villeneuve d'Ascq, France. (06/06/2012)

16. *Optical Wave Turbulence (1h30)*
A. Picozzi, S. Rica, P. Suret, S. Randoux, P. Aschieri, C. Michel, G. Millot, J. Garnier
Summer school on Wave propagation in complex media
Cargese, France. (07/08/2012)

17. *Cours d'Optique de Champ Proche*
B. Cluzel
Ecole pré-doctorale - La nanophotonique des structures périodiques : outils théoriques et expérimentaux, de la conception à l'analyse des performances
Les Houches, France. (22/10/2012)

18. *Microstructured fibres from nonlinear glasses for infrared supercontinuum sources*
F. Smektala
International Symposium on Cutting Edge Technologies, Toyota Technological Institute
Nagoya, Japan. (07/03/2013)

19. *Les sources lasers à façon pour la LIBS*
O. Musset
Journées LIBS 2013
Lyon, France. (05/06/2013)

20. *Développement de sources lasers solides à façon par l'utilisation d'une approche système intégrant l'application finale*
O. Musset, M. Claudon, M. Delqué, P. Tinguy
Journées Nationale des Cristaux pour l'Optique 2013
Cherbourg, France. (12/06/2013)

21. *Mid-IR Fibres from Various Soft Glasses for Wide Band Sources*
F. Smektala
Workshop on Specialty Optical Fiber and Their Applications WSOF 2013
Sigtuna, Sweden. (28/08/2013)

22. *Complex short-pulse dynamics in fiber lasers*
Ph. Grelu, C. Lecaplain, J.M. Soto-Crespo, N. Akhmediev
Workshop on Spatio-Temporal Complexity in Optical Fibers
Como, Italy. (16/09/2013)

23. *Vers un système LIBS portable à performances de laboratoire*
O. Musset, T. Gonthiez
Journées LIBS 2014
Paris, France. (02/06/2014)

24. *Verres et fibres optiques non silice pour l'infrarouge*
F. Smektala
Séminaire à l'Ecole d'Eté Innov Fibre 2014 organisée par le GIS GRIFON
Urrugne, France. (23/06/2014)

25. *Temporal dynamics of dissipative solitons in laser cavities*
Ph. Grelu
Nano-Tera MFCA2014 workshop Microresonator frequency combs and their applications
Monte Verita, Switzerland. (17/08/2014)

26. *Scanning near field optical microscopy*
A. Bouhelier
FCS 2013
Bangalore, India. (24/10/2014)

27. *Spectroscopies et microscopies optiques amplifiées par effet de pointe*
A. Bouhelier
Forum des Microscopies à sondes locales
Troyes, France. (16/03/2015)

28. *Nonlinear Fiber Optics, concepts and applications (3h30), International School on Parametric Nonlinear Optics*
G. Millot
Classical, Quantum, Materials, Geometries, Devices and Applications
Les Houches, France. (20/04/2015)

29. *Lasers et spectromètres pour la LIBS : besoins, état de l'art et innovations*
O. Musset
Journées LIBS 2015
INERIS, France. (01/06/2015)

30. *Optical wave turbulence (1h30)*
A. Picozzi, G. Xu, J. Garnier, M. Guasoni, J. Fatome, B. Rumpf, D. Faccio, D. Vocke, P. Suret, S. Randoux, S. Trillo, G. Millot
Summer school on Rogue and shock waves in nonlinear dispersive media
Cargèse, France. (06/07/2015)

31. *Fundamental concepts of nonlinear fiber optics (3h15)*
G. Millot
Summer school Rogue and Shock Waves in Nonlinear Dispersive Media
Cargèse, France. (06/07/2015)

32. *Dual-comb spectroscopy with frequency-agile lasers*
G. Millot, M. Yan, K. Iwakuni, S. Pitois, A. Bendahmane, Th. W. Hänsch, N. Picqué
International School on spatiotemporal complexity in nonlinear optics
Como, Italy. (31/08/2015)

D. Invited talks

1. *Coupled Nanocavities integrated on Silicon Slot Waveguides*
B. Cluzel, K. Foubert, L. Lalouat, J. Dellinger, E. Picard, D. Peyrade, E. Hadji et F. De Fornel
European Meeting Research Society
Strasbourg, France. (00/00/2010)

2. *Supercontinuum généré par fibre optique à cristal photonique pour l'accès multiple à répartition par code,*
C. Finot, V. Couderc, C. Lepers, C. Ware, B. Kibler, S. Cordette, I. Fsaifes, A. Tonello, M. Douay, S. Wabnitz and G. Millot
deuxième grand colloque STIC, Cité des Sciences et de l'Industrie
Paris, France. (05/01/2010)

3. *Optical near field interactions*
F. de Fornel, B. Cluzel, L. Salomon, L. Lalouat, D. Peyrade, P. Lalanne, E. Hadji
SPIE Photonic West
San Francisco, USA. (23/01/2010)

4. *Effets de polarisation non linéaires et évènements extrêmes dans les fibres optiques*
G. Millot, C. Finot, J. Fatome, K. Hammani, B. Kibler, S. Pitois
Séminaire à l'IPCMS
Strasbourg, France. (27/01/2010)

5. *Evanescent assembly of air slotted nanocavities*
K. Foubert, L. Lalouat, E. Picard, D. Peyrade, E. Hadji, F. de Fornel, Benoit Cluzel
Photonics Europe
Brussels, Belgium. (12/04/2010)

6. *Negative refraction and focalisation with a dielectric metamaterial lens*
G. Scherrer, M. Hofman, W. Smigaj, B. Cluzel, O. Vanbésien, B. Gralak, F. de Fornel
Photonics Europe
Brussels, Belgium. (12/04/2010)

7. *Modeling of metallo-dielectric photonic crystals: toward a subwavelength resolution of superlens by compensation of losses, comparison between TE and TM polarization*
Y. Ould Agha, L. Salomon, B. Cluzel, F. de Fornel
Photonics Europe
Brussels, Belgium. (12/04/2010)

8. *Experimental observation of infrared spectral enlargement in As2S3 suspended core microstructured fibre*
F. Smektala, M. El Amraoui, J. Fatome, J. C. Jules, G. Gadret, I. Skripatchev, Y. Messaddeq, G. Renversez, M. Szpulak, J. Troles, L. Brilland
Photonics Europe
Brussels, Belgium. (12/04/2010)

9. *Coupled Nanocavities integrated on Silicon Slot Waveguides*
B.Cluzel, K. Foubert, L. Lalouat, E. Picard, D. Peyrade, E. Hadji and F.de Fornel
EMRS
Strasbourg, France. (05/05/2010)

10. *Low losses highly nonlinear As2S3 suspended core microstructured optical fibres*
F. Smektala, M. El-Amraoui, J. C. Jules, G. Gadret, J. Fatome, C. Polacchini, I. Skripatchev, Y. Messaddeq, G. Renversez, M. Szpulak, J. Troles, L. Brilland
GOMD 2010 Ceramic Society Glass and Optical Materials Division Annual Meeting
Corning, NY, USA. (16/05/2010)

11. *Fibres Optiques Microstructurées à C=C5=93ur Suspendu en Verres As2S3 : vers des sources IR large bande*
F. Smektala, M. El Amraoui, J. Fatome, J. C. Jules, G. Gadret, G. Renversez, M. Szpulak
LAOG Laboratoire d'Astrophysique de L'observatoire de Grenoble
Grenoble, France. (28/05/2010)

12. *Higher-order Kerr terms allow ionization-free filamentation in gases*
P. Béjot, W. Ettoumi, Y. Petit, J. Kasparian, S. Henin, V. Loriot, T. Vieillard, E. Hertz, O. Faucher, B. Lavorel, J.-P. Wolf
Third International Symposium on Filamentation (COFIL 2010)
Capsis Elite Resort, Greece. (31/05/2010)

13. *Negative and positive Kerr nonlinearity of air calibrated with transient molecular alignment*
O. Faucher, V. Loriot, E. Hertz, B. Lavorel, P. Béjot, S. Henin, J. Kasparian, J.-P. Wolf
Third International Symposium on Filamentation (COFIL 2010)
Capsis Elite Resort, Greece. (31/05/2010)

14. *Infrared non-linear optical properties of low losses As2S3 photonic crystal fibres with different profiles*
F. Smektala, M. El-Amraoui, J. C. Jules, J. Fatome, C. Fortier, G. Gadret, B. Kibler, F. Désévédavy, I. Skripatchev, C. F. Polacchini, Y. Messaddeq, J. Troles, L. Brilland
Photonics North
Niagara Falls, Canada. (01/06/2010)

15. *Optical ODCDMA enhanced by nonlinear optics*
C. Ware, S. Cordette, C. Lepers, I. Fsaifes, A. Tonello, V. Couderc, M. Douay, C. Finot, and G. Millot
12th International Conference on Transparent Optical Network (ICTON)
Munich, Germany. (27/06/2010)

16. *Light by light polarization control for telecommunication applications*
J. Fatome, S. Pitois, C. Finot, and G. Millot
12th International Conference on Transparent Optical Network (ICTON)
Munich, Germany. (27/06/2010)

17. *Wave turbulence and thermalization of optical waves*
A. Picozzi, P. Suret, S. Randoux, C. Michel, S. Rica, C. Sun, C. Barsi, J. Fleischer
Laser Optics 2010
St Petersbourg, Russia. (28/06/2010)

18. *Attracteur de polarisation et évènements extrêmes dans les fibres optiques*
G. Millot, C. Finot, J. Fatome, K. Hammani, B. Kibler, S. Pitois
Séminaire au LPN
Marcoussis, France. (29/06/2010)

19. *Higher-order Kerr terms allow ionization-free filamentation in gases*
P. Béjot, W. Ettoumi, Y. Petit, J. Kasparian, S. Henin, V. Loriot, T. Vieillard, E. Hertz, O. Faucher, B. Lavorel, J.-P. Wolf

19th International Laser Physics Workshop (LPHYS'10)
Foz do Iguaçu, Brazil. (05/07/2010)

20. *Anomalous thermalization of nonlinear waves, some open questions about wave turbulence in optical systems*
S. Randoux, P. Suret, C. Michel, A. Picozzi
Wave Turbulence
Les Treilles, Tourtour, France. (12/07/2010)

21. *Emergence of extreme events in fiber based nonlinear devices*
B. Kibler, K. Hammani, C. Finot, and G. Millot
2010 IEEE/LEOS Summer Topical Meetings
Playa del Carmen, Mexico. (19/07/2010)

22. *General Features of Dissipative Soliton Resonances: a Roadmap for High-energy Optical Pulses?*
Ph. Grelu, W. Chang, N. Akhmediev, J.M. Soto-Crespo, A. Ankiewicz,
SIAM Conference on Nonlinear Waves and Coherent Structures
Philadelphia, USA. (16/08/2010)

23. *A Roadmap for High-energy Optical Pulses?*
Ph. Grelu, W. Chang, N. Akhmediev, J.M. Soto-Crespo, A. Ankiewicz, "General Features of Dissipative Soliton Resonances
SIAM Conference on Nonlinear Waves and Coherent Structures
Philadelphia, USA. (16/08/2010)

24. *Optical wave turbulence and thermalization of random nonlinear waves*
A. Picozzi, C. Michel, P. Suret, S. Randoux, P. Aschieri, S. Rica, C. Sun, C. Barsi, S. Jia, J. Fleischer
ICONO/LAT 2010
Kazan, Russia. (23/08/2010)

25. *Modeling of metallo-dielectric photonic crystals : Toward a subwavelength resolution of superlens by compensation of losses. Comparison between TE and TM polarization*
Y. Ould Agha, L. Salomon B. Cluzel and F. de Fornel
PECS IX
Granada, Spain. (26/09/2010)

26. *Interface engineering for improved light transmittance through photonic crystal flat lenses*
G. Scherrer, M. Hofman, W. Smigaj, B. Gralak, X. Mélique, O. Vanbésien, D.Lippens, C. Dumas, B. Cluzel, and F. de Fornel
PECS IX
Granada, Spain. (26/09/2010)

27. *Coupling evanescently low loss Silicon-on-insulator (SOI) ridge waveguides(WGs) including high Q nanocavities*
B. Cluzel, K. Foubert, L. Lalouat, E. Picard, D. Peyrade, E. Hadji and F. de Fornel
PECS IX
Granada, Spain. (26/09/2010)

28. *Microfibres de verre : caractérisation champ proche et utilisation en optique non linéaire*
A. Coillet, L.M. Moubouessi, J. Dellinger, B. Cluzel, G. Vienne, P. Grelu et F. de Fornel
JNOG 2010
Besançon, France. (20/10/2010)

29. *Towards CEP Stable Sub Two Cycle IR Pulse Compression with Bulk Material*
François Légaré, Bruno E. Schmidt, Andrew D. Shiner, Pierre Béjot, Jean-Pierre Wolf, David M. Villeneuve, Jean-Claude Kieffer, Paul B. Corkum
Frontiers in Optics
Rochester, United States. (24/10/2010)

30. *Nanoroughness mesurements: comparative investigations using power spectral density*
Z. Silvestri, C. Zerrouki, N. Fourati, P. Pinot, H. Nasralah, F. de Fornel
Nanoscale 2010
Brno, Czech Republic. (27/10/2010)

31. *Parabolic pulse formation and applications*
C. Finot and G. Millot
Aston University
Aston, United Kingdom. (02/11/2010)

32. *Demonstration of Experimental Infrared Spectral Broadening in Chalcogenide As2S3 Suspended Core Microstructured Optical Fibers*
F. Smektala, M. El-Amraoui, J. C. Jules, G. Gadret, J. Fatome, B. Kibler, F. Désévédavy, G, Qin, T. Suzuki, Y. Ohishi, C. Polacchini, I. Skripatchev, Y. Messaddeq, G. Renversez, M. Szpulak
ICC3 Third International Congress on Ceramics
Osaka, Japan. (14/11/2010)

33. *Highly nonlinear microstructured optical fibers based on infrared glasses,*
F. Smektala
at the Institute of Physics Wroclaw University of Technology
Wroclaw, Poland. (10/12/2010)

34. *Complex self-organization of solitons in a fiber laser: Rain of Solitons, characterization and control*
S. Chouli and Ph. Grelu
International Conference on Optics, Photonics and their Applications, ICOPA'10 proceedings
Algiers, Algeria. (13/12/2010)

35. *Solitons to supercontinuum: new nonlinear structures in fiber propagation*
B. Kibler, J. Fatome, C. Finot, G. Millot, F. Dias, G. Genty, N. Akhmediev, J.M. Dudley
Photonics Global Conference 2010
Singapore, Singapore. (14/12/2010)

36. *Dissipative Solitons for Mode Locked Fiber Lasers*
Ph. Grelu
Photonics Global Conference 2010
Singapore, Singapore. (14/12/2010)

37. *Optical field molding within near field coupled twinned nanobeam cavities*
B. Cluzel , K. Foubert, L. Lalouat, E. Picard ,D. Peyrade , F. de Fornel and E. Hadji
Integrated Photonics Research conference
Toronto, Canada. (00/00/2011)

38. *Si based micro and nano resonators for on-chip light handling*
E. Hadji, J.B. Jager, K. Foubert, V. Calvo, B. Cluzel, E. Picard, P. Noe, T. Charvolin, F. de Fornel, D. Peyrade,
Material Research Society Fall Meeting
Boston, USA. (00/00/2011)

39. *On chip light handling with single and twinned nanobeam cavities*
B. Cluzel , K. Foubert, L. Lalouat, E. Picard ,D. Peyrade , F. de Fornel and E. Hadji
Photonics Plasmonics and Metamaterials
Bilbao, Spain. (00/00/2011)

40. *Lentille plate à cristaux photoniques et ingénierie d'interface : investigation en champ proche optique*
G. Scherrer, Maxence Hofman, Wojciech Smigaj, Boris Gralak, Xavier Mélique, Olivier Vanbésien, Didier Lippens, Colette, Dumas, Benoit Cluzel et Frédérique de Fornel
Colloque métamatériaux
Paris, France. (00/00/2011)

41. *Wave turbulence and thermalization of random waves*
A. Picozzi, C. Michel, P. Suret, S. Randoux, P. Aschieri, S. Rica
Conference on Nonlinear Systems and Dynamics
Tiruchirapally, India. (24/01/2011)

42. *Couplage émetteur(s) quantique - plasmon de surface*
G. Colas des Francs
Congrès de la société française de microscopie
Strasbourg, France. (28/01/2011)

43. *Tracking electron motion at the 1fs temporal scale*
D. Charalambidis, E. Skantzakis, P. Tzallas, J. Kruse, O. Faucher, G. D. Tsakiris
Laser 2011
Istanbul, Turkey. (13/02/2011)

44. *Optical Rogue Waves: Physics and Impact*
G. Genty, J. M. Dudley, B. Kibler, J. Fatome, C. Finot, G. Millot, F. Dias, N. Akhmediev and J.M. Dudley
Optical Fiber Communications conference
Los Angeles, USA. (07/03/2011)

45. *Emergence of rogue waves from optical wave turbulence and Akhmediev breathers*
A. Picozzi, K. Hammani, B. Kibler, C. Michel, C. Finot
29th Progress in Electromagnetics Research Symposium
Marrakesh, Morocco. (20/03/2011)

46. *Complex Self-organized Multi-pulse Dynamics in a Fiber Laser : The Rain of Solitons*
S. Chouli and Ph. Grelu
PIERS 2011 Marrakesh, Progress In Electromagnetics Research Symposium
Marrakesh, Morocco. (20/03/2011)

47. *Supercontinuum to solitons: extreme nonlinear structures in optics*
J. M. Dudley, B. Kibler, J. Fatome, C. Finot, G. Millot, F. Dias, G. Genty, N. Akhmediev
French Israeli Symposium on Non-linear & Quantum Optics,
Aussois, France. (28/03/2011)

48. *Analytical studies of modulation instability and nonlinear compression dynamics in optical fiber propagation*
B. Kibler, B. Wetzel, M. Erkintalo, G. Genty, K. Hammani, J. Fatome, C. Finot, F. Dias, N. Akhmediev, J. M. Dudley
SPIE Optics+Optoelectronics
Prague, Czech Republic. (18/04/2011)

49. *Photonic Crystal Fibres from Non Silica Glasses for Fibre Optic Sources in the NIR and MIR ranges*
F. Smektala
OFS 21 21st International Conference on Optical Fibre Sensors
Ottawa, Canada. (15/05/2011)

50. *Recent developments in non-linear fiber-based optical pulse shaping*
S. Boscolo, C. Finot, S.K. Turitsyn
Photonics North
Ottawa, Canada. (16/05/2011)

51. *Recent developments in soft glasses microstructured optical fibres,*
F. Smektala
at the Centre d'Optique Photonique et Laser, Université Laval
Québec, Canada. (20/05/2011)

52. *Les solitons optiques: un modèle pour les vagues scélérates océaniques ?*
K. Hammani, B. Kibler, C. Finot, G. Millot
109ième session de l'Association Technique Maritime et Aéronautique
Paris, France. (23/05/2011)

53. *Optical Peregrine soliton generation in standard telecommunications fibers*
C. Finot, K. Hammani, B. Kibler, I. El-Mansouri, J. Fatome, J.M. Dudley and G. Millot
13th International Conference on Transparent Optical Network (ICTON)
Stockholm, Sweden. (26/06/2011)

54. *Contrôle électrique des nano-antennes optiques*
A. Bouhelier
XXI Colloque de la société Française de microscopie
Strasbourg, France. (27/06/2011)

55. *Going to the extreme in dissipative soliton dynamics resonances and soliton rains*
Ph. Grelu
NLWO11 Nonlinear Waves in Optics
Rouen, France. (28/06/2011)

56. *Cascaded four-wave mixing in fiber optics: From higher-order modulation instability to quasi-phase matching*
M. Erkintalo, Y.Q. Xu, S. Murdoch, K. Hammani, B. Kibler, C. Finot, J.M. Dudley and G. Genty
14th International Conference on Transparent Optical Network (ICTON)
Warwick, United Kingdom. (02/07/2011)

57. *Approche non conventionnelle sur les conversions non linéaires par la théorie cinétique*
A. Picozzi, C. Michel, B. Kibler, G. Millot, P. Suret, S. Randoux, S. Rica
Optique/03/eille-Horizons de l'optique
Marseille, France. (04/07/2011)

58. *Anomalous thermalization of nonlinear optical wave systems*
P. Suret, C. Michel, A. Picozzi, S. Randoux
20th Internat. Laser Phys. Conference
Sarajevo, Bosnia Herzegovina. (11/07/2011)

59. *Transition from plasma- to Kerr-driven laser filamentation*
P. Béjot, E. Hertz, J. Kasparian, B. Lavorel, O. Faucher, J.-P. Wolf
20th International Laser Physics Workshop (LPHYS'11)
Sarajevo, Bosnia and Herzegovina. (11/07/2011)

60. *Recent developments in chalcogenide PCF, I*
F. Smektala, M. El-Amraoui, J. Fatome, B. Kibler, J. C. Jules, G. Gadret, F. Désévédavy, G; Renversez, J. Troles, L. Brilland, M. Duhant, G. Canat, Y. Ohishi
EEE Photonics Society Summer Topicals
Montreal, Canada. (18/07/2011)

61. *Near-field control of optical bistability in a nanocavity*
D. Brissinger, B.Cluzel , A. Coillet, C., Dumas, P. Grelu, F. de Fornel
URSI GA
Istanbul, Turkey. (11/08/2011)

62. *Interface engineering for improved light transmittance through photonic crystal flat lenses*
G.Scherrer,, M. Hofman, W.migaj, B. Gralak, X. Mélique, O.Vanbésien, D. Lippens, C., Dumas, B. Cluzel, and F. de Fornel
URSI GA
Istanbul, Turkey. (11/08/2011)

63. *Higher-order Kerr effect in ultrashort laser pulse propagation and laser filamentation*
P. Béjot, J. Kasparian, O. Faucher, E. Hertz, , B. Lavorel, J.-P. Wolf
URSI General Assembly and Scientific Symposium (XXXth URSI GAAS)
Istanbul, Turkey. (14/08/2011)

64. *Light-by-light polarization control and its applications in optical communications*
J. Fatome, P. Morin, S. Pitois, C. Finot and G. Millot
Nonlinnear Photonics,: Theory, Materials and applications
Saint Petersburg, Russia. (24/08/2011)

65. *The Peregrine soliton in nonlinear fiber optics*
C. Finot, B. Kibler, K. Hammani, J. Fatome, G. Millot, F. Dias, G. Genty, N. Akhmediev, B. Wetzel, J.M. Dudley
Nonlinear Photonics: Theory, Materials, Applications
Saint Petersburg, Russia. (24/08/2011)

66. *Dissipative soliton resonances in laser systems: latest developments*
Ph. Grelu, W. Chang, E. Ding, J.M. Soto-Crespo, J.N. Kutz, A. Ankiewicz, N. Akhmediev
NPh'11Nonlinear Photonic: Theory, Materials, Applications
St, Petersburg, Russia. (24/08/2011)

67. *Excitation of a one-dimensional evanescent wave by edge diffraction of surface plasmon*
A. Bouhelier
Frontier in Plasmonics
Xi'an, Chine. (03/09/2011)

68. *Nonlinear pulse shaping in fibres for pulse generation and optical processing*
S. Boscolo, S. Turitsyn, C. Finot
15th international SAOT workshop on all-optical signal regeneration
Erlangen, Germany. (28/09/2011)

69. *Spectroscopies exaltées sur surface métallique : couplage émetteurs-nanostructures plasmoniques*
G. Colas des Francs
GDR Plasmonique moléculaire et spectroscopies exaltées
Meudon, France. (14/10/2011)

70. *Kinetic wave equations and possible optical experiments*
A. Picozzi, C. Michel, P. Suret, S. Randoux, S. Rica, P. Aschieri, J. Garnier
Conference on long range interactions
Lyon, France. (17/10/2011)

71. *Observation d'effets Kerr d'ordres élevés (HOKE) dans les gaz*
J. Houzet, T. Vieillard, E. Hertz, F. Billard, B. Lavorel, P. Béjot, J. Kasparian, J.-P. Wolf, O. Faucher
9ème Journées de Phénomènes Ultra-rapides (JPU 2011)
France, Rouen. (17/10/2011)

72. *Stratégies de contrôle pour la manipulation spatiale de molécules*
E. Hertz, Z. Hoque, B. Lavorel, O. Faucher
9ème Journées de Phénomènes Ultra-rapides (JPU 2011)
France, Rouen. (17/10/2011)

73. *Toward a kinetic formulation of statistical nonlinear optics*
A. Picozzi, C. Michel, P. Suret, S. Randoux, S. Rica, P. Aschieri, G. Millot, J. Garnier
Complex Phenomena in Nonlinear Physics
Erice, Italy. (08/11/2011)

74. *Dispersive shock waves: wave-mixing experiments and other perspectives*
S. Trillo, A. Armaroli, S. Malaguti, J. Fatome, C. Finot, G. Millot, A. Fratalocchi, M. Crosta, C. Conti, N. Ghofranhia, G. Ruocco, M. Peccianti
Complex Phenomena in Nonlinear Physics
Erice, Italy. (08/11/2011)

75. *Experimental investigation of the optical Kerr effect at large laser intensity: impact on the propagation of a short and intense laser pulse*
O. Faucher, V. Loriot, T. Vieillard, E. Hertz, B. Lavorel, P. Béjot, S. Henin, J. Kasparian, J.-P. Wolf
International Workshop on Atomic Physics
Dresden, Germany. (22/11/2011)

76. *Vers une formulation cinétique de l'optique non linéaire statistique*
A. Picozzi, C. Michel, P. Suret, S. Randoux, S. Rica, P. Aschieri, J. Garnier
Journée Electromagnétisme, Polarisation et Optique Statistique
Marseille, France. (25/11/2011)

77. *Rogue waves and extreme statistics in fiber optical systems*
K. Hammani, C. Finot, B. Kibler, J. Fatome, J.M. Dudley and G. Millot
Aston University
Aston, United Kingdom. (12/12/2011)

78. *Optical trapping and assembly of particles by a nanocavity*
C. Renaut, B. Cluzel, J. Dellinger, , L. Lalouat, D. Peyrade, E. Picard, E. Hadji, F. de Fornel
Photonics Europe
Brussels, Belgium. (00/00/2012)

79. *Optical tweezing with nanobeam coupled cavities*
C. Renaut, B. Cluzel, J. Dellinger, L. Lalouat, D. Peyrade, E. Picard, E. Hadji, F. de Fornel
Near-Field Optics
San Sebastian, Spain. (00/00/2012)

80. *On chip optical tweezers like: trapping and assembly of nanoparticles into an optofluidic system*
C. Renaut, B. Cluzel, J. Dellinger, L. Lalouat, D. Peyrade, E. Picard, E. Hadji, F. de Fornel
European Meeting Research Society
Strasbourg, France. (00/00/2012)

81. *Modélisation mathématique et étude expérimentale des instabilités non linéaires*
J. M. Dudley, F. Dias, C. Finot, B. Kibler, A. Picozzi, K. Hammani, G. Millot, B. Wetzel, J. Garnier
des vagues scélérates et des phénomènes extrêmes (MANUREVA), Grand colloque STIC 2012
Lyon, France. (04/01/2012)

82. *Molecular plasmonics - dipolar emitter coupling to plasmons*
G. Colas des Francs
International Webinar on Recents Advances in Material Sciences
Mumbay, India. (10/01/2012)

83. *Optical Antennas: a paradigm shift for nanoscale wireless communication*
A. Bouhelier
Japan France Frontier of Engineering
Kyoto, Japon. (05/02/2012)

84. *Wave turbulence in integrable systems, nonlinear propagation of incoherent optical waves in single-mode fibers*
P. Suret, A. Picozzi, S. Randoux
Conference on Wave Interactions
Linz, Austria. (07/02/2012)

85. *Some recent developments around wave turbulence in nonlinear fiber optics*
S. Randoux, A. Picozzi, P. Suret
Conference on Wave Interactions
Linz, Austria. (07/02/2012)

86. *Optical wave condensation*
J. Fleischer, S. Rica, and A. Picozzi
Ecole des Houches, Wave Turbulence
Les Houches, France. (25/03/2012)

87. *Wave turbulence in optical fibers*
P. Suret, A. Picozzi, S. Randoux
Ecole des Houches, Wave Turbulence
Les Houches, France. (25/03/2012)

88. *Tellurite and Chalcogenide Microstructured Optical Fibres for Broadband Sources in the Infrared*
F. Smektala
GOMD 2012 Ceramic Society Glass and Optical Materials Division Annual Meeting
St Louis, MO, USA. (20/05/2012)

89. *Soft Glasses Photonic Crystal Fibres for Supercontinuum Generation in the Infrared*
F. Smektala
10th International Conference of Solid State Chemistry 2012
Pardubice, Czech Republic. (10/06/2012)

90. *Hamiltonian Relaxation Phenomena and Applications to Nonlinear Optics*
E. Assemat, A. Picozzi, H. Jauslin, D. Sugny
SIAM Conference on nonlinear waves and coherent structures
Seattle, USA. (13/06/2012)

91. *Wave turbulence in nonlinear fiber optics: Experiment and theory*
P. Suret, A. Picozzi, S. Randoux
SIAM Conference on nonlinear waves and coherent structures
Seattle, USA. (13/06/2012)

92. *All-optical Control of Polarization State in Optical Fibers for Telecommunication Applications*
J. Fatome, S. Pitois, and P. Morin
2012 SIAM Conference on Nonlinear Waves and Coherent Structures (NW12)
Seattle, USA. (13/06/2012)

93. *Higher-order modulation instability in fiber optics*
M. Erkintalo, K. Hammani, B. Kibler, C. Finot, N. Akhmediev, J.M. Dudley, G. Genty
14th International Conference on Transparent Optical Network (ICTON)
Coventry, United Kingdom. (02/07/2012)

94. *Observation of the condensation of classical waves*

S. Rica, A. Picozzi, C. Sun, J. Fleischer
Wave propagation in complex media
Cargese, France. (07/08/2012)

95. *Optical near field imaging of cloaked wave fronts at telecommunication wavelength*
G. Scherrer ; M. Kadic, M. Hofman, X. Mélique, O. Vanbésien, W. Smigaj, B. Gralak, S. Guenneau, B. Cluzel, F. de Fornel
ETOPIM 9
Marseille, France. (02/09/2012)

96. *Hyperspectral near-field imaging for nanophotonics*
J. Dellinger,L. Lalouat, B. Cluzel, and F de Fornel
NFO12,
San Sebastian, Spain. (03/09/2012)

97. *Coupling photonic crystal nanocavities in optical near-field field*
L. Lalouat, B. Cluzel, K. Foubert, J. Dellinger, ,E. Picard, E. Hadji, D. Peyrade, and F. de Fornel
NFO12
San Sebastian, Spain. (03/09/2012)

98. *Optical Antennas: a paradigm shift for nanoscale wireless communication*
A. Bouhelier
European Physical Society meeting
Edinburgh, Ecosse. (03/09/2012)

99. *Optical near-field imaging of cloaked wave fronts at telecommunication wavelength*
G. Scherrer, M. Kadic, M. Hofman, X. Mélique, D. Lippens, O. Vanbésien, W. Smigaj, B. Gralak, S. Guenneau, B. Cluzel, F. de Fornel
EOSAM
Aberdeen, United Kingdom. (24/09/2012)

100. *Near-field interactions between a photonic crystal nanocavity and a near-field probe*
L. Lalouat, B. Cluzel,K. Foubert, J. Dellinger, ,M. Ding, G. Brambilla, E. Picard, E. Hadji, D. Peyrade, and F. de Fornel
EOSAM
Aberdeen, United Kingdom. (24/09/2012)

101. *Higher-order Kerr effects improve quantitative modelling of harmonics generation and laser filamentation*
J. Kasparian, P. Béjot, M. Petrarca, E. Hertz, B. Lavorel, O. Faucher, J.-P. Wolf
Fourth International Symposium on Filamentation (COFIL 2012)
Tucson, United States. (07/10/2012)

102. *Optical antenna: a paradigm shift for nanoscale wireless telecommunication*
A. Bouhelier
5th Mediterranean Conference on NanoPhotonics
Barcelone, Espagne. (05/11/2012)

103. *Facteur de Purcell à proximité de structures plasmoniques : implication pour le contrôle et l'adressage de nanosources optiques*
G. Colas des Francs
GDR Ondes, Journées thématiques - Modélisation du visible au
Troyes, France. (21/11/2012)

104. *Nonlinear optical properties of special fibres based on infrared glasses,*
F. Smektala
at the University Houari Boumediene
Alger, Algeria. (06/12/2012)

105. *Nonlinear glasses and special optical fibres for the Mid-Infrared,*
F. Smektala
at the University Houari Boumediene
Alger, Algeria. (06/12/2012)

106. *Extreme events in nature, randomness and rogue wave in optics*
J. Dudley, B. Wetzel, B. Kibler, C. Finot, G. Millot, K. Hammani, G. Genty, F. Dias
Photonics Global Conference
Singapore, Singapore. (13/12/2012)

107. *Plasmonic Purcell factor : control and adressing of optical nanosources*
G. Colas des Francs
Ecole de Physique des Houches, Winter workshop "Addressing, Transport and Storage of information by single atoms and molecules"
Les Houches, France. (14/01/2013)

108. *Understanding mode-locked laser dynamics with dissipative solitons*
Ph. Grelu
XXXVII National Symposium of the Optical Society of India

Pondicherry University, India. (23/01/2013)

109. *New soliton on finite background experiments in optics*
B. Kibler, B. Frisquet, G. Millot
2nd ERC MULTIWAVE Workshop on Rogue Waves,
University College Dublin, Ireland. (22/03/2013)

110. *Wave Turbulence in 1D Nonlinear Schrödinger Equation*
P. Suret, S. Randoux, A. Picozzi
The Eighth IMACS International Conference On Nonlinear Evolution Equations and Wave Phenomena, University of Georgia
Athens, USA. (25/03/2013)

111. *Optical antenna: a paradigm shift for nanoscale communication*
A. Bouhelier
Séminaire USTC Hefei
Hefei, Chine. (10/05/2013)

112. *Nanocolloid motion control by optical nanobeam cavities*
C. Renaut, B. Cluzel, J. Dellinger, L. Lalouat, D. Peyrade, E. Picard, E. Hadji, F. de Fornel
2nd EOS Conference on Optofluidics, World of Photonics Congress
Munich, Germany. (14/05/2013)

113. *Nanoplasmonique pour l'optoélectronique*
A. Bouhelier
Séminaire de l'institut des Nanotechnologies de Lyon
Nanjing, Chine. (15/05/2013)

114. *chi2 processes in electrically contacted optical gap antennas: second harmonic generation and optical rectification*
A. Bouhelier
Séminaire Nanjing University
Nanjing, Chine. (15/05/2013)

115. *Wave Turbulence in 1D Nonlinear Schrödinger Equation*
P. Suret, A. Picozzi, S. Randoux
Waves 2013, 1st International Conference on Mathematical and Numerical Aspects of Waves
Tunis, Tunisia. (03/06/2013)

116. *Rogue waves : rational solitons and wave turbulence theory*
B. Kibler, B. Frisquet, J. Fatome, C. Finot, A. Picozzi, G. Millot
The third international conference : nonlinear waves - theory and applications
Beijing, China. (12/06/2013)

117. *Quantum mechanical interpretation of higher-order optical Kerr effect in the strong field regime*
P. Béjot, J. Houzet, F. Billard, E. Hertz, B. Lavorel, O. Faucher, J. Kasparian, J.-P. Wolf, E. Cormier
ICONO/LAT 13
Moscow, Russia. (18/06/2013)

118. *Nonlinear pulse shaping and polarization dynamics in mode-locked fibre lasers*
S.V. Sergeyev, S. Boscolo, C. Mou, C. Finot, , S.K. Turitsyn
15th International Conference on Transparent Optical Network (ICTON)
Cartagena, Spain. (23/06/2013)

119. *Hyperspectral near-field imaging of light bending in a graded photonic crystal*
B. Cluzel, J. Dellinger, K-V. Do, E. Cassan, F. de Fornel
ICTON
Cartagena, Spain. (24/06/2013)

120. *Optique non linéaire statistique, Vers une formulation thermodynamique hors-équilibre unifiée*
A. Picozzi, J. Garnier, G. Millot, B. Kibler, C. Michel, G. Xu, P. Suret, S. Randoux
Optique Paris, Coloq, Un. Paris Nord
Villetaneuse, France. (08/07/2013)

121. *Solitons sur fond continu en optique non-linéaire fibrée*
B. Kibler, B. Frisquet, K. Hammani, J. Fatome, C. Finot, J. Dudley et G. Millot
COLOQ 2013
Villetaneuse, France. (08/07/2013)

122. *L'Omnipolariseur: Démonstration expérimentale d'un phénomène d'auto-polarisation de la lumière dans les fibres optiques*
J. Fatome, P. Morin, S. Pitois, P. Y. Bony, M. Guasoni, D. Sugny, A. Picozzi, H. Jauslin, G. Millot, S. Wabnitz
Journées nationales d'optique guidées, JNOG 2013
Villetaneuse, France. (08/07/2013)

123. *Optical wave turbulence, Advanced Workshop on Nonlinear Photonics, Disorder and Wave Turbulence*
A. Picozzi, J. Garnier, G. Xu, P. Aschieri, M. Guasoni, J. Fatome, G. Millot
International Center for Theoretical Physics
Trieste, Italy. (15/07/2013)

124. *Holographic plasmonic couplers for vortex beams and non-diffracting surface waves*
Patrice Genevet, Jiao Lin, Jean Dellinger, Benoit Cluzel, Frédérique De Fornel, Mikhail A. Kats, Federico Capasso
Photonic West
San Francisco, USA. (25/08/2013)

125. *Optical wave turbulence*
A. Picozzi, J. Garnier, G. Xu, S. Trillo, C. Michel, P. Aschieri, P. Suret, S. Randoux, M. Guasoni, J. Fatome, G. Millot
International workshop on Spatio-Temporal Complexity in Optical Fibers
Como, Italy. (16/09/2013)

126. *Role of incoherence on the formation and suppression of dissipative rogue waves in a passive fiber cavity*
G. Millot, J. Fatome, S. Pitois, B. Kibler, C. Finot, A. Picozzi, C. Michel, M. Conforti, A. Mussot
International workshop on Spatio-Temporal Complexity in Optical Fibers
Como, Italy. (16/09/2013)

127. *Self-organization of polarization state in optical fibers for Telecommunication applications*
J. Fatome, S. Pitois, P. Morin, P. Y. Bony, M. Guasoni, A. Picozzi, D. Sugny, H. Jauslin, G. Millot and S. Wabnitz
International workshop on Spatio-Temporal Complexity in Optical Fibers
Como, Italy. (16/09/2013)

128. *Nonlinear shaping in optical fibers*
C. Finot, K. Hammani, J. Fatome, B. Kibler, G. Millot
International workshop on Spatio-Temporal Complexity in Optical Fibers
Como, Italy. (16/09/2013)

129. *Toward a wave turbulence description of supercontinuum generation*
A. Picozzi, B. Kibler, B. Barviau, C. Michel, G. Xu, A. Kudlinski, J. Fatome, G. Millot,
Workshop on Supercontinuum generation, Univ. Franche-Comté
Besançon, France. (20/09/2013)

130. *Imagerie hyperspectrale en champ proche optique : Applications pour la nanophotonique*
B. Cluzel
Congrès National Métamatériaux
Orsay, France. (07/10/2013)

131. *Ingénierie des interactions champ proche dans les nanocavités à cristaux photoniques*
B. Cluzel
Assemblée générale du GDR Ondes
Dijon, France. (28/10/2013)

132. *Toward a long-range optical wave turbulence ?*
A. Picozzi, G. Xu, P. Aschieri, P. Suret, S. Randoux, J. Fatome, G. Millot, J. Garnier
Statistical Mechanics and Nonlinear Physics
Lille, France. (12/11/2013)

133. *Auto-organisation de la polarisation dans les fibres optiques: L'Omnipolariseur*
J. Fatome, P. Morin, P. Y. Bony, M. Guasoni, S. Pitois, D. Sugny, A. Picozzi, H. R. Jauslin G. Millot, S. Wabnitz
Journée &Électromagnétisme, Polarisation et Optique Statistique EPOS 2013
Marseille, France. (19/11/2013)

134. *Plasmonique et Champ proche*
F. de Fornel, L. Salomon, B. Cluzel, J. Dellinger
GDR Plasmonique Moléculaire et Spectroscopie Exaltée
Ecole Polytechnique, Palaiseau, France. (20/11/2013)

135. *Generating circularly polarized low-order harmonics through aligned molecules*
J. Houzet, E. Hertz, F. Billard, B. Lavorel, O. Faucher
1st User Workshop of the Extreme Light Infrastructure - Attosecond Light Pulse Source (ELI-ALPS)
Szeged, Hungary. (21/11/2013)

136. *Light Bending in a all-dielectric metamaterial*
J. Dellinger, K. Van Do, X. Le Roux, F. de Fornel, E. Cassan, B. Cluzel
SPIE Photonics Europe
Brussels, Belgium. (00/00/2014)

137. *Photonic tweezers on a chip: from optical trapping to manipulation of microparticles*
C. Pin, C. Renaut, E. Picard, E. Hadji, D. Peyrade, F. de Fornel & B. Cluzel
SPIE Photonics Europe,
Brussels, Belgium. (00/00/2014)

138. *On-chip photonic tweezers: integrated tools for optical trapping, self-assembly and micromanipulation*
C. Pin, C. Renaut, E. Picard, E. Hadji, D. Peyrade, F. de Fornel, B. Cluzel
SPIE Optics+Photonics 2014, Optical Trapping and Optical Micromanipulation XI
San Diego, USA. (00/00/2014)

139. *Optical wave turbulence*

A. Picozzi, J. Garnier, G. Xu, M. Guasoni, J. Fatome, G. Millot
Aston University
Aston, United kingdom. (22/02/2014)

140. *Optique non linéaire incohérente,*
A. Picozzi, G. Xu, J. Garnier, S. Randoux, P. Suret, S. Trillo, G. Millot
Rencontres du Non Linéaire
Paris, France. (18/03/2014)

141. *Nanoplasmonics: an interface technology for opto-electronics devices*
A. Bouhelier
SPIE Europe
Brussels, Belgique. (14/04/2014)

142. *Optical wave turbulence*
A. Picozzi, J. Garnier, G. Xu, M. Guasoni, J. Fatome, S. Trillo, B. Kibler, G. Millot
The Nonlinear Meeting 2014
Edinburgh, United Kingdom. (17/05/2014)

143. *Higher-order breathers in nonlinear fiber optics*
B. Kibler, B. Frisquet, G. Millot, A. Chabchoub
The Nonlinear Meeting 2014
Edinburgh, United Kingdom. (17/05/2014)

144. *Polarization modulational instability in a Manakov system*
G. Millot, J. Fatome, S. Pitois, B. Kibler, C. Finot, A. Picozzi, C. Michel, M. Conforti, A. Mussot
The nonlinear Meeting 2014
Edinburgh, United Kingdom. (17/05/2014)

145. *Higher-order breathers in nonlinear fiber optics*
B. Kibler, B. Frisquet, G. Millot, A. Chabchoub
3rd ERC MULTIWAVE Workshop on Rogue Waves
University College Dublin, Ireland. (04/06/2014)

146. *Shallow water optical rogue waves: optical tsunamis*
S. Wabnitz, B. Varlot, C. Finot, J. Fatome, G. Millot
Workshop on Abnormal Wave Events 2014
Nice, France. (05/06/2014)

147. *Optical wave turbulence*
A. Picozzi, J. Garnier, G. Xu, S. Trillo, B. Kibler, M. Guasoni, J. Fatome, G. Millot
Workshop on abnorormal wave events
Nice, France. (05/06/2014)

148. *Higher-order breathers in nonlinear fiber optics*
B. Kibler, B. Frisquet, G. Millot, A. Chabchoub
Workshop on Abnormal Wave Events
Nice, France. (05/06/2014)

149. *Fast Polarization Scramblers Based on Forward and Backward Nonlinear Interactions in Optical Fibers*
M. Guasoni, J. Fatome, S. Pitois, P. Morin, P. Y. Bony, A. Picozzi, D. Sugny, H. Jauslin, S. Wabnitz
International Conference on Transparent Optical Networks
Graz, Austria. (06/07/2014)

150. *Temporal dynamics of incoherent nonlinear waves*
A. Picozzi, G. Xu, J. Garnier, S. Trillo, B. Kibler, G. Millot, P. Suret, S. Randoux
International Workshop 'Rogue waves, dissipative solitons, plasmonics, supercontinuum and special fibres'
Barcelona, Spain. (25/07/2014)

151. *The frontiers of mode locking*
Ph. Grelu and C. Lecaplain
International Workshop 'Rogue waves, dissipative solitons, plasmonics, supercontinuum and special fibres'
Barcelona, Spain. (25/07/2014)

152. *Higher-order breathers in nonlinear fiber optics*
B. Kibler, B. Frisquet, G. Millot, A. Chabchoub
International Workshop 'Rogue waves, dissipative solitons, plasmonics, supercontinuum and special fibres'
Barcelona, Spain. (25/07/2014)

153. *Nonlinear pulse shaping in normally dispersive fibers: experimental examples*
C. Finot, K . Hammani, J. Fatome, G. Milot, S. Boscolo, H. Rigneault, S. Wabnitz
SIAM Conference on Nonlinear Waves and Coherent Structures
Cambridge, United Kingdom. (11/08/2014)

154. *Transducing electron and photons in electrically contacted optical gap antennas*
A. Bouhelier

Séminaire University College Dublin
Dublin, Irland. (16/09/2014)

155. *All-optical polarization control in fibers for telecom applications*
J. Fatome, P-Y. Bony, M. Guasoni, S. Pitois, P. Morin, D. Sugny, A. Picozzi, H. R. Jauslin, G. Millot, S. Wabnitz
Advanced Laser Technologies (ALT14)
Cassis, France. (06/10/2014)

156. *All-optical control of polarization state in optical fibre for telecom applications*
J. Fatome, S. Pitois, P. Morin, P. Y. Bony, M. Guasoni, A. Picozzi, D. Sugny, H. Jauslin, G. Millot and S. Wabnitz
IEEE Photonics Conference (IPC 2014)
San Diego, USA. (12/10/2014)

157. *Optical wave thermalization*
A. Picozzi, J. Garnier, G. Xu, S. Trillo, M. Guasoni, J. Fatome, G. Millot
Workshop on negative temperature states
Glasgow, United Kingdom. (23/10/2014)

158. *Spectroscopie de Fourier par peignes de fréquences générés par un laser continu*
G. Millot, S. Pitois, P. Morin, G. Fanjoux, N. Picqué
Journées nationales d'optique guidées
Nice, France. (29/10/2014)

159. *Chalcogenide fibers for mid-IR light generation: potentialities and drawbacks of the microstructured design in sulfide waveguides*
F. Smektala
Advanced Solid State Lasers (ASSL) OSA Congress, Conference and exhibition
Shanghaï, China. (16/11/2014)

160. *Transducing electron and photons in electrically-contacted optical gap antennas*
A. Bouhelier
Photonic West
San Francisco, USA. (07/02/2015)

161. *Modulational Instability, Analogies between Water Waves and Nonlinear Fibre Optics,*
B. Kibler
at COEST, Swinburne University of Technology
Hawthorn, Australia. (11/02/2015)

162. *Transducing Electrons and Photons in Electrically-Contacted Tunneling*
A. Bouhelier
Quantum Plasmonics 2015
Benasque, Espagne. (08/03/2015)

163. *All-Optical Polarization Control for Telecom Applications*
J. Fatome, P-Y. Bony, M. Guasoni, S. Pitois, A. Picozzi, D. Sugny, H. Jauslin, G. Millot, S. Wabnitz
Optical Fiber Communications Conference OFC 2015
Los Angeles, USA. (22/03/2015)

164. *Ondes scélérates en optique, Physique des ondes en milieux complexes et aux interfaces*
C. Finot, K. Hammani, J. Fatome, G. Millot and B. Kibler
GT 7 du GDR Onde
Paris, France. (22/06/2015)

165. *Advanced nonlinear signal processing in silicon-based waveguides*
P. Petropoulos, M. A. Ettabib, K. R. Bottrill, C. Lacava, F. Parmigiani, K. Hammani, M. Brun, P. Labeye, S. Nicoletti, A. Bogris, A. Kapsalis, D. Syvridis
European Conference of Networks and Optical Communications 2015 (NOC'2015)
London, United Kingdom. (30/06/2015)

166. *Collision de mascarets optiques dans les fibres optiques*
C. Finot, J. Fatome, G. Millot, A. Armarolli and S. Trillo
Optique Bretagne 2015 14ième Colloque sur les Laser et l'Optique Quantique
Rennes, France. (06/07/2015)

167. *Optical wave turbulence, Waves*
A. Picozzi, G. Xu, M. Guasoni, S. Trillo, D. Faccio, D. Vocke, J. Fatome, G. Millot
Solitons and Turbulence in Optical Systems
Berlin, Germany. (12/10/2015)

168. *Nonlinear Polarization Manipulation in Optical Fibers*
J. Fatome, P-Y. Bony, M. Guasoni, M. Gilles, A. Picozzi, S. Pitois, G. Millot, S. Wabnitz
Frontiers in Optics
San Jose, USA. (18/10/2015)

169. *Optical Kerr effect in the strong field regime*

P. Béjot, G. Karras, J. Houzet, F. Billard, E. Cormier, E. Hertz, B. Lavorel, J. Kasparian, J.-P. Wolf, O. Faucher
CLEO US 2013
San Jose, United States. (09/06/2103)

E. Oral contributions

1. *Fabrication of low-loss chalcogenide photonic-crystal =EF=AC=81bres by a moulding process*
Q. Coulombier, L. Brilland, P. Houizot, T. N. Nguyen, T. Chartier, G. Renversez, J. Fatome, F. Smektala, J.C. Sangleboeuf, T. Pain, J. Troles
Photonics West 2010
San José, CA, USA. (23/01/2010)

2. *As2S3 suspended core microstructured optical fibres for mid-IR supercontinuum generation: modelling and experimental results*
G. Renversez , M. Szpulak, M. El-Amraoui, J.C. Jules, G. Gadret, L. Brilland, J. Troles, I. Skripatchev, C. Polacchini, Y. Messaddeq, F. Smektala
Photonics West 2010
San José, CA, USA. (23/01/2010)

3. *Modulation instability, Akhmediev breathers, and "rogue waves" in nonlinear fiber optics*
J.M. Dudley, G. Genty, F. Dias, B. Kibler, N. Akhmediev
SPIE Photonics West Conference
San Francisco, USA. (23/01/2010)

4. *Thermalisation anormale d'ondes non linéaires*
P. Suret, A. Picozzi, H. Jauslin, S. Randoux
Rencontres du Non Linéaire
Paris, France. (10/03/2010)

5. *The dynamics of a developing CW supercontinuum: analytical predictions and experiments*
J.M. Dudley, G. Genty, F. Dias, B. Kibler, N. Akhmediev
Optical Fiber Communication Conference
San Diego, USA. (21/03/2010)

6. *Plasmonic waveguide modelling : density and local density of guided modes approach*
G. Colas des Francs, J. Grandidier, S. Massenot, A. Bouhelier, J.-C. Weeber, and A. Dereux,
Optical Waveguide Theory and Numerical Modelling (OWTNM10)
Cambridge, Royaume-Uni. (10/04/2010)

7. *Akhmediev Breather dynamics and the nonlinear modulation instability spectrum*
G. Genty, F. Dias, B. Kibler, N. Akhmediev, J.M. Dudley
SPIE Photonics Europe
Brussels, Belgium. (12/04/2010)

8. *Glass microfibers: use in nonlinear optics and near-field characterization*
A. Coillet, B. Cluzel, G. Vienne, F. de Fornel, Ph. Grelu
SPIE Photonics Europe
Brussels, Belgium. (12/04/2010)

9. *Casting process for manufacturing a low loss chalcogenide photonic crystal fibre*
L. Brilland, Q. Coulombier, P. Houizot, T. N. Nguyen, T. Chartier, F. Smektala, G. Renversez, A. Monteville, J. C. Sangleboeuf, J. Troles
Photonics Europe
Brussels, Belgium. (12/04/2010)

10. *Photonic crystal fibre multi wavelength laser*
F. Prudenzano, L. Mescia, L. Allegretti, V. Moizan, V. Nazabal, F. Smektala
Photoluminescence in Rare Earths PRE 2010
Firenze, Italy. (28/04/2010)

11. *Observation of the condensation of classical waves,*
C. Sun, Shu Jia, C. Barsi, A. Picozzi, S. Rica, J. W. Fleischer
CLEO/QELS
San José, California, USA. (16/05/2010)

12. *Aqueous corrosion of the GeSe4 chalcogenide glass: surface properties and corrosion mechanism*
Y.F. Niu, J. P. Guin, T. Rouxel, A. Abdelouas, J. Troles, F. Smektala
GOMD 2010American Ceramic Society Glass and Optical Materials Division Annual Meeting
Corning, NY, USA. (16/05/2010)

13. *Elaboration by casting method of low losses chalcogenide fibres for near and mid infrared applications*
J. Troles, L. Brilland, Q. Coulombier, F. Désévédavy, F. Smektala, T. Chartier, G. Renversez, J.L. Adam
ISNOG 2010 17th International Symposium on Non-Oxide and New Optical Glasses
Ningbo, China. (13/06/2010)

14. *Strong spectral enlargement in chalcogenide suspended core optical fibers*

F. Smektala, M. El-Amraoui, J. C. Jules, G. Gadret, J. Fatome, B. Kibler, C. Fortier, F. Desevedavy, C. Polacchini, I. Skrypatchev, Y. Messaddeq, G. Renversez, M. Szpulak, J. Troles, L. Brilland
ISNOG 2010 17th International Symposium on Non-Oxide and New Optical Glasses
Ningbo, China. (13/06/2010)

15. *Condensation of classical optical waves*
C. Sun, Shu Jia, C. Barsi, A. Picozzi, S. Rica, J. W. Fleischer
Nonlinear Photonics
Karlsruhe, Germany. (21/06/2010)

16. *Anomalous thermalization of nonlinear optical waves,*
C. Michel, P. Suret, S. Randoux, H. Jauslin, A. Picozzi
Nonlinear Photonics
Karlsruhe, Germany. (21/06/2010)

17. *Soliton generation and rogue-wave like behavior through four order modulation instability*
C. Finot, K. Hammani, B. Kibler, G. Millot
Nonlinear Photonics
Karlsruhe, Germany. (21/06/2010)

18. *Emergence of rogue waves from optical turbulence*
K. Hammani, B. Kibler, C. Finot, A. Picozzi
Nonlinear Photonics
Karlsruhe, Germany. (21/06/2010)

19. *All optical soliton-based 2R regeneration at 170 Gbps*
C. Finot, J. Fatome, M. Gay, M. Costa e Silva, T.N. Nguyen, L. Bramerie, T. Chartier, M. Joindot, J.C. Simon, J.L. Oudar
Nonlinear Photonics
Karlsruhe, Germany. (21/06/2010)

20. *Third harmonic generation in optical fibers with long period grating*
K. Tarnowski, W. Urbanczyk, B. Kibler and C. Finot
the 17th Slovak-Czech-Polish Optical Conference Wave and Quantum Aspects of Contemporary Optics
Liptovsk=C3=BD J=C3=A1n, Slovakia. (06/09/2010)

21. *Rugosité aux échelles nanométriques : caractérisation et stabilité à court et moyen termes*
Z. Silvestri, C. Zerrouki, N. Fourati, P. Pinot, H. Nasralah, F. de Fornel
Materiaux 2010
Nantes, France. (18/10/2010)

22. *Fibres optiques microstructurées à c=C5=93ur creux en verre de chalcogénure pour l'infrarouge*
G. Renversez, F. Désévédavy, L. Brilland, P. Houizot, I. Vassiliev, Q. Coulombier, D. Méchin, F. Smektala, J.-L. Adam et J. Troles
29ième Journées Nationales d'Optique Guidée (JNOG)
Besançon, France. (19/10/2010)

23. *Amélioration de la transmission des FOMs en verres de chalcogénures : de plus 10 dB/m à moins 50 dB/km. Applications dans l'IR*
J. Troles, L. Brilland, Q. Coulombier, P. Toupin, M. Duhant, G. Canat, T. Chartier, M. Thual, D.M. Nguyen, F. Smektala, G. Renversez, A. Monteville, D. Méchin, D. Trégoat
29ième Journées Nationales d'Optique Guidée (JNOG)
Besançon, France. (19/10/2010)

24. *Génération de supercontinuum dans une fibre en verre de fluorures pompée en régime de dispersion anormal à 2µm*
M. Duhant, W. Renard, G. Canat, F. Smektala, J. Troles, P. Bourdon
29ième Journées Nationales d'Optique Guidée (JNOG)
Besançon, France. (19/10/2010)

25. *Evénements extrêmes et turbulence optique*
K. Hammani, B. Kibler, C. Finot et A. Picozzi
29ièmes Journées Nationales de l'Optique Guidée
Besançon, France. (20/10/2010)

26. *Thermalisation anormale d'ondes incohérentes*
P. Suret, C. Michel, A. Picozzi, H. R. Jauslin, S. Randoux
29ièmes Journées Nationales de l'Optique Guidée
Besançon, France. (20/10/2010)

27. *Annulation de la biréfringence de groupe et de l'instabilité de modulation vectorielle dans une fibre microstructurée air/silice*
P. Morin, B. Kibler, J. Fatome, et G. Millot
29ièmes Journées Nationales de l'Optique Guidée
Besançon, France. (20/10/2010)

28. *Evaluation expérimentale des performances d'un système hybride WDM/DS-OCDMA*
S. Cordette, I. Fsaifes, B. Kibler, C. Ware, C. Lepers, C. Finot and G. Millot

29ièmes Journées Nationales de l'Optique Guidée
Besançon, France. (20/10/2010)

29. *Laser impulsionnel Raman à verrouillage de modes passif fonctionnant à 1 GHz*
A. Boucon, J. Fatome, C. Finot, T. Sylvestre, M.W. Lee, P. Grelu, G. Millot
29ièmes Journées Nationales de l'Optique Guidée
Besançon, France. (20/10/2010)

30. *Observation of condensation of classical waves*
C. Sun, Shu Jia, C. Barsi, A. Picozzi, S. Rica, J. W. Fleischer
Frontiers in Optics, OSA
Rochester, New York, USA. (24/10/2010)

31. *Observation of the Peregrine optical soliton*
G. Genty, B. Kibler, J. Fatome, C. Finot, G. Millot, F. Dias, N. Akhmediev, J.M. Dudley
EOS Annual Meeting
Paris, France. (26/10/2010)

32. *Rain of Solitons: characterization and control*
S. Chouli and Ph. Grelu,
European Optical Society Annual Meeting EOSAM 2010
Paris, France. (26/10/2010)

33. *Role of fabrication noise on the optical near-field properties of coupled photonic crystal nanocavities, Topical meeting: Towards new horizons for Photonics in Random Systems*
B. Cluzel, K. Foubert, J. Dellinger, D. Peyrade, E. Picard, E. Hadji, F. de Fornel
GDR Ondes
Lyon, France. (18/11/2010)

34. *Potentialities of microfibers for nonlinear optics*
A. Coillet, G. Vienne and Ph. Grelu
Photonics Global Conference, session Photonics Devices and Systems
Singapore, Singapore. (14/12/2010)

35. *Assemblage évanescent de nanocavités à cristaux photoniques*
B. Cluzel, K. Foubert, , D. Peyrade, E. Picard, E. Hadji, F. de Fornel
Journées Nationales de l'Optique Guidée
Marseille, France. (00/00/2011)

36. *Rediscovered dynamics of nonlinear fiber optics: from breathers to extreme localisation*
G. Genty, B. Kibler, J. Fatome, C. Finot, G. Millot, F. Dias, M. Erkintalo, N. Akhmediev, J.M. Dudley
SPIE Photonics West
San Francisco, USA. (22/01/2011)

37. *Optical Rogue Waves : Physics and Impact*
G. Genty, B. Kibler, J. Fatome, G. Millot, F. Dias, N. Akhmediev, J.M. Dudley.
The Optical Fiber Communication Conference OFC/NFOEC
Los Angeles, USA. (06/03/2011)

38. *Supercontinuum to Solitons: Extreme Nonlinear Structures in Optics*
J.M. Dudley, B. Kibler, J. Fatome, C. Finot, G. Millot, F. Dias, G. Genty, N. Akhmediev
FRISNO
Aussois, France. (28/03/2011)

39. *Nonlinear pulse shaping for coherent Raman microscopy*
E. R. Andresen, J.M. Dudley, D. Oron, C. Finot and H. Rigneault
Focus on Microscopy
Konstanz, Germany. (17/04/2011)

40. *Nonlinear effects generation in suspended core chalcogenide fibres*
M. El Amraoui, M. Duhant, F. Désévédavy, G. Canat, G. Gadret, JC Jules, J. Fatome, B. Kibler, G. Renversez, J. Troles, L. Brilland , Y. Messaddeq, F. Smektala
SPIE Optics & Optoelectronics
Prague, Czech Republic. (18/04/2011)

41. *Supercontinuum generation in microstructured tellurite fibres*
I. Savelii, G. Gadret, B. Kibler, M. El-Amraoui, J. Fatome, J. C. Jules, F. Désévédavy, J. M. Dudley, J. Troles, L. Brilland, G. Renversez, F. Smektala
SPIE Optics & Optoelectronics
Prague, Czech Republic. (18/04/2011)

42. *Optimization and characterization of a femtosecond tunable light source based on the soliton self-frequency shift in photonic crystal fiber*
C-H. Hage, B. Kibler, E. Mottay, H. Rigneault, J.M. Dudley, G. Millot, C. Finot
SPIE Optics & Optoelectronics
Prague, Czech Republic. (18/04/2011)

43. *Quasi-phase-matched third harmonic generation in optical fibers using refractive-index gratings*
K. Tarnowski, B. Kibler, C. Finot, W. Urbanczyk
SPIE Optics & Optoelectronics
Prague, Czech Republic. (18/04/2011)

44. *Observation of the optical Peregrine soliton*
B. Kibler, K. Hammani, J. Fatome, C. Finot, G. Millot, F. Dias, G. Genty, N. Akhmediev, J.M. Dudley
SPIE Optics & Optoelectronics
Prague, Czech Republic. (18/04/2011)

45. *Fourth Order Cascaded Raman Shift in As38Se62 chalcogenide suspended core fibre pumped at 1.995 µm*
M. Duhant, W. Renard, G. Canat, T. N. Nguyen, F. Smektala, J. Troles, Q. Coulombier, L. Brilland, G. Renversez, P. Bourdon
International Conference on Lasers and Electro-Optics CLEO 2011
Baltimore, USA. (01/05/2011)

46. *Visible light generation in As2S3 microstructured fibre and its influence to supercontinuum*
W. Gao, M. Liao, X. Yan, C. Kito, T. Suzuki, Y. Ohishi, M. El-Amraoui, J-C. Jules, G. Gadret, F. Désévédavy, F. Smektala
International Conference on Lasers and Electro-Optics CLEO 2011
Baltimore, USA. (01/05/2011)

47. *Emergence of rogue waves from optical turbulence*
K. Hammani, B. Kibler, C. Finot and A. Picozzi
International Conference on Lasers and Electro-Optics CLEO 2011
Baltimore, USA. (01/05/2011)

48. *Peregrine soliton in optical fiber-based systems*
K. Hammani, B. Kibler, J. Fatome, C. Finot, G. Millot, F. Dias, G. Genty, N. Akhmediev and J.M. Dudley
International Conference on Lasers and Electro-Optics CLEO 2011
Baltimore, USA. (01/05/2011)

49. *Generating Ultra-short High-energy pulses using Dissipative Soliton Resonance Pulse Compression Schemes*
W. Chang, Ph. Grelu, A. Ankiewicz, J.M. Soto-Crespo, N. Akhmediev
CLEO Europe/EQEC 2011, Conference on Lasers and Electro-Optics Europe
Munich, Germany. (22/05/2011)

50. *Anomalous Thermalization of Nonlinear Wave Systems*
P. Suret, C. Michel, H.R. Jauslin, A. Picozzi and S. Randoux
SIAM Conference on Applications of Dynamical Systems
Snowbird, Utah, USA. (22/05/2011)

51. *Improving mid-infrared supercontinuum generation efficiency by pumping a fluoride fibre directly into the anomalous regime at 1995 nm*
M. Duhant, W. Renard, G. Canat, C. Planchat, F. Smektala, J. Troles, P. Bourdon
International Conference on Lasers and Electro-Optics CLEO Europe 2011
Munich, Germany. (22/05/2011)

52. *High-harmonic km-long self-pulsed Raman fiber laser*
A. Boucon, B. Barviau, J. Fatome, C. Finot, T. Sylvestre, M.W. Lee, Ph. Grelu and G. Millot
CLEO Europe (Conference on Laser and ElectroOptic)
Munich, Germany. (22/05/2011)

53. *Universal spectral dynamics of modulation instability : theory, simulation, experiment*
K. Hammani, B. Wetzel, B. Kibler, J. Fatome, C. Finot, N . Akhmediev and J. M. Dudley
CLEO Europe (Conference on Laser and ElectroOptic)
Munich, Germany. (22/05/2011)

54. *Anomalous Thermalization of Nonlinear Wave Systems,*
S. Randoux, P. Suret, C. Michel, A. Picozzi
CLEO Europe (Conference on Laser and ElectroOptic)
Munich, Germany. (22/05/2011)

55. *Transition dynamics in optical fiber amplifiers operating in the normal dispersion regime*
B. Bale, K. Hammani, C. Finot and S. Boscolo
CLEO Europe (Conference on Laser and ElectroOptic)
Munich, Germany. (22/05/2011)

56. *Measuring elastic collisions from strong field molecular alignment*
T. Vieillard, F. Chaussard, B. Lavorel, S. Ivanov, D. Sugny, O. Faucher
European Conference on Nonlinear Optical Spectroscopy (ECONOS 2011)
Twente, The Netherlands. (23/05/2011)

57. *Purcell factor for point-like dipolar emitter coupling to 2D-plasmonic waveguides*
G. Colas des Francs, J. Barthes, A. Bouhelier, J.Weeber, and A. Dereux,
conference on laser and electro optics (CLEO Europe)
Munich, Allemagne. (25/05/2011)

58. *New developments in the study of optical parabolic pulses in normally dispersive fibers*
C. Finot, K. Hammani, B.B Bale, S. Boscolo
13th International Conference on Transparent Optical Network (ICTON)
Stockholm, Sweden. (26/06/2011)

59. *All-optical measurement of residual chromatic dispersion and OSNR using self-phase modulation in optical fiber*
C. Finot, C. Courvoisier, J. Fatome
13th International Conference on Transparent Optical Network (ICTON)
Stockholm, Sweden. (26/06/2011)

60. *Propagation d'ondes incohérentes dans une fibre optique monomode: évolution irréversible du spectre optique*
P. Suret, A. Picozzi et S. Randoux
30ièmes Journées Nationales de l'Optique Guidée
Marseille, France. (04/07/2011)

61. *Double regeneration tout-optique du profil temporal et de l'état de polarisation d'un signal telecom à 40 Gbit/s*
P. Morin, J. Fatome, C. Finot, S. Pitois, C.H. Hage, V. Tissot, R. Claveau et G. Millot
30ièmes Journées Nationales de l'Optique Guidée
Marseille, France. (04/07/2011)

62. *Dissipative Soliton Resonance in a Passively Mode-Locked Fiber Laser*
E. Ding, Ph. Grelu, J.N. Kutz,
WAVES 2011 10th International Conference on Mathematical and Numerical Aspects of Waves
Vancouver, Canada. (25/07/2011)

63. *Optical rogue waves and localized structures in nonlinear fiber optics*
G. Genty, M. Erkintalo, J. Fatome, C. Finot, K. Hammani, G. Millot, F. Dias, N. Akhmediev, B. Wetzel, J.M. Dudley
30 URSI General assembly and scientific symposium of international union of radio science
Istanbul, Turkey. (13/08/2011)

64. *Model for Coherence Transfer in a Backward Optical Parametric Oscillator Internat*
C. Montes, P. Aschieri, A. Picozzi
Commission for Optics, ICO
Puebla, Mexico. (15/08/2011)

65. *Simultaneous and all-optical polarization attraction and regeneration of a 40-Gbit/s RZ signal*
P. Morin, J. Fatome, C. Finot, S. Pitois and G. Millot
ECOC 2011 (European Conference on Optical Communication)
Geneva, Switzerland. (18/09/2011)

66. *Nonlinear Effects Above 2 µm in Chalcogenide Suspended Core Microstructured Optical Fibres: Modelling and Experiments*
G. Renversez, M. Duhant, W. Renard, A. Betourne, T.-N. Nguyen, G. Canat, F. Smektala, Q. Coulombier, J. Troles, and L. Brilland
IEEE Photonics 2011
Arlington Virginia, USA. (09/10/2011)

67. *Experimental control over soliton interaction in optical fiber by pre-shaped input field*
E. Andresen, J.M. Dudley, D. Oron, C. Finot, H. Rigneault
SPIE Photonics West 2012
San Francisco, USA. (21/01/2012)

68. *Higher-order modulation instability in nonlinear fiber optics*
M. Erkintalo, K. Hammani, B. Kibler, C. Finot, G. Millot, N. Akhmediev, J.M. Dudley, G. Genty
SPIE Photonics West 2012
San Francisco, USA. (21/01/2012)

69. *Mid-infrared strong spectral broadening in microstructured tapered chalcogenide AsSe fibre*
M. Duhant, W. Renard, G. Canat, J. Troles, P. Toupin, L. Brilland, F. Smektala, A. Betourne, P. Bourdon, G. Renversez
SPIEPhotonics West, Conference on Fibre Lasers IX-Technology, Systems, and Applications
San Francisco, California, USA. (23/01/2012)

70. *Plasmons de Mie: Volumes effectifs, facteurs de qualité et effet Purcell*
S. Derom, R. Vincent, G. Colas des Francs
GDR Ondes
Dijon, France. (10/02/2012)

71. *Filamentation of Few-Cycle Mid-Infrared Pulses in Gases*
D. Kartashov, S. Alisauskas, A. Baltuska, A. A. Voronin, A. Zheltikov, M. Petrarca, P. Béjot, J. Kasparian, A. Pugzlys
High Intensity Lasers and High Field Phenomena
Berlin, Germany. (19/03/2012)

72. *Light-by-light polarization control and stabilization in optical fibers for telecommunication applications*
J. Fatome, P. Morin, S. Pitois and C. Finot
SPIE Photonics Europe
Brussels, Belgium. (16/04/2012)

73. *Observation of modulational and hydrodynamics instabilities of multiple four-wave mixing*
J. Fatome, C. Finot, A. Armaroli and S. Trillo
SPIE Photonics Europe
Brussels, Belgium. (16/04/2012)

74. *All-optical fiber based devices for ultrafast amplitude jitter magnification*
C. H. Hage, J. Fatome, B. Kibler and C. Finot
SPIE Photonics Europe
Brussels, Belgium. (16/04/2012)

75. *Higher-order modulation instability in optical fibers*
M. Erkintalo, K. Hammani, B. Kibler, C. Finot, G. Millot, N. Akhmediev, J.M. Dudley, G. Genty
Quantum Electronics and Laser Science Conference (QELS) 2012
San Jose, USA. (06/05/2012)

76. *Purcell factor near plasmonic waveguides or microcavities*
G. Colas des Francs, J. Barthes, A. Bouhelier, J.Weeber, and A. Dereux,
E-MRS
Strasbourg, France. (15/05/2012)

77. *Nonlinear propagation of incoherent waves in single-mode fibers: experiments and theory*
P. Suret, A. Picozzi and S. Randoux
Solitons, Collapses and turbulence : Achievements, Developments and Perspectives
Novosibirsk, Russia. (04/06/2012)

78. *Nonlinear dynamics of modulatd signals in optical fibers*
B. Kibler, J. Fatome, C. Finot, G. Millot, M. Erkintalo, G. Genty, B. Wetzel, N. Akhmediev, F. Dias, J.M. Dudley
Solitons, Collapses and turbulence : Achievements, Developments and Perspectives
Novosibirsk, Russia. (04/06/2012)

79. *Light pulses slowing down with photorefractive four-wave mixing*
K. Shcherbin, A. Shymelyuk, S. Odoulov, P. Mathey, G. Gadret
10th Photorefractive program review
Longboat Key, Florida, USA. (10/06/2012)

80. *Kuznetsov-Ma Soliton Dynamics in Nonlinear Fiber Optics*
G. Millot, B. Kibler, J. Fatome, C. Finot, G. Genty, N. Akhmediev, B. Wetzel, F. Dias, J.M. Dudley
Nonlinear Photonics
Colorado Springs, USA. (17/06/2012)

81. *All-optical fiber-based devices for ultrafast amplitude jitter magnification*
J. Fatome, C.H. Hage, B. Kibler and C. Finot
Nonlinear Photonics 2012
Colorado Springs, USA. (17/06/2012)

82. *Incoherent soliton turbulence*
B. Kibler, C. Michel, J. Garnier, A. Picozzi
Nonlinear Photonics 2012
Colorado Springs, USA. (17/06/2012)

83. *Nonlinear propagation of incoherent waves in single-mode fibers: from wave turbulence theory to experiments*
S. Randoux, P. Suret, A. Picozzi
Nonlinear Photonics 2012
Colorado Springs, USA. (17/06/2012)

84. *Rogue Wave Description: Rational Solitons and Wave Turbulence Theory*
B. Kibler, K. Hammani, C. Michel, C. Finot, A. Picozzi
Nonlinear Photonics 2012
Colorado Springs, USA. (17/06/2012)

85. *Spontaneous Generation of Spectral, Incoherent Solitons through Supercontinuum Generation*
B. Kibler, C. Michel, A. Kudlinski, B. Barviau, G. Millot, A. Picozzi
Nonlinear Photonics 2012
Colorado Springs, USA. (17/06/2012)

86. *All-fiber transform-limited spectral compression by self-phase modulation of amplitude shaped pulses*
B. Kibler, J. Fatome, E.R. Andresen, H. Rigneault, C. Finot
Nonlinear Photonics 2012
Colorado Springs, USA. (17/06/2012)

87. *All-optical nonlinear simultaneous polarization and intensity regeneration of a 40-Gb/s telecommunication signal*
J. Fatome, P. Morin, C. Finot, S. Pitois and G. Millot
Nonlinear Photonics 2012
Colorado Springs, USA. (17/06/2012)

88. *Dissipative rogue wave out of fiber lasers*

N. Akhmediev, J.M. Soto-Crespo, Ph. Grelu
Nonlinear Photonics 2012 Topical Meeting of the Optical Society of America
Colorado Springs, USA. (17/06/2012)

89. *Third-harmonic generation in optical microfibers*
A. Coillet and Ph. Grelu
Nonlinear Photonics 2012 Topical Meeting of the Optical Society of America
Colorado Springs, USA. (17/06/2012)

90. *Dissipative rogue wave generation from a mode-locked fiber laser experiment"*
C. Lecaplain, Ph. Grelu, J.M. Soto-Crespo, N. Akhmediev
Nonlinear Photonics 2012 Topical Meeting of the Optical Society of America
Colorado Springs, USA. (17/06/2012)

91. *Lasers: Chirped Soliton Molecules*
A. Zaviyalov, Ph. Grelu, F. Lederer, "Influence of Slow Gain Dynamics in Mode-Locked Fiber
in Nonlinear Photonics 2012 Topical Meeting of the Optical Society of America
Colorado Springs, USA. (17/06/2012)

92. *Tellurite TeO2-ZnO-Na2O microstructured fibres for IR laser sources development*
I. Savelii, J. C. Jules, G. Gadret, B. Kibler, F. Désévédavy, T. Kohoutek, Y. Ohishi and F. Smektala
ISNOG 2012 18th International Symposium on Non-Oxide and New Optical Glasses
Saint-Malo, France. (01/07/2012)

93. *Photosensitivity and second harmonic generation in chalcogenide arsenic sulphide poled glasses*
M. Dussauze, X. Zheng, J. Wilkinson, T. Shoulders, F. Adamietz, V. Rodriguez, E. Fargin, T. Cardinal, F. Smektala, K. Richardson
ISNOG 2012 18th International Symposium on Non-Oxide and New Optical Glasses
Saint-Malo, France. (01/07/2012)

94. *Synthesis of high-purity tellurite glasses and glass-ceramics for optical fibre applications*
G. Guéry, J.D. Musgraves, F. Smektala, V. Rodriguez, T. Cardinal, K. Richardson
ISNOG 2012 18th International Symposium on Non-Oxide and New Optical Glasses
Saint-Malo, France. (01/07/2012)

95. *As2S3 Microstructured Optical Fibres Pumped near 2 µm For Infrared Broadband Sources*
O. Mouawad, F. Désévédavy, J. C. Jules, G. Gadret, M. Duhant, G. Canat, L. Brilland, J Troles, G. Renversez and F. Smektala
ISNOG 2012 18th International Symposium on Non-Oxide and New Optical Glasses
Saint-Malo, France. (01/07/2012)

96. *Kuznetsov-Ma soliton dynamics in optical fibre*
B. Kibler, J. Fatome, C. Finot, G. Millot, G. Genty, B. Wetzel, N. Akhmediev, F. Dias, J.M. Dudley
IUTAM Symposium 2012: Understanding common aspects of extreme events in fluids
Dublin, Ireland. (02/07/2012)

97. *New fiber laser architecture with transform-limited nonlinear spectral compression*
S. Boscolo, S. Turitsyn and C. Finot
14th International Conference on Transparent Optical Network (ICTON)
Warwick, United Kingdom. (02/07/2012)

98. *Nonlinearly generated advanced pulse waveforms for optical signal processing*
S. Boscolo, C. Finot
14th International Conference on Transparent Optical Network (ICTON)
Warwick, United Kingdom. (02/07/2012)

99. *Selenium nanoparticles synthesized via a facile hydrothermal method*
Y. Niu, J.P. Guin, R. Chassagnon, F. Smektala, A. Abdelouas, T. Rouxel, J. Troles
AEMT 2012
Zhuhai, China. (06/07/2012)

100. *Higher-order Kerr effects improve quantitative modelling of harmonics generation and laser filamentation*
J. Kasparian, P. Béjot, M. Petrarca, S. Hertz, B. Lavorel, O. Faucher, J.-P. Wolf
Xviiith International Conference on Ultrafast Phenomena
Lausanne, Switzerland. (08/07/2012)

101. *Mid-Infrared femtosecond filament and three octaves continuum generation in gase*
S. Alisauskas, D. Kartashov, A. Pugzlis, A. Voronin, A. Zheltikov, M. Petrarca, P. Béjot, J. Kasparian, A. Baltuska
Xviiith International Conference on Ultrafast Phenomena
Lausanne, Switzerland. (08/07/2012)

102. *Dynamique des solitons de Kusnetsov-Ma observée en optique fibrée non-linéaire*
C. Finot, B. Kibler, J. Fatome, G. Millot, G. Genty, N. Akhmediev, B. Wetzel, F. Dias, J.M. Dudley
Recueil des communications des 32ièmes Journées Nationales de l'Optique Guidée
Lyon, France. (10/07/2012)

103. *Onde de chocs et instabilités collectives dans les fibres optiques*

J. Fatome, C. Finot, G. Millot, A. Armaroli, S. Trillo
Recueil des communications des 32ièmes Journées Nationales de l'Optique Guidée
Lyon, France. (10/07/2012)

104. *Silencing SHG in coupled optical antennas*
A. Bouhelier
Journées de la matière condensée JMC13
Montpellier, France. (27/08/2012)

105. *Control of the spontaneous emission inside a plasmonic cavity*
S. Derom, G. Colas des Francs, A. Bouhelier, J.C. Weeber and A. Dereux
The 12th International Conference on Near-Field optics, nanophotonics and related techniques (NFO12),
San Sebastian, Espagne. (05/09/2012)

106. *Resonance quality, radiative/omhmic losses and modal volume of Mie plasmon*
S. Derom, R. Vincent, G. Colas des Francs
EOS Annual meeting
Aberdeen, Ecosse. (26/09/2012)

107. *Control of the spontaneous emission inside a plasmonic cavity*
S. Derom, A. Bouhelier, G. Colas des Francs, J.P. Hermier, J.-C. Weeber and A. Dereux,
The 1st International Conference on Enhanced Spectroscopy (ICES 2012)
Porquerolles, France. (04/10/2012)

108. *Seeded and spontaneous higher order modulation instability*
M. Erkintalo, K. Hammani, B. Kibler, C. Finot, N. Akhmediev, J.M. Dudley, G. Genty
OSA'S 96th Annual Meeting: Frontiers in Optics
Rochester, USA. (14/10/2012)

109. *Optical flip-flop memory and routing operation based on polarization bistability in optical fibe*
P.-Y. Bony, M. Guasoni, E. Assémat, S. Pitois, D. Sugny, A. Picozzi, H. R. Jauslin and J. Fatome
SPIE Photonics Europe
Brussels, Belgium. (14/04/2013)

110. *Mid-infrared supercontinuum generation in chalcogenide and tellurite suspended core fibres*
F. Désévédavy, I. Savelii, O. Mouawad, J.C. Jules, G. Gadret, B. Kibler, J. Fatome, P-Y. Bony, J. Picot-Clemente, C. Strutynski, H. Kawashima, W. Gao, T. Kohoutek, T. Suzuki, Y. Ohishi, F. Smektala
SPIE Optics & Optoelectronics
Praha, Czech Republic. (15/04/2013)

111. *Mid-infrared supercontinuum generation in suspended-core Chalcogenide and Tellurite optical fibres*
I. Savelii, O. Mouawad, J. Fatome, B. Kibler, C. Finot, F. Désévédavy, G. Gadret, J-C Jules, P-Y. Bony, H. Kawashima, W. Gao, T. Kohoutek, T. Suzuki, Y. Ohishi and F. Smektala
Conference on Lasers and Electro-Optics and the International Quantum Electronics Conference CLEO/Europe-IQEC 2013
Munich, Germany. (12/05/2013)

112. *Long range incoherent solitons*
G. Xu, C. Michel, B. Kibler, J. Garnier, A. Picozzi
Conference on Lasers and Electro-Optics
Munich, Germany. (12/05/2013)

113. *Spontaneous generation of spectral incoherent solitons through supercontinuum generation*
G. Xu, B. Kibler, C. Michel, A. Kudlinski, B. Barviau, G. Millot, A. Picozzi
Conference on Lasers and Electro-Optics
Munich, Germany. (12/05/2013)

114. *Fiber Optical Parametric Polarizer*
B. Stiller, P. Morin, J. Fatome, S. Pitois, C. R. Menyuk and T. Sylvestre
European Conference on Lasers and Electro-Optics, CLEO Europe 2013
Munich, Germany. (12/05/2013)

115. *A universal all-fiber Omnipolarizer*
J. Fatome, S. Pitois, P. Morin, P. Bony, E. Assemat, D. Sugny, A. Picozzi, H. Jauslin, G. Millot, V. Kozlov, M. Guasoni, and S. Wabnitz
CLEO Europe 2013
Munich, Germany. (12/05/2013)

116. *All-optical polarization-based temporal cloaking*
P.-Y. Bony, P. Morin, M. Guasoni, S. Pitois, and J. Fatome
European Conference on Lasers and Electro-Optics, CLEO Europe 2013
Munich, Germany. (12/05/2013)

117. *Mid-infrared supercontinuum generation in suspended-core Chalcogenide and Tellurite optical fibers*
C. Finot, I. Savelii, O. Mouavad, J. Fatome, B. Kibler, F. Désévédavy, G. Gadret, J.C. Jules, P.Y. Bony, H. Kawashima, W. Gao, T. Kohoutek, T. Suzuki, Y. Ohishi, F. Smektala

Conference on Lasers and Electro-Optics
Munich, Germany. (12/05/2013)

118. *Kerr Frequency Comb Generation in the Normal Dispersion Regime of Dispersion Oscillating Telecom Fiber*
C. Finot, J. Fatome, A. Sysoliatin, A. Kosolapov, S. Wabnitz
Conference on Lasers and Electro-Optics
Munich, Germany. (12/05/2013)

119. *Dissipative rogue waves through multi-pulse collisions in a fiber laser*
C. Lecaplain, Ph. Grelu, J.M. Soto-Crespo, N. Akhmediev
CLEO/IQEC 2013 Conference on Lasers and Electro Optics Europe
Munich, Germany. (12/05/2013)

120. *Ultra-high repetition-rate selectable passive harmonic mode locking of a fiber laser*
C. Lecaplain and Ph. Grelu
CLEO 2013 Conference on Lasers and Electro Optics Europe
Munich, Germany. (12/05/2013)

121. *Thermo-plasmonic components at telecom wavelength*
J.C. Weeber, K. Hassan, L. Markey, F. Zacharatos, M. Grondahl-Nielsen, J. Fatome, C. Finot, A. Dereux
6th International Conference on Surface Plasmon Photonics
Ottawa, Canada. (26/05/2013)

122. *Electrical excitation of SPP by a carbon nanotube transistor*
A. Bouhelier
Surface Plasmon Photonics 6 SPP6
Ottawa, Canada. (26/05/2013)

123. *Mid-infrared supercontinuum generation in suspended-core Chalcogenide and Tellurite optical fibres*
I. Savelii, O. Mouawad, J. Fatome, B. Kibler, C. Finot, F. Désévédavy, G. Gadret, J-C Jules, P-Y Bony, H. Kawashima, W. Gao, T. Kohoutek, T. Suzuki, Y. Ohishi, and F. Smektala
Conference on Lasers and Electro-Optics CLEO 2013
San Jose, CA, USA. (09/06/2013)

124. *Nonlinear pulse shaping and soliton dynamics in mode-locked fibre lasers*
S. Boscolo, S. Sergeyev, C. Mou, C. Finot and S. Turistyn
Physics and Mathematics of Nonlinear Phenomena 2013
Galipoli, Italy. (22/06/2013)

125. *2000nm spanning supercontinuum in suspended-core As2S3 microstructured optical fibres*
O. Mouawad, F. Désévédavy, J.C. Jules, G. Gadret G, J. Fatome, B. Kibler, H. Kawashima, Y. Ohishi and F. Smektala
23rd International Congress on Glass, ICG 2013
Prague, Czech Republic. (01/07/2013)

126. *Dissipative rogue waves generated by passively mode locked lasers*
J.M. Soto-Crespo, Ph. Grelu, N. Akhmediev, C. Lecaplain
VIII Reuni=C3=B3n Española de Optoelectr=C3=B3nica, OPTOEL'13
Madrid, Spain. (10/07/2013)

127. *A universal all-fiber Omnipolarizer*
J. Fatome, S. Pitois, P. Morin, P. Y. Bony, E. Assémat, D. Sugny, A. Picozzi, H. R. Jauslin, G. Millot, V. V. Kozlov, M. Guasoni, S. Wabnitz
Nonlinear Optics 2013
Kohala Coast, Hawaii, USA. (21/07/2013)

128. *Mid-infrared supercontinuum generation in suspended-core Chalcogenide and Tellurite optical fibers*
J. Fatome, I. Savelii, O. Mouawad, B. Kibler, F. Désévédavy, G. Gadret, J-C Jules, P. Y. Bony, H. Kawashima, W. Gao, T. Kohoutek, T. Suzuki, Y. Ohishi, and F. Smektala
Nonlinear Optics 2013
Kohala Coast, Hawaii, USA. (21/07/2013)

129. *Impact of pressure on modulation instability processes in a birefringent microstructured fiber*
K. Tarnowski, A. Anuszkiewicz, J. Olszewski, P. Mergo, B. Kibler, W. Urbanczyk
Nonlinear Optics Applications XII International Workshop
Gdansk, Poland. (18/09/2013)

130. *Giant soliton on finite background in nonlinear fiber optics*
B. Frisquet, B. Kibler, G. Millot
Nonlinear Optics Applications XII International Workshop
Gdansk, Poland. (18/09/2013)

131. *Dark Rogue Waves in Media with Long Wave-Short Wave Resonance*
S. Chen, Ph. Grelu, J.M. Soto-Crespo
2013 Australian and New Zealand Conference on Optics and Photonics (ANZCOP), proceedings of the Workshop “Rogue Waves and Extreme Events”

Fremantle, Australia. (08/12/2013)

132. *Optical antenna: a paradigm shift for nanoscale communication*
A. Bouhelier
GDR Or-Nano: Nanoparticules d'or et nanoélectronique
Paris, France. (14/01/2014)

133. *Single molecule controlled emission in planar plasmonic cavity*
G. Colas des Francs, S. Derom, A. Bouhelier, J. Weeber, S.Buil, X. Quélin, and J. Hermier,
Nanolight
Benasque, Espagne. (05/03/2014)

134. *Impact of hydrostatic pressure on modulation instability processes in a birefringent microstructured fiber*
K. Tarnowski, A. Anuszkiewicz, J. Olszewski, P. Mergo, B. Kibler, W. Urbanczyk
SPIE Photonics Europe
Brussels, Belgium. (14/04/2014)

135. *Giant breathers in nonlinear fiber optics*
B. Frisquet, B. Kibler, G. Millot
SPIE Photonics Europe
Brussels, Belgium. (14/04/2014)

136. *Using molecular alignment to track the collisional relaxation of a gas sample*
G. Karras, F. Billard, J. Houzet, E. Hertz, B. Lavorel, J. M. Hartmann, O. Faucher
European Conference on Nonlinear Optical Spectroscopy (ECONOS 2014)
Dole, France. (12/05/2014)

137. *Temporal and spectral nonlinear pulse shaping in normally dispersive optical fibers*
S. Boscolo and Finot
Nonlinear Waves and Integrable Systems in Sicily
Taormina, Italy. (08/06/2014)

138. *Controlling the orientation of the molecular angular momentum by shaping the polarization of a fs laser pulse*
G. Karras, E. Hertz, M. Ndong, F. Billard, D. Sugny, B. Lavorel, O. Faucher
46th Confrerence of the European Group on Atmoc Systems (EGAS 2014)
Lille, France. (01/07/2014)

139. *New types of dissipative localized waves in modelocked fiber lasers*
S. Boscolo, C. Finot and S. Turitsyn
International Workshop “Rogue waves, dissipative solitons, plasmonics, supercontinuum and special fibers”
Barcelona, Spain. (25/07/2014)

140. *Incoherent dispersive shocks and spectral collapse*
G. Xu, J. Garnier, S. Trillo, A. Picozzi
Nonlinear Photonics 2014
Barcelona, Spain. (27/07/2014)

141. *Long range interaction of temporal incoherent solitons,*
G. Xu, C. Michel, J. Garnier, B. Kibler, A. Picozzi
Nonlinear Photonics 2014
Barcelona, Spain. (27/07/2014)

142. *Manakov polarization modulation instability in normal dispersion optical fiber*
S. Wabnitz, B. Kibler, B. Frisquet, Ph. Morin, J. Fatome, F. Baronio, M. Conforti, G. Millot
Nonlinear Photonics 2014
Barcelona, Spain. (27/07/2014)

143. *3.5-μm bandwidth mid-infrared supercontinuum generation in a 2-cm long suspended-core chalcogenide fiber*
O. Mouawad, J. Picot-Clémente, F. Amrani, C. Strutynski, J. Fatome, B. Kibler, F. Désévédavy, G Gadret, J-C Jules, D. Deng, Y. Ohishi and F. Smektala
Nonlinear Photonics 2014
Barcelona, Spain. (27/07/2014)

144. *Optical Flip-Flop Memory and Routing Operation Based on Polarization Bistability in Optical Fiber*
P.-Y. Bony, M. Guasoni, E. Assémat, S. Pitois, D. Sugny, A. Picozzi, H.-R. Jauslin and J. Fatome
Nonlinear Photonics 2014
Barcelona, Spain. (27/07/2014)

145. *All-fiber based chaotic polarization scrambler*
M. Guasoni, P.-Y. Bony, D. Sugny, A. Picozzi, H.-R. Jauslin and J.Fatome
Nonlinear Photonics
Barcelona, Spain. (27/07/2014)

146. *Flaticon pulses in optical fibers*
S. Wabnitz, B. Varlot, J. Fatome, G. Millot and C. Finot
Nonlinear Photonics

Barcelona, Spain. (27/07/2014)

147. *Statistical description of soliton clustering in fiber lasers with slow-gain dynamics*
J.N. Kutz and Ph. Grelu
Proceedings of Nonlinear Photonics 2014 Advanced Photonics Congress
Barcelona, Spain. (27/07/2014)

148. *Collective coordinate approach for the dynamics of light pulses in fiber ring lasers*
M. Alsaleh, E. Tchogo-Felenou, C. Mback, P. Tchofo-Dinda, Ph. Grelu
Proceedings of Nonlinear Photonics 2014 Advanced Photonics Congress
Barcelona, Spain. (27/07/2014)

149. *Rogue wave statistics from a noise-like pulse laser*
C. Lecaplain and Ph. Grelu
Proceedings of Nonlinear Photonics 2014 Advanced Photonics Congress
Barcelona, Spain. (27/07/2014)

150. *Turbulent dynamics of an incoherently pumped passive optical fibre cavity : quasi-solitons and dispersive waves*
C. Finot, M. Conforti, A. Mussot, J. Fatome, S. Pitois, K. Hammani, B. Kibler, C. Michel, G. Millot and A. Picozzi
SIAM Conference on Nonlinear Waves and Coherent Structures
Cambridge, United Kingdom. (11/08/2014)

151. *In-cavity transformations for new nonlinear regimes of pulse generation in mode-locked fiber lasers*
S. Boscolo, S. K. Turitsyn and C. Finot
SIAM Conference on Nonlinear Waves and Coherent Structures
Cambridge, United Kingdom. (11/08/2014)

152. *Mixing Photons and Electrons in a Nanogap*
M. Mennementeuil, J. Dellinger, M. Buret et A. Bouhelier
Near-Field Optics 13
Salt Lake City, USA. (31/08/2014)

153. *Gold nanowire plasmonic mode photo-thermal modulation at telecom wavelengths*
S. Kaya, T. Bernardin, G. Colas des Francs, J. Fatome, C. Finot, J.-C. Weeber
PHOTON 14
Imperial College, London, United Kingdom. (01/09/2014)

154. *Silicon germanium platform enabling mid-infrared to near-infrared conversion for telecom and sensing applications*
A. Bogris, A. Kapsalis, K. Hammani, M. A. Ettabib, M. Brun, P. Labeye, S. Nicoletti, P. Petropoulos and D. Syvridis
European Conference on Optical Communication (ECOC)
Cannes, France. (21/09/2014)

155. *Observation of Manakov Polarization Modulation Instability in the Normal Dispersion Regime of Randomly Birefringent Telecom Optical Fiber*
S. Wabnitz, B. Kibler, B. Frisquet, Ph. Morin, J. Fatome, F. Baronio, M. Conforti, G. Millot
40th ECOC (CLEO Focus Meeting)
Cannes, France. (21/09/2014)

156. *Optical Flip-Flop Memory and Routing Operation Based on Polarization Bistability in Optical Fiber*
P.-Y. Bony, M. Guasoni, E. Assémat, S. Pitois, D. Sugny, A. Picozzi, H.-R. Jauslin, and J. Fatome
European Conference on Optical Communication ECOC
Cannes, France. (21/09/2014)

157. *Fast Polarization Scrambler Based on Chaotic Dynamics in Optical Fibers*
P.-Y. Bony, M. Guasoni, S. Pitois, D. Sugny, A. Picozzi, H.-R. Jauslin, and J. Fatome
European Conference on Optical Communication ECOC
Cannes, France. (21/09/2014)

158. *Spectral Broadening and Material Ageing in As2S3 Suspended-Core Microstructured Optical Fibres*
O. Mouawad, J. Picot-Clémente, C. Strutynski, F. Désévédavy, G. Gadret, J.C Jules, B. Kibler, J. Fatome, F. Amrani, D. Dinghuan, Y. Ohishi, and F. Smektala
Advanced Architectures in Photonics 2014
Praha, Czech Republic. (21/09/2014)

159. *Supercontinuum generation in highly nonlinear tellurite glass microfibers devices: simulations and experiments*
J. Picot-Clemente, B. Kibler, O. Mouawad, C. Strutynski, F. Désévédavy, J-C Jules, G. Gadret, F. Smektala
, Advanced Architectures in Photonics 2014
Praha, Czech Republic. (21/09/2014)

160. *Novel Recess Photomask Contact Lithography : Application to the heterointegration of SOI and plasmonic waveguide switches in a datacom router prototype*
L.Markey, F.Zacharatos, JC.Weeber, A.Prinzen, M.Waldow, T.Tekin, A.Dereux
40th Conference Micro and Nano Engineering 2014
Lausanne, Switerland. (22/09/2014)

161. *Fibres microstructurées sulfures et supercontinuum infrarouge : potentialités et inconvénients*

F. Smektala, O. Mouawad, F. Amrani, B. Kibler, J. Picot-Clémente, C. Strutynski, J. Fatome, F. Désévédavy, G. Gadret, J-C Jules, O. Heintz, E. Lesniewska
JNOG 2014
Nice, France. (29/10/2014)

162. *De la conversion de fréquence dans les fibres microstructurées vers des capteurs à fibre optique non-linéaire*
B. Frisquet, K. Tarnowski, A. Anuszkiewicz, J. Olszewski, P. Mergo, B. Kibler, W. Urbanczyk
JNOG
Nice, France. (29/10/2014)

163. *Instabilité de modulation vectorielle de type Manakov dans une fibre optique à dispersion normale*
B. Frisquet, B. Kibler, P. Morin, J. Fatome, F. Baronio, M. Conforti, G. Millot, S. Wabnitz
JNOG
Nice, France. (29/10/2014)

164. *&Éclatement des bandes de gain paramétrique dans une fibre à dispersion oscillante*
F. Feng, C. Finot, P. Morin, Y. Chembo and S. Wabnitz
34ièmes Journées Nationales de l'Optique Guidée
Nice, France. (29/10/2014)

165. *Génération linéaire de trains impulsionnels triangulaires ou paraboliques à haut-débit*
C. Finot
34ièmes Journées Nationales de l'Optique Guidée
Nice, France. (29/10/2014)

166. *Emergence de flaticons dans les fibres optiques*
C. Finot, B. Varlot, S. Wabnitz, J. Fatome, G. Millot
34ièmes Journées Nationales de l'Optique Guidée
Nice, France. (29/10/2014)

167. *Nanocavités couplées pour la manipulation optique de colloïdes*
C. Renaut, B. Cluzel, J. Dellinger, L. Lalouat, E. Picard, D. Peyrade, E. Hadji, F. de Fornel
GDR Ondes Journée thématique sur les dispositifs nanophotoniques
Dijon, France. (12/01/2015)

168. *Localisation de la lumière dans les milieux périodiques désordonnés : Rôle de la masse effective*
R. Faggiani, X. Zang, K. Vynck, P. Lalanne, A. Baron, L. Lalouat, B. Cluzel, F. de Fornel, S. Schulz, B.O'Regan, T.F. Krauss
GDR Ondes Journée thématique sur les dispositifs nanophotoniques
Dijon, France. (12/01/2015)

169. *Micro-girouette & sondes browniennes : applications des forces optiques dans le champ proche des nanocavités*
C. Pin, C. Renaut, E. Picard, E. Hadji, D. Peyrade, F. de Fornel, B. Cluzel
GDR Ondes Journée thématique sur les dispositifs nanophotoniques
Dijon, France. (12/01/2015)

170. *Réflecteur multimodal à fort facteur de qualité*
R. Laberdesque, A. Monmeyrant, H. Camon, O. Gauthier-Lafaye, M. Petit, O. Demichel, B. Cluzel
GDR Ondes Journée thématique sur les dispositifs nanophotoniques
Dijon, France. (12/01/2015)

171. *Multi-emitter stimulated Raman adiabatic passage mediated by plasmons*
B. Rousseaux, D. Dzsotjan, G. Colas des Francs, H. Jauslin, and S. Guérin,
Conference on Quantum Plasmonics
Benasque, Espagne. (05/03/2015)

172. *Near-Infrared Dual-Comb Spectroscopy with a Continuous-Wave Laser*
G. Millot, S. Pitois, N. Picqué
FRISNO 13th French/Israeli Symposium on Nonlinear and Quantum Optics
Aussois, France. (17/03/2015)

173. *Génération expérimentale de solitons de cut-off dans une ligne électrique non linéaire*
P. Marquié, K. Tse Ve Koon P. Tchofo Dinda S. Morfu
Rencontre du Non-Linéaire 2015
Paris, France. (18/03/2015)

174. *Telecom to Mid-infrared Supercontinuum Generation in a Silicon Germanium Waveguide*
M. A. Ettabib, L. Xu, A. Bogris, A. Kapsalis, M. Belal, E. Lorent, P. Labeye, S. Nicoletti, K. Hammani, D. Syvridis, J. Price, D. J. Richardson, and P. Petropoulos
Optical Fiber Communication Conference (OFC)
Anaheim, California, USA. (22/03/2015)

175. *Polarization Insensitive Wavelength Conversion of 40 Gb/s DPSK Signals in a Silicon Germanium Waveguide*
M. A. Ettabib, V. Rancaño, F. Parmigiani, A. Kapsalis, A. Bogris, K. R. Bottrill, M. Belal, M. Brun, P. Labeye, S. Nicoletti, K. Hammani, D. Syvridis, D. J. Richardson, and P. Petropoulos
Optical Fiber Communication Conference (OFC),

Anaheim, California, USA. (22/03/2015)

176. *New nonlinear regimes of pulse generation in mode-locked fiber lasers*
S. Boscolo, S.K. Turistyn, C. Finot
9th IMACS International conference on nonlinear evolution equations and wave phenomena: computation and theory (Waves 2015)
Athens, USA. (01/04/2015)

177. *Spectral broadening in low OH content and dispersion-managed tellurite fiber for compact Mid IR sources*
C. Strutynski, J. Picot-Clémente, F. Amrani, O. Mouawad, F. Désévédavy, J.C. Jules, G. Gadret, B. Kibler, Y. Ohishi, F. Smektala
SPIE Opics+Optoelectronics, conference on Micro-structured and Specialty Optical Fibres
Prague, Czech Republic. (13/04/2015)

178. *Record Phase Sensitive Extinction Ratio in a Silicon Germanium Waveguide*
M. A. Ettabib, F. Parmigiani, A. Kapsalis, A. Bogris, M. Brun, P. Labeye, S. Nicoletti, K. Hammani, D. Syvridis, D. Richardson, and P. Petropoulos
Conference on Laser and Electro-Optic (CLEO)
San Jose, USA. (10/05/2015)

179. *Dual-comb spectroscopy with frequency-agile lasers*
M. Yan, S. Pitois, T. Hovannysyan, A. Bendahmane, Th. W. Hänsch, N. Picqué, G. Millot
CLEO 2015 Laser Science to Photonic Applications
San Jose, USA. (10/05/2015)

180. *Photo-inscriptible silver-containing phosphate glass fibers*
S. Danto, J.C. Desmoulin, F. Désévédavy, F. Smektala, Y. Petit, L. Canioni, M. Dussauze, V. Rodriguez, E. Fargin, T. Cardinal
ACERS GOMD-DGG Joint Annual Meeting 2015
Miami, Florida, USA. (17/05/2015)

181. *Atmospheric Aging of As2S3 Microstructured Fibers: Optical, Structural, Surface Issues and their Impact on Mid-Infrared Supercontinuum Generation*
F. Smektala, O. Mouawad, F. Amrani, B. Kibler, J. Picot-Clémente, C. Strutynski, J. Fatome, F. Désévédavy, G. Gadret, J-C Jules, O. Heintz, E. Lesniewska
ACERS GOMD-DGG Joint Annual Meeting 2015
Miami, Florida, USA. (17/05/2015)

182. *Parabolic similaritons in optical fibres*
S. Boscolo, C. Finot
Physics and Mathematics of Nonlinear Phenomena 2015
Gallipoli, Italy. (20/06/2015)

183. *Harmonic pulse pattern generation in a fiber laser by an adaptative feedback loop*
U. Andral, R. Si Fodil, F. Amrani, F. Billard, E. Hertz, and Ph. Grelu
CLEO/Europe-EQEC 2015
Munich, Germany. (21/06/2015)

184. *Fiber laser mode locked trough an evolutionary algorithm*
U. Andral, R. Si Fodil, F. Amrani, F. Billard, E. Hertz, and Ph. Grelu
CLEO/Europe-EQEC 2015
Munich, Germany. (21/06/2015)

185. *Towards a generalized weak Langmuir optical turbulence*
G. Xu, J. Garnier, S. Trillo, D. Churkin, S. Turityn, A. Picozzi
Conference on Lasers and Electro-Optics
Munich, Germany. (21/06/2015)

186. *Observation of black vector rogue waves in the normal dispersion regime of optical fibers*
B. Frisquet, B. Kibler, J. Fatome, P. Morin, F. Baronio, M. Conforti, G. Millot, S. Wabnitz
CLEO/Europe-EQEC
Munich, Germany. (21/06/2015)

187. *400 THz bandwidth supercontinuum generation in tapered tellurite suspended core fiber*
J. Picot-Clemente, C. Strutynski, F. Amrani, F. Désévédavy, J-C Jules, G. Gadret, D. Deng, T. Cheng, Y. Ohishi, B. Kibler, F. Smektala
CLEO/Europe-IQEC
Munich, Germany. (21/06/2015)

188. *Fast and Chaotic WDM All-Optical Polarization Scrambler Laser*
M. Guasoni, P.-Y. Bony, M. Gilles, A. Picozzi, and J. Fatome
Conference on Lasers and Electro-Optics CLEO 2015
Munich, Germany. (21/06/2015)

189. *Optical Nyquist pulse generation in mode-locked fibre laser*
S. Boscolo, C. Finot, S.K. Turistyn

Conference on Lasers and Electro-Optics
Munich, Germany. (21/06/2015)

190. *Spectral sideband splitting inn strongly dispersion oscillating fibers*
S. Wabnitz, F. Feng, P. Morin, Y. Chembo, A. Sysoliatin, C. Finot
Conference on Lasers and Electro-Optics
Munich, Germany. (21/06/2015)

191. *Dual-Comb Spectroscopy by Spectral Broadening of an Intensity-Modulated Continuous-wave Laser in the C- and L-Telecom Bands*
G. Millot, M. Yan, S. Pitois, T. Hovannysyan, A. Bendahmane, Th. W. Hänsch, N. Picqué
CLEO/Europe-EQEC 2015
Munich, Germany. (21/06/2015)

192. *Ondes siamoises en parois de domaine pour des communications optiques au-delà de la non-linéarité Kerr*
M. Gilles, P.-Y. Bony, M. Guasoni, A. Picozzi et J. Fatome
Optique Bretagne 2015 35ième Journées Nationales de l'Optique Guidée
Rennes, France. (06/07/2015)

193. *Réseau temporel dispersif dans une fibre optique*
C. Finot and H. Rigneault
Optique Bretagne 2015 35ième Journées Nationales de l'Optique Guidée
Rennes, France. (06/07/2015)

194. *PSA-based Phase Regeneration of DPSK Signals in a Silicon Germanium Waveguide*
M. A. Ettabib, K. R. Bottrill, F. Parmigiani, A. Kapsalis, A. Bogris, M. Brun, P. Labeye, S. Nicoletti, K. Hammani, D. Syvridis, D. J. Richardson, and P. Petropoulos
European Conference on Optical Communication (ECOC)
Valencia, Spain. (27/09/2015)

F. Posters

1. *Higher order Kerr refraction indices of atmospheric components*
V. Loriot, E. Hertz, B. Lavorel, O. Faucher
UltraFast Optics/High field Short Wavelength (UFO VII/HFSWXIII)
Arcachon, France. (30/08/2009)

2. *Modélisation mathématique et étude expérimentale des instabilités non-linéaires, des vagues scélérates et des phénomènes extrêmes*
J. M. Dudley, F. Dias, C. Finot, B. Kibler, A. Picozzi, K. Hammani, G. Millot and J. Garnier
deuxième grand colloque STIC, Cité des Sciences et de l'Industrie
Paris, France. (05/01/2010)

3. *Broadband multiplex CARS micro-spectroscopy in the picosecond regime*
S. Michel, A. Courjaud, J. Dudley, C. Finot, E. Mottay and H. Rigneault
SPIE Photonics West 2010
San Francisco, USA. (23/01/2010)

4. *Non-linear operation in As2S3 photonic crystal fibres*
M. El-Amraoui, J. C. Jules, J. Fatome, C. Fortier, G. Gadret, B. Kibler, F. Désévédavy, I. Skripatchev, F. C. Polacchini, Y. Messaddeq, J. Troles, L. Brilland, F. Smektala
ISNOG 2010n 17th International Symposium on Non-Oxide and New Optical Glasses
Ningbo, China. (13/06/2010)

5. *Extreme statistics in Raman fiber amplifiers: influence of pump depletion and dispersion*
K. Hammani, C. Finot, G. Millot
Nonlinear Photonics
Karlsruhe, Germany. (21/06/2010)

6. *All-optical fiber-based amplitude jitter magnifier*
J. Fatome and C. Finot
12th International Conference on Transparent Optical Network (ICTON)
Munich, Germany. (27/06/2010)

7. *Extreme statistics in Raman fiber amplifiers: from experiments to analytical description*
K. Hammani, C. Finot, J. Fatome, A. Picozzi and G. Millot
12th International Conference on Transparent Optical Network (ICTON)
Munich, Germany. (27/06/2010)

8. *Higher-order Kerr terms allow ionization-free filamentation in gases*
P. Béjot, W. Ettoumi, Y. Petit, J. Kasparian, S. Henin, V. Loriot, T. Vieillard, E. Hertz, O. Faucher, B. Lavorel, J.-P. Wolf
Worshop on laser-matter interaction 2010
Porquerolles, France. (13/09/2010)

9. *Génération de supercontinuum dans une fibre en verre de fluorures pompée en régime de dispersion anormale à 2µm*
M. Duhant, W. Renard, G. Canat, F. Smektala, J. Troles, P. Bourdon

29ième Journées Nationales d'Optique Guidée (JNOG)
Besançon, France. (19/10/2010)

10. *Génération de supercontinuum dans une fibre optique microstructurée en verre de tellurite*
I. Savelii, G. Gadret, B. Kibler, M. El-Amraoui, J. Fatome, J. C. Jules, F. Désévédavy, J. M. Dudley, J. Troles, L. Brilland, F. Smektala
29ième Journées Nationales d'Optique Guidée (JNOG)
Besançon, France. (19/10/2010)

11. *Auto modulation de phase et émission Raman dans des fibres optiques microstructurées à c=C5=93urs suspendus en verre de sulfure As2S3*
M. El-Amraoui, B. Kibler, J. Fatome, J. C. Jules, G. Gadret, F. Désévédavy, I. Skripatchev, Y. Messaddeq, G. Renversez, J. Troles, L. Brilland, F. Smektala
29ième Journées Nationales d'Optique Guidée (JNOG)
Besançon, France. (19/10/2010)

12. *&Évènements extrêmes et turbulence optique*
K. Hammani, B. Kibler, C. Finot and A. Picozzi
29ièmes Journées Nationales de l'Optique Guidée
Besançon, France. (20/10/2010)

13. *Statistiques extrêmes dans les amplificateurs Raman fibrés*
K. Hammani, A. Picozzi and C. Finot
29ièmes Journées Nationales de l'Optique Guidée
Besançon, France. (20/10/2010)

14. *Optimisation de la densité spectrale d'énergie obtenue par auto-décalage fréquentiel Raman dans une fibre microstructurée*
C.H. Hage, B. Kibler, E. Mottay, J.M. Dudley, H. Rigneault and C. Finot
29ièmes Journées Nationales de l'Optique Guidée
Besançon, France. (20/10/2010)

15. *Dispositif à base de fibre optique non-linéaire pour la mise en évidence de gigue d'amplitude ou d'erreurs*
C. Finot and J. Fatome
29ièmes Journées Nationales de l'Optique Guidée
Besançon, France. (20/10/2010)

16. *Field-free permanent planar alignment of molecules*
Md. Ziaul Hoque, E. Hertz, F. Billard, B. Lavorel, O. Faucher
International Workshop on Atomic Physics
Dresden, Germany. (22/11/2010)

17. *Coupling evanescently low loss Silicon-on-insulator (SOI) ridge waveguides(WGs) including high Q nanocavities: for light control*
B. Cluzel, K. Foubert, L. Lalouat, E. Picard, D. Peyrade, E. Hadji and F. de Fornel
ICTON
Stockholm, Sweden. (00/00/2011)

18. *Optical antennas go electrical*
A. Bouhelier
séminaire IEF
Orsay, France. (26/04/2011)

19. *Slow light with backward-wave four-wave mixing in photorefractive crystal*
P. Mathey, G. Gadret, K. Shcherbin
Photorefractive Materials, Effects and Devices PR'11
Ensenada, Mexico. (01/07/2011)

20. *Coherent semilinear oscillator with SPS photorefractive crystal*
A. Grabar, P. Mathey, R. Iegorov
Photorefractive Materials, Effects and Devices PR'11
Ensenada, Mexico. (01/07/2011)

21. *Convective and absolute instabilities in photorefractive backward wave four wave mixing*
P. Mathey, H-R. Jauslin, G. Gadret, G. Cook, D.R. Evans, S. Odoulov
Photorefractive Materials, Effects and Devices PR'11,
Ensenada, Mexico. (01/07/2011)

22. *Extension d'un supercontinuum infrarouge dans une fibre chalcogénure As2S3 c=C5=93ur suspendu pompée par un gaz de solitons*
J. Fatome, B. Kibler, M. El-Amraoui, J. C. Jules, G. Gadret, F. Désévédavy et F. Smektala
30ièmes Journées Nationales d'Optique Guidée (JNOG)
Marseille, France. (04/07/2011)

23. *Sources optiques picosecondes entièrement fibres cadencées à 20 GHz et 40 GHz*
I. El Mansouri, J. Fatome, S. Pitois, C. Finot et M. Lintz
30ièmes Journées Nationales de l'Optique Guidée

Marseille, France. (04/07/2011)

24. *Dispositif fibré pour la détection de faibles fluctuations d'intensité d'impulsions ultracourtes*
C. H. Hage, B. Kibler, C. Finot
30ièmes Journées Nationales de l'Optique Guidée
Marseille, France. (04/07/2011)

25. *Spatial detection of high order Kerr effects in gases exposed to strong laser field*
J. Houzet, T. Vieillard, F. Billard, E. Hertz, B. Lavorel, O. Faucher
High Resolution Molecular Spectroscopy (HRMS 2011)
Dijon, France. (29/08/2011)

26. *All-fibered high-quality 20-GHz and 40-GHz picosecond pulse generator*
I. El Mansouri, J. Fatome, S. Pitois, C. Finot, M. Lintz
ECOC 2011 (European Conference on Optical Communication)
Geneva, Switzerland. (18/09/2011)

27. *Silencing SHG Generation in optical gap antennas*
A. Bouhelier
Réunion GDR Plasmonique
Meudon, France. (13/10/2011)

28. *Measuring elastic collisions from strong field molecular alignment*
T. Vieillard, F. Chaussard, B. Lavorel, S. Ivanov, D. Sugny, O. Faucher
European Conference on Nonlinear Optical Spectroscopy (ECONOS 2011) and European CARS Workshop (ECW 2011)
Twente, The Netherlands. (23/11/2011)

29. *Modélisation mathématique et étude expérimentale des instabilités non linéaires, des vagues scélérates et des phénomènes extrêmes*
J. M. Dudley, F. Dias, C. Finot, B. Kibler, A. Picozzi, K. Hammani, G. Millot, B. Wetzel, J. Garnier
(MANUREVA), Grand colloque STIC 2012
Lyon, France. (04/01/2012)

30. *Mid-infrared strong spectral broadening in microstructured tapered chalcogenide AsSe fibre*
M. Duhant, W. Renard, G. Canat , J. Troles, L. Brilland , F. Smektala, G. Renversez, P. Bourdon
Photonics West 2012
San Francisco, CA, USA. (21/01/2012)

31. *Four-wave mixing instabilities in telecom fibers*
J. Fatome, C. Finot, G. Millot, A. Armaroli, S. Trillo
Nonlinear Photonics 2012
Colorado Springs, USA. (17/06/2012)

32. *Suppression of the frequency drifts in polarization modulational instability spectra by means of a photon reservoir*
M. N. Zambo Abou'ou, P. Tchofo Dinda, and C. M. Ngabireng
Nonlinear Photonics 2012
Colorado Springs, USA. (17/06/2012)

33. *Rogue wave description: rational solitons and wave turbulence theory*
B. Kibler, K. Hammani, C. Michel, C. Finot, A. Picozzi
Nonlinear Photonics 2012
Colorado Springs, USA. (17/06/2012)

34. *Microscopic origin of higher-order Kerr effect in gases*
P. Béjot, E. Cormier, E. Hertz, , B. Lavorel, J. Kasparian, J.-P. Wolf, O. Faucher
Xviiith International Conference on Ultrafast Phenomena
Lausanne, Switzerland. (08/07/2012)

35. *Obtention d'impulsions en limite de Fourier par compression spectral réalisée dans une fibre optique*
J. Fatome, B. Kibler, E.R. Andresen, H. Rigneault and C. Finot
Recueil des communications des 32ièmes Journées Nationales de l'Optique Guidée
Lyon, France. (10/07/2012)

36. *Nouvelle architecture de cavité laser à fibre bénéficiant du processus de compression spectral non-linéaire*
S. Boscolo, S. Turitsyn and C. Finot
Recueil des communications des 32ièmes Journées Nationales de l'Optique Guidée
Lyon, France. (10/07/2012)

37. *Corrélation croisée large bande à partir d'une photodiode à deux photons*
C.H. Hage, F. Billard, B. Kibler, C. Finot and G. Millot
Recueil des communications des 32ièmes Journées Nationales de l'Optique Guidée
Lyon, France. (10/07/2012)

38. *Amplifier similariton fibre laser with nonlinear spectral compression*
S. Boscolo, S. Turitsyn and C. Finot
ECOC European Conference on Optical Communication

Amsterdam, Netherlands. (17/09/2012)

39. *Hyperspectral near-field imaging of light bending in a graded photonic crystal*
J. Dellinger, K.-V. Do, B. Cluzel, E. Cassan and F de Fornel
EOSAM
Aberdeen, United Kingdom. (24/09/2012)

40. *Seeded and spontaneous higher order modulation instability*
M. Erkintalo, K. Hammani, B. Kibler, C. Finot, N. Akhmediev, J.M. Dudley, G. Genty
OSA'S 96th Annual Meeting: Frontiers in Optics
Rochester, USA. (01/10/2012)

41. *Une nouvelle famille d'ondes scélérates dans les fibres optiques*
S. Wabnitz, C. Finot, J. Fatome and G. Millot
16ième Rencontre du Non-Linéaire
Paris, France. (25/03/2013)

42. *Shallow water rogue waves in nonlinear optical fibers*
S. Wabnitz, C. Finot, J. Fatome and G. Millot
CLEO Conference on Lasers and Electro-Optics
Munich, Germany. (12/05/2013)

43. *Double-seed stabilization of a continuum generated from fourth-order modulation instability*
K. Hammani, C. Finot, R. Habert, A. Mussot, A. Kudlinski
CLEO Conference on Lasers and Electro-Optics
Munich, Germany. (12/05/2013)

44. *Experimental observation of the spectral Gouy phase shift*
E.R. Andresen, C. Finot, D. Oron, H. Rigneault
CLEO/IQEC 2013 International Quantum Electronics Conference
Munich, Germany. (12/05/2013)

45. *Polarization domain-wall complexes in fiber lasers*
C. Lecaplain, Ph. Grelu, S. Wabnitz
CLEO/IQEC 2013 International Quantum Electronics Conference
Munich, Germany. (12/05/2013)

46. *Soliton temporel incohérent et approche Vlasov*
C. Michel, B. Kibler, G. Xu, B. Barviau, J. Garnier, A. Picozzi
Optique Paris, Coloq, Univ. Paris Nord
Villetaneuse, France. (08/07/2013)

47. *Formation de solitons spectraux incohénts lors de la génération supercontinuum en fibre a cristaux photonique*
B. Kibler, C. Michel, G. Xu, B. Barviau, G. Millot, A. Picozzi
Optique Paris, Coloq, Univ. Paris Nord
Villetaneuse, France. (08/07/2013)

48. *Ab initio molecular dynamic simulations of line-mixing effects in CO2 infrared and Raman bands*
J. Lamouroux, J.-M. Hartmann, H. Tran, B. Lavorel, M. Snels, S. Stefani, G. Piccioni
Colloquium on High Resolution Molecular Spectroscopy (HRMS 2013)
Budapest, Hungary. (25/08/2013)

49. *Acceleration of light pulses with photorefractive beam fanning*
A. Grabar, P. Mathey, G. Gadret
PR'13 International conference on photorefractive effects, materials and devices
Winchester, United kingdom. (04/09/2013)

50. *Thermodynamic approach of supercontinuum generation in photonic crystal fibers*
G. Xu, B. Kibler, G. Millot, S. Trillo, C. Michel, J. Garnier, B. Barviau, A. Picozzi
Spatio-temporal Complexity in Optical Fibers Annual Meeting
Como, Italy. (15/09/2013)

51. *Tellurite and chalcogenide microstructured fibres for mid-infrared light sources*
F. Amrani, O. Mouawad, I. Savelii, F. Désévédavy, G. Gadret, J-C Jules, J. Fatome, B. Kibler, T. Godin, J. Dudley, T. Sylvestre, and F. Smektala
Séminaire du Labex Action
Besançon, France. (06/12/2013)

52. *Les breathers d'Akhmediev comme sources à très haut-débit ou à ultra-large bande*
B. Varlot, K. Hammani, J. Fatome, B. Kibler, G. Millot, J. M. Dudley, Y. Chembo and C. Finot
Séminaire annul Labex Action: bilan et perspectives
Besançon, France. (06/12/2013)

53. *Spontaneous Emission of Radiation by Solitons in Fiber-optic Waveguides*
E. Tchomgo Felenou, P. Tchofo Dinda and C. M. Ngabireng
2nd International Conference on Photonics, Optics and Laser Technology (PHOTOPTICS 2014)

Lisbon, Portugal. (07/01/2014)

54. *Instabilités optiques dans les fibres à dispersion oscillante*
C. Finot, J. Fatome, A. Sysoliatin, A. Kosopalov and S. Wabnitz
17ième rencontre du Non-Linéaire
Paris, France. (18/03/2014)

55. *Composite silver-containing phosphate-based glass fibers: preliminary results and further development*
S. Danto, J-C. Desmoulin, Y. Petit, E. Fargin, T. Cardinal, N. Marquestaut, L. Canioni, F. Désévédavy, F. Smektala
ACERS GOMD-DGG Joint Annual Meeting 2014
Aachen, Germany. (25/05/2014)

56. *Long-range plasmonic waveguide for Tb/s optical interconnect application*
C. Vernoux, L. Markey, J.C. Weeber, A. Dereux
XVème Journée de l'école doctorale Carnot-Pasteur
Besançon, France. (27/05/2014)

57. *Tailored waveform generation in mode-locked fiber lasers by in-cavity pulse shaper*
S. Boscolo, C. Finot and P. Petropoulos
Nonlinear Photonics 2014
Barcelona, Spain. (27/07/2014)

58. *Gain sideband splitting in dispersion oscillating fibers*
C. Finot and S. Wabnitz
Nonlinear Photonics 2014
Barcelona, Spain. (27/07/2014)

59. *Dark-and-bright rogue waves in long wave-short wave resonance*
S. Chen, J.M. Soto-Crespo, and Ph. Grelu
Proceedings of Nonlinear Photonics 2014 Advanced Photonics Congress
Barcelona, Spain. (27/07/2014)

60. *Transition from polarization disorder to antiphase polarization domains in a fiber laser*
Ph. Grelu, C. Lecaplain, A. Ba, F. Amrani, S. Wabnitz
Proceedings of Nonlinear Photonics 2014 Advanced Photonics Congress
Barcelona, Spain. (27/07/2014)

61. *Selective Excitation of Surface Plasmon Modes in Ag Silver Nanowire*
J. Dellinger, M. Song, M. Buret et A. Bouhelier
Near-Field Optics 13
Salt Lake City, USA. (31/08/2014)

62. *Impact of hydrostatic pressure on scalar modulation instability efficiency in a birefringent microstructured fiber*
K. Tarnowski, A. Anuszkiewicz, B. Frisquet, P. Mergo, B. Kibler, W. Urba=C5=84czyk
19th Polish-Slovak-Czech Optical Conference on Wave and Quantum Aspects of Contemporary Optics
Wojan=C3=B3w Palace, Poland. (08/09/2014)

63. *Applications of SPS photorefractive crystals in optical schemes with modulated beams*
A. Grabar, P. Mathey, G. Gadret
Optics of crystals, International Scientific Conference
Mozyr, Belarus. (23/09/2014)

64. *Dispersion oscillating fibers : a new tool for nonlinear optics*
F. Feng, J. Fatome, P. Morin, A. Sysoliatin, Y. Chembo, S. Wabnitz and C. Finot
Sino-French workshop on Photonics and Optoelectronics
Paris, France. (25/09/2014)

65. *Mieux comprendre la dualité temps/fréquence et la modulation de phase optique*
K. Hammani, J. Fatome and C. Finot
CETSIS 2014
Besançon, France. (26/10/2014)

66. *Façonnage d'impulsions optiques par filtrage intra-cavité dans un laser à fibre*
S. Boscolo, C. Finot and P. Petropoulos
34ièmes Journées Nationales de l'Optique Guidée
Nice, France. (29/10/2014)

67. *Effect of taperization on microstructured tellurite fiber: supercontinuum generation from visible to 3300 nm*
J. Picot-Clémente, C. Strutynski, F. Amrani, B. Kibler, F. Désévédavy, G. Gadret, J-C Jules, D. Deng, T. Cheng, Y. Ohishi, F. Smektala
Toyota Technological Institute Symposium
Nagoya, Japan. (27/02/2015)

68. *Tellurite glasses for the near-IRfrom material design to fiber fabrication*
S. Danto, T. Billotte, N.T. Lo, F. Désévédavy, C. Strutynski, S. Chenu, M. Dussauze, V. Rodriguez, G. Delaizir, J.R. Duclere, P. Thomas, F. Smektala, K. Richardson, E. Fargin, T. Cardinal

ACERS GOMD-DGG Joint Annual Meeting 2015
Miami, Florida, USA. (17/05/2015)

69. *Flexible Long-range plasmonic waveguide for optical interconnect application*
Christian Vernoux, Laurent Markey, Yiting Chen, Sergey Bozhevolnyi, Thorsten Felder, Alain Dereux
XVIème Journée de l'école doctorale Carnot-Pasteur
Dijon, France. (22/05/2015)

70. *Flexible Long-range plasmonic waveguide for optical interconnect application*
Christian Vernoux, Laurent Markey, Yiting Chen, Sergey Bozhevolnyi, Thorsten Felder, Alain Dereux
The 7th International Conference on surface Plasmonic Polariton
Jerusalem, Israel. (04/06/2015)

71. *Light pulse slowing down using backward-wave four-wave mixing with local response*
K. Shcherbin, G. Gadret, A. Kamshilin, P. Mathey
Photorefractive Photonics 2015
Villars, Switzerland. (16/06/2015)

72. *Lensless dynamical interferometer on the base of SPS photorefractive crystal*
A. Grabar, P. Mathey, G. Gadret, M. Tsyhyka, I. Stoika
Photorefractive Photonics 2015
Villars, Switzerland. (16/06/2015)

73. *Baseband Modulation Instability as the Origin of Rogue Waves*
F. Baronio, S. Wabnitz, S. Chen, Ph. Grelu, M. Conforti
CLEO/Europe-EQEC 2015
Munich, Germany. (21/06/2015)

74. *Efficient semi-analytical modeling of passively mode-locked lasers*
M. Alsaleh, C. B. L. Mback, T. Tchomgo-Felenou, P. Tchofo Dinda, and Ph. Grelu
CLEO/Europe-EQEC 2015
Munich, Germany. (21/06/2015)

75. *Generation of light pulses with specifically carved profiles in a fiber laser using a NOLM and a narrow spectral filter*
C. B. L. Mback, P. Tchofo Dinda, Ph. Grelu, A. B. Moubissi
CLEO/Europe-EQEC 2015
Munich, Germany. (21/06/2015)

76. *Adjustable high-repetition-rate pulse trains in a passively mode-locked fiber laser*
R. Si Fodil, F. Amrani, A. Kellou, and Ph. Grelu
CLEO/Europe-EQEC 2015
Munich, Germany. (21/06/2015)

77. *Nonlinear parametric resonances in aperiodic dispersion oscillating fibers*
C. Finot, A. Sysoliatin, S. Wabnitz
Conference on Lasers and Electro-Optics
Munich, Germany. (21/06/2015)

78. *Dispersive shocks and extreme events in incoherent optical random wave*
G. Xu, J. Garnier, D. Vocke, D. Faccio, S. Trillo, A. Picozzi
Summer school on Rogue and shock waves in nonlinear dispersive media
Cargese, France. (06/07/2015)

79. *Résonances paramétriques dans les fibres optiques à dispersion oscillante quasi-périodique*
C. Finot, A. Sysoliatin and S.Wabnitz
Optique Bretagne 2015 - 14ième Colloque sur les Lasers et l'Optique Quantique
Rennes, France. (06/07/2015)

80. *Compression spectrale dans les fibres optiques en présence de dispersion normale*
C. Finot and S.Boscolo
Optique Bretagne 2015 - 35ième Journées Nationales de l'Optique Guidée
Rennes, France. (06/07/2015)

81. *Doublement d'impulsion dans une fibre à dispersion oscillante, Optique Bretagne 2015*
C. Finot and S.Wabnitz
35ième Journées Nationales de l'Optique Guidée
Rennes, France. (06/07/2015)

82. *Exploiter une plateforme de recherche en télécommunications optiques pour souligner la dualité temps/fréquence*
K. Hammani, J. Fatome and C. Finot
Optique Bretagne 2015 Rencontres pédagogiques
Rennes, France. (06/07/2015)

83. *Molecular line-shape modeling from fisrt principles*
P. Wcislo, H. Cybulski, R. Ciurylo, F. Thibault, H. Tran, F. Chaussard
High Resolution Molecular Spectroscopy (HRMS 2015)

Dijon, France. (24/08/2015)

84. *Probing collisional relaxation dynamics in CO2 gas mixtures through field-free molecular alignment*
F. Chaussard, T. Vieillard, F. Billard, O. Faucher, B. Lavorel, D. Sugny, J.-M. Hartmann, C. Boulet
High Resolution Molecular Spectroscopy (HRMS 2015)
Dijon, France. (24/08/2015)

II.6.2.3. Department Nanosciences

A. Plenary talks

1. *Integration of reproducible assay in microfluidics for Surface Enhanced Raman Scattering based sensors*
Finot E
Villa Conference on Interactions Among Nanostructures
Santorin, Greece. (01/06/2010)

2. *Surface Enhanced Raman Spectroscopy for nanomedecine*
Finot E
BIT' s 1st AnnualWorld Congress of Nanomedicine
Bejing, China. (01/06/2010)

3. *Visible Photothermal Deflection Spectroscopy*
Finot E
International Workshop onNanomechanical Cantilever Sensors
Banff, Canada. (01/08/2010)

4. *Nanotechnology approaches to study the role of melatonin in molecular mechanism of amyloid toxicity and neuroprotection related to Alzheimer's disease*
Finot E
Nanotechnology Zing Conference 2012
Mexico, Mexico. (31/10/2012)

5. *Nanospectroscopy of proteins*
Eric Finot,
Canadian Biophysical Society
Waterloo, Brazil. (16/06/2015)

B. Key lectures

1. *Surface Plasmon Circuitry in Opto-Electronics*
A. Dereux
CLEO 2012
San Jose, USA. (06/05/2012)

2. *A step-by-step elaboration of a preclinical theranostic platform from titanate nanotubes against prostate cancer*
J. Boudon, C. Mirjolet, A. Loiseau, T. Gautier, J. Paris, G. Créhange, N. Millot
Matériaux 2014
Montpellier, France. (24/11/2014)

3. *De nouvelles sondes nanoparticulaires pour l'imagerie médicale multimodale*
J. Boudon, G. Thomas, L. Maurizi, N. Millot, J. Paris, M. Moreau, Y. Bernhard, R. Decréau, F. Demoisson, F. Bouyer
Matériaux 2014
Montpellier, France. (24/11/2014)

C. Invited lectures

1. *Les nanomatériaux en imagerie médicale*
N. Millot, D. Vandroux, P. Walker, C. Mirjolet
Formations PharmImage
Dijon, France. (23/06/2010)

2. *Elaboration de nanohybrides multifonctionnels à destination de la santé : état de l'art en Bourgogne*
N. Millot
Journées des étudiants de l'ENS Cachan
Cachan, France. (25/03/2011)

3. *Near-field characterization of plasmonic components and devices*
A. Dereux
4 hour lecture at Doctoral School << Short course on
lausanne, Switzerland. (18/07/2011)

4. *Nanomatériaux et utilisation en médecine : quelques exemples dijonnais*
N. Millot
Journées scientifiques CHU Besançon
Besançon, France. (18/11/2011)

5. *Physics for biology. A travel in the energy landscape of proteins: from atoms to diseases*

P. Senet
Physics Colloquium, Dept. of Physics, Applied Physics and Astronomy, RPI
Troy, USA. (21/03/2012)

6. *Active & Passive Surface Plasmon Waveguides and Circuits*
A. Dereux
Nano Photonics Summer School (NSERC-CREATE initiative in Extreme Photonics Project)
Ottawa, Canada. (04/05/2012)

7. *Applications of Surface Plasmon Polaritons In Opto-Electronics & Health Diagnosis*
A. Dereux
Seminar at California Institute of Technology
Pasadena, USA. (08/05/2012)

8. *Anomalous diffusion on the free-energy profiles of proteins and the dynamical transition*
P. Senet
Université de Lorraine
Nancy, France. (12/06/2012)

9. *Plasmon sensing in biology*
Finot E
University of Waterloo
Waterloo, Canada. (15/07/2012)

10. *Plasmon nanosensors*
Finot E
University of Alberta
Alberta, Canada. (31/10/2012)

11. *A journey in the free-energy landscape of proteins: from small bond fluctuations to large conformational changes*
P. Senet
Laboratoire de Biochimie Théorique, Université Paris VII
Paris, France. (04/04/2013)

12. *Decipher the Mechanisms of Protein Conformational Changes Induced by Nucleotide Binding through Free-Energy Landscape Analysis: ATP binding to Hsp70*
P. Senet
Life Science Laboratory, UMass
Amherst, USA. (15/10/2013)

13. *Plasmonics applied to optoelectronics and protein recognition*
A. Dereux
Lecture Series: Methods and Materials in Materials Science of J. Gutenberg Univ.
Mainz, Germany. (27/11/2013)

14. *Data analysis in Fluorescence Lifetime Imaging Microscopy (FLIM)*
A. Leray
ANF
Rennes, France. (16/06/2014)

15. *Fluctuations and unfolding*
P. Senet
Baker Laboratory of Chemistry and Chemical Biology, Cornell University
Ithaca, USA. (01/07/2014)

16. *Preclinical development of a Docetaxel nanocarrier to enhance prostate cancer radiosensitivity*
C. Mirjolet, J. Boudon, R. A. Loiseau, Boidot, S. Chevrier, C.Dalban, B. Collin, A. Oudot, T. Gautier, N. Millot, G. Créhange
congrès Nanohybrides XII (Nanohybrides 2015)
Bastia (Furiani, Corse, France. (18/05/2015)

17. *Plasmonics for protein detection*
Eric Finot,
Nanoscale Biophysics Workshop
Rio de Juanero, Brazil. (26/06/2015)

18. *Nanoworld Simulations*
P. Senet
School: Measuring and modelling biology 2015
Les Houches, France. (23/10/2015)

D. Invited talks

1. *Nanoparticules et radiothérapie : nouvel outil dans le traitement du cancer ?*
C. Mirjolet, A.-L. Papa, G. Créhange, N. Millot, P. Maingon
Nanohybrides VII
Porquerolles, France. (03/05/2010)

2. *Nouvelles méthodes de synthèse d'USPIO en tant qu'agents de contraste des pathologies cardiovasculaires : études in vitro et in vivo chez la souris*
L. Maurizi, H. Bisht, M. Ariane, D. Vandroux, L. Dumont, P. Walker, F. Demoisson, F. Bouyer, N. Millot
Nanohybrides VII
Porquerolles, France. (03/05/2010)

3. *Functionalized titanate nanotubes as potential carriers in nanomedicine*
N. Millot
9th Japan-France Workshop on Nanomaterials
Toulouse, France. (24/11/2010)

4. *Detection of Optical Magnetic Field Using Surface Plasmons Resonances - Short Review (Replacement talk)*
A. Dereux
SPP5- 5th International Conference on Surface Plasmon Photonics
Busan, South-Korea. (17/05/2011)

5. *Silicon Plasmonic Router for Optical Interconnects. PLATON Approach.*
A. Dereux, L. Markey, K. Hassan, J.C. Weeber, M. Baus, T. Tekin, N. Pleros
SPIE Photonics West
San Francisco, USA. (25/01/2012)

6. *Physics for biology. A travel in the energy landscape of proteins: from atoms to diseases*
P. Senet
8ième Réunion de la Chimie Théorique du Grand Est
Dijon, France. (02/06/2012)

7. *SERS and photothermal spectroscopy for molecular detection in microfluidics*
Finot E
SPIE Baltimore
Baltimore, USA. (15/04/2013)

8. *Development of novel theranostic platforms: from titanate nanotubes to SPIO, comparison with other nanostructures*
N. Millot, A.-L Papa, J. Boudon, R. A. Decréau
EMRS Spring Meeting
Strasbourg, France. (28/05/2013)

9. *Les nanomatériaux : de leur préparation à leurs propriétés particulières. Quelles applications dans la vie de tous les jours : intérêts ou dangers ?*
N. Millot
22ème conférence nationale des comités de protection des personnes
Dijon, France. (20/06/2013)

10. *Surface Plasmon Polaritons In Opto-Electronics & Health*
A. Dereux
LAPHIA Symposium
Bordeaux, France. (03/09/2013)

11. *Non linear Microscopy for biological imaging: applications and developments*
A. Leray
NB- Photonics
Gand, Belgique. (06/01/2014)

12. *New versatile theranostic platforms based on SPIONs and titanate nanotubes*
N. Millot
UCL French Embassy Science and Technology Workshops : Nanomaterials for Biomedical Application
Londres, UK. (10/01/2014)

13. *Nanoparticles as building blocks for narrow-band nanoacoustic materials*
L. Saviot
1st International Symposium on Nanoparticles/Nanomaterials and Applications (ISN2A)
Lisboa, Portugal. (20/01/2014)

14. *Merging plasmonic components on Si motherboard for optical interconnects*
A. Dereux
<< Nanolight >>, Centro de Ciencias de Benasque
Benasque, Spain. (14/03/2014)

15. *Fluorescence lifetime imaging microscopy (FLIM) for measuring molecular interactions by FRET: principle and applications*
A. Leray
5 èmes Journées DImaCell
Besançon, France. (03/04/2014)

16. *Development of novel versatile theranostic platforms: from SPIONs to titanate nanotubes*
N. Millot
4th Zing Bionanomaterials Conference
Narja, Spain. (08/04/2014)

17. *Plasmonic switches in true optical data processing conditions*
A. Dereux
META 14 Conference
Singapore, Singapore. (22/05/2014)

18. *Plasmonics Integration Technology and Building Blocks*
A. Dereux
Summer School On Optical Interconnects
University of Thessaloniki, Greece. (05/06/2014)

19. *Applications de nanoparticules en santé : nanorisque et apport sur les volets diagnostic et thérapeutique*
N. Millot
Congrès de l'association des Pédiatres du Sud de Paris
Bordeaux, France. (07/06/2014)

20. *Active plasmonic devices in true optical data processing conditions*
A. Dereux
Gordon Research Conference
Sunday River Resort, Newry, Maine, USA. (06/07/2014)

21. *DOTA-Functionalized Magnetite Nanoparticles as Contrast Agents for MRI/PET Double Imaging*
G. Thomas, F. Demoisson, J. Boudon, J. Paris, N. Millot
XII International Conference on Nanostructured Materials (NANO 2014)
Moscow, Russia. (13/07/2014)

22. *Surface Plasmon Polaritons in Interconnect Technology*
A. Dereux
SPP7- 7th International Conference on Surface Plasmon Photonics
Jerusalem, Israel. (03/06/2015)

23. *Determination of the =C2=A0in-line concentration of single molecules using SERS nanosensors*
Eric Finot,
ISPM 2015
Rio de Juanero, Brazil. (23/06/2015)

E. Oral contributions

1. *Acousto-Plasmonic Dynamics in Metallic Nano-Objects*
N. Large, A. Mlayah, L. Saviot, J. Margueritat, J. Gonzalo, C.N. Afonso, J. Aizpurua
13th International Conference on Phonon Scattering in Condensed Matter (Phonons 2010)
Taipei, Taiwan. (01/04/2010)

2. *Acousto-plasmonic coupling in engineered metal nanocoposites*
N. Large, A. Mlayah, L. Saviot, J. Margueritat, J. Gonzalo, C. N. Afonso, J. Aizpurua
CLEO/QELS 2010 - Laser Science to Photonic Application
San José, USA. (01/05/2010)

3. *Trafic intracellulaire des nanohybrides TiONts/PEI en tant que vecteurs d'ADN dans les cardiomyocytes*
A.L. Papa, L. Dumont, D. Vandroux, N. Millot
Nanohybrides VII
Porquerolles, France. (03/05/2010)

4. *Human inducible Hsp70: Structures, Dynamics, and Interdomain Communication from All-atom Molecular Dynamics Simulations*
A. Nicolaï, P. Senet, P. Delarue
Journée des écoles doctorales Carnot
Besançon, France. (06/05/2010)

5. *New Method of Synthesis of USPIO: In Vitro and In Vivo Biological Applications as a MRI Contrast Agent*
L. Maurizi, H. Bisht, M. Ariane, D. Vandroux, L. Dumont, P. Walker, F. Demoisson, F. Bouyer, N. Millot
Particles 2010
Orlando, USA. (22/05/2010)

6. *Acousto-plasmonic Hot Spots: Driving New Selection Rules in Raman Spectroscopy of Metallic Nanoantennas*
J. Aizpurua, N. Large, L. Saviot, A. Mlayah
Photonic Metamaterials and Plasmonics (META 2010)
Tucson, USA. (01/06/2010)

7. *Human Inducible Hsp70: Structures, Dynamics and Interdomain Communication from All-atom Molecular Dynamics Simulations*
A. Nicolaï, P. Senet, P. Delarue
7ième Réunion de la Chimie Théorique du Grand Est
Nancy, France. (04/06/2010)

8. *Diffusion rotationnelle anormale des liaisons N-H des liaisons peptidiques d'une protéine révélée par l'étude de leurs fonctions d'auto-corrélation rotationnelles*

Y. Cote, P. Senet, P. Delarue
7ième Réunion de la Chimie Théorique du Grand Est
Nancy, France. (04/06/2010)

9. *Observation and modelling of the acoustic vibrations of anisotropic nanoparticles*
L. Saviot, D. B. Murray
2nd International Symposium on Laser Ultrasonics (LU 2010)
Talence, France. (05/07/2010)

10. *Observation and modelling of the acoustic vibrations of anisotropic nanoparticles*
L. Saviot, D. B. Murray
XXII International Conference on Raman Spectroscopy (ICORS 2010)
Boston, USA. (07/08/2010)

11. *Human inducible 70 kDa Heat Shock Protein Structures and Dynamics from All-atom Molecular Dynamics Simulations*
A. Nicolaï, P. Senet and P. Delarue
Second International Conference on "Transient Chemical Structures in Dense Media
Paris, France. (29/11/2010)

12. *Characterization of ensembles of protein structures in terms of the dynamics around their alpha-carbon atoms*
H. A. Scheraga, J. A. Vila, P. Senet, G. Maisuradze
PACIFICHEM 2010
Honolulu, USA. (15/12/2010)

13. *Exaltation de la diffusion Raman basse fréquence de nanosphères d'or*
L. Saviot, A. Mlayah, R. Marty, A. Arbouet, C. Girard, S. Tripathy, V. K. Lin, S. L. Teo, E. Ye, M. Y. Han
GDR Ondes
Paris, France. (17/03/2011)

14. *Acousto-Plasmonic Dynamics in Raman Scattering*
N. Large, L. Saviot, J. Aizpurua, A. Mlayah
5th International Conference on Surface Plasmons Photonics (SPP5)
Busan, Korea. (01/05/2011)

15. *Fluctuations in SERS*
Finot E.
GdR Plasmonique Moléculaire et Spectroscopies Exaltées (PMSE)
Paris, France. (23/05/2011)

16. *Synthèse et caractérisation de nanorubans d'oxydes de titane destinés à des applications biomédicales*
V. Bellat, R. Chassagnon, O. Heintz, L. Saviot, N. Millot
Nanohybrides VIII
Bastia, France. (06/06/2011)

17. *(Bio-)fonctionnalisation de nanotubes d'oxydes de titane comme plateforme multifonctionnelle pour des applications diagnostique et thérapeutique*
J. Boudon, J. Paris, A.-L. Papa, C. Mirjolet, P. Maingon, L. Dumont, D. Vandroux, N. Millot
Nanohybrides 8
Bastia, Corse, France. (08/06/2011)

18. *Nonexponential decay and long time limit of internal rotational correlation functions of native proteins and NMR derived data*
Y. Cote, P. Senet, P. Delarue, G. G. Maisuradze, and H. A. Scheraga
Groupe Graphisme et Modélisation Moléculaire (GGMM) XVIIième
La Rochelle, France. (30/06/2011)

19. *Functionalized Titanate Nanotubes: a Potential Versatile Platform for Diagnostic and Therapeutic*
J. Boudon, J. Paris, A.-L. Papa, C. Mirjolet, P. Maingon, L. Dumont, D. Vandroux, N. Millot
UK colloids 2011
London, England. (04/07/2011)

20. *XPS study of steric and electrostatic stabilization of iron oxide nanoparticles and titanate nanotubes*
O. Heintz, L. Maurizi, J. Paris, J. Boudon, F. Bouyer, N. Millot
ECASIA'11 - 14th European Conference on Applications of Surface and Interface Analysis
Cardiff, Wales. (04/09/2011)

21. *Spectral and temporal fluctuations in dynamic Raman nanospectroscopy*
Finot E.
International workshop on plasmonic sensing and spectroscopy
Chalmers, Sweden. (23/09/2011)

22. *Nanoparticules pour l'imagerie multimodale et la nanovectorisation de principes actifs*
J. Boudon, J. Paris, R. Mayap Talom, N. Millot, Y. Bernhard, R. Decréau, C. Bernhard, F. Denat
Réunion scientifique PharmImage
Dijon, France. (24/01/2012)

23. *NP sizes in the Plasma Plume Induced by PL Irradiation of metallic targets by using SAXS : influence of target composition*
L. Lavisse, J.-L. Le Garrec, L. Hallo, J.-M. Jouvard, M.Girault, L. Barilleau, S. Carles, B. Mitchell, J. Decloux, V. Potin, H. Andrzejewski, J. Perez, M. C. Marco de Lucas, S. Bourgeois
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (16/05/2012)

24. *Fonctionnalisation de nanotubes d'oxydes de titane pour des applications en imagerie médicale : apport de l'XPS*
J. Paris, O. Heintz, J. Boudon, R. Mayap Talom, Y. Bernhard, C. Bernhard, R. Decréau, F. Denat, N. Millot
ELSPEC 2012, 5ème Conférence Francophone sur les Spectroscopies d'Electrons
Louvain-La-Neuve, Belgium. (20/05/2012)

25. *Platelet activity of a new engineered recombinant collagen peptide*
Debrand S.
XXVth International Symposium on Technological Innovations in Laboratory Hematology
Nice, France. (23/05/2012)

26. *Surface stress sensing at the nanoscale*
Finot E
THE 14TH INTERNATIONAL SCANNING PROBE MICROSCOPY CONFERENCE
Toronto, Canada. (15/07/2012)

27. *Amplitude fluctuations in dynamic Surface Enhanced Raman spectroscopy*
Finot E
International Conference on Nanoscience + Technology
Paris, France. (23/07/2012)

28. *Dynamic Nanospectroscopy of multidomain proteins in microfluidic*
Brulé T.
International Conference on Enhanced Spectroscopy
Porqureolles, France. (23/08/2012)

29. *Multimodal SuperParamagnetic Iron Oxide Nanoparticles: Versatile Probes for the in Vivo Imaging of Specific Pathologies*
J. Paris, R. Mayap Talom, J. Boudon, L. Maurizi, Y. Bernhard, R. Decréau, P. Walker, L. Dumont, D. Vandroux, F. Denat, N. Millot
World Molecular Imaging Congress WMIC
Dublin, Ireland. (05/09/2012)

30. *The radiosensitization effect of titanate nanotubes as a promising tool in radiotherapy: a proof-of-concept*
C. Mirjolet, A. L. Papa, G. Créhange, J. Boudon, O. Raguin, C. Seignez, C. Paul, G. Truc, N. Millot, P. Maingon
4th Symposium on Novel Targeting Drugs and Radiotherapy: From the Bench to the Clinic (ESTRO 2012)
Toulouse, France. (10/09/2012)

31. *Biodistribution Study of a Novel Theranostic Versatile Platform Composed of Surface-modified Titanate Nanotubes*
J. Boudon, J. Paris, R. Mayap Talom, A-L Papa, M Moreau, C Bernhard, Y Bernhard, R. Decréau, F. Denat, P. Walker, A. Oudot, A. Courteau, J.-M. Vrigneaud, B. Collin, N. Millot
International Conference on Nanotechnology in Medicine NanoMED UK
London, England. (07/11/2012)

32. *Bimodal Contrast Agents for the in Vivo Imaging: The Elaboration of Functionalized SuperParamagnetic Iron Oxide Nanoparticles*
J. Paris, J. Boudon, Y. Bernhard, R. Decréau, R. Mayap Talom, L. Maurizi, F. Bouyer, P. Walker, L. Dumont, D. Vandroux, F. Denat, N. Millot
International Conference on Nanotechnology in Medicine NanoMED UK
London, England. (07/11/2012)

33. *Functionalized titanate nanotubes: a versatile platform for theranostic. From DNA transfection to a promising tool in radiotherapy, first in vivo experiments*
J. Boudon, A.-L. Papa, J. Paris J., R. Mayap Talom, C. Mirjolet, L. Dumont, G. Créhange, J.-M. Vrigneaud, A. Oudot, B. Collin, D. Vandroux, P. Maingon, N. Millot
27th GTRV scientific meeting
Chilly-Mazarin, France. (03/12/2012)

34. *Development of a Novel Theranostic Versatile Platform from Titanate Nanotubes: Study of their Biodistribution*
J. Boudon, J. Paris, R. Mayap Talom, F. Bouyer, A.-L. Papa, M. Moreau, C. Bernhard, Y. Bernhard, R. A. Decréau, F. Denat, P. Walker, A. Oudot, A. Courteau, J. M. Vrigneaud, B. Collin, N. Millot
Third international conference on Multifunctional, Hybrid and Nanomaterials
Sorrento, Italy. (03/03/2013)

35. *Functionalized mesoporous silica nanoparticles as drug delivery system for poorly soluble drugs*
M. Varache, F. Bouyer, I. Bezverkhyy, M. Moussus, F. Crevat, R. Chassagnon, N. Geoffroy, L. Saviot, F. Baras, F. Bouyer
E-MRS, Spring Meeting
Strasbourg, France. (27/05/2013)

36. *Au-doped TiO2 thin films: low-frequency Raman study*
S. Reymond-Laruinaz, L. Saviot, F. Vaz, V. Potin, M. C. Marco de Lucas

E MRS European Material Research Society Spring Meeting
Strasbourg, France. (28/05/2013)

37. *Raman and Brillouin scattering from highly-compressed oxide nanoparticles*
L. Saviot, F. Demoisson, M. C. Marco de Lucas, D. B. Murray, D. Machon, J. Margueritat, A. Mermet
GDR MECANO
Toulouse, France. (03/06/2013)

38. *Deciphering how ATP binding to Hsp70 induces a large conformational change from molecular dynamics simulations*
P. Senet
9ième Réunion de la Chimie Théorique du Grand Est
Moussy, France. (08/06/2013)

39. *Synthesis of Oxide Nano-Particles with a Continuous Hydrothermal Production Process under Sub and Supercritical Conditions*
F. Demoisson, R. Piolet, G. Thomas, A. Leybros, L. Saviot, M. Ariane, N. Millot, F. Bernard
Sustainable Manufacturing of Nanomaterials and their Organization for Hybrid Device Structures
Ile d'Oleron, France. (15/06/2013)

40. *Terahertz vibrations of ZrO2 nanoparticles in a nanopowder under high-pressure*
L. Saviot, D. Machon, A. Mermet, D.B. Murray, S. V. Adichtchev, J. Margueritat, F. Demoisson, M. Ariane, M. C. Marco De Lucas
19th International Vacuum Congress
Paris, France. (15/09/2013)

41. *Functionalized titanate nanotubes and iron oxide nanoparticles for the in vivo imaging: contribution of XPS*
O. Heintz, J. Paris, J. Boudon, N. Millot
6th International Symposium on Practical Surface Analysis
Okinawa, Japan. (10/11/2013)

42. *Principal Component Analysis of Surface Enhanced Raman Spectra of single proteins*
Eric Finot,
Winter Workshop of nanospectroscopy
Linz, Austria. (04/02/2014)

43. *Docetaxel-based titanate nanotubes to enhance radiotherapy and to target chemotherapy for the treatment of prostate cancer*
J. Boudon, C. Mirjolet, T. Gautier, J. Paris, G. Créhange, N. Millot
International Conference on Nanotechnology in Medicine NanoMED UK
London, England. (26/02/2014)

44. *Déconvolution de Laguerre en microscopie FLIM*
M.S. Alkhwaja , A. Leray , A. Dieterlen
Opt- Diag
Paris, France. (14/05/2014)

45. *Entre diffusion Brillouin et diffusion Raman: modes de vibrations acoustiques localisés aux échelles nanométriques*
A. Mermet, J. Marguéritat, A. Girard, H. Gehan, L. Saviot
XXèmes journées du Groupe Français de Spectroscopie Vibrationnelle (GFSV 2014)
Paris, France. (21/05/2014)

46. *Docetaxel-Titanate Nanotubes Nanohybrids for Dual Therapy with a View to Prostate Cancer Treatment*
J. Boudon, C. Mirjolet, T. Gautier, A. Loiseau, J. Paris, G. Créhange, N. Millot
XII International Conference on Nanostructured Materials (NANO 2014)
Moscow, Russia. (13/07/2014)

47. *Engineering of a new nanobiohybrid composed of titanate nanoribbons for regenerative medicine*
V. Bellat, M. Moreau, J. Boudon, D. Vandroux, F. Denat, N. Millot
XII International Conference on Nanostructured Materials (NANO 2014)
Moscow, Russia. (13/07/2014)

48. *SERS study of ultrathin atomic layer deposited TiO2 films*
S. Reymond-Laruinaz, L. Avril, L. Imhoff, V. Potin, M. C. Marco de Lucas
XXIV International Conference on Raman Spectroscopy (ICORS 2014)
Iena, Germany. (11/08/2014)

49. *SERS and TEM study of protein bioconjugated silver nanoparticles*
S. Reymond-Laruinaz, L. Saviot, V. Potin, M. C. Marco de Lucas
XXIV International Conference on Raman Spectroscopy (ICORS 2014)
Iena, Germany. (12/08/2014)

50. *Low-frequency Raman scattering from nanoparticles under high pressure*
L. Saviot, M. C. Marco de Lucas , A. Mermet, J. Margueritat, D. Machon
XXIV International Conference on Raman Spectroscopy (ICORS 2014)
Iena, Germany. (15/08/2014)

51. *Incorporation of gold nanoparticles in a TiO2 matrix for surface plasmonic properties*

L. Avril, J. Boudon, P. Simon, L. Imhoff
13th European Vacuum Conference (EVC13)
Aveiro, Portugal. (08/09/2014)

52. *Protéine recombinante analogue du collagène : Applications en médecine régénératrice*
D. Vandroux, E. de Maistre, N. Millot, O. Trost
50ème Congrès de la Société Française de Stomatologie et Chirurgie Maxillo-Faciale et Chirurgie Orale
Lyon, France. (17/09/2014)

53. *nanoSERS of proteins*
Eric Finot
COST
Troyes, France. (04/10/2014)

54. *Fluorescence lifetime imaging microscopy (FLIM) for measuring molecular interactions by FRET*
P. Heinrich, A. Leray
MiFoBio
Seignosse, France. (04/10/2014)

55. *Microscopie par diffusion Raman anti-Stokes cohérente (coherent anti-Stokes Raman scattering microscopy—CARS)*
C.-H. Hage, A. Leray
MiFoBio
Seignosse, France. (04/10/2014)

56. *Synthesis of SPIONs functionalized by DHCA, L-DOPA or citric acid under continuous hydrothermal conditions*
G. Thomas, F. Demoisson, N. Millot
4th ISHA
Bordeaux, France. (26/10/2014)

57. *Fluorescence lifetime imaging microscopy (FLIM) for measuring molecular interactions by FRET*
J.-M. Perrier Cornet, A. Leray
5 èmes Journées du Réseau des microscopistes INRA
Dijon, France. (12/11/2014)

58. *The enhancement of radiotherapy efficacy with docetaxel-titanate nanotubes as a new nanohybrid for localized high risk prostate cancer*
C. Mirjolet, J. Boudon, A. Loiseau, S. Chevrier, T. Gautier, R. Boidot, J. Paris, N. Millot, G. Crehange
26th EORTC-NCI-AACR SYMPOSIUM
Barcelona, Spain. (18/11/2014)

59. *In vivo SPECT-CT imaging of theranostic titanate nanotubes-docetaxel nanohybrids into human prostate tumors and in vitro studies on prostate cancer cell lines*
J. Boudon, C. Mirjolet, A. Loiseau, T. Gautier, J. Paris, G. Créhange, N. Millot
Matériaux 2014
Montpellier, France. (24/11/2014)

60. *Ingénierie d'un nouveau nanobiohybride pour la régénération tissulaire à base de nanorubans de titanates*
V. Bellat, R. Chassagnon, M. Moreau, V. Bérard, F. Denat, D. Vandroux, N. Millot
Matériaux 2014
Montpellier, France. (24/11/2014)

61. *Statistical and Fourier analyses for in line concentration determination in single molecule dynamic SERS*
Eric Finot,
Optical Nanospectroscopy II
Dublin, Irland. (18/03/2015)

62. *A titanate-docetaxel nanohybrid monitored by SPECT-CT for the treatment of prostate cancer*
J. Boudon, C. Mirjolet, A. Loiseau, T. Gautier, G. Créhange, B. Collin, A. Oudot, N. Millot
6th International Congress of Nanotechnology in Medicine & Biology (BioNanoMed 2015)
Graz, Austria. (09/04/2015)

63. *Vers l'identification de protéines uniques grâce à la diffusion Raman exaltée par effet de surface (SERS)*
A. Leray
Journées des CR1 de l'INC
Paris, France. (15/06/2015)

64. *Protein dynamics and function from a physicist point of view*
P. Senet
Vibrations at Surfaces (VAS15)
Donastia-San Sebastian, Spain. (22/06/2015)

65. *Ultra low frequency Raman scattering of silver nano-needles*
J. Margueritat, S. Adichtchev, A. Girard, H. Gehan, L. Saviot, E. Duval, A. Mermet
15th International Conference on Phonon Scattering in Condensed Matter (Phonons 2015)
Nottingham,, UK. (14/07/2015)

66. *Crystallinity segregation from self-assembling of single crystalline gold nanocrystals in colloidal solution*
H. Portalès, N. Goubet, L. Saviot, A. Mermet, E. Duval, M. P. Pileni
7th International Gold Conference
Cardiff, UK. (28/07/2015)

F. Posters

1. *Synthèse de nanoparticules de silice pour l'encapsulation de molécules anticancéreuses*
M. Varache, F. Bouyer, J. Moretto, H. Ornek, F. Bouyer
Nanohybrides 7
Porquerolles, France. (02/05/2010)

2. *Dispersions de nanotubes d'oxydes de titane par des polymères (PEG et PEI)*
V. Bellat, A.L. Papa, H. Bisht, N. Millot
Nanohybrides VII
Porquerolles, France. (03/05/2010)

3. *Human Inducible Hsp70: Structures, Dynamics and Interdomain Communication from All-atom Molecular Dynamics Simulations*
A. Nicolaï, P. Delarue, P. Senet
XIème Journée des écoles doctorales Pasteur et Carnot
Besançon, France. (06/05/2010)

4. *Synthesis of silica nanoparticles for controlled delivery of anticancer drugs*
F. Bouyer, A. Winter, J. Moretto, A. Fauger, M. Varache, B. Chauffert, F. Bouyer
Particles 2010
Orlando, USA. (22/05/2010)

5. *Titanate nanotubes as a new carrier in the field of cardiovascular diseases: synthesis, functionalization, internalization and toxicity*
A.L. Papa, L. Dumont, L. Maurizi, P. Athias, D. Vandroux, N. Millot
Particles 2010
Orlando, USA. (23/05/2010)

6. *New method of synthesis of SPIONs: in vitro and in vivo biological applications as a MRI contrast agent*
L. Maurizi, H. Bisht, M. Ariane, D. Vandroux, L. Dumont, P. Walker, F. Demoisson, F. Bouyer, N. Millot
8th International Conference on the Scientific and Clinical Applications of Magnetic Carriers
Rostock, Germany. (27/05/2010)

7. *Titanate nanotubes as a new carrier in the fields of cardiovascular diseases: synthesis, functionalization, internalization and toxicity*
A.L. Papa, L. Dumont, L. Maurizi, P. Athias, D. Vandroux, N. Millot
8th International Conference on the Scientific and Clinical Applications of Magnetic Carriers
Rostock, Germany. (27/05/2010)

8. *Dynamics of proteins recorded by the fluctuations of a local probe*
Y Cote, P. Senet, P. Delarue
EMBO Practical Course 2010, Multidimensional NMR in Structural Biology
Il Ciocco, Lucca, Italy. (01/08/2010)

9. *Acousto-plasmonic dynamics of metallic nano-objects*
N. Large, L. Saviot, A. Mlayah, J. Aizpurua
Passion for knowledge (DIPC10)
San Sebasti=C3=A1n, Spain. (01/09/2010)

10. *Evaluation des activités cytotoxiques et prooxydantes de nanoparticules d'oxydes de fer fonctionnalisées sur des cultures d'oligodendrocytes murins 158N*
F. Bouyer, L. Maurizi, M. Baarine, N. Millot, J. Bruniaux, F. Masson, G. Lizard
Congrès annuel de l'Association Française de Cytométrie
Marseille, France. (27/10/2010)

11. *Calcium pectinate beads drug delivery modulation by a novel silica coated system*
E. J. Laukamp, A. Assifaoui, F. Bouyer, O. Chambin
7th World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology
Valletta, Malte. (08/11/2010)

12. *Synthesis by a continuous hydrothermal process and functionalization of SPIONs. In vitro and in vivo biological applications*
L. Maurizi, J. Paris, H. Bisht, D. Vandroux, L. Dumont, P.Walker, F. Demoisson, F. Bouyer, N. Millot
9th Japan-France Workshop on Nanomaterials
Toulouse, France. (24/11/2010)

13. *Impact de nanoparticules d'argent sur deux espèces de candida en comparaison avec un ammonium quaternaire*
N. Seguy, J Fondart, F. Bouyer
Congrès de la Société Française de Mycologie Médicale
Paris, France. (26/11/2010)

14. *Functionalization and internalization of magnetic nanoparticles and evaluation of their biological activities on murine oligodendrocytes 158N*
F. Bouyer, L. Maurizi; N. Millot, J. Bruniaux, F. Masson and G. Lizard
Hybrid Materials
Strasbourg, France. (06/03/2011)

15. *Development of smart MRI contrast agents for the molecular imaging of vulnerable atherosclerosis plaques*
J. Boudon, S. Mornet, M.-J. Jacobin-Valat, G. Clofent-Sanchez, C.E. Hagemeyer, E. Duguet
2nd International Conference on Multifunctional, Hybrid and Nanomaterials
Strasbourg, France. (06/03/2011)

16. *Protein Grafting on Nanometer-sized Metallic Oxides for Biomedical Applications in the Field of Cardiovascular Diseases*
J. Boudon, J. Paris, V. Bellat, L. Maurizi, A.-L. Papa, D. Vandroux, N. Millot
2nd International Conference on Multifunctional, Hybrid and Nanomaterials
Strasbourg, France. (06/03/2011)

17. *Raman pressure in metallic nano-objects: a picture of the acousto-plasmonic interactions*
N. Large, L. Saviot, A. Mlayah, J. Aizpurua
ImagineNano 2011 - Photonics-Plasmonics and Magneto-Optics (PPM2011)
Bilbao, Spain. (01/04/2011)

18. *Synthèse de nanotubes d'oxydes de titane marqués par des USPIO en vue d'applications diagnostic (IRM) et thérapeutique (radiosensibilisant)*
J. Paris, J. Guichard, J. Boudon, N. Millot
Séminaire Particule, Molécule et Surface
Besançon, France. (01/04/2011)

19. *Conformations of Hsp70s: Comparison between FRET data of mtHsp70, DnaK and BiP with all-atom molecular dynamics simulations of human Hsp70*
A. Nicolaï, P. Delarue, P. Senet
XIIème Journée des écoles doctorales Pasteur et Carnot
Dijon, France. (05/05/2011)

20. *Conformations of Hsp70s: comparison between FRET data of mtHsp70, DnaK and BiP with all-atom molecular dynamics simulations of human Hsp70*
A. Nicolaï, P. Delarue, P. Senet
EMBO conference: The Biology of Molecular chaperones
Grundlsee, Austria. (19/05/2011)

21. *Nonexponential decay of internal correlation functions of native proteins and NMR relaxation data*
P. Senet, Y. Cote, P. Delarue, G. Maisuradze, H. A. Scheraga
EMBO conference: Computational Aspects - Biomolecular NMR
Il Ciocco, Lucca, Italy. (22/05/2011)

22. *Design of titanate nanotubes functionalized by iron oxide nanoparticles for theranostics*
J. Paris, J. Guichard, J. Boudon, A.-L. Papa, N. Millot
Nanohybrides 8
Bastia, Corse, France. (08/06/2011)

23. *Synthesis and characterization of mesoporous silica nanoparticles (MSNs) for the encapsulation of anticancer drug*
M. Varache, A. Cot, I. Bezverkhyy, F. Baras, F. Bouyer
Particles 2011
Berlin, Germany. (09/07/2011)

24. *Functionalized titanate nanotubes for applications in medical imaging*
J. Boudon, J. Paris, Y. Bernhard, C. Bernhard, R. Decreau, F. Denat, N. Millot
Particles 2011 - Stimuli-Responsive Particles and Particle Assemblies
Berlin, Germany. (09/07/2011)

25. *Elaboration of mesostructured silica nano-objects for the encapsulation of anticancer drug candidates*
M. Varache, F. Bouyer, I. Bezverkhyy, L. Saviot, F. Baras, F. Bouyer
8th World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology
Istanbul, Turkey. (19/03/2012)

26. *Drug release modulation using silica-coated pectinate beads*
A. Assifaoui, F. Bouyer, P. Cayot, O. Chambin
8th World Meeting on Pharmaceutics, Biopharmaceutics and Pharmaceutical Technology
Istanbul, Turkey. (19/03/2012)

27. *Synthesis of nanoparticles by proteins bioconjugated: applications in SERS spectroscopy*
S. Reymond-Laruinaz, L. Saviot, M. C. Marco de Lucas
1st International Conference on Enhanced Spectroscopy
Porquerolles, France. (04/05/2012)

28. *Anomalous diffusion and dynamical correlation between the side chains and the main chain of proteins in their native state*
Y. Cote, P. Senet, P. Delarue, G. G. Maisuradze, H. A. Scheraga

8ième Rencontre des Chimistes Théoriciens du Grand Est (RCTGE)
Dijon, France. (01/06/2012)

29. *Controlled Release of Cisplatin from Functionalized Mesoporous Silica Nanoparticles*
M. Varache, F. Bouyer, I. Bezverkhyy, L. Saviot, F. Baras, F. Bouyer
Colloids and Nanomedicine
Amsterdam, Netherlands. (15/07/2012)

30. *Titanate nanoribbons: a promising new nanostructure for biomedical applications*
V. Bellat, M. Moreau, R. Chassagnon, O. Heintz, F. Denat, D. Vandroux, N. Millot
Colloids and Nanomedicine 2012
Amsterdam, The Nederlands. (15/07/2012)

31. *Functionalized Titanate Nanotubes As A Potential Versatile Platform For Theranostic*
R. Mayap Talom, J. Boudon, J. Paris, A.-L. Papa, C. Bernhard, R. Decreau, Y. Bernhard, F. Denat, D. Vandroux, P. Walker, C. Mirjolet, A. Oudot, B. Collin, N. Millot
Colloids and Nanomedicine 2012
Amsterdam, The Netherlands. (15/07/2012)

32. *Iron Oxide Nanoparticles As Multimodal Probes For In Vivo Imaging*
J. Paris, R. Mayap Talom, J. Boudon, L. Maurizi, Y. Bernhard, R. Decréau, P. Walker, C. Bernhard, F. Denat, N. Millot
Colloids and Nanomedicine 2012
Amsterdam, The Netherlands. (15/07/2012)

33. *Deciphering the conformational changes induced by ATP binding in a HSP70 molecular chaperone from an analysis of its free-energy landscape in different nucleotide states*
A. Nicolaï, P. Delarue, and P. Senet
Energy Landscapes
Obergurgl, Austria. (16/07/2012)

34. *Functionalized titanate nanotubes as a new versatile platform for theranostic applications*
J. Boudon, R. Mayap Talom, J. Paris, A.-L. Papa, C. Bernhard, R. Decréau, Y. Bernhard, F. Denat, D. Vandroux, P. Walker, C. Mirjolet, A. Oudot, B. Collin and N. Millot
World Molecular Imaging Congress WMIC
Dublin, Ireland. (05/09/2012)

35. *Syntheses of phthalocyanines and subphthalocyanines for multimodal imaging*
Y. Bernhard, J. Paris, J. Boudon, R. Mayap Talom, N. Millot, R. Decréau
3rd French-Czech Vltava Chemistry Meeting
Dijon, France. (10/09/2012)

36. *Organic Functionalization of Mesoporous Silica Nanoparticles: Effect on the Cisplatin Loading/Release Profiles, Colloidal Stability and Cytotoxicity*
M. Varache, F. Bouyer, I. Bezverkhyy, L. Saviot, F. Baras, F. Bouyer
Hybrid Materials
Sorrento, Italy. (03/03/2013)

37. *Optimization of the Structural and Physicochemical Properties of Mesoporous Silica Nanoparticles for Biomedical Applications*
M. Varache, I. Bezverkhyy, L. Saviot, F. Baras, F. Bouyer
Hybrid Materials
Sorrento, Italy. (03/03/2013)

38. *Theophylline Release Modulation Using Pectin-Based Hybrid Bead*
A. Assifaoui, F. Bouyer, P. Cayot, O. Chambin
Hybrid Materials
Sorrento, Italy. (03/03/2013)

39. *Nanomaterial-based Multimodal Contrast Agents for the in Vivo Imaging: Advanced Surface-modified SuperParamagnetic Iron Oxide Nanoparticles*
J. Paris, J. Boudon, Y. Bernhard, R. Decréau, R. Mayap Talom, L. Maurizi, F. Bouyer, P. Walker, L. Dumont, D. Vandroux, F. Denat and N. Millot
Third international conference on Multifunctional, Hybrid and Nanomaterials
Sorrento, Italy. (03/03/2013)

40. *Nanoparticules d'oxydes métalliques à base de fer, de titane ou de silicium comme NANOmatériaux multifonctionnels pour applications BIOmédicales*
J. Boudon, J. Paris, M. Varache, F. Bouyer, G. Thomas, F. Demoisson, N. Millot
journées d'imagerie biomédicales intitulées "la vie en transparence" (Exposition CNRS)
Dijon, France. (29/04/2013)

41. *Monitoring the protein free-energy landscape to decipher allosteric communication: the case of conformational changes controlled by ATP in Hsp70 molecular chaperones*
A. Nicolaï, P. Delarue, P. Senet
EMBO Conference on Allosteric Interactions in cell signaling and regulation

Paris, France. (14/05/2013)

42. *Deciphering how ATP binding to Hsp70 induces a large conformational change from molecular dynamics simulations*
A. Nicolaï, P. Delarue, P. Senet
EMBO conference: The Biology of Molecular chaperones
Santa Margherita di Pula, Italy. (17/05/2013)

43. *Protein conjugated silver nanoparticles: a transmission electron microscopy and surface enhanced Raman spectroscopy study*
S. Reymond-Laruinaz, L. Saviot, V. Potin, M. C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (28/05/2013)

44. *Nanotoxicologie : Effets toxiques in vitro des nanoparticules d'oxydes de fer*
V. Bellat, I. Séverin, N. Millot, M.C. Chagnon
Congrès annuel de la Société Française de Toxicologie
Paris, France. (14/11/2013)

45. *Magneto-optical nanomaterials: a SPIO-phthalocyanine scaffold built step-by-step towards bimodal imaging*
J. Boudon, J. Paris, Y. Bernhard, R. Decréau, N. Yousfi, J. Chluba and N. Millot
International Conference on Nanotechnology in Medicine NanoMED UK
London, England. (26/02/2014)

46. *Quantitative control of the error bounds of a fast superresolution technique for microscopy and astronomy*
P. Chainais , P. Pfennig, A. Leray
ICASSP
Florence, Italie. (04/05/2014)

47. *Nucleotide Induced Conformational Change in Hsp70 Chaperone from MD and Free-energy-Landscape analysis*
A. Nicolaï, P. Delarue, P. Senet
TSRC Protein Dynamics Workshop
Les Houches, France. (18/05/2014)

48. *Evaluation in vitro de la toxicité de nanoparticules d'oxyde de fer et de nanotubes d'oxyde de titane*
Y. Saibi, V. Bellat, I. Séverin, J. Boudon, N. Millot, M.-C. Chagnon
ARET-SFTG 2014
Paris, France. (03/06/2014)

49. *SPIO-Phthalocyanine Magneto-Optical Nanomaterials Built Step-By-Step Towards Bimodal Imaging*
J. Boudon, Y. Bernhard, R. A. Decréau, N. Yousfi, J. Chluba, J. Paris, N. Millot
XII International Conference on Nanostructured Materials (NANO 2014)
Moscow, Russia. (13/07/2014)

50. *THz acoustic vibrations in self-assembled ZrO2 nanoparticles*
L. Saviot, D. B. Murray, G. Caputo, M. C. Marco de Lucas, N. Pinna
XXIV International Conference on Raman Spectroscopy (ICORS 2014)
Iena, Germany. (14/08/2014)

51. *Docetaxel-titanate nanotubes nanocarrier to improve radiotherapy efficacy for a human prostate cancer model*
C. Mirjolet, J. Boudon, R. Boidot, S. Chevrier, C. Dalban, A. Loiseau, B. Collin, A. Oudot, T. Gautier, N. Millot, G. Créhange
Société française de nanomédecine (SFNano), Annual Meeting 2014
Nancy, France. (09/09/2014)

52. *Synthesis of SPIONs functionalized by DHCA, L-DOPA or citric acid under continuous hydrothermal conditions*
G. Thomas, F. Demoisson, J. Boudon, N. Millot
4th International Solvothermal and Hydrothermal Association Conference (ISHA 2014)
Bordeaux, France. (18/11/2014)

53. *In vitro evaluation of iron oxyde nanoparticles and titanate nanotubes on a hepatoma cell line: cytotoxicity and genotoxicity*
Y. Saibi, V. Bellat, I. Séverin, J. Boudon, N. Millot, M.-C. Chagnon
Nanosafe 2014, 4th international conference on safe production and use of nanomaterials
Grenoble, France. (18/11/2014)

54. *Synthesis of mesoporous silica nanoparticles for the encapsulation and delivery of a poorly soluble drug*
M. Varache, F. Bouyer, I. Bezverkhyy, L. Saviot, F. Baras, F. Bouyer
SFNano
Nancy, France. (09/12/2014)

55. *Preclinical development of a docetaxel nanocarrier to enhance prostate cancer radiosensitivity*
G. Créhange, J. Boudon, R. Boidot, S. Chevrier, C. Dalban, A. Loiseau, B. Collin, A. Oudot, T. Gautier, N. Millot, C. Mirjolet
2015 Genitourinary Cancers Symposium
Orlando, Florida, USA. (26/02/2015)

56. *Synthesis of functionalized mesoporous silica nanoparticles for the encapsulation and delivery of a poorly soluble drug*
M. Varache, F. Bouyer, I. Bezverkhyy, R. Chassagnon, L. Saviot, F. Baras and F. Bouyer

Journées Annuelles du GFC
Dijon, France. (24/03/2015)

57. *Fonctionnalisation de nanotubes de titanate par le docetaxel pour le traitement du cancer de la prostate : suivi par imagerie SPECT-CT*
A. Loiseau, J. Boudon, C. Mirjolet, G. Créhange, B. Collin, A. Oudot, N. Millot
Journées annuelles du Groupe Français de la Céramique (GFC 2015)
Dijon, France. (24/03/2015)

58. *Multimodal nonlinear microscopy (CARS, SHG) using a high power Yb fiber -based laser*
C.-H. Hage , A. Ibrahim, A. Souissi , S. Souissi , L. Héliot , B. Vandenbunder , A. Leray
Focus On Microscopy
Göttingen, Allemagne. (29/03/2015)

59. *Laguerre expansion technique for FLIM data denoising and deconvolution*
M. Safa Alkhwaja , A. Leray , M. Tramier , A. Dieterlen
Focus On Microscopy
Göttingen, Allemagne. (29/03/2015)

60. *Optimisation of FRET measurement in phasor by image segmentation*
C. Le Nézet , M. Henry, M. Gonzalez Pisfil , L. Héliot , B. Vandenbunder , A. Leray
Focus On Microscopy
Göttingen, Allemagne. (29/03/2015)

61. *In vitro evaluation of iron oxide nanoparticles and titanate nanotubes on a hepatoma cell line: cytotoxicity and genotoxicity*
Y. Saibi, V. Bellat, I. Séverin, J. Boudon, N. Millot, M.-C. Chagnon
6th International Congress of Nanotechnology in Medicine & Biology (BioNanoMed 2015)
Graz, Austria. (10/04/2015)

62. *Multimodal imaging magnetite nanoparticles labelled by NODA-GA for MRI/PET double imaging applications*
G. Thomas, T. Courant, J. Boudon, F. Demoisson, M. Moreau, N. Millot
Conférence France Life Imaging (FLI) : agents d'imagerie pour les applications en oncologie
Dijon, France. (15/04/2015)

63. *Magneto-optical nanomaterials: a SPIONs-phthalocyanine scaffold built step-by-step towards bimodal imaging*
J. Boudon, J. Paris, Y. Bernhard, R. Decréau and N. Millot
Conférence France Life Imaging (FLI) : agents d'imagerie pour les applications en oncologie
Dijon, France. (15/04/2015)

64. *Preclinical development of a Docetaxel nanocarrier to enhance prostate cancer radiosensitivity*
C. Mirjolet, J. Boudon, R. Boidot, S. Chevrier, C.Dalban, A. Loiseau, B. Collin, A. Oudot, T. Gautier, N. Millot, G. Créhange
Colloque Interrégional Grand-Est de Recherche Translationnelle en Oncologie (Oncotrans 2015)
Dijon, France. (25/06/2015)

II.6.2.4. Department PMDM

A. Plenary talk

1. *DOTA-Functionalized Magnetite Nanoparticles as Contrast Agents for MRI/PET Double Imaging*
G. Thomas, F. Demoisson, J. Boudon, J. Paris, N. Millot
XII International Conference on Nanostructured Materials
Moscou, Russie. (15/07/2014)

B. Key lectures

1. *Décapage et dégraissage des surfaces industrielles à l'aide de sources laser*
L. Lavisse, J-M Jouvard, R. Oltra
Journée Technique Netsurf
Chalon sur Saône, France. (12/10/2010)

2. *Advanced Usage of SPS Technology for Producing Innovative Materials*
F. Naimi, L. Minier, C. Morin, S. Le Gallet and F. Bernard
The 10th Pacific Rim Conference on Ceramic and Glass Technology
San Diego, USA. (02/06/2013)

3. *Preparation of ceramics by SPS reactive sintering: success and difficulties*
S. Le Gallet and F. Bernard
CIMTEC 2014
Montecatini Terme, Italy. (08/06/2014)

4. *French studies on the development of potential conditioning matrices for iodine 129*
L. Campayo, F. Audubert, J.E. Lartigue, E. Courtois, S. Le Gallet, F. Bernard, T. Lemesle, F. Mear, L. Montagne, A. Coulon, D. Laurencin
2014 MRS Fall meeting
Boston, USA. (30/11/2014)

C. Invited lectures

1. *Analyse de poudre à l'aide de rayonnements X*
   L. Lavisse, V. Potin, J-L Legarrec, S. Carles, J-B Mitchell, L. Hallo, D. Hebert
   Journée Chimie des poudres du Réseau plasmas froids CNRS
   Albi, France. (09/06/2010)
2. *Soudage hybride sur matériaux métalliques*
   Simone Matteï
   Journée du Cercle d'études des Métaux
   Saint Etienne, FRANCE. (24/05/2012)
3. *Fonctionnalisation de surfaces en titane par des couches minces d'oxynitrures*
   F. Torrent, M.C. Marco de Lucas, G. Pillon, L. Lavisse, P. Berger, B. Dourthe, H. Andrejewski, S. Kaya-Boussougou, C. Godeau, Y. Berthier, A. Tidu, J-M. Jouvard
   Laserap 7
   Iles d'Oléron, France. (05/09/2012)
4. *mécanismes de formation de nanoparticules dans un plasma généré en milieu atmosphérique par irradiation laser d'une surface métallique en régime nanoseconde.*
   M.Girault, J-M. Jouvard, L. Lavisse, L. Hallo
   Laserap 7
   Iles d'Oléron, France. (05/09/2012)
5. *La simulation numérique du soudage laser : évolutions récentes et limitations*
   S. Matteï
   Ecole CNRS Laserap 7, 1-5 octobre 2012, ile d'Oléron, France.
   Ile d'Oléron, FRANCE. (01/10/2012)
6. *Réactivité à l'échelle nanométrique des multifeuillets métalliques : thermodynamique, cinétique et mécanismes élémentaires*
   F. Baras et O. Politano
   Université Libre de Bruxelles
   Bruxelles, Belgique. (06/05/2014)
7. *Caractérisation spatio-temporelle de la plume formée par laser dans l'air ambiant : Etude de la formation de nano particules*
   J.M.Jouvard, M. Girault, L. Lavisse
   Journées LIBS 2014
   Paris, France. (03/06/2014)
8. *Réactivité à l'échelle nanométrique des multifeuillets métalliques Ni-Al: une étude par dynamique moléculaire*
   F. Baras and O. Politano
   IM2NP
   Marseille, France. (07/07/2015)

D. Invited talks

1. *Utilisation du SIMS dans l'étude de la corrosion des métaux et alliages à haute température*
   S. Chevalier, O. Heintz
   Ecole Thématique Corrosion et Protection Des Matériaux à Haute Température
   Porquerolles, France. (30/05/2010)
2. *Coût de la corrosion à haute température : une approche macro-économique et métallurgique*
   S. Chevalier
   Ecole Thématique Corrosion et Protection Des Matériaux à Haute Température
   Porquerolles, France. (30/05/2010)
3. *Modeling the combustion synthesis of intermetallic compounds*
   F. Baras
   International Ceramics Congress
   Montecatini, Italy. (06/06/2010)
4. *Réalisation et caractérisation de couches d'oxynitrures de titane à l'aide de source laser : Utilisation de microfaisceaux dans l'étude des fonctionnalités*
   L.Lavisse, G. Pillon, P. Berger, M.C. Marco de Lucas, S. Bourgeois, J-M. Jouvard
   Gi2M
   Metz, France. (30/09/2010)
5. *Modélisation de la synthèse par combustion des siliciures : du front d'onde à la microstructure des produits*
   F. Baras
   Matériaux 2010
   (nantes, France. (18/10/2010)
6. *Interconnecteurs métalliques de piles SOFC : Vieillissement pendant 320, 640 et 960 jours à 800°C*
   S. Fontana, S. Chevalier, G. Caboche

Matériaux 2010
Nantes, France. (18/10/2010)

7. *Nanoparticles Evidence in a Laser Expanded Plasma Plume*
L.Hallo, L. Lavisse, J-L. Legarrec, J-M. Jouvard, D. Herbert
EMSLIBS 2011
Istanbul, Turquie. (10/06/2011)

8. *What's new in materials sciences ?*
S. Chevalier
University of Technology Petronas
Tronoh, Malaysia. (12/04/2012)

9. *(n)ucleation and growth of NiAl intermetallic compound in Ni-Al reactive multilayers*
F. Baras and O. Politano
Gordon research conference: energetic materials
Mount Snow, Vermont, USA. (17/06/2012)

10. *What did we learn on the Reactive Element Effect in chromia scale since Pfeil's patent?*
S. Chevalier
EFC-Workshop "Beyond Single Oxidants"
Frankfurt am Main, Germany. (19/09/2012)

11. *Reactivity of Ni/Al nanofoils: thermodynamics, kinetics and basic elementary mechanisms*
F. Baras and O. Politano
MRS fall meeting
Boston, USA. (25/11/2012)

12. *Use of isotopic marker experiments in order to understand the oxide scale growth mechanism in water vapor*
S. Chevalier
National Institute for Materials Science
Tsukuba, Japan. (19/03/2013)

13. *Oxide scale growth mechanism in water vapor*
S. Chevalier
Hokkaido University
Sapporo, Japan. (25/03/2013)

14. *Interconnect developments for SOFC and SOEC : Part II Understanding of mechanisms using marker experiments*
S. Chevalier
Chalmers University
Goteborg, Sweden. (15/05/2013)

15. *Interconnect developments for SOFC and SOEC : Part I Improvement of interconnect performances (oxidation and ASR)*
C. Desgranges
Chalmers University
Goteborg, Sweden. (15/05/2013)

16. *Evidence of H effect on the conductivity of oxide scales on chromia former alloys*
C. Desgranges, S. Chevalier, S. Guillou, M.R. Ardigo, I. Popa
Gordon Research Conference, High Temperature Corrosion Solution for Energy Issues and Future Role in High Temperature Processes
Colby-Sawyer College, New London, NH, USA. (21/07/2013)

17. *SHS in nanofoils: a molecular dynamics approach*
O. Politano and F. Baras
International Ceramics Congress
Montecatini, Italy. (08/06/2014)

E. Oral contributions

1. *Etude de la résistance à la corrosion et de la conductivité à 800°C de plusieurs alliages revêtus dans le cadre de l'Electrolyse à Haute Température (EHT)*
S. Guillou, C. Desgranges, S. Chevalier
41èmes Journées d'Etude sur la Cinétique Hétérogène
Le Puy en Velay, France. (31/03/2010)

2. *Numerical modeling of dissimilar laser welding of copper to stainless steel*
I. Tomashchuk, P. Sallamand, J. M. Jouvard
8th Conference Beam Technology 2010
Halle, Germany. (14/04/2010)

3. *Tribological study of Nd: YAG laser treated titanium plates: A novel approach by multianalysis (Raman, XPS, NRA and PIXE)*
L. Lavisse, P. Berger, G. Pillon, M.C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (10/06/2010)

4. *The Modeling of Dissimilar Welding of Immiscible Materials by Using Phase Field Method*
I. Tomashchuk, P. Sallamand, J. M. Jouvard
2nd European Seminar on Coupled Problems
Pilsen, Czech Republic. (28/06/2010)

5. *Génération de nano et microparticules métalliques par irradiation laser nanoseconde*
L. Lavisse, J.M. Jouvard, I. Shupyk, M. C. Marco de Lucas, S. Bourgeois
Journée thématique du réseau Plasma Froids "Chimie des poudres dans les plasmas"
Albi, France. (06/07/2010)

6. *Numerical modelling: laser ablation of metallic targets in the open air*
M. Cirisan, J. M. Jouvard, L. Lavisse, R. Oltra
24th Symposium on Plasma Physics and Technology
Prague, Czech Republic. (05/09/2010)

7. *9 % Cr steel high temperature oxidation. solutions investigated for improving corrosion resistance of the steel*
H. N. Evin, O. Heintz, C. Föjer, S. Jakani, A. Dhont, S. Claessens, S. Chevalier
9th Liège Conference on Materials for Advanced Power Engineering
Liège, Belgique. (27/09/2010)

8. *(n)anometric metallic multilayers: a molecular dynamics approach*
F. Baras, A. Linde and O. Politano
3ème séminaire franco-russe sur la SHS et les nano-systèmes réactifs
Dijon, France. (04/10/2010)

9. *Préparation en continu de nanoparticules d'oxydes métalliques en conditions eau-supercritiques*
F.Demoisson, M.Ariane, R.Piolet, F. Bernard
Materiaux 2010
Nantes, France. (15/10/2010)

10. *Cycles thermiques et résistance à la corrosion à haute températures d'aciers à 9 % de chrome : influence de la vapeur d'eau*
H. N. Evin, O. Heintz, C. Föjer, S. Claessens, S. Chevalier
Matériaux 2010
Nantes, France. (18/10/2010)

11. *Interconnecteurs métalliques de piles SOFC : Vieillissements de différentes nuances*
M. Bostetter, S. Chevalier, G. Caboche, L. Combemale
Matériaux 2010
Nantes, France. (18/10/2010)

12. *Etude de la résistance à la corrosion et de la conductivité à 800°C de plusieurs alliages revêtus dans le cadre de l'Electrolyse à Haute Température (EHT)*
S. Guillou, C. Desgranges, S. Chevalier
Matériaux 2010
Nantes, France. (18/10/2010)

13. *Metallic interconnects for Solid Oxide Fuel Cell: performances of reactive element coating after long time exposure*
S. Fontana, S. Chevalier, G. Caboche
International Symposium on High-Temperature Oxidation and Corrosion
Zushi, Japan. (08/11/2010)

14. *High temperature oxidation of TiAl and TiAl8Nb alloys in air and air-H2O gas mixtures*
J. Pra=C5=BCuch, K. Przybylski, S. Chevalier, T. Brylewski
International Symposium on High-Temperature Oxidation and Corrosion
Zushi, Japan. (08/11/2010)

15. *Numerical and Experimental Analysis of Convection Transfer During*
Abdellah Laazizi, Bruno Courant, Frédéric Jacquemin, Henri Andrzejewski, Simone Mattei
ASME 2010 International Mechanical Engineering Congress and Exposition
Vancoover, Canada. (12/11/2010)

16. *Incorporation d'éléments légers dans le titane assistée par faisceau laser*
P. Berger, G. Pillon, L. Lavisse, J.M. Jouvard, S. Bourgeois, M.C. Marco de Lucas
Congrès IBAF-2010
Namur, Belgique. (16/11/2010)

17. *Céramiques polycristallines transparentes de YAG : Synthèse par co-précipitation et essais de consolidation par frittage SPS*
C. Marlot, E. Barraud, S. Le Gallet, M. Eichorn, F. Moitrier et F. Bernard
Journées Annuelles du GFC
France, Limoges. (21/03/2011)

18. *Etude d'un nouveau matériau comme interconnecteur métallique pour l'électrolyse de la vapeur d'eau à haute température : le FeNiCo*
M. R. Ardigo, I. Popa, S. Chevalier
42èmes Journées d'Etude sur la Cinétique Hétérogène
La Rochelle, France. (30/03/2011)

19. *3D Digitization of Metallic Specular Surfaces using Scanning*
Bajard A., Aubreton O., Eren G., Sallamand P., Truchetet F.
Conference on the Three-Dimensional Imaging, Interaction, and
San Francisco, USA. (24/04/2011)

20. *Microstructural Study of Nd: YAG Laser Treated Titanium Plates*
J A. Bahloul , M.C. Sahour, L. Lavisse, R. Oumeddour, J-M. Jouvard
ICONEM'11
Annaba, Algérie. (03/05/2011)

21. *Laser Surface Modification of CP Titanium: Tribological Properties*
M.C. Sahour, A. Bahloul, L. Lavisse, G. Pillon, H. Boussaha
ICONEM'11
Annaba, Algérie. (05/05/2011)

22. *Influence of a coating on the oxidation resistance and resistivity of several chromia former alloys for High Temperature Vapor Electrolysis application*
S. Guillou, C. Desgranges, S. Chevalier
ICMCTF 2011 - 38th International Conference on Metallurgical Coatings & Thin Films
San Diego, USA. (06/05/2011)

23. *Nanoparticles spatial localization in the plume induced by a pulsed laser*
L. Lavisse, J.-L. Le Garrec, L. Hallo, J.-M. Jouvard, S. Carles, J.-M. A
E MRS European Material Research Society Spring Meeting
Nice, France. (11/05/2011)

24. *Synthèse hydrothermale en continu de nanopoudres au-delà du point critique de l'eau*
F.Demoisson, M.Ariane, F. Bernard
Poudres et Matériaux Frittés 2011
Saint Etienne, France. (15/05/2011)

25. *Localisation de NPs dans une plume plasma générée par laser*
L. Lavisse, J.-M. Jouvard, S. Bourgeois, G. Pillon, S. Carles, J.-L. Le Garrec, J.B. Mitchell
10ème journées du réseau plasma froids
Toulouse, France. (26/05/2011)

26. *Study of the reactive dynamics of nanometric multilayers using molecular dynamics: the Al-Ni system*
O. Politano, A. Linde and F. Baras
DIMAT 2011 (8th International Conference on Diffusion in Materials)
Dijon, France. (03/07/2011)

27. *Study of the growth mechanism of some oxide scales on alloy 230 in High Temperature Vapor Electrolysis (HTVE) conditions*
S. Guillou, C. Desgranges, S. Chevalier
DIMAT 2011-Diffusion in Materials
Dijon, France. (03/07/2011)

28. *Optimisation of metallic interconnects for hydrogen production by high temperature water vapour electrolysis*
M.R. Ardigo, V. Parry, I. Popa, S. Chevalier, W. Chandra-Ambhorn, P. Phakpeetinan, Y. Wouters
DIMAT 2011-Diffusion in Materials
Dijon, France. (03/07/2011)

29. *Benefits of SPS for the conditioning of volatile radionuclides: case of 129I*
L. Campayo, E. Courtois, P.E. Frayssines, B. Oresic, Ph Bucci, S. Le Gallet, F. Bernard, Yu Grin, S. Hoffmann and G. Thollet
The 9th Pacific Rim Conf. on Ceramic and Glass Technology
Cairns, Australia. (11/07/2011)

30. *Continuous Hydrothermal Synthesis of Metal Oxide Nanoparticles under Supercritical Conditions*
F. Bernard, M. Ariane, R. Piolet, F.Demoisson
9th International Meeting of Pacific Rim Ceramic Societies
Cairns, Australie. (15/07/2011)

31. *Study of the reactivity of nanometric Ni-Al multilayers by molecular dynamics simulations*
O. Politano and F. Baras
XI Internatinal Smposium on Self-propagating High Temperature Synthesis
Anavyssios, Attica, Greece. (05/09/2011)

32. *Optimization of selective Laser melting technology using*
M . Averyanova , E . Cicala , Ph . Bertrand and D . Grevey
5th International Conference on Advanced Research in Virtual
Leiria, Portugal. (28/09/2011)

33. *In-situ study of nanoparticles in the plasma plume induced by pulsed laser irradiation of a metallic target*
L. Lavisse, J.-L. Le Garrec, L. Hallo, J.-M. Jouvard, S. Carles, J. Perez, J. B. A. Mitchell, J. Decloux, M. Girault, V. Potin, H. Andrzejeweski, M. C. Marco de Lucas, S. Bourgeois
5ème workshop international DyNano
Kyoto, Japan. (05/10/2011)

34. *Influence of SCW Processing Parameters on ZnO Nano-Structure Using Both Experimental and CFD Approaches*
R. Piolet, F. Demoisson, A. Leybros, M. Ariane, F. Bernard
13th European Meeting on Supercritical Fluids
La Haye, Pays Bas. (15/10/2011)

35. *Joining of bi-metallic systems by Spark Plasma Sintering (SPS)*
L. Minier, F. Naimi, S. Le Gallet, J. C. Niepce, F. Bernard
2nd International Workshop on SPS
Capbreton, France. (20/10/2011)

36. *Etude des mécanismes d'oxydation d'un alliage commercial sous atmosphère enrichie en vapeur d'eau*
M. R. Ardigo, I. Popa, S. Chevalier
43èmes Journées d'Etude sur la Cinétique Hétérogène
Vandoeuvre-les-Nancy, France. (29/03/2012)

37. *Production of Nano-Oxides with a Continuous Supercritical Water Device*
R. Piolet, F.Demoisson, M. Ariane, A. Leybros, C. Quadri, F.Bernard
10th International Symposium on Supercritical Fluids
San Francisco, USA. (15/05/2012)

38. *In-situ SAXS study of a laser induced plasma plume : influence of the metal target composition on the formed nanoparticles size*
L. Lavisse, J.-L. Le Garrec, L. Hallo, J.-M. Jouvard, S. Carles, J.B.A. Mitchell, V. Potin, H. Andrzejeweski, M. C. Marco de Lucas, S. Bourgeois, J. Perez
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (17/05/2012)

39. *Study of Conductivity of K41X Chromia Forming Alloy in High Temperature Electrolysis Environment*
S. Guillou, C. Desgranges, S. Chevalier
8th International Symposium On High-Temperature Corrosion and Protection of Materials (HTCPM 2012)
Les Embiez (Var, France. (20/05/2012)

40. *CMT Joining of Aluminium and Magnesium alloys in a*
C. Toma, E. Cicala, P. Sallamand, D. Grevey
21st International Conference on Metallurgy and Materials
Brno, Czeh Republic. (23/05/2012)

41. *The Progress in Numerical Modeling of Melted Zone Formed Between Dissimilar Metallic Materials*
I. Tomashchuk, P. Sallamand, J.-M. Jouvard
6th International Conference Mathematical Modeling and Information Technologies in Welding and Related Processes
Katsiveli, Ukraine. (29/05/2012)

42. *Comparison of Keyhole Characteristics Obtained by Two Experimental Methods: The "Direct Observation of Drilled Hole" Method and the "Sandwich" Method*
Simone Mattei, Jean-Marie Jouvard, Massaud Mostafa,Henri Andrzejewski, Iryna Tomashchuk
International Congress on Applications of Lasers & Electro-Optics (ICALEO2012)
Anaheim, USA. (23/09/2012)

43. *The Numerical Simulation of Heat Transfer During a Hybrid Laser-MIG Welding of Duplex Steel*
Issam Bendaoud, Henri Andrzejewski, Alexandre Mathieu, Simone Mattei, Pierre Sallamand, Iryna Tomashchuk, Eugen Cicala, Amelie Fanica
International Congress on Applications of Lasers & Electro-Optics (ICALEO2012)
Anaheim, USA. (23/09/2012)

44. *Er/YAG transparent ceramics for laser applications : co-precipitation synthesis and spark plasma sintering*
C. Marlot, E. Barraud, S. Le Gallet, M. Eichorn and F. Bernard
Materials science and Engineering
Darmstadt, Germany. (25/09/2012)

45. *Assemblage laser du TA6V avec inox AISI 316L par l'intermédiaire d'un feuillard du vanadium*
I. Tomashchuk, P. Sallamand, H. Andrzejewski
Ecole CNRS Laserap 7
ile d'Oléron, France. (01/10/2012)

46. *Optimisation d'un modèle multiphysique du soudage hybride laser-MIG des aciers de fortes épaisseurs par la méthode des plans d'expérience*
I. Tomashchuk, E. Cicala, I. Bendaoud, S. Mattei, H. Andrzejewski, P. Sallamand, A. Mathieu, A. Fanica
Ecole CNRS Laserap 7
ile d'Oléron, France. (01/10/2012)

47. *Simulation de l'apport de chaleur du procédé de soudage Hybride laser/MIG par l'approche sources équivalentes*
I. Bendaoud, E. Cicala, S. Mattei, I. Tomashchuk, H.Andrzejewski, P. Sallamand, A. Mathieu, F. Bouchaud
Ecole CNRS Laserap 7
ile d'Oléron, France. (01/10/2012)

48. *Contribution to the understanding and modelling of physical phenomena occurring during the hybrid welding*

I. Tkachenko, A. Mathieu, I. Lertrusdachakul, P. Sallamand
LASERAP'7
île d'Oléron, France. (01/10/2012)

49. *Evaluation des champs thermique et de déformation au cours du soudage hybride Laser/MIG mono-passe d'acier Super Duplex Uranus=C2=AE 52N d'épaisseur 20 mm*
A. Mathieu, H. Andrzejewski, I. Tkachenko, P. Sallamand, I. Bendaoud, S. Matteï, F. Bouchaud
LASERAP'7
île d'Oléron, France. (01/10/2012)

50. *Simulation des procédés hybrides Laser/MIG-MAG*
Simone Matteï
Journées Nationales des Procédés Laser pour l'Industrie
Mulhouse, FRANCE. (28/11/2012)

51. *Oxidation properties of TiAl8Nb alloy at high temperatures*
J. Pra=C5=BCuch, S. Chevalier, T. Brylewski, E. Durda, K. Przybylski
16th FRENCH-POLISH SEMINAR
Krakow, Poland.. (10/12/2012)

52. *In-situ high temperature synchrotron diffraction study of T/P91 steel oxidation*
I. Popa, H. Evin, C. Curfs, S. Chevalier, C. Fojer
16th FRENCH-POLISH SEMINAR
Krakow, Poland. (10/12/2012)

53. *Use of isotopic marker experiments in order to understand the oxide scale growth mechanism in water vapor*
S. Chevalier, M.R. Ardigo, I. Popa
16th FRENCH-POLISH SEMINAR
Krakow, Poland. (10/12/2012)

54. *Study of hybrid laser-GMAW welding process*
Grevey Dominique, Andrzejewski Henri, Bendaoud Issam, Cicala Eugen, Mathieu Alexandre, Matteï Simone, Sallamand Pierre, Tkachenko Iuliia, Tomashchuk Iryna
XVI French-Polish Seminar on Reactivity of Solids, 10-12 December 2012, Krakow, Poland
Krakow, Poland. (10/12/2012)

55. *The advances in comprehension of melted zone formation during fusion welding of dissimilar metals*
I. Tomashchuk, H. Andrzejewski, E. Cicala, D. Grevey, A. Mathieu, S. Mattei, P. Sallamand
XVI French-Polish Seminar on Reactivity of Solids
Krakow, Poland. (10/12/2012)

56. *Influence de la longueur d'onde sur l'insertion d'azote dans le titane par irradiation laser dans l'air*
F. Torrent, L. Lavisse, H. Andrzejeweski, P. Berger, G. Pillon, S. Bourgeois and M. C. Marco de Lucas
IBAF- Ion Beam Analysis Francophone
Saint-Paul-lès-Durance, France. (14/12/2012)

57. *Réactivité des multicouches nanométriques métalliques : thermodynamique, cinétique et mécanismes élémentaires*
F. Baras and O. Politano
GDR nano-alliages
Orléans, France. (17/12/2012)

58. *Transparent MgAl2O4 spinel obtained by SPS - large dimension parts*
N. Brach, G. Servin, G. Bonnefont, G. Fantozzi, V. Garnier, M. Ariane, F. Bernard, S. Le Gallet, L. Minier et F. Barthélémy
Journées Annuelles du GFC
France, Orléans. (26/03/2013)

59. *La compréhension et la maitrise des jonctions hétérogènes titane-aluminium réalisés par faisceau laser*
I. Tomashchuk, P. Sallamand, M. Duband, E. Cicala, A. Mathieu
11ème colloque simulation numérique du soudage Simulation du soudage et du brasage de matériaux hétérogènes
Paris, France. (28/03/2013)

60. *TalentCampus : nouvelle approche pour développer et révéler les compétences sociales chez les jeunes chercheurs*
S. Chevalier
44èmes Journées d'Etude sur la Cinétique Hétérogène
Gif sur Yvette, France. (04/04/2013)

61. *Effect of coatings on a commercial stainless steel for interconnect application in high temperature water vapour electrolysis: study in anode atmosphere*
M.R. Ardigo, I. Popa, S. Chevalier, V. Parry, A. Galerie, P. Girardon, F. Perry, R. Laucournet, A. Brevet
5th International Conference on Fundamentals & Development of Fuel Cells FDFC2013
Karlsruhe, Germany. (16/04/2013)

62. *Correlation of nucleation-growth steps of Zinc Oxide nanoparticles versus the supercritical water conditions*
R. Piolet, F.Demoisson, M.Ariane, F. Bernard
Poudres et Matériaux Frittés 2013
Belfort, France. (15/05/2013)

63. *Influence of the composition and the reactivity of surface oxynitride layers on the fretting behavior of functionalized titanium plates: Nd:YAG surface laser treatments versus PVD*
F. Torrent, P. Berger, G. Pillon, L. Lavisse, F. Vaz, M. C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (27/05/2013)

64. *YAG transparent ceramics produced by SPS from nanopowders prepared by co-precipitation method*
C. Marlot, E. Barraud, S. Le Gallet, F. Naimi, M. Eichorn and F. Bernard
The 10th Pacific Rim Conf. on Ceramic and Glass Technology
San Diego, USA. (02/06/2013)

65. *Influence of the environmental gas on the size of Nanoparticles in the Plasma Plume Induced by a Pulsed Laser Irradiation by using SAXS*
L. Lavisse, J-M. Jouvard, M. Girault, J-L. Legarrec, S. Carles, J.B. Mitchell, L. Barillot, L. Hallo, D. Hebert, J. Decloux
E-MRS 2013
Strasbourg, France. (07/06/2013)

66. *Synthesis of Oxide Nano-Particles with a Continuous Hydrothermal Production Process under Sub and Supercritical Conditions*
F. Demoisson, R. Piolet, G. Thomas, A. Leybros, L. Saviot, M. Ariane, N. Millot, F. Bernard
Sustainable Manufacturing of Nanomaterials and their Organization for Hybrid Device Structures
Ile d'Oleron, France. (15/06/2013)

67. *Spark Plasma sintering of mechanically activated Si+C mixtures*
Tram Pham, S. Le Gallet, L. Minier and F. Bernard
ECERS XIII
Limoges, France. (23/06/2013)

68. *Nano-SiC / carbon nanotube composites sintered by SPS : synthesis and mechanical characterization*
B. Lanfant, Y. Leconte, N. Herlin-Boime, M. Pinault, Martine Mayne-L'hermite, G. Bonnefont, G. Fantozzi, V. Garnier, Y. Jorand, S. Le Gallet and F. Bernard
ECERS XIII
Limoges, France. (23/06/2013)

69. *Terahertz vibrations of ZrO2 nanoparticles in a nanopowder under high-pressure*
L.Saviot, D.Machon, A. Mermet, D.B. Murray, S.V. Adichtchev, J. Margueritat, F. Demoisson, M. Ariane, M.C. Marco De Lucas
19th International Vacuum Congress
Paris, France. (15/09/2013)

70. *Nanoparticles formation in the plasma plume induced by pulsed laser irradiation of metallic targets in air*
M. Girault, J.M. Jouvard, L. Lavisse, L. Hallo
EMSLIBS 2013
Bari, Italie. (18/09/2013)

71. *Molecular Dynamics studies of nanometric metallic multilayers: reactivity of the Ni-Al system*
F. Baras and O. Politano
XII Internatinal Smposium on Self-propagating High Temperature Synthesis
South Padre Island, Texas, U.S.A.. (21/10/2013)

72. *Effect of coatings on long term behaviour of a commercial stainless steel for high temperature steam electrolysis interconnect application in H2/H2O atmosphere*
M.R. Ardigo, I. Popa, S. Chevalier, P. Girardon, F. Perry, R. Laucournet, A. Brevet, C. Desgranges
Fifth European Fuel Cell Technology & Applications Conference - Piero Lunghi Conference
Rome, Italy. (11/12/2013)

73. *Dual atmosphere study of the k41x stainless steel for interconnet application in high temperature water vapour electrolysis*
I. Popa, M.R. Ardigo, L. Combemale, S. Chevalier, P. Girardon
EHEC 2014 “European Hydrogen Energy Conference”
Sevilla, Spain. (12/03/2014)

74. *Réalisation de composites céramique/métal élaborés par Spark Plasma Sintering (SPS)*
C. Madec, F. Bernard, S. Le Gallet, E. Petitpas, D. Vallée, B. Salesse et F. Barthélémy
Journées Annuelles du GFC
France, Lyon. (18/03/2014)

75. *Spatial-temporal characterization of laser plasma plume: applications of nanoparticles formation in the ambient air*
M. Girault, J.M. Jouvard, L. Lavisse, F. Hamadi, F.-X. Ouf
E-MRS 2014
Lille, France. (27/05/2014)

76. *Iodate-substituted hydroxyapatite sintering at low temperature by SPS*
A. Coulon, L. Campayo, S. Le Gallet, L. Minier, D. Laurencin, A. Grandjean and S. Rossignol
CIMTEC 2014
Montecatini Terme, Italy. (08/06/2014)

77. *Weld pool surface temperature measurement from polarization state of thermal emission*

N. Coniglio, A. Mathieu, O. Aubreton, C. Stolz
QIRT 2014
Bordeaux, France. (07/07/2014)

78. *Nano-SiC/CNT composites sintered by SPS : CNT amount effect on mechanical, thermal and electrical properties*
B. Lanfant, Y. Leconte, N. Debski, M. Pinault, Martine Mayne L'hermite, N.Herlin-Boime, G. Bonnefont, V. Garnier, Y. Jorand, G. Fantozzi, S. Le Gallet and F. Bernard
3rd International Workshop on SPS
France, Capbreton. (16/07/2014)

79. *Effect of powder microstructure and process parameters on densification, microstructure and neck growth mechanisms during SPS processing of model spherical powders*
R. Collet, S. Le Gallet, F. Naimi, F. Charlot, S. Lay, J. M. Chaix and F. Bernard
International conference on SINTERING 2014
Germany, Dresden. (24/08/2014)

80. *Synthesis of SPIONs functionalized by DHCA, L-DOPA or citric acid under continuous hydrothermal conditions*
G. Thomas, F. Demoisson, J. Boudon, N. Millot
4th International Solvothermal and Hydrothermal Association Conference
Bordeaux, France. (20/10/2014)

81. *The nucleation and growth of hydrothermal ZnO nanoparticles from ambient to supercritical conditions*
F. Demoisson, R. Piolet, M. Ariane, A. Leybros, F. Bernard
4th International Solvothermal and Hydrothermal Association Conference
Bordeaux, France. (20/10/2014)

82. *Microstructure and properties of welds between 5754 Al alloys and AZ31 Mg alloys using a Yb:YAG laser*
Sana Bannour, Michel Autric, Jean-Eric Masse, Simone Mattei, Hatem Mhiri
XX International Symposium on High-Power Laser Systems and Applications 2014
Chengdu, China. (25/10/2014)

83. *Réactivité à l'échelle de multi-feuillets Ni-Al: germination, croissance et épitaxie des intermétalliques aux interfaces*
F. Baras and O. Politano
Matériaux 2014
Montpellier, France. (24/11/2014)

84. *Compréhension de la formation des assemblages titane-aluminium réalisés par faisceau laser*
I.Tomashchuk, P. Sallamand, M.Duband, A. Mathieu, E. Cicala
Materiaux 2014
Montpelier, France. (24/11/2014)

85. *Simulation numérique thermomécanique du soudage tandem Laser-MIG d'un acier Superduplex de 20 mm d'épaisseur*
A. Mathieu, I. Tomashchuk
Matériaux 2014
Montpellier, France. (24/11/2014)

86. *Propriétés mécaniques, thermiques et électriques de composites à matrice SiC nanostructurée renforcée par des nanotubes de carbone*
B. Lanfant, Y. Leconte, M. Pinault, M. Mayne-LHermite, N. Herlin, G. Bonnefont, V. Garnier, Y. Jorand, G. Fantozzi, S. Le Gallet, F. Bernard
MATERIAUX 2014
France, Montpellier. (28/11/2014)

87. *Mécanismes de frittage par SPS dans une poudre de cuivre sphérique*
R. Collet, S. Le Gallet, F. Naimi, F. Herbst, F. Charlot, G. Bonnefont, G. Fantozzi, J-M. Chaix, F. Bernard
MATERIAUX 2014
France, Montpellier. (28/11/2014)

88. *Melting, mixing and nucléation at interfaces in Ni-Al nanofoils: a molecular dynamics approach*
F. Baras, V. Turlo and O. Politano
International Conference on Micro- and Nano-Joining
Emetten, Switzerland. (08/12/2014)

89. *Transparent MgAl2O4 spinel obtained by SPS*
N. Brach, G. Servin, G. Bonnefont, G. Fantozzi, V. Garnier, M. Ariane, F. Bernard, S. Le Gallet, L. Minier et F. Barthélémy
Journée Technique Céramiques Transparentes du GFC
France, Paris. (20/01/2015)

90. *SAXS studies of nanoparticles formed by laser ablation and electrics arcs*
E. Carvou, S. Carles, E. Lee-Choi, M. Girault, J-M. Jouvard, M. Kerka, L. Lavisse, J-L. Legarrec, J.B.A. Mitchell, F-X Ouf, J. Yu, V. Potin, M.C. Marco de Lucas
Soleil 10th Users meeting
Saint Aubin, France. (23/01/2015)

91. *New strategy for SOFC working at temperature of 600°C*
S. Chevalier, L. Combemale, I. Popa, K. Perrin, P. Giradon

Fundamentals and Developments on Fuel Cells (FDFC2015)
Toulouse, France. (03/02/2015)

92. *Real time polarization imaging of weld pool surface*
C. Stolz, N. Coniglio, A. Mathieu, O. Aubreton
The International Conference on Quality Control by Artificial Vision 2015
Le Creusot, France. (30/04/2015)

93. *Oxidation mechanisms and material transfer in the fretting wear of titanium functionalized by surface laser treatments*
L. Lavisse, F. Torrent, G. Pillon, P. Berger, M. C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Lille, France. (14/05/2015)

94. *Nuclear microprobe analysis of fretting corrosion track*
J. Labbe, E. Carvou,L. Lavisse, P. Berger, G. Pillon, M.C. Marco de Lucas, V. Potin
E MRS European Material Research Society Spring Meeting
Lille, France. (14/05/2015)

95. *Influence of the reactive atmosphere on the formation of nanoparticles in the plasma plume induced by pulsed laser irradiation of metallic targets*
M. Girault, L. Lavisse, J.-L. Le Garrec, E. Carvou, J.B.A. Mitchell, J.M. Jouvard, J. Yu, F-X. Ouf, S. Carles, M. C. Marco de Lucas, V. Potin, L. Hallo, L. Barillot, G. Pillon, S. Bourgeois, J. Perez
E MRS European Material Research Society Spring Meeting
Lille, France. (14/05/2015)

96. *Melting, mixing and nucléation at interfaces in Ni-Al nanofoils: a molecular dynamics approach*
F. Baras, V. Turlo and O. Politano
GDR nanoalliages
Porquerolles, France. (18/05/2015)

97. *Dissolution in layered Ni (solid) - Al (liquid) thin films*
V. Turlo, O. Politano and F. Baras
DSL2015
Munich, Germany. (22/06/2015)

98. *Surface and volume modifications in pure titanium substrate under laser treatments in air*
L. Lavisse, A. Tidu, N. Sabki, M. Novelli, H. Torres-Hernandez, F. Pacaud, M. Girault, C. Marco de Lucas, J-M. Jouvard, G. Pillon, S. Philippon, L. Faure, C. Shuman
17th international French-Polish seminar on Reactivity of Solids
Dijon, France. (01/07/2015)

F. Posters

1. *Optimization of metallic interconnect for hydrogen production by high temperature water vapor electrolysis*
M. R. Ardigo, I. Popa, S. Chevalier
Gordon Research Conference on High Temperature Corrosion
Colby-Sawyer College, New London, NH, USA. (24/07/20011)

2. *&Étude des transferts d'énergie en soudage profond par laser en régime impulsionnel*
M. Mostafa, J-M Jouvard, S Mattei, H Andrzejewski
Congrès Français de Thermique, SFT 2010
Le Touquet, France. (25/05/2010)

3. *Effect of water vapor on 9% Cr steels high temperature corrosion resistance in cyclic condition*
H. N. Evin, O. Heintz, C. Föjer, S. Jakani, S. Claessens, S. Chevalier
International Symposium on High-Temperature Oxidation and Corrosion
Zushi, Japan. (08/11/2010)

4. *Anatase to rutile transition in titanium surfaces oxidized by pulsed laser treatments: a thermokinetic modelling*
L. Lavisse, J. M. Jouvard, I. Shupyk, S. Bourgeois and M. C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Nice, France. (11/05/2011)

5. *Staining and physico-chemical modifications in laser welding of TA6V4 titanium alloys*
F. Torrent, L. Lavisse, C. Cossu, H. Andrzejeweski, P. Berger, G. Pillon, S. Bourgeois, M. C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Nice, France. (11/05/2011)

6. *Morphology of zinc oxide nanoparticles and effect of synthesis parameters in a continuous supercritical water process*
R.Piolet, F.Demoisson, A.Leybros, M. Ariane, F.Bernard.
Poudres et Matériaux Frittés 2011
Saint Etienne, France. (15/05/2011)

7. *Synthesis of dimethyl carbonate from carbon dioxide - Assistance of nano-oxides produced by an original supercritical water device*
F. Demoisson, M. Ariane, F. Bernard

11th International Conference on Carbon Dioxide Utilization
Dijon, France. (15/06/2011)

8. *In-situ high temperature powder diffraction study of T/P91 steel oxidation*
I. Popa, H. Evin, C. Curfs, S. Chevalier
XXII Congress and General Assembly of the IUCr
Madrid, Spain.. (01/08/2011)

9. *Original supercritical water device for continuous production of nanopowders- Examples of synthesized nano-oxides*
F. Demoisson, M. Ariane, R. Piolet, A. Leybros, F. Bernard
13th European Meeting on Supercritical Fluids
La Haye, Pays Bas. (15/10/2011)

10. *Synthèse en continu de nanoparticules de ZnO au-delà du point critique de l'eau. Compréhension des mécanismes de formation à l'aide de la CFD*
A.Leybros, R. Piolet, M. Ariane, F. Bernard, F. Demoisson
Congrès bisannuels de la Société Française de Génie des Procédés
Lille, France. (15/12/2011)

11. *influence of surrounding atmosphere and nature of target on the size of NPs in the Plasma plume induced by pulsed laser irradiation by using SAXS*
L. Lavisse, J.-L. Le Garrec, L. Hallo, J.-M. Jouvard , M. Girault, S. Carles, J.B.A. Mitchell, J. Decloux, V. Potin, H. Andrzejewski , M. C. Marco de Lucas, S. Bourgeois, J. Perez
7th SOLEIL Users meeting
Saint Aubin, France. (18/01/2012)

12. *Frequency-doubled Nd:YAG laser irradiation of titanium in air for oxygen and nitrogen insertion*
F. Torrent, L. Lavisse, H. Andrzejeweski, P. Berger, G. Pillon, S. Bourgeois, M. C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (17/05/2012)

13. *Mechanisms of nanoparticles formation in ns-laser expanded plasma-plume*
M. Girault, L. Hallo, L. Lavisse, J.-M. Jouvard
E-MRS 2012
Strasbourg, France. (18/05/2012)

14. *ffect of Water Vapor on the Oxidation Mechanisms of a Commercial Stainless Steel for Interconnect Application in High Temperature Water Vapor Electrolysis*
M. R. Ardigo, I. Popa, S. Chevalier, S. Weber, O. Heintz, M. Vilasi
8th International Symposium On High-Temperature Corrosion and Protection of Materials (HTCPM 2012)
Les Embiez (Var, France. (20/05/2012)

15. *Simulation de l'apport de chaleur du procédé de soudage Hybride laser/MIG par l'approche sources équivalentes*
I. Bendaoud, E. Cicala, S. Matteï, I. Tomashchuk, H. Andrzejewski, P. Sallamand, A. Mathieu, A. Fanica
Congres Français de Thermique: thermique en conditions extrêmes
Bordeaux, France. (29/05/2012)

16. *Nanoparticles spatial localization in the plume induced by a pulsed laser*
L. Lavisse, J-L. Legarrec, L. Hallo, J-M. Jouvard, S. Carles, J-M. Mitchell, G. Pillon, J. Decloux, H. Andrejewski, M.C. Marco de Lucas, S. Bourgeois
X-FEL 2012
Annecy, France. (08/06/2012)

17. *Modeling of Zinc Oxide Nanoparticle Formation in a Continuous Supercritical Water Synthesis Process*
R. Piolet, A. Leybros, M. Ariane, F. Demoisson, F. Bernard
10th International Symposium on Supercritical Fluids
San Francisco, USA. (15/06/2012)

18. *Direct Synthesis of DMC from scCO2 - Assistance of Nano-Oxides Produced by an scH2O Device*
F.Demoisson, S.R. Sanapureddy, M. Ariane,L. Plasseraud, F. Bernard
10th International Symposium on Supercritical Fluids
San Francisco, USA. (15/06/2012)

19. *Electron beam welding of austenitic stainless steel to titanium alloy through copper interlayer*
I. Tomashchuk, M. Pilloz, P. Sallamand, N. Belyavina
International conference on Modern problems of Condensed Matter
Kiev, Ukraine. (10/10/2012)

20. *Mécanismes de formation de nanoparticules dans un plasma généré en milieu atmosphérique par irradiation laser d'une surface métallique en régime nanoseconde*
M. Girault, J.M. Jouvard, L. Lavisse
Journées du réseaux plasmas froids CNRS
Ecully, France. (11/10/2012)

21. *Influence on the size of NPs in the plasma plume induced by pulsed Laser Irradiation by using SAXS*

L. Lavisse, J.-L. Le Garrec, L. Hallo, J.-M. Jouvard , M. Girault, S. Carles, J.B.A. Mitchell, J. Decloux ,V. Potin ,H. Andrzejewski , M. C. Marco de Lucas, S. Bourgeois, J. Perez
8th SOLEIL Users Meeting
Saint Aubin, France. (22/01/2013)

22. *Modélisation numérique du soudage hybride laser-MIG des aciers inoxydables en fortes épaisseurs*
I. Tomashchuk, I. Bendaoud, E. Cicala, S. Matteï, H. Andrzejewski, P. Sallamand, A. Mathieu, F. Bouchaud
Congres Français de Thermique: thermique et contexte incertain
Gerardmer, France. (28/05/2013)

23. *Simulation and experimental study of the plasma-plume induced by pulsed laser irradiation of metal targets*
M. Girault, L. Barillot, L. Lavisse, J.-L. Le Garrec, L. Hallo, J.-M. Jouvard, S. Carles, J.-M. A Mitchell, M. C. Marco de Lucas, S. Bourgeois
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (30/05/2013)

24. *Nanosecond IR laser treatments under controlled reactive gas mixtures for the insertion of light elements on the top of titanium targets*
F. Torrent, P. Berger, L. Lavisse, B. Dourthe, J. M. Jouvard, M. C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (30/05/2013)

25. *Study of the zinc oxide nanoparticle nucleation and growth behavior according to continuous supercritical water synthesis parameters*
R. Piolet, A. Leybros, M. Ariane, F. Demoisson, F. Bernard
Sustainable Manufacturing of Nanomaterials and their Organization for Hybrid Device Structures
Ile d'Oléron, France. (15/06/2013)

26. *Corrélation entre la tenue envers l'oxydation à haute température des alliages chromino-formeurs et leur état mécanique de surface*
I. Popa, O. Danylova, F. Riblet, T. Barry, R. Bousquet, S. Chevalier, G. Goehl, L. Combemale
10e colloque Rayons X et Matière
Nantes, France. (12/09/2013)

27. *Effect of coatings on a commercial stainless steel for SOEC interconnect application in anode atmosphere*
M.R. Ardigo, I. Popa, S. Chevalier, V. Parry, A. Galerie, P. Girardon, F. Perry, R. Laucournet, A. Brevet
Thirteenth International Symposium on Solid Oxide Fuel Cell Cells (SOFC-XIII)
Okinawa, Japan. (06/10/2013)

28. *Surface oxynitring of titanium metal by laser irradiation under controlled gas mixtures: influence of the O2/N2 partial pressure ratio*
F. Torrent, P. Berger, L. Lavisse, B. Dourthe, J. M. Jouvard, M. C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Lille, France. (29/05/2014)

29. *Caractérisation de nanoparticules formées dans un plasma généré par irradiation laser d'un métal dans l'air*
M. Girault, J-M. Jouvard, L. Lavisse, F-X. Ouf
Journées LIBS
Paris, France. (03/06/2014)

30. *Formation de nanoparticules dans un plasma généré par irradiation laser d'une surface métallique dans l'air*
M. Girault, J.M. Jouvard, L. Lavisse, L. Hallo
Journées LIBS 2013
Lyon, France. (05/06/2014)

31. *Origin of the ?-Zr Phase formed during High Temperature Oxidation of Zirconium Alloys*
J. Favergeon, S. Chevalier, T. Montesin, G. Bertrand
International Symposium on High-temperature Oxidation and Corrosion (ISHOC 2014)
Hakodate, Hokkaido, Japan. (23/06/2014)

32. *The nucleation and growth of zinc oxide nanoparticles from ambient to supercritical conditions*
F. Demoisson, R. Piolet, M. Ariane, A. Leybros and F. Bernard
14th European Meeting on Supercritical Fluids
Marseille, France. (15/10/2014)

33. *CFD simulation in supercritical water: design of a reactor and prediction tool for morphology of ZnO nanoparticles*
M. Ariane, F. Demoisson, A. Leybros, R. Piolet, F. Bernard
14th European Meeting on Supercritical Fluids
Marseille, France. (15/10/2014)

II.6.2.5. Department INTERFACES

A. Plenary talks

1. *C-S-H and concrete Properties*
A. Nonat

6th Conference Dni Betonu
Wisla, Pologne. (22/05/2012)

2. *Hydration of cementitious materials, what do we know, what do we need ?*
A. Nonat
IBAUSIL
Weimar, Allemange. (12/09/2012)

3. *Localisation des électrons en excès sur une surface d'oxyde non stoechiométrique par diffraction de photoélectrons*
B. Domenichini
Journées Surfaces et Interfaces 2013
Orléans, France. (30/01/2013)

4. *Dynamique à l'échelle moléculaire des processus d'adsorption, simulation de la dynamique moléculaire*
J.-M. Simon
Ecole thématique de l'AFA
Paris, France. (12/02/2013)

5. *Introduction à la diffusion dans les solides nanoporeux. Approche macroscopique et limites*
J.P. Bellat
2ème journées de l'Association Française de l'Adsorption (AFA)
Paris, France. (14/02/2013)

6. *Flash-back sur 40 ans d'adsorption à Dijon*
J.-P. Bellat
29ème Réunion du Groupe Français des Zéolithes
Semur en Auxois, France. (26/03/2013)

B. Key lectures

1. *Localisation d'électrons en excès sur une surface d'oxyde (TiO_2) par diffraction de photoélectrons en résonance*
B. Domenichini, P. Krüger, S. Bourgeois
ELSPEC 4
Fès, Maroc. (06/05/2010)

2. *Hydration of cementitious materials, present and future*
A. Nonat
13th International Congress on the Chemistry of Cement
Madrid, Espagne. (06/07/2011)

3. *Physico-Chemical processes occurring in cement-waste forms at early age*
S. Gauffinet
1st International Symposium on Cement-based Materials for Nuclear Wastes
Avignon, France. (11/10/2011)

4. *Corrosion localisée : de la simulation numérique de systèmes modèles au développement de modèles prédictifs de comportement*
B. Vuillemin, R.Oltra
Ecole thématique MICROREACTEURS, MICROCAPTEURS, MICROBATTERIES
Autrans, France. (27/05/2013)

5. *Apport de la modélisation et de la simulation en corrosion*
R.Oltra, B.Malki, B.Vuillemin, A.Marion
Ecole thématique THEMA CORR
BASTIA - LA MARANA, France. (29/09/2013)

6. *Stability of negatively charged platelets in calcium rich anionic copolymer solutions*
C. Labbez
29th Conference of the European Colloid and Interface Society
Bordeaux, France. (06/09/2015)

C. Invited lectures

1. *Analyse de poudre à l'aide de rayonnements X*
L. Lavisse, V. Potin, J-L Legarrec, S. Carles, J-B Mitchell, L. Hallo, D. Hebert
Journée Chimie des poudres du Réseau plasmas froids CNRS
Albi, France. (09/06/2010)

2. *Infrared spectroscopic investigations of molecules physically adsorbed on MFI zeolites*
G. Weber
22th Colloquium on High Resolution Molecular Spectroscopy
Dijon, France. (29/08/2011)

In-situ study of nanoparticles in the plasma plume induced by pulsed laser irradiation of a metallic target

3. L. Lavisse, J.-L. Le Garrec, L. Hallo, J.-M. Jouvard, S. Carles, J. Perez, J. B. A. Mitchell, J. Decloux, M. Girault, V. Potin, H. Andrzejeweski, M. C. Marco de Lucas, S. Bourgeois
5ème workshop international DyNano
Kyoto, Japan. (05/10/2011)
4. *Fonctionnalisation de surfaces en titane par des couches minces d'oxynitrures*
F. Torrent, M.C. Marco de Lucas, G. Pillon, L. Lavisse, P. Berger, B. Dourthe, H. Andrejewski, S. Kaya-Boussougou, C. Godeau, Y. Berthier, A. Tidu, J-M. Jouvard
Laserap 7
Iles d'Oléron, France. (05/09/2012)
5. *La Corrosion*
R.Oltra
Action Nationale de Formation (ANF) - METALLURGIE FONDAMENTALE
Aussois, France. (22/10/2012)
6. *Predictive Modeling of Localized Corrosion*
R.Oltra, B.Vuillemin, B.Malki
International School on Modelling of Corrosion
Saclay, France. (10/12/2012
7. *Connection between small and large system thermodynamics*
S. K. Schnell, T. J. H. Vlugt, J.-M. Simon, D. Bedeaux, S. Kjelstrup
23th Sitges Conference on Statistical Mechanics
Sitges, Spain. (01/06/2012)
8. *Apport du SEXAFS pour l'étude de l'adsorption et de la décomposition de molécules de type "carbonyle"*
B. Domenichini, P. Paufert, S. Bourgeois et E. Fonda
Workshop C(RS)2 2014
Gif sur Yvette, France. (14/10/2014)
9. *TEM studies of catalytic layers on carbon substrates*
J. Lavkova, M. Dubau, S. Haviar, I. Khalakhan, M. Chundak, M. Vorokhta, V. Potin, I. Matolinova, V. Matolin
Workshop germano-franco-tchèque
Chatel, France. (25/03/2014)

D. Invited talks

1. *Core-level lineshapes and resonant photoelectron diffraction.*
P. Kruger
International Workshop and Winterschool : Photoemission
Dijon, France. (23/02/2010)
2. *Long range bonding and short range correlation effects in L2,3-edge spectra*
P. Kruger
Coupling XAS and theoretical chemistry for heavy atoms (GNR PARIS & Actinet I3 Work-shop)
Avignon, France. (23/06/2010)
3. *Réalisation et caractérisation de couches d'oxynitrures de titane à l'aide de source laser : Utilisation de microfaisceaux dans l'étude des fonctionnalités*
L.Lavisse, G. Pillon, P. Berger, M.C. Marco de Lucas, S. Bourgeois, J-M. Jouvard
Gi2M
Metz, France. (30/09/2010)
4. *Defect in topmost oxide layers probed by resonant photoelectron diffraction*
B. Domenichini, P. Krüger, S. Bourgeois
SF2M Annual Meeting 2010
Paris, France. (23/06/2010)
5. *Multichannel multiple scattering calculations on dichroic L23-edge spectra of titanium oxide nanostructures*
P. Kruger
X-ray Spectroscopy: Recent Advances in Modelling and New Challenges, (Cecam workshop)
Zurich, Switzerland. (14/07/2011)
6. *Self-healing on galvanized steel cut-edges: From basic Zn coating to Zn-alloyed coatings*
R.Oltra
62nd ISE Annual Meeting "Electrochemical Frontiers in Global Environment and Energy"
Niigata, Japan. (11/09/2011)
7. *Band gap states and magnetism studied by resonant photoelectron diffraction and HAXPES*
P. Kruger, A. Gray, C. Fadley
HAXPES 2011 - 4th International Workshop on Hard X-ray Photoeletron spectroscopy
Hamburg, Germany. (15/09/2011)

8. *Quels outils pour quelles propriétés ? Présentation de fiches méthodologiques sur les techniques de modélisation de grandeurs thermodynamiques, du moléculaire au macroscopique*
   J.-M. Simon
   Journée de la SFGP : La thermodynamique, se former pour se comprendre
   Lille, France. (28/11/2011)
9. *Electrochemical transients caused by mechanical events*
   R.Oltra
   Third Meeting of the Quantitative Micro-Nano Project
   Idaho Falls, USA. (10/06/2012)
10. *Dichroism in X-ray absorption of titanium dioxide nanostructures*
    P. Kruger, C. Bittencourt, A. Hitchcock
    XAFS theory and nano particles (XAFS15 satellite workshop)
    Chiba, Japan. (19/07/2012)
11. *Chemistry of cement hydration ad the building of the microstructure of the hydrated cement paste*
    A. Nonat
    Microstructure ,Setting and Aging of Cement: From Soft Matter Physics to Sustainable Materials
    Monte Verita, Suisse. (12/08/2012)
12. *Transport of mass and heat through a binary liquid-vapour interface. What can we learn from molecular dynamics simulations?*
    J.-M. Simon, I. Inzoli, S. Kjelstrup, D. Bedeaux
    6th International Workshop on Nonequilibrium Thermodynamics and 3rd Lars Onsager Symposium
    Roros, Norway. (19/05/2012)
13. *Towards predictive models for Fick and Maxwell-Stefan diffusivities using molecular dynamics simulation*
    X. Liu, S. K. Schnell, J.-M. Simon, D. Bedeaux, S. Kjelstrup, A. Bardow, T. J. H. Vlugt
    18th Symposium on Thermophysical Properties
    Boulder, USA. (01/06/2012)
14. *Fick Diffusion in ternary liquids from equilibrium molecular dynamics*
    X. Liu, S. K. Schnell, J.-M. Simon, D. Bedeaux, S. Kjelstrup, A. Bardow, T. J. H. Vlugt
    6th International Workshop on Nonequilibrium thermodynamics
    Roros, Norway. (01/08/2012)
15. *Transfer coefficients for the liquid-vapor interface of a two-component mixture*
    I. Inzoli, S. Kjelstrup, D. Bedeaux, J.-M. Simon
    18th Symposium on Thermophysical Properties
    Boulder, USA. (19/08/2012)
16. *Unified picture of the excess electron distribution at the rutile TiO2(110) surface*
    P. Krüger, J. Jupille, S. Bourgeois, B. Domenichini, A. Verdini, L. Floreano, A. Morgante
    AVS2012
    Tampa, USA. (30/10/2012)
17. *Finite size scaling of thermodynamic properties in small open systems*
    J.-M. Simon
    Workshop du GDR Thermodynamique Moléculaire et des Procédés
    Lyon, France. (11/12/2012)
18. *Mesoscopic simulations of clay gels: A step towards models of C-S-H gels*
    C. Labbez
    Microstructure, setting ang aging of cement: from soft Matter physics to sustainable materials
    Monte Verita, Suisse. (12/08/2012)
19. *Defects in topmost oxide surfaces through the synchrotron radiation light*
    B. Domenichini, P. Krüger, J. Jupille, A. Verdini, L. Floreano, A. Morgante, S. Bourgeois
    XVI French Polish seminar on Reactivity of Solids
    Krakow, Poland. (11/12/2012)
20. *Decomposition of adsorbed Mo(CO)6 layers by electron beam followed by X-ray absorption*
    P. Paufert, E. Fonda, Z. Li, B. Domenichini, S. Bourgeois
    XVI French Polish seminar on Reactivity of Solids
    Krakow, Poland. (11/12/2012)
21. *Le Ciment Hydraté, un matériau poreux désordonné*
    A. Nonat
    29ème réunion du Groupe Français des Zeolithes
    Semur En Auxois, France. (27/03/2013)
22. *Comprendre et simuler le comportement de matériaux pour optimiser la durabilité de leur assemblage ou leur élaboration en couches minces*

A. Zimmer
Séminaire Institut Jean Barriol
Metz, France. (08/04/2013)

23. *Hydrothermal stability of MIL-53 (Al, Fe) metal organic frameworks*
I. Bezverkhyy
2nd Workshop on Zeolites
Caen, France. (06/05/2013)

24. *De l'eau et du soleil : l'énergie du futur ?*
B. Domenichini
Université de Mila
Centre Universitaire de Mila - Université de Constantine, Algérie. (06/06/2013)

25. *Bridging scale with thermodynamics: from Nano to Macro*
S. Kjelstrup, S. K. Schnell, T. J. H. Vlugt, J.-M. Simon, D. Bedeaux
IWNA 2013
Ho Chi Minh Ville, Vietnam. (01/11/2013)

26. *Solute adsorption on cement hydrates from a statistical mechanics point of view*
C. Labbez
1rst International Conference on the Chemistry of Construction Materials
Berlin, Allemagne. (07/10/2013)

27. *Single ion effects at solid/liquid interfaces, International Workshop Adsorption of Ions at Solid/Liquid Intefaces*
C. Labbez
International Workshop on Adsorption of Ions at Solid/electrolyte Interfaces
Leiden, Hollande. (10/03/2014)

28. *TEM characterization of CeOx thin films elaborated by MOCVD*
P. Simon, N. Zanfoni, L. Avril, L. Imhoff, V. Potin, B. Domechini & S. Bourgeois
Workshop germano-franco-tchèque
Chatel, France. (25/03/2014)

29. *Pt doped CeOx films deposited on carbon nanotubes as a reference system for carbon substrates.*
P. Simon, V. Potin, M. Dubau, I. Matolínov=C3=A1, V. Matolín
Workshop germano-franco-tchèque
Chatel, France. (26/03/2014)

30. *MOCVD elaboration and characterization of Pt doped CeO2 thin films*
N. Zanfoni, L. Avril, L. Imhoff, S. Bourgeois, B. Domenichini
Workshop germano-franco-tchèque
Chatel, France. (26/03/2014)

31. *From C-S-H to C-A-S-H: experimental study and thermodynamic modeling*
A. Nonat
Workshop Calcium Silicate Hydrates containing aluminium
Dübendorf, Suisse. (05/06/2014)

32. *Growth and heterogeneous aggregation of calcium silicate hydrate*
C. Labbez
International workshop on cement hydration
Villard Sur Ollons, Suisse. (26/06/2014)

33. *Chemical potential of charged species at solid/liquid interfaces*
C. Labbez
International workshop on Nanothermodynamics
Leiden, Hollande. (01/12/2014)

34. *Adsorption of metal carbonyls on surfaces: from physi- to chemisorption through irradiations*
B. Domenichini
University of Erlangen
Erlangen, Allemagne. (27/02/2014)

35. *Non ideal mixture data for nano-sized systems from molecular dynamics simulations*
S. Kjelstrup, R. Skorpa, T. Trinh, D. Bedeaux, J.-M. Simon
25th Sitges conference on Statistical Physics
Barcelona, Spain. (01/06/2014)

36. *Metal oxide surfaces and films: from fondamentals to applications*
B. Domenichini
CanmetMATERIALS
Hamilton, CANADA. (24/10/2014)

37. *Thermodynamics of CO2 adsorbed on a graphite surface from molecular dynamics simulation and small system method*
T. Trinh, D. Bedeaux, S. Kjelstrup, J.M. Simon
Nanothermodynamics Lorentz Center
Leiden, The Netherlands. (04/12/2014)

38. *Small systems thermodynamics to determine Kirkwood-Buff coefficients from equilibrium molecular dynamics simulations*
S. K. Schnell, T. J. H. Vlugt, J.-M. Simon, D. Bedeaux, S. Kjelstrup
Nanothermodynamics Lorentz Center
Leiden, The Netherlands. (04/12/2014)

39. *Application of Hill's thermodynamics of small system : the small system method*
J.-M. Simon, D. Bedeaux, S. Kjelstrup, S.K. Schnell, T. J.H. Vlugt P. Krüger
Nanothermodynamics Lorentz Center
Leiden, The Netherlands. (04/12/2014)

40. *Internal structure and gas transport through cork*
A. Lagorce-Tachon, T. Karbowiak, C. Loupiac, J.-M. Simon, R. Gougeon, J.-P. Bellat
19th Symposium on Thermophysical Properties
Boulder, USA. (21/06/2015)

41. *Localisation des électrons en excès par diffraction de photoélectrons : TiO2 rutile vs. anatase*
B. Domenichini
LCC UPR 8241
Toulouse, France. (21/07/2015)

E. Oral contributions

1. *Resonant photoelectron and photoelectron diffraction across the FeL3 edge of Fe3O4*
H. Magnan, P. Le Fèvre, D. Chandesris, P. Krüger, S. Bourgeois, B. Domenichini, A. Verdini, L. Floreano, A. Morgante
SOLEIL Users' Meeting SUM10
St Aubin, France. (21/01/2010)

2. *Linear and circular dichroism in absorption*
P. Kruger
LighTnet Code Dissemination Workshop
Frascati, Italy. (02/04/2010)

3. *Experimental Evidence of the Inhibition of the Oxygen Reduction on Galvanized Steel Cut-edges*
B.Vuillemin, F. Thébault, R. Oltra, C.Alllely, K.Ogle
8th Spring Meeting of the International Society of Electrochemistry
Columbus, USA. (03/06/2010)

4. *Ettringite surface chemistry : interplay of electrostatic and ion specificity*
Medala M., Labbez C., Pochard I., Nonat A.
International Symposium on Electrokinetic Phenomenon
Turku, Finlande. (06/06/2010)

5. *Acid-base properties of 2:1 clays; the role of electrostatics*
F. Thomas, C. Labbez, M. Delhorme, C. Caillet
Conference on Goldschmidt 2010 - Earth, Energy, and the Environment
Knoxville, USA. (13/06/2010)

6. *Modelling of guest-ion incorporation in the anhydrous calcium silicate phases of Portland cement by DFT calculations*
Jansang B., Skibsted J., Nonat A.
Symposium on Concrete Modelling
Lausanne, Suisse. (22/06/2010)

7. *Accelerated Calcium Silicate Hydrates Growth, Experiments and Modeling*
L. Nicoleau, S. Garrault, A.Nonat
Symposium on Concrete Modelling
Lausanne, Suisse. (22/06/2010)

8. *Tricalcium silicate hydration modeling and numerical simulations*
S. Garrault, L. Nicoleau, A. Nonat
Symposium on Concrete Modelling
Lausanne, Suisse. (22/06/2010)

9. *Colloidal behavior of CSH nanohydrates in cement paste*
Labbez C., Pochard I., Nonat A., Jönsson B.
Symposium on Concrete Modelling
Lausanne, Suisse. (22/06/2010)

10. *Computer simulation of local attacks on carbon stee*
S. Tricoit, B. Vuillemin, R. Oltra, D. Crusset

4th international workshop on long-term prediction of corrosion damage in nuclear waste systems
Bruges, BELGIUM. (02/07/2010)

11. *Génération de nano et microparticules métalliques par irradiation laser nanoseconde*
L. Lavisse, J.M. Jouvard, I. Shupyk, M. C. Marco de Lucas, S. Bourgeois
Journée thématique du réseau Plasma Froids "Chimie des poudres dans les plasmas"
Albi, France. (06/07/2010)

12. *Influence of deposition atmosphere on the MOCVD elaboration of nanometric barium silicate films*
M. Mitoraj, L. Imhoff, B. Domenichini, P. M. Peterlé, S. Bourgeois
4th Int. Meeting on Developments in Materials (MPA)
Braga, Portugal. (28/07/2010)

13. *Thermodynamic and structure properties of clay dispersions : A Monte Carlo study*
Delhorme M., Labbez C., Jönsson B.
24th Conference of the European Colloid and Interface Society
Prague, Tchécoslovaquie. (05/09/2010)

14. *Charge reversal and charge regulation at silica surfaces*
Labbez C., Jönsson B., Borkovec M.
24th Conference of the European Colloid and Interface Society
Prague, Tchécoslovaquie. (05/09/2010)

15. *On the origin of cement cohesion*
Labbez C., Pochard I., Jönsson B., Nonat A.
7th International Conference on Engineering Computational Technology
Valence, Espagne. (14/09/2010)

16. *Use of the Scanning Electrochemical Microscope to Study Localized Trenching on Aluminium Alloys*
R. Oltra, A. Zimmer, C.Sorriano, F. Rechou, C. Borkowski
6th Workshop on Scanning Electrochemical Microscopy
Fréjus, France. (03/10/2010)

17. *Corrosion behaviour of aircraft assemblies: modelling and experimental approaches*
R. Oltra, A. Zimmer, O. Rogliano, J. Deconinck, S. Van Damme, R. Akid
EASN meeting
Paris, France. (07/10/2010)

18. *Rôle des éléments d'alliages sur le pouvoir cicatrisant de revêtements Al-Zn exposes en environnement humide*
A. Q.Vu, B. Vuillemin, R. Oltra, C. Allely
Matériaux 2010
Nantes, France. (18/10/2010)

20. *Simulation des risques de corrosion dans les assemblages aéronautiques*
R. Oltra, A. Zimmer, B.Vuillemin, B.Rogliano
Matériaux 2010
Nantes, France. (18/10/2010)

21. *Adsorption properties of cork material for water vapour*
S. Lequin, J.-P. Bellat, T. Karbowiak, R. Gougeon, L. Brachais, D. Chassagne
EUROFOODWATER, Conference on Water in Food
Reims, France. (21/03/2010)

22. *Adsorption properties of cork material for water, ethanol and sulphur dioxide*
S. Lequin, J.-P. Bellat, T. Karbowiak, L. Brachais, D. Chassagne
First International Meeting on Material / Bioproduct Interactions (MATBIM 2010)
Paris, France. (03/05/2010)

23. *Non-equilibrium thermodynamics applied to transport of n-butane through a membrane of silicalite. The effect of the coupling between heat of adsorption and mass transfer*
I. Inzoli, S. Kjelstrup, D. Bedeaux, J.-M. Simon
International Zeolite Membrane Meeting
Loutraki, Greece. (05/05/2010)

24. *Dynamics of H2 molecules on graphite by molecular dynamics simulation and quasi-elastic neutron scattering*
O.E. Haas, J.M. Simon, S. Kjelstrup
10th International Conference on Fundamentals of Adsorption (FOA-10)
Hyogo, Japan. (23/05/2010)

25. *In situ FFIR spectroscopy study of ethylene or trichloroethylene on silicalite-1 at 298 K*
A. Ballandras, G. Weber, M. Rotger, J.-P. Bellat
10th International Conference on Fundamentals of Adsorption (FOA-10)
Hyogo, Japan. (23/05/2010)

26. *High pressure calorimetry of water intrusion in silicalite-1*

T. Karbowiak, C. Paulin, A. Ballandras, G. Weber, J.-P. Bellat
10th International Conference on Fundamentals of Adsorption (FOA-10)
Hyogo, Japan. (23/05/2010)

27. *Adsorption behaviour of water vapour on polyacrylic polymer*
H. Bahaj, M. Bakass, C. Bayane, J.P. Bellat, M. Benchanaa, G. Bertrand
International Conference on Nano materials and Renewable Energies
Safi, Maroc. (05/06/2010)

28. *Stark spectrum simulation of X2Y4 asymetric molecules: application to ethylene in a MFI-type host zeolite*
M. Sanzharov, V. Boudon, M. Loete, N. Zvereva-Loete, A. Ballandras, G. Weber
65th International Symposium on Molecular Spectroscopy (ISMS 2010)
Colombus, USA. (21/06/2010)

29. *O2/SO2 : que se passe- t-il au niveau du liège ?*
S. Lequin, J.-P. Bellat, T. Karbowiak, L. Brachais, D. Chassagne
Les grands rendez-vous techniques de Bourgogne
Beaune, France. (06/07/2010)

30. *Polyvalence des adsorbants zéolithiques pour le piégeage des traces de contaminants gazeux*
L. Tessier, P. Massiani, J.-L. Bonardet, T. Onfroy, S. Casale, J.-P. Bellat, G. Weber, I. Bezverkhyy, V. Lena, E. De La Rochefoucault, S. Alperine
Matériaux 2010
Nantes, France. (18/10/2010

31. *Corrosion risks simulation in aerospace assembly*
R. Oltra, A. Zimmer, B. Rogliano, S. Van Damme, L.C. Abodi, J. Deconninck, R. Akid
SICOM Workshop
Brême, Allemagne. (10/11/2010)

32. *Incorporation d'éléments légers dans le titane assistée par faisceau laser*
P. Berger, G. Pillon, L. Lavisse, J.M. Jouvard, S. Bourgeois, M.C. Marco de Lucas
Congrès IBAF-2010
Namur, Belgique. (16/11/2010)

33. *L23-edge spectra calculated with multichannel multiple scattering theory*
P. Kruger
Journées EELS (JEELS2011)
Les Diablerets, Switzerland. (20/01/2011)

34. *Mo(CO)6 adsorption and decomposition on Cu(111) studied by STM*
M. Petukhov,. P. Krüger, B. Domenichini, S. Bourgeois
Forum de microscopies à sonde locale
Ecully, France. (31/03/2011)

35. *Structural analysis of Ti/TiOx and W/WOy periodic multilayered thin films sputter deposited by the reactive gas pulsing process*
V. Potin, A. Cacucci, L. Imhoff, N. Martin
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (10/05/2011)

36. *Nanoparticles spatial localization in the plume induced by a pulsed laser*
L. Lavisse, J.-L. Le Garrec, L. Hallo, J.-M. Jouvard, S. Carles, J.-M. A
E MRS European Material Research Society Spring Meeting
Nice, France. (11/05/2011)

37. *Localisation de NPs dans une plume plasma générée par laser*
L. Lavisse, J.-M. Jouvard, S. Bourgeois, G. Pillon, S. Carles, J.-L. Le Garrec, J.B. Mitchell
10ème journées du réseau plasma froids
Toulouse, France. (26/05/2011)

38. *Behaviour of wine active gaseous molecules in contact with cork*
S. Lequin, J.-P. Bellat, T. Karbowiak, L. Brachais, D. Chassagne
Wine Active Compounds
Beaune, France. (24/03/2011)

39. *Oxygen diffusion through natural raw cork*
S. Lequin, J.-P. Bellat, T. Karbowiak, J-M. Simon, D. Chassagne
9ème Symposium International d'=C5=92nologie "=C5=92no 2011"
Bordeaux, France. (15/06/2011)

40. *Dynamics of H_2 molecules on graphite*
J.M. Simon, O.E. Haas, S. Kjelstrup
DIMAT 2011

Dijon, France. (01/07/2011)

41. *Couplage electron-trou en absorption X*
P. Kruger
Workshop du GDR coDFT
Obernai, France. (29/06/2011)

42. *Etude de la réactivité cathodique de particules intermétalliques : la surface d'un alliage d'aluminium par une approche SECM en mode génération*
C. Sorriano, R. Oltra, A. Zimmer, B. Vuillemin, C. Borkowski, O. Neel
Journées d'électrochimie 2011
Grenoble, France. (04/07/2011)

43. *Retention of alkalis by hydrated low-pH cements designed for underground radioactive waste repositories*
Bach TTH, Cau-Dit-Coumes C., Pochard I., Nonat A.
13th International Congress on the Chemistry of Cement
Madrid, Espagne. (06/07/2011)

44. *Model for equilibrium, surface chemistry and interface properties of hydrates in the CaO-SiO2-Al2O3-H2O system*
Haas J., Pochard I., Nonat A.
13th International Congress on the Chemistry of Cement
Madrid, Espagne. (06/07/2011)

45. *Formation And Destabilization Of Organo-Aluminate AFm Phases*
Giraudeau, C., d'Espinose de Lacaillerie, J.-B,Flatt, R. Nonat A.
13th International Congress on the Chemistry of Cement
Madrid, Espagne. (06/07/2011)

46. *A unique relationship fluidity/adsorption for comb-type superplasticizers in sulfated pore solution*
F. DALAS, S. POURCHET, A. NONAT, D. RINALDI, M. MOSQUET
13th International Congress on the Chemistry of Cement
Madrid, Espagne. (06/07/2011)

47. *On the origin of the dormant period*
S. Garrault, A. Nonat, Y. Sallier, L. Nicoleau
XIII eme international Congress on the Chemistry of Cement
Madrid, Espagne. (06/07/2011)

48. *Influence of calcium sulphate on hydration and mechanical strength of tricalcium silicate*
S. Gunay, S. Garrault, A. Nonat, P. Termkhajornkit
XIII eme international Congress on the Chemistry of Cement
Madrid, Espagne. (06/07/2011)

49. *Adsorption and growth of Mo(CO)6 films on Cu(111)*
P. Kruger, M. Petukhov, B. Domenichini, S. Bourgeois
European Conference on Surface Science (ECOSS28)
Wroclav, Poland. (30/08/2011)

50. *Corrosion in alcanolamines for natural gas treatment - High temperature experiments in lean and rich conditions*
J. Kittel, E. Fleury, M. Bonis, G. Perdu, B. Vuillemin, R. Oltra
EUROCORR 2011
Stockholm, Sweden. (04/09/2011)

51. *Self-healing mechanisms on galvanized steel cut-edges: from basic Zn coating to Zn-alloyed coatings*
R.Oltra, B.Vuillemin, F.Thebault, A.Q. Vu, C.Allely, K.Ogle
62nd ISE Annual Meeting "Electrochemical Frontiers in Global Environment and Energy“
Niigata, Japan. (11/09/2011)

52. *Thin oxide films created by laser surface melting : Influence of laser parameters on 304L pitting corrosion resistance*
W. Pacquentin, N. Caron, C.Blanc, A. Cheniere, H.Plouzennec, P.-Y. Thro, G. Moutiers, R. Oltra
EUROMAT 2011
Montpellier, France. (12/09/2011)

53. *Hard coatings for wood machining tools: dream or reality?*
C. Nouveau, H. Aknouche, B. Tlili, I. Rahil, Y. Benlatreche, L. Imhoff, B. Laganiere, V. Blanchard
6th Symposium on Vacuum based Science and Technology
Koszalin-Ko=C5=82obrzeg, Poland. (20/09/2011)

54. *Localized trenching on aluminium alloys: a phenomenological approach using a modified SECM experiment*
C. Sorriano, R. Oltra, A. Zimmer, O. Neel
220th ECS Meeting & Electrochemical Energy Summit
Boston, USA. (09/10/2011)

55. *Localized Trenching on Aluminum Alloys: A Phenomenological Approach Using a Modified SECM Experiment*
C. Sorriano, R. Oltra, A. Zimmer, And O. Neel
220th ECS Meeting

Boston, USA. (09/10/2011)

56. *Investigation of a Critical Factor in Localized Corrosion on Carbon Steels: The Shape of an Existing Defect*
S. Tricoit, B. Vuillemin, R. Oltra
220th ECS Meeting
Boston, USA. (09/10/2011)

57. *Adsorption and decomposition of metal carbonyl molecules adsorbed on surfaces*
P. Paufert, E. Fonda, Z. Li, B. Domenichini, S. Bourgeois
8th International Workshop on Oxide Surfaces IWOX VIII
Baqueira Beret, spain. (17/01/2012)

58. *Identification of Binding Peptides on CS-H*
Picker A., Nicoleau L., Nonat A., Labbez C., Coelfen H.
European Material Research Society Spring 2012
France, Strasbourg. (14/05/2012)

59. *Calcium mediated polyelectrolyte adsorption on likecharged surfaces*
Turesson M., Labbez C., Nonat A.
14th International Association of Colloid and Interface Scientists
Sendai, Japon. (14/05/2012)

60. *Coarse graining intermolecular interactions in dispersions of highly charged colloids*
Turesson M., Jönsson B., Labbez C.
14th International Association of Colloid and Interface Scientists
Sendai, Japon. (14/05/2012)

61. *In-situ SAXS study of a laser induced plasma plume : influence of the metal target composition on the formed nanoparticles size*
L. Lavisse, J.-L. Le Garrec, L. Hallo, J.-M. Jouvard, S. Carles, J.B.A. Mitchell, V. Potin, H. Andrzejeweski, M. C. Marco de Lucas, S. Bourgeois, J. Perez
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (17/05/2012)

62. *TEM analysis of nanoporous Ptn+-CeOx catalyst on CNTs*
V. Potin, S. Bruyère, V. Matolín, I. Matolínov=C3=A1, M. Vorokhta, S. Bourgeois
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (17/05/2012)

63. *Caractérisation de multicouches périodiques metal/oxide par XPS*
A. Cacucci, O. Heintz, V. Potin, L. Imhoff, N. Martin
5 ème conférence francophone sur les spectroscopies d'électrons
Louvain La Neuve, Belgique. (22/05/2012)

64. *Modelling of the Corrosion in Electrolyte Trapped in Aluminum Alloy 2024 Lap Joints*
R. Oltra, B. Vuillemin, L. Le, A. Zimmer
VI International Symposium on Aluminium Surface Science & Technology
Sorrento, Italie. (27/05/2012)

65. *Microstructural Corrosion of Aluminium Alloys: a Predictive FEM Model Based on Corrosion-Mimicking Experiments*
C. Sorriano, R. Oltra, A. Zimmer, B. Vuillemin, C. Borkowski, O. Neel
VI International Symposium on Aluminium Surface Science & Technology
Sorrento, Italie. (27/05/2012)

66. *Microstructural corrosion of aluminium alloys: a predictive fem model based on corrosion-mimicking experiments*
C.Sorriano, R.Oltra, A.Zimmer, B.Vuillemin, C.Borkowski, O.Néel
ASST VI
Sorrento, Italy. (27/05/2012)

67. *Modelling of the corrosion in electrolyte trapped in aluminum alloy 2024 lap joints*
R. Oltra, A. Zimmer, L. Le Thi My, B.Vuillemin
ASST VI
Sorrento, Italy. (27/05/2012)

68. *Annealing process on Ti/TiO/TiO2 multilayer thin films, studied by XPS and HRTEM*
I. Tsiaoussis, A. Cacucci, O. Heintz, L. Avril, L. Imhoff, N. Martin, V. Potin, S. Bourgeois
9th International Conference on Nanosciences & Nanotechnologies (NN12)
Thessaloniki, Greece. (03/06/2012)

69. *TEM analysis of Pt doped CeO2 thin films on CNTs*
V. Potin, A. Cacucci, S. Bruyère, V. Matolín, I. Matolínov=C3=A1, M. Vorokhta, S. Bourgeois
European Conference on Nanofilms 2 (ECNF2)
Ancona, Italy. (20/06/2012)

70. *Electrical properties dependency of W/WOx and Ti/TiOx periodic multilayer thin films*
A. Cacucci, S. Loffredo, V. Potin, L. Imhoff, N. Martin,

European Conference on Nanofilms 2 (ECNF2)
Ancona, Italy. (21/06/2012)

71. *Annealing process on Ti/TiO/TiO2 multilayers thin films studied by XPS and HRTEM*
I. Tsiaoussis, A. Cacucci, O. Heintz, L. Avril, L. Imhoff , N. Martin, V. Potin, S. Bourgeois
International Conference on Nanosciences & Nanotechnologies (NN12)
Thessalonique, Greece. (04/07/2012)

72. *Surface Area Measurement of C3A/CaSO4/H2O/Superplasticizers. Proceedings of the 10th International conference*
F. Dalas, S. Pourchet, A. Nonat, D. Rinaldi, M. Mosquet, J.-P. Korb
10th International conference Superplasticizers and other chemical admixtures in concrete
Prague, Tchécoslovaquie. (14/09/2012)

73. *Heat and mass transport through surfaces*
S. Kjelstrup, D. Bedeaux, J.-M. Simon
Workshop InMoTher
Lyon, France. (01/03/2012)

74. *Towards non classical techniques for measuring sorption, diffusion and permeation in packaging materials*
T. Karbowiak, A. Voilley, J.-P. Bellat, F. Debeaufort
MATBIM
Dijon, France. (22/04/2012)

75. *Coadsorption of sulphur dioxide and water on raw cork*
S. Lequin, J.-P. Bellat, T. Karbowiak
1ères journées de l'Association Française de l'Adsorption (AFA)
Paris, France. (24/05/2012)

76. *Mise en évidence par spectroscopie infrarouge in situ de la flexibilité de la charpente de la silicalite-1 au cours d'un phénomène d'adsorption*
A. Ballandras, G. Weber, J.-P. Bellat
1ères journées de l'Association Française de l'Adsorption (AFA)
Paris, France. (24/05/2012)

77. *Time correlation function for fluids in mesoscopic systems*
S. K. Schnell, T. J. H. Vlugt, J.-M. Simon, D. Bedeaux, S. Kjelstrup
23th Sitges Conference on Statistical Mechanics
Sitges, Spain. (01/06/2012)

78. *Analytical micro-system for the detection of an explosive taggant at low ppb levels*
Y. Mohsen, J.-B. Sanchez, F. Berger, H. Lahlou, I. Bezverkhyy, G Weber, J.-P. Bellat, V. Fierro, A. Celzard
6èmes Journées Franço-Espagnoles IBERNAM-CMC2
Marseille, France. (22/11/2012)

79. *Unified Picture of the Excess Electron Distribution at the TiO2(110) Surface*
P. Krüger, J. Jupille, S. Bourgeois, B. Domenichini, A. Verdini, L. Floreano, A. Morgante
American Vacuum Society International Symposium
Tampa, USA. (29/10/2012)

80. *TiO2 anatase structure obtained by atomic layer deposition at low temperature*
L. Avril, L. Imhoff
XVI French-Polish Seminar on Reactivity of Solids
Krakow, Poland. (12/12/2012)

81. *Influence de la longueur d'onde sur l'insertion d'azote dans le titane par irradiation laser dans l'air*
F. Torrent, L. Lavisse, H. Andrzejeweski, P. Berger, G. Pillon, S. Bourgeois and M. C. Marco de Lucas
IBAF- Ion Beam Analysis Francophone
Saint-Paul-lès-Durance, France. (14/12/2012)

82. *Molybdenum Hexacarbonyl Dissociation on Copper Surface*
M. Petukhov, B. Domenichini, S.Bourgeois
Forum de microscopies a sonde locale
Spa, Belgium. (06/03/2013)

83. *Silver nanoparticle/protein bioconjugates : Synthesis and SERS study*
S. Reymond-Laruinaz, L. Saviot, M. C. Marco de Lucas
GDR Or-Nano & PMSE
Nantes, France. (03/04/2013)

84. *Predominant surface reactions towards a kinetic model for the C3S dissolution*
Nicoleau L. Nonat A.
3rd International Workshop Mechanisms and modelling of waste/cement interactions
Gent, Belgique. (06/05/2013)

85. *Thermodynamic modelling in the CaO-Al2O3-SiO2-H2O system*
Haas J., Pochard, I. , Nonat A.
3rd International Workshop Mechanisms and modelling of waste/cement interactions
Gent, Belgique. (06/05/2013)

86. *Interactions of cationic exchange resins (saturated with Na+, K+, or Ca2+) with Portland cement during hydration*
E. Lafond, C. Cau-Dit-Coulmes, S. Gauffinet, D. Chartier, Patrick Le Bescop, L. Stefan, A. Nonat
3rd International Workshop Mechanisms and modelling of waste/cement interactions
Gent, Belgique. (06/05/2013)

87. *Controlling the Cohesion of Calcium Silicate Nanohydrates by the Use of Polyelectrolytes: Towards Sustainable Cementitious Materials*
Brunel F., Labbez C., Pochard I., Garrault S., Nonat A.
2013 International Concrete Sustainability Conference
San Fransisco, USA. (06/05/2013)

88. *Influence of the composition and the reactivity of surface oxynitride layers on the fretting behavior of functionalized titanium plates: Nd:YAG surface laser treatments versus PVD*
F. Torrent, P. Berger, G. Pillon, L. Lavisse, F. Vaz, M. C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (27/05/2013)

89. *Improved Mechanical Properties of Hybrid Organic-Inorganic Materials*
Brunel F., Labbez C., Pochard I., Garrault S., Nonat A.
European Materials Research Society 2013 spring meeting
Strasbourg, France. (27/05/2013)

90. *Au-doped TiO2 thin films: low-frequency Raman study*
S. Reymond-Laruinaz, L. Saviot, F. Vaz, V. Potin, M. C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (28/05/2013)

91. *Raman and Brillouin scattering from highly-compressed oxide nanoparticles*
L. Saviot, F. Demoisson, M. C. Marco de Lucas, D. B. Murray, D. Machon, J. Margueritat, A. Mermet
GDR MECANO
Toulouse, France. (03/06/2013)

92. *Structural and electrical properties of nanostructured W/WOx multilayers*
A. Cacucci, V. Potin, L. Imhoff, N. Martin
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (04/06/2013)

93. *Caractérisation d'adsorbants pour la realization d'un micro-préconcentrateur : application à la detection d'un produit de degradation du trinitrotoluène*
J.-B. Sanchez, Y. Mohsen, F. Berger, H. Lahlou, I. Bezverkhyy, G Weber, J.-P. Bellat, V. Fierro, A. Celzard
2ème journées de l'Association Française de l'Adsorption (AFA)
Paris, France. (14/02/2013)

94. *Diffusion de l'oxygène dans le liège*
A. Tachon, S. Lequin, J.-M. Simon, T. Karbowiak, R. Gougeon, J.-P. Bellat
2ème journées de l'Association Française de l'Adsorption (AFA)
Paris, France. (14/02/2013)

95. *Pulsed direct liquid injection ALD of TiO2 films using titanium tetraisopropoxide precursor*
L. Avril, J.M. Decams, L. Imhoff
EuroCVD 19
Varna, Bulgaria. (02/09/2013)

96. *Molybdenum Hexacarbonyl Dissociation on Copper (111) and (001) Surfaces*
M. Petukhov,. P. Krüger, Xiaowen Wan, C. Dupont, B. Domenichini, S. Bourgeois
IVC19 19th International Vacuum Congress
Paris, France. (11/09/2013)

97. *Terahertz vibrations of ZrO2 nanoparticles in a nanopowder under high-pressure*
L. Saviot, D. Machon, A. Mermet, D.B. Murray, S. V. Adichtchev, J. Margueritat, F. Demoisson, M. Ariane, M. C. Marco De Lucas
19th International Vacuum Congress
Paris, France. (15/09/2013)

98. *C-A-S-H synthesis and thermodynamic modelling in CaO-Al2O3-SiO2-H2O system*
Haas J., Pochard, I. , Nonat A.
32nd Cement an Concrete Science Conference
Belfast, Irlande. (17/09/2013)

99. *Anion uptake by calcium silicate hydrate*
Plusquellec G., Nonat A., Pochard I.

32nd Cement an Concrete Science Conference
Belfast, Irlande. (17/09/2013)

100. *Efect of comb-type superplasticizer on the rheology of cement model system: the ettringite contribution*
F. Dalas, S. Pourchet, A. Nonat, D. Rinaldi, M. Mosquet
1rst International Conference on the Chemistry of Construction Materials
Berlin, Allemagne. (07/10/2013)

101. *The C3S dissolution*
Nicoleau L. Nonat A.
1rst International Conference on the Chemistry of Construction Materials
Berlin, Allemagne. (07/10/2013)

102. *Controlled Interaction in C-S-H/Polycation composites: Effect on mechanical properties*
Brunel F., Labbez C., Pochard I.
1rst International Conference on the Chemistry of Construction Materials
Berlin, Allemagne. (07/10/2013)

103. *Comparison of Morphology and Chemical Structure of C-S-H Synthesized by Silica-Lime Reaction and by the Controlled Hydration of C3S*
E. Tajuelo , I. G. Richardson, L. Black, J. Skibsted, A. Nonat
TRANSCEND Conference
Guildford, UK. (03/11/2013)

104. *Anions uptake by calcium silicate hydrates: influence of type of counter-ions and temperature*
G. Plusquellec, I. Pochard, A. Nonat
TRANSCEND Conference
Guildford, UK. (03/11/2013)

105. *Analyses EELS et METHR de films minces d'oxyde de cérium dopé platine*
P. Simon, N. Zanfoni, L. Avril, L. Imhoff, B. Domechini, S. Bourgeois, V. Potin
Workshop “Cercle des microscopistes JEOL” (CMJ 2014)
Lille, France. (02/04/2014)

106. *Anion uptake by C-(A-)S-H: experimental results and thermodynamic modelling*
G. Plusquellec, A. Nonat
Workshop on Calcium Silicate Hydrates containing aluminium
Dübendorf, Suisse. (05/05/2014)

107. *Etude de couches minces d'oxydes de cérium dopées au platine obtenues par dépôt chimique en phase vapeur*
N. Zanfoni, L. Avril, L. Imhoff, S. Bourgeois, B. Domenichini
6° conférence francophone sur les spectroscopies d'électrons
Fes, Marocco. (20/05/2014)

108. *Active role of carbon and oxygen during the formation of porous cerium oxide layer used as catalyst in fuel cell*
J. Lavkova, M. Dubau, S. Haviar, I. Khalakhan, M. Chundak, M. Vorokhta, R. Fiala, V. Potin, I. Matolinova, V. Matolin
XV ièmes Journées de l'Ecole Doctorale Carnot-Pasteur (JED)
Besançon, France. (26/05/2014)

109. *Imagerie chimique de nouveaux oxydes pour l'énergie : étude STEM-EELS de Pt-CeOx*
V. Potin, P. Simon, J. Lavkova, I. Matolinova, V. Matolin,
Colloque international "9ème édition des Journées de l'EELS" (JEELS 2014)
Roscoff, France. (26/06/2014)

110. *Chemical imaging of new oxides for energy: STEM-EELS study of Pt-CeOx*
P. Simon, N. Zanfoni, L. Avril, L. Imhoff, B. Domechini, S. Bourgeois, V.Potin, J. Lavkova, M. Dubau, I. Matolinova & V. Matolin,
Microscience Microscopy Congress (MMC 2014)
Manchester, United Kingdom. (01/07/2014)

111. *Thin films Pt-CeOx nanocatalysts for on-chip fuel cell technology*
V. Potin, J. Lavkova, M. Dubau, I. Matolinova, V. Matolin
5th International Conference on Advanced Nanomaterials (ANM 2014)
Aveiro, Portugal. (03/07/2014)

112. *SERS and TEM study of protein bioconjugated silver nanoparticles*
S. Reymond-Laruinaz, L. Saviot, V. Potin, M. C. Marco de Lucas
XXIV International Conference on Raman Spectroscopy (ICORS 2014)
Iena, Germany. (12/08/2014)

113. *Low-frequency Raman scattering from nanoparticles under high pressure*
L. Saviot, M. C. Marco de Lucas , A. Mermet, J. Margueritat, D. Machon
XXIV International Conference on Raman Spectroscopy (ICORS 2014)
Iena, Germany. (15/08/2014)

114. *TEM study of thin films Pt-CeOx nanocatalysts for on-chip fuel cell technology*

V.Potin, P. Simon, S. Bourgeois, J. Lavkova, M. Dubau, I. Matolinova & V. Matolin,
Workshop "Advanced Electron Microscopy for Catalysis" (EMCAT 2014)
Seeon Monastery, Germany. (04/09/2014)

115. *Incorporation of gold nanoparticles in a TiO2 matrix for surface plasmonic properties*
L. Avril, J. Boudon, P. Simon, L. Imhoff
13th European Vacuum Conference (EVC13)
Aveiro, Portugal. (08/09/2014)

116. *Experimental study of the effect of mass transfer on the efficiency of inhibitors released from an inhibited-primer*
F. Peltier, R. Oltra, G. Zalamansky
EUROCORR 2014
Pisa, Italy. (08/09/2014)

117. *Predictive modelling of the corrosion rate of carbon steel focusing on the effect of the precipitation of corrosion products*
A. Marion, B. Vuillemin, R. Oltra, D. Crusset
EUROCORR 2014
Pisa, Italy. (08/09/2014)

118. *A controlled experimental approach of the effect of confinement on the damage inside an aluminium alloy lap joint*
T.M.L. Le, R. Oltra, A. Zimmer
EUROCORR 2014
Pisa, Italy. (08/09/2014)

119. *Elaboration of WC-based thin film by rf-magnetron sputtering deposition*
J. Nazon, M. Herbst, M.C. Marco de Lucas, S. Bourgeois, B. Domenichini
XIII European Vacuum Conference
Aveiro, Portugal. (09/09/2014)

120. *Chemical structure and morphology of C-S-H synthesized by silica-lime reaction and by the controlled hydration of C3S*
E. Tajuelo, I. G. Richardson, L. Black, J. Skibsted, A. Nonat, E. Boehm-Courjault
34th Annual Cement and Concrete Science Conference
Sheffield, UK. (14/09/2014)

121. *Study of the hydration of cement with high slag content*
S. Stephant, L. Chomat, A. Nonat, T. Charpentier
34th Annual Cement and Concrete Science Conference
Sheffield, UK. (14/09/2014)

122. *Retarding effect of gluconate and D-glucitol on the hydration of tricalcium silicate:*
C. nalet, A. Nonat
34th Annual Cement and Concrete Science Conference
Sheffield, UK. (14/09/2014)

123. *On the optimum sulphate dosage: study of the model system C3S/C3A ground with hemi-hydrate and gypsum*
S. Gunay, S. Garrault, A. Nonat, P. Termkhajornkit
34th Cement and Concrete Science Conference
Sheffield, Angleterre. (14/09/2014)

124. *Study of the behavior of resins saturated with Na+ ions in CEM I and CEM III cement pastes*
S. Gauffinet, E. Lafond, C. Cau-Dit-Coumes, D. Chartier, Patrick Le Bescop, L. Stefan, A. Nonat
34th Cement and Concrete Science Conference
Sheffield, Angleterre. (14/09/2014)

125. *Crystallography study of cerium oxide nanoparticles in accordance with DFT models*
J. Lavkova, M. Dubau, P. Simon, M. Chundak, M. Vorokhta, V. Potin, I. Matolinova, V. Matolin
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (16/09/2014)

126. *Extremely porous Pt-CeO2 structures grown on amorphous carbon films for fuel cells applications*
J. Lavkova, M. Dubau, I. Khalakhan, M. Chundak, R. Fiala, V. Potin, I. Matolínova & V. Matolin
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (18/09/2014)

127. *Nanostructured composite TiO2-Pt films by direct liquid injection MOCVD process*
L. Avril, L. Imhoff
16th International Conference on Thin Films (ICTF16)
Dubrovnik, Croatia. (14/10/2014)

128. *IMAGINOXE : Imagerie chimique de nouveaux oxydes pour l'énergie*
V. Potin
Journées Nationales Nanosciences et Nanotechnologies" (J3N 2014)
Lyon, France. (13/11/2014)

129. *Etude cinétique de l'hydrolyse de l'hydrure de lithium*
J. Guichard, E. Sciora, F. Bouyer, F.Bernard, H. Lecoq, J.P. Bellat

Matériaux 2014
Montpellier, France. (24/11/2014)

130. *Séparation isotopique d'un mélange gazeux binaire dihydrogène/dideutérium par adsorption sur zéolithe faujasite*
S. Lectez, J.-M. Simon, J.-M. Salazar, M. Macaud, J.-P. Bellat, G. Weber, I. Bezverkhyy
3ème journées de l'Association Française de l'Adsorption (AFA)
Paris, France. (11/02/2014)

131. *Structural transitions in flexible gallium-based MIL-53 induced by water adsorption*
J. M Salazar, G. Weber, I. Bezverkhyy, J.-M. Simon, J.-P. Bellat
MATERIAUX 2014
Montpellier, France. (24/11/2014)

132. *Séparation isotopique d'un mélange gazeux dihydrogène/dideutérium par adsorption sur zéolithes*
S. Lectez, J.M. Salazar, J.-M. Simon, J.-P. Bellat, G. Weber, I. Bezverkhyy, M. Macaud
MATERIAUX 2014
Montpellier, France. (24/11/2014)

133. *Partial molar enthalpy from fluctuations at small scale*
J.-M. Simon, S. K. Schnell, R. Skorpa, D. Bedeaux, S. Kjelstrup, T. J. H. Vlugt
19th Symposium on Thermophysical Properties
Boulder, USA. (21/06/2015)

134. *Internal structure and gas transport through cork*
A. Lagorce-Tachon, T. Karbowiak, C. Loupiac, J.-M. Simon, R. Gougeon, J.-P. Bellat
10th International Symposium on Oenolgy (Oeno 2015)
Bordeaux, France. (29/06/2015)

135. *Effect of CO2 sorption on PLA properties*
J.R. Rocca-Smith, T. Karbowiak , A. Lagorce-Tachon, J.-P. Bellat, E. Marcuzzo, A. Sensidoni, F. Piasente, F. Debeaufort
Biopol 2015
San Sebastian, Spain. (06/10/2015)

136. *SAXS studies of nanoparticles formed by laser ablation and electrics arcs*
E. Carvou, S. Carles, E. Lee-Choi, M. Girault, J-M. Jouvard, M. Kerka, L. Lavisse, J-L. Legarrec, J.B.A. Mitchell, F-X Ouf, J. Yu, V. Potin, M.C. Marco de Lucas
Soleil 10th Users meeting
Saint Aubin, France. (23/01/2015)

137. *Oxidation mechanisms and material transfer in the fretting wear of titanium functionalized by surface laser treatments*
L. Lavisse, F. Torrent, G. Pillon, P. Berger, M. C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Lille, France. (14/05/2015)

138. *Nuclear microprobe analysis of fretting corrosion track*
J. Labbe, E. Carvou,L. Lavisse, P. Berger, G. Pillon, M.C. Marco de Lucas, V. Potin
E MRS European Material Research Society Spring Meeting
Lille, France. (14/05/2015)

139. *Influence of the reactive atmosphere on the formation of nanoparticles in the plasma plume induced by pulsed laser irradiation of metallic targets*
M. Girault, L. Lavisse, J.-L. Le Garrec, E. Carvou, J.B.A. Mitchell, J.M. Jouvard, J. Yu, F-X. Ouf, S. Carles, M. C. Marco de Lucas, V. Potin, L. Hallo, L. Barillot, G. Pillon, S. Bourgeois, J. Perez
E MRS European Material Research Society Spring Meeting
Lille, France. (14/05/2015)

140. *Laboratory-scale testing of the anti-corrosion effectiveness of various primer coatings on a bare AA2024 surface*
R.Oltra, F.Peltier, G.Zalamansky, P. Michelin
ASST VII
Madère, Portugal. (17/05/2015)

141. *The growth of charged platelets*
C. Labbez
15th conference of International Association of Colloid and Interface Scientists
Mainz, Allemagne. (24/05/2015)

142. *Observation of porous Pt-CeO2 thin films directly grown on TEM grids*
P. Simon, N. Zanfoni, L. Avril, V. Potin, L. Imhoff, B. Domenichini, S. Bourgeois
Workshop Chipcat
Dijon, France. (09/06/2015)

143. *Cheap precursor for synthesis of tungsten oxycarbide catalysts*
N. Zanfoni, M. Giraudet, L. Imhoff, V. Potin, S. Bourgeois, B. Domenichini
Workshop Chipcat

Dijon, France. (09/06/2015)

144. *Tuning of commercial GDL by using amorphous nitrogenated carbon*
J. Lavkova, M. Dubau, V. Potin, I. Matolinova, V. Matolin
6th International Conference on Advanced Nanomaterials (ANM 2015)
Aveiro, Portugal. (21/07/2015)

145. *Porous Pt-CeO2 thin films grown on silicon substrates for fuel cell applications*
P. Simon, N. Zanfoni, L. Avril, V.Potin, L. Imhoff, B. Domenichini, S. Bourgeois
EMRS European Material Research Society - Fall Meeting
Warsaw, Poland. (15/09/2015)

146. *The influence of Mg on the surface properties in rutile TiO2 (011)*
A. Verdini, B. Domenichini, A.Cossaro, L. Floreano, C. Dupont, J.Jupille, S. Bourgeois
European Conference on Surface Crystallography and Dynamics (ECSCD 12)
Trieste, Italy. (20/10/2015)

F. Posters

1. *TEM analysis of Pt doped CeO2 thin films on CNTs*
V. Potin, V. Matolin, I. Matolinova, M. Vorokhta, S. Bourgeois
Workshop “Advanced Electron Microscopy for Catalysis and Electron storage Materials” (EMCAT)
Munich, Germany. (18/01/2010)

2. *STM study of Mo nanoclusters morphology on TiO2(110)*
M. Petukhov, P. Krüger
Journées Surfaces et Interfaces
Nantes, France. (22/01/2010)

3. *Influence of Thermal Annealing in the Bonding States and Structural Arrangements of Multifunctional Ti(C,O,N) Coatings*
C. Moura, L. Cunha, J. M. Chappé, F. Vaz, M. C. Marco de Lucas, L. Imhoff, O. Heintz
CIMTEC 2010 – 12th International Ceramics Congress
Montecatini Terme, Italy. (06/06/2010)

4. *Structure and Chemical Bonds in Black Ti(C,N,O) Thin Films*
M. C. Marco De Lucas, J. M. Chappé, L. Cunha, C. Moura, J. F. Pierson, L. Imhoff, V. Potin, S. Bourgeois, F. Vaz
ICORS 2010 – XXII International Conference on Raman Spectroscopy
Boston, United States. (08/08/2010)

5. *Etude comparative des propriétés électriques des films de Ta2O5, élaborés par différents procédés PVD, pour capacité MOS*
S. Yapi, C. Rousselot, J-Y. Rauch, N. Martin, C. Nouveau, I. Rahil, L. Imhoff
Matériaux 2010
Paris, France. (18/10/2010)

6. *Cinétique du gonflement d'un polymère super absorbant partiellement réticulé avec du potassium*
R.Benaddi, H. Bahaj, M. Bakass, C.Bayane, M.Benchanaa, J.-P.Bellat, G.Bertrand
36ème Journées d'Etude des Equilibres entre phases
Montpellier, France. (24/03/2010)

7. *Détermination et modélisation des isothermes d'adsorption de la vapeur d'eau sur un polymère acrylique*
H. Bahaj, R.Benaddi, M. Bakass, C.Bayane, J.P.Bellat, M.Benchanaa, G.Bertrand
36ème Journées d'Etude des Equilibres entre phases
Montpellier, France. (24/03/2010)

8. *Etude comparative des propriétés d'adsorption d'un getter non-évaporable et d'une zéolithe Pd/NaX*
L. Teyssier, N. Ben Khaled, J. Fromageot, P. Massiani, J.-L. Bonardet, T. Onfroy, S. Casale, J.-P. Bellat, G. Weber, I. Bezverkyy, V. Lena, E. De La Rochefoucauld, S. Alperine
26ème Réunion du Groupe Français des Zéolithes (GFZ)
Giens, France. (31/03/2010)

9. Préparation d'un oxyde mésoporeux mixte de Ni et Mo avec une haute activité dans l'adsorption réactive du thiophène
J. Skrzypski, I. Bezverkhyy, O. Safonova, J.-P. Bellat
26ème Réunion du Groupe Français des Zéolithes (GFZ)
Giens, France. (31/03/2010)

10. *Membrane transport of n-butane by a temperature gradient*
I. Inzoli, S. Schnell Kvalvag, J.-M. Simon, S. Kjelstrup
10th International Conference on Fundamentals of Adsorption (FOA-10)
Hyogo, Japan. (23/05/2010)

11. *Adsorption equilibria of sulphur dioxide on dry and hydrated raw cork*
S. Lequin, T. Karbowiak, L. Brachais, D. Chassagne, J.-P. Bellat
10th International Conference on Fundamentals of Adsorption (FOA-10)
Hyogo, Japan. (23/05/2010)

12. *Etude par spectroscopie infrarouge in situ de l'interaction de C2H2, C2HCl3 et SF6 sur la silicalite-1 à 298 K*
A. Ballandras, G. Weber, M. Rotger, J.-P.Bellat
PAMO-JMS 2010
Orsay, France. (29/06/2010)

13. *Structure and Chemical Bonds in Black Ti(C,N,O) Thin Films*
M. C. Marco De Lucas, J. M. Chappé, L. Cunha, C. Moura, J. F. Pierson, L. Imhoff, V. Potin, S. Bourgeois, F. Vaz
ICORS 2010 – XXII International Conference on Raman Spectroscopy
Boston, United States. (08/08/2010)

14. *Oxydes nanostructurés*
A. Cacucci, V. Potin, L. Imhoff, N. Martin
XVèmes Journées de l'Ecole Doctorale Carnot-Pasteur
Besançon, France. (05/05/2011)

15. *Anatase to rutile transition in titanium surfaces oxidized by pulsed laser treatments: a thermokinetic modelling*
L. Lavisse, J. M. Jouvard, I. Shupyk, S. Bourgeois and M. C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Nice, France. (11/05/2011)

16. *Staining and physico-chemical modifications in laser welding of TA6V4 titanium alloys*
F. Torrent, L. Lavisse, C. Cossu, H. Andrzejeweski, P. Berger, G. Pillon, S. Bourgeois, M. C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Nice, France. (11/05/2011)

17. *Croissance, structure et stabilité de nano-objets d'oxydes de tungstène*
V. Potin, S. Bruyère, M. Gillet, B. Domenichini, S. Bourgeois
XIIème Colloque de la Société Française des Microscopies
Strasbourg, France. (29/06/2011)

18. *Synthesis and mechanical properties of Mo-Cr-N hard coatings by dual RF magnetron sputtering for wood machining*
I. Rahil, C. Nouveau, A. Fabre, L. Imhoff, A. Stanishevsky
Diamond 2011
Garmisch-Partenkirchen, Germany. (04/09/2011)

19. *XPS study of nanostructured oxides. Optimization of the depth resolution*
A. Cacucci, O. Heintz, V. Potin, L. Imhoff, N. Martin
European Conference on Applications of Surface and Interface Analysis (ECASIA)
Cardiff, United Kingdom. (05/09/2011)

20. *NiO - NiMoO4: novel mesoporous nanocomposite for absorption of sulfur-containing molecules*
J. Skrzypski, O. Safonova, J-P. Bellat
International Conference on Hybrid Materials
Strasbourg, France. (06/03/2011)

21. *Adsorption of SO2 on dry and hydrated raw cork used for manufacturing natural stoppers*
S. Lequin, J.-P. Bellat, T. Karbowiak, L. Brachais, D. Chassagne
Wine Active Compounds
Beaune, France. (24/03/2011)

22. *Sorption equilibria of water vapour on dry cork stopper*
S. Lequin, J.-P. Bellat, T. Karbowiak, R. Gougeon, L. Brachais, D. Chassagne
Wine Active Compounds
Beaune, France. (24/04/2011)

23. *Sorption properties of cork*
S. Lequin, J.-P. Bellat, T. Karbowiak, L. Brachais, D. Chassagne
9ème Symposium International d'=C5=92nologie "=C5=92no 2011"
Bordeaux, France. (15/06/2011)

24. *Commensurate diffusion effects on n-heptane in silicalite-1*
J.-M. Simon, N. Floquet, J.-P. Bellat, G. Weber
Diffusion fundamental IV. Basic principles of Theory, Experiment and Application
USA, New York. (21/08/2011)

25. *Oxygen diffusion through uncompressed raw cork*
S. Lequin, J.-P. Bellat, J-M. Simon, T. Karbowiak, D. Chassagne
Diffusion fundamental IV. Basic principles of Theory, Experiment and Application
New York, USA. (21/08/2011)

26. *In situ spectroscopy study of ethylene, tetrachloroethylene and p-xylene adsorbed on silicalite-1 at 298 K*
A. Ballandras, G. Weber, J. P. Bellat, M. Rotger
22th Colloquium on High Resolution Molecular Spectroscopy

Dijon, France. (29/08/2011)

27. *Stark calculations based on tensorial formalism and ab initio methods: application to the study of ethylene adsorbed in silicalite-1 zeolite*
M. Sanzharov, M. Rotger, M. Loëte, V. Boudon, N. Zvereva-Loëte, A. Ballandras, G. Weber
22th Colloquium on High Resolution Molecular Spectroscopy
Dijon, France. (29/08/2011)

28. *influence of surrounding atmosphere and nature of target on the size of NPs in the Plasma plume induced by pulsed laser irradiation by using SAXS*
L. Lavisse, J.-L. Le Garrec, L. Hallo, J.-M. Jouvard , M. Girault, S. Carles, J.B.A. Mitchell, J. Decloux, V. Potin, H. Andrzejewski , M. C. Marco de Lucas, S. Bourgeois, J. Perez
7th SOLEIL Users meeting
Saint Aubin, France. (18/01/2012)

29. *Electro-décomposition de Mo(CO)6 adsorbées sur Cu(111) suivie par SEXAFS*
P. Paufert, E. Fonda, B. Domenichini, S. Bourgeois
Journées Surfaces Interfaces (JSI2012)
St Aubin, France. (26/01/2012)

30. *Adsorption and monolayer growth of Mo(CO)6 on copper*
M. Petukhov,. P. Krüger, B. Domenichini, S. Bourgeois
Forum des microscopies à sonde locale
Saint-Jacut-de-la-Mer, France. (05/03/2012)

31. *Synthesis of nanoparticles by proteins bioconjugated: applications in SERS spectroscopy*
S. Reymond-Laruinaz, L. Saviot, M. C. Marco de Lucas
1st International Conference on Enhanced Spectroscopy (ICES 2012)
Porquerolles, France. (04/05/2012)

32. *Bismuth telluride films grown by electrodeposition: in situ monitoring and characterizations*
A. Zimmer, L. Broch, M. Mass, S. Diliberto, N. Stein, C. Boulanger
E-MRS 2012 SPRING MEETING
Strasbourg, France. (14/05/2012)

33. *Frequency-doubled Nd:YAG laser irradiation of titanium in air for oxygen and nitrogen insertion*
F. Torrent, L. Lavisse, H. Andrzejeweski, P. Berger, G. Pillon, S. Bourgeois, M. C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (17/05/2012)

34. *Nanoparticles spatial localization in the plume induced by a pulsed laser*
L. Lavisse, J-L. Legarrec, L. Hallo, J-M. Jouvard, S. Carles, J-M. Mitchell, G. Pillon, J. Decloux, H. Andrejewski, M.C. Marco de Lucas, S. Bourgeois
X-FEL 2012
Annecy, France. (08/06/2012)

35. *TEM analysis of nanoporous Ptn+-CeOx catalyst on CNTs*
V. Potin, I. Tsiaoussis, A. Cacucci, S. Bruyère, V. Matolín, I. Matolínov=C3=A1, M. Vorokhta, S. Bourgeois
International Conference on Nanosciences & Nanotechnologies (NN12)
Thessalonique, Greece. (05/07/2012)

36. *Generation of accurate multiple scattering potentials for near-edge XAFS from full potential charge densities*
P. Kruger, K. Hatada, K. Hayakawa, C. R. Natoli
XAFS 15
Beijing, China. (25/07/2012)

37. *Study of microstructure, mechanical properties and thermal stability of CrxMo1-xN coatings for machining tools*
I. Rahil, C. Nouveau, L. Imhoff, A. Fabre, L. Barrallier, V. Potin, O. Heintz, B. Laganiere
13th International Conference on Plasma Surface Engineering (PSE2012)
Garmisch-Partenkirchen, Germany. (10/09/2012)

38. *Nitrogen pulsing to modify the properties of Chromium nitride thin films DC magnetron sputter deposited*
A. Zairi, N. Martin, C. Nouveau, A. Besnard, F. Herbst, O. Heintz, L. Imhoff, A. Iost, A. Ben Cheikhlarbi
13th International Conference on Plasma Surface Engineering (PSE2012)
Garmisch-Partenkirchen, Germany. (10/09/2012)

39. *Comparative Study of CrSiN films deposited using RF magnetron sputtering with constant and pulsed injection of Nitrogen*
A. Zairi, C. Nouveau, A. Besnard, N. Martin, F. Herbst, L. Imhoff, O. Heintz, A. Iost, A. Ben Cheikh Larbi
13th International Conference on Plasma Surface Engineering (PSE2012)
Garmisch-Partenkirchen, Germany. (10/09/2012)

40. *Multilayer structure of WC-CrN and nanocrystalline diamond coatings*
M. Walock, Y. Zou, F. Herbst, J. Montgomery, D. Lagadrillere, L. Imhoff, C. Nouveau, A. Stanishevsky, A. Besnard
13th International Conference on Plasma Surface Engineering (PSE2012)
Garmisch-Partenkirchen, Germany. (10/09/2012)

41. *Blue luminescence related to stacking faults in ZnO:Ag*
V. Khranovskyy, I. Tsiaoussis, V. Potin, S. Bourgeois, M. Eriksson, R. Yakimova
International Workshop "Zinc oxide and related materials" (IWZnO 2012)
Nice, France. (12/09/2012)

42. *Investigation of vapor phase grown Cu2O nanostructures on sapphire*
A. Wagner, I. Tsiaoussis, J. Stoemenos, P. Bela, M.C. Marco de Lucas, V. Potin, S. Bourgeois, A. Waag, A. Bakin
E MRS European Material Research Society Fall Meeting
Varsaw, Polang. (18/09/2012)

43. *Oxidation state study in Ptn+-CeOx catalyst on CNTs*
V. Potin, S. Bruyère, V. Matolín, I. Matolinova, M. Vorokhta, S. Bourgeois
International Conference on "Electron Microscopy Conference" (EMC 2012)
Manchester, united Kingdom. (20/09/2012)

44. *Etude de multicouches périodiques métal/oxyde par spectroscopie de perte d'énergie des électrons*
V. Potin, A. Cacucci, L. Imhoff, N. Martin
Colloque international 8ème édition des Journées de l'EELS (JEELS 2012)
Aix-les-Bains, France. (23/10/2012)

45. *Analyses EELS de films de CeO2 déposés sur feuillet carbone*
S. Bruyere, V. Potin, I. Matolinova, V. Matolin, M. Vorokhta, S. Bourgeois
8ème édition des Journées de l'EELS (JEELS 2012)
Aix-les-bains, France. (24/10/2012)

46. *Oxygen diffusion through uncompressed raw cork*
S. Lequin, J.-P. Bellat, J.-M. Simon, T. Karbowiak, D. Chassagne
MATBIM
Dijon, France. (22/04/2012)

47. *Selection and characterization of adsorbents for the analysis of explosive traces in the air*
Y. Mohse, J.P. Sanchez, F. Berger, H. Lahlou, I. Bezverkhyy, V. Fierro, G. Weber, A. Celzard, J.P. Bellat
The 14th International Meeting on Chemical Sensors (IMCS 2012)
Nürnberg, Germany. (20/05/2012)

48. *How does the statistical distribution function of the diffusion coefficient scales with system size?*
J.-M. Simon, P. Kruger, S. Lequin, T. Karbowiak, J.-P. Bellat
23th Sitges Conference on Statistical Mechanism
Barcelona, Spain. (04/06/2012)

49. *Influence on the size of NPs in the plasma plume induced by pulsed Laser Irradiation by using SAXS*
L. Lavisse, J.-L. Le Garrec, L. Hallo, J.-M. Jouvard , M. Girault, S. Carles, J.B.A. Mitchell, J. Decloux ,V. Potin ,H. Andrzejewski , M. C. Marco de Lucas, S. Bourgeois, J. Perez
8th SOLEIL Users Meeting
Saint Aubin, France. (22/01/2013)

50. *XPS and TEM study of periodic nanostructured tantalum oxide thin films*
L. Debbichi, B. Domenichini, A. Cacucci, O. Heintz, V. Potin, L. Imhoff & N. Martin
Journées Surfaces-Interfaces (JSI 2013)
Orléans, France. (30/01/2013)

51. *Real-Time ellipsometric spectra without systematics errors*
L. Broch, Y. Battie, A. En Naciri, A. Zimmer, N. Stein
6th International Conference on Spectroscopic Ellipsometry
Kyoto, Japon. (26/05/2013)

52. *Influence of flash annealing on structure and electrical properties of multilayered TiO2/TiO/Ti thin films*
A. Cacucci, I. Tsiaoussis, N. Martin, V. Potin, L. Imhoff
European Materials Research Society Spring Meeting (E-MRS)
Strasbourg, France. (27/05/2013)

53. *Chemical and structural characterization of periodic metal/oxide nanometric layers using STEM-EELS*
V. Potin, A. Cacucci, L. Imhoff, N. Martin
International Conference on "Enhanced Data Generated by Electrons" (EDGE 2013)
Sainte-Maxime, France. (27/05/2013)

54. *Protein conjugated silver nanoparticles: a transmission electron microscopy and surface enhanced Raman spectroscopy study*
S. Reymond-Laruinaz, L. Saviot, V. Potin, M.C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (28/05/2013)

55. *EELS analysis of CeOx films on C substrates*
S. Bruyère, V. Potin, V. Matolin, I. Matolinova, M. Vorokhta, S. Bourgeois
International Conference on "Enhanced Data Generated by Electrons" (EDGE 2013)

Sainte-Maxime, France. (28/05/2013)

56. *Simulation and experimental study of the plasma-plume induced by pulsed laser irradiation of metal targets*
M. Girault, L. Barillot, L. Lavisse, J.-L. Le Garrec, L. Hallo, J.-M. Jouvard, S. Carles, J.-M. A Mitchell, M. C. Marco de Lucas, S. Bourgeois
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (30/05/2013)

57. *Nanosecond IR laser treatments under controlled reactive gas mixtures for the insertion of light elements on the top of titanium targets*
F. Torrent, P. Berger, L. Lavisse, B. Dourthe, J. M. Jouvard, M. C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Strasbourg, France. (30/05/2013)

58. *CeOx catalyst layers deposited on carbon substrate*
J. Lavkova, S. Bruyère, V. Potin, M. Dubau, S. Haviar, I. Khalakhan, I. Matolinova, M. Vorokhta
XVIièmes Journées de l'Ecole Doctorale Carnot-Pasteur (JED)
Dijon, France. (30/05/2013)

59. *Elaboration of Nanostructured Coatings by Direct Liquid Injection Chemical Vapor Deposition*
L. Avril, J. Boudon, M.C. Marco de Lucas, L. Imhoff
= 8th International Conference on Surfaces, Coatings and NanoStructured Materials (NANOMAT)
Granada, Spain. (22/09/2013)

60. *Redox reactions in Pt/TiO2-WO3/SiO2 planar system*
J. Nazon, L. Imhoff, B. Domenichini, Z. Li, M. Chorro, Sylvie Bourgeois
8th International Conference on Surfaces, Coatings and NanoStructured Materials (NANOMAT)
Granada, Spain. (22/09/2013)

61. *Mise en évidence par spectroscopie infrarouge in situ de la flexibilité de la charpente de matériaux poreux au cours d'un phénomène d'adsorption*
G. Weber, A. Ballandras, J.-P. Bellat, I. Bezverkhyy, C. Paulin
29ème Réunion du Groupe Français des Zéolithes
Semur en Auxois, France. (26/03/2013)

61. *Décomposition de MIL-53(M) (M = Al, Fe) dans l'eau à 100°C*
I. Bezverkhyy, G. Ortiz, G. Chaplais, C. Marichal-Westrich, J.-P. Bellat
29ème Réunion du Groupe Français des Zéolithes 2013
Semur en Auxois, France. (26/03/2013)

62. *Comparison of the sticking coefficient of different gaseous molecules in silicalite-1 by molecular dynamics simulations*
J.M. Simon, J.P. Bellat
11th International Conference on the Fundamentals of Adsorption (FOA 2013)
Baltimore, USA. (19/05/2013)

63. *Interaction of water with a flexible MOF type gallium MIL-53*
J.P. Bellat, I. Bezverkhyy, G. Weber, A. Ballandras, G. Chaplais, G. Ortiz, J. Patarin, A. Boutin, D. Bousquet, A. Ortiz, F.X. Coudert, A. Fuchs
11th International Conference on the Fundamentals of Adsorption (FOA 2013)
Baltimore, USA. (19/05/2013)

64. *Growing a porous =CE=B3-AlO(OH) layer of tunable thickness on MIL-53(Al) particles*
I. Bezverkhyy, G. Ortiz, G. Chaplais, C. Marichal-Westrich, J.-.P. Bellat
17th International Conference on Zeolites (IZC17)
Moscow, Russia. (07/07/2013)

65. *Surface oxynitring of titanium metal by laser irradiation under controlled gas mixtures: influence of the O2/N2 partial pressure ratio*
F. Torrent, P. Berger, L. Lavisse, B. Dourthe, J. M. Jouvard, M. C. Marco de Lucas
E MRS European Material Research Society Spring Meeting
Lille, France. (29/05/2014)

66. *STEM-EELS characterization of metal oxides nanometric periodic multilayers*
V. Potin, A. Cacucci, N. Martin
Colloque international 9ème édition des Journées de l'EELS (JEELS 2014)
Roscoff, France. (23/06/2014)

67. *Cerium oxidation state in Pt-CeOx thin films for fuel cells applications*
P. Simon, N. Zanfoni, L. Avril, L. Imhoff, V. Potin, S. Bourgeois, B. Domenichini
Colloque “9ème édition des Journées de l'EELS” (JEELS 2014)
Roscoff, France. (24/06/2014)

68. *TEM analysis of Pt-CeOx nanocatalysts on carbon nanotubes*
P. Simon, J. Lavkova, V. Potin, M. Dubau, I. Matolínov=C3=A1, V. Matolín
ANM 5th International Conference on Advanced Nanomaterials

Aveiro, Portugal. (03/07/2014)

69. *Hydrolysis Mechanism of Lithium Hydride*
J. Guichard, E. Sciora, F. Bouyer, F.Bernard, H. Lecoq, J.P. Bellat
14th International Symposium on Metal-Hydrogen Systems
Manchester, UK. (10/07/2014)

70. *SERS study of ultrathin atomic layer deposited TiO2 films*
S. Reymond-Laruinaz, L. Avril, L. Imhoff, V. Potin, M.C. Marco de Lucas
XXIV International Conference on Raman Spectroscopy (ICORS 2014)
Iena, Germany. (14/08/2014)

71. *THz acoustic vibrations in self-assembled ZrO2 nanoparticles*
L. Saviot, D. B. Murray, G. Caputo, M. C. Marco de Lucas, N. Pinna
XXIV International Conference on Raman Spectroscopy (ICORS 2014)
Iena, Germany. (14/08/2014)

72. *Oxidation state of cerium in ceria based catalyst thin films deposited by MOCVD*
P. Simon, N. Zanfoni, L. Avril, L. Imhoff, V. Potin, S. Bourgeois, B. Domenichini
Workshop "Advanced Electron Microscopy for Catalysis" (EMCAT 2014)
Seeon Monastery, Germany. (04/09/2014)

73. *Blue luminescence related to stacking faults in ZnO:Ag*
I. Tsiaoussis, V. Potin, S. Bourgeois, V. Khranovskyy, M. Eriksson, R. Yakimova
18th International Microscopy Congress (IMC 2014)
Prague, Czech Republic. (09/09/2014)

74. *Relationships between elaboration conditions, structural parameters and electrical properties in metal oxides nanometric periodic multilayers*
V. Potin, A. Cacucci, N. Martin
18th International Microscopy Congress (IMC 2014)
Prague, Czech Republic. (09/09/2014)

75. *Active role of carbon during the formation of porous cerium oxide layer used as catalyst in fuel cell*
J. Lavkova, I. Khalakhan, M. Chundak, S. Haviar, V. Potin, I. Matolinova
18th International Microscopy Congress (IMC 2014)
Prague, Czech Republic. (09/09/2014)

76. *HRTEM and STEM-EELS study of thin films Pt-CeOx nanocatalysts for on-chip fuel cell technology*
P. Simon, J. Lavkova, V. Potin, M. Dubau, I. Matolinova & V. Matolin
18th International Microscopy Congress (IMC 2014)
Prague, Czech Republic. (09/09/2014)

77. *Crystallographic structure and oxidation state of cerium in Pt-doped cerium oxide thin films deposited by CVD*
P. Simon, N. Zanfoni, L. Avril, L. Imhoff, V. Potin, S. Bourgeois, B. Domenichini
18th International Microscopy Congress" (IMC 2014)
Prague, Czech Republic. (09/09/2014)

78. *Mo(CO)6 molecular dynamics and dissociation on Cu(111) stimulated by Scanning Tunneling Microscope*
M. Petukhov, C. Dupont, P. Krüger
16th Workshop on Dynamical Phenomena at Surfaces
Madrid, Spain. (30/10/2014)

79. *Diffusion of oxygen in cork: Knudsen or Fick regime?*
A. Tachon, T. Karbowiak, J.-M. Simon, R. Gougeon, J.-P. Bellat
Wine active compounds
Beaune, France. (01/03/2014)

80. *Calculating Kirkwood-Buff integrals from molecular dynamics simulations on Small systems*
P. Englebienne, S.K. Schnell, J.-M. Simon, T.J.H. Vlugt
ESAT 2014
Eindhoven, The Netherlands. (01/07/2014)

81. *Adsorption isotherm of the N2-CO equimolar mixture in clathrate at 50 K - Implications for the composition of solid bodies of the outer Solar System*
S. Lectez, J.-M. Simon, O. Mousis, J.-M. Salazar, S. Picaud
ESPC2014
Estoril Cascais, Portugal. (01/09/2014)

82. *Calculations of subvolume density fluctuations to characterize phase transitions in polydisperse charged colloidal dispersions*
G. Bareigts, C. Labbez, J.-M. Simon
Nanothermodynamics Lorentz Center
Leiden, The Netherlands. (04/12/2014)

83. *Incorporation of gold nanoparticles in a TiO2 matrix using direct liquid injection MOCVD*
L. Avril, P. Simon, J. Boudon, B. Domenichini, M.C. Marco de Lucas, L. Imhoff, S. Bourgeois
8th Or-Nano conference
Paris, France. (23/03/2015)

84. *Elaboration and Chemical Characterization of Porous Cerium Oxide Thin Films Grown on Carbon Foil Substrate*
P. Simon, N. Zanfoni, L. Avril, J. Lavkova, I. Matolínov=C3=A1, V. Potin, L. Imhoff, B. Domenichini, S. Bourgeois
ANM 6th International Conference on Advanced Nanomaterials
Aveiro, Portugal. (22/07/2015)

85. *Platinum doped cerium oxide layers on nitrogenated carbon: from primary microscopic study to fuel cell application*
J. Lavkova, M. Dubau, V. Potin, I. Matolinova, V. Matolin
Microscopy conference 2015 (MC 2015)
Göttingen, Germany. (10/09/2015)

86. *WOx films sputter deposited by glad and gas pulsing*
Xiaolong Xu, M. Yazdi, J-Y Rauch, R. Salut, A. Billard, V. Potin, N. Martin
Innovations in Thin Films Processing and Characterization (ITFPC 15)
Nancy, France. (17/11/2015)

87. *Diffusion mechanisms in cork*
A. Lagorce-Tachon, T. Karbowiak, C. Loupiac, J.-M. Simon, R. Gougeon, J.-P. Bellat
MATBIM 2015
Zaragoza, Spain. (17/06/2015)

II.6.3. Academic appeal & reputation indicators

II.6.3.1. Department ICQ

- **ITN Marie Curie « FASTQUAST »** (2008-12) (coordinators: S. Guérin, HR Jauslin, 5M€)

  The FastQuast Project is a joint effort of 13 University Laboratories and Industries in the high-tech field of *Ultrafast control of quantum systems by strong laser fields* aiming mainly at training early stage researchers. FastQuast addresses the control of atoms and molecules by laser at the femtosecond scale; it covers the handling of molecules, ultrafast spectroscopy and microscopy, control of chemical reactions, production of attosecond XUV pulses, ultrafast quantum information processing, manipulation and characterization of single-photon ultrashort pulses, ultrafast quantum memory, laser filamentation, and the production of new versatile robust tunable UV ultrashort sources.
- **European FP7 Network QUAINT** (coordinator I. Krypov (U.K)), D. Sugny, local coordinator, on the optimal control of quantum systems (2012-2015, 400 k€)
- **ANR-DFG project Explosys** on the optimal control of spin systems with applications to medical imaging (500 k€, Coordinator: D. Sugny, 2015-2018).
- D. Sugny: **Hans Fisher fellowship** funded by the University of Munich and the Marie Curie COFUND program (prize 30 000 € + 250 000 € for the research project).
- **ANR CoMoC** project on the control of molecular processes (Coordinator: S. Guérin, 2007-2011, 500k€)
- **ANR Coconics**, project on the control of large molecular processes (coordinator F. Gatti, U. Montpellier, local coordinators S. Guérin and E.Hertz, PFL, 2013-2016, 450 k€).
- **ANR CH_4@Titan** (coordinator A. Coustenis, LESIA Meudon, local coordinator V. Boudon), in-depth study of the methane absorption in Titan's atmosphere (2009–2012, 565 k€).
- **European FP7 Network "Research Infrastructures" VAMDC** (*Virtual Atomic and Molecular Data Centre*, coordinator M.-L. Dubernet, LERMA2 Paris, local coordinator V. Boudon), setup of databases of calculated spectroscopic line lists, included in an international portal dedicated to the access to atomic and molecular data (2010–2013, 16 k€ for SMPCA).
- **Laboratoire International Associé CNRS- National Academy of Sciences of Armenia LIA-IRMAS** "Interaction of radiation with matter: From atoms to solids" (French coordinator Claude Leroy). Participant laboratories: ICB, (UMR 6303) CNRS, Laboratoire de Physico-Chimie des Matériaux Luminescents (LPCML, later ILM) – UMR 5620 CNRS (Lyon), Institute for Physical Research (IPR) Ashtarak, Armenia.
- 2010-2014: **European project FP7-ERA WIDE « IPERA »**. Consortium associating the LIA IRMAS and Consultant Intelligentsia (UK), coordinated by A. Papoyan (IPR) and C. Leroy (ICB).
- C. Leroy has been awarded **"Certificates of Honour"** by the National Academy of Sciences of Armenia (2014) and by the State Committee of Science of Armenia (2013) for his outstanding contributions to the scientific cooperation between France and Armenia.
- **CNRS PICS** project France-Germany (coordinator: D. Sugny) on the optimal control of spin dynamics (2013-2015, 4k€ each year).
- **CNRS PEPS** project (coordinator: D. Sugny) on the relaxation of nonlinear waves in optical fibers (2014, 4k€).
- D. Sugny: member of the **INRIA team GECO** on the geometric optimal control of quantum systems (2011-2015)
- D. Sugny: Coordinator of the **France-Bayern project** on the optimal control of spin dynamics (2013, 4.5 k€).
- D. Sugny: Member of the **US. NSF project** on the geometric control of quantum systems (2011-2014, 100 k€).
- **CNRS PEPS** project (coordinator: D. Sugny) on the singularities of dynamical systems (2010, 4k€).
- D. Sugny: **Invited professor** 7 months in 2012, 7 months in 2015 at TU München. (Pr. S. Glaser) and 1 month in 2013 at the University of Hawaii (Pr. M. Chyba).
- S. Guérin: **European Project BALATON**, **PHC (**Hubert Curien program) France (Dijon) – Hungary (Budapest), N° 30503YD (2013-2014).
- **PCMI** (Programme National de Physique Chimie du Milieu Interstellaire, INSU/CNRS) 2014-2015: "Chimie des espèces hydrogénées dans l'univers primordial et les milieux diffus : vers des calculs quantiques exacts".
- **CEFIPRA/IFCPAR** collaborative research project between India and France:"Nonadiabatic quantum reactive scattering dynamics on multi-sheeted potential energy surface" 2011-2014.
- **PCMI** (Programme National de Physique Chimie du Milieu Interstellaire, INSU/CNRS) 2011-2013: "Etudes théoriques de processus réactifs mettant en jeu l'oxygène moléculaire interstellaire".
- **LEFE-CHAT** (Les Enveloppes Fluides et l'Environnement-Chimie atmosphérique, INSU/CNRS) 2012-2013: "Etude théorique de la réactivité du radical hydroxyle OH avec l'oxygène dans l'atmosphère terrestre : détermination de l'abondance du complexe HO_3".
- **LEFE-CHAT** (Les Enveloppes Fluides et l'Environnement-Chimie atmosphérique, INSU/CNRS) 2014-2015 : "Mesure et analyse des bandes de combinaison intervenant dans les bandes chaudes de SF_6".
- **PNP** (Programme National de Planétologie) 2013_2014 : "Mesure et modélisation de l'opacitédes planets extrasolaires de type Jupiter chaud et Neptune chaud", projet mené par l'IPR à Rennes.

- **PEPS** "Physique Théorique et ses Interfaces" 2010-2011: "Theory of the few-body systems in atomic and molecular physic: fundamental science and applications".
- **PHP** (Programme Hubert Curien) "Tournesol" 2014-2015 avec l'ULB (Bruxelles) : "Mesure et modélisation des intensités d'absorption et d'émission du methane pour applications aux atmospheres planétaires".
- *The SMPCA group is also:*
  - Member of the international Associated Laboratory **LIA « SAMIA** » (France-Russia).
  - Member of the **OSU THETA** « Terre-Homme-Environnement-Temps-Astronomie » of Franche-Comté-Bourgogne. V.Boudon is member of its Scientific Committee.
  - Member of the European Consortium **(MoU) VAMDC** (« *Virtual Atomic and Molecular Data Centre* »).
  - Member of the **GdR CNRS 3152 « SpecMo »** de Spectroscopie Moléculaire. Directed by Vincent Boudon.
- V. Boudon is co-host (with Franck Delahaye) of the **Pôle Thématique « Atomes et Molécules » of INSU**.
- V. Boudon is member of the international committee of the database consortium **HITRAN**.
- V. Boudon is elected member of the **Comité des Utilisateurs du Synchrotron SOLEIL** (ORGUES), depuis 2013.
- P. Honvault is member of the bureau and co-founder of the **GDR THEMS** No 3575 (CNRS-INP.),"dynamique quantique de systèmes moléculaires: théorie, modélisation, simulation" since 2013.
- P. Honvault is member of the **Comité National CNRS Section 04** (2012-16).
- D. Sugny was member of the **CNU section 30** (2010-2014), member of the board (2013-2014).
- V. Boudon is member of the Scientific Committee and local Chairman of the Conference series on High Resolution Molecular Spectroscopy.
- H.R. Jauslin was the head of an integrated project in the framework of the program "PARI" of the Conseil Régional de Bourgogne, in the domain "Control and characterization of matter by lasers" (2009-2014).

II.6.3.2. Department Photonics

A. International and national boards and councils

- G. Millot, Member of the national council of the CNRS, section 04 from 2008 to 2012, and member of the evaluation committee for the National Research Agency (ANR), SIMI4, CDS32.
- G. Colas-des-Francs, Member of the evaluation committee for the National Research Agency (ANR), CES24.
- O. Faucher, Member of the National Council of Universities (section 30) from 2011 to 2015.

B. Participation in scientific networks

- O. Faucher member of the steering committee of the Femtosecond Technology Network (FEMTO) of the CNRS mission for interdisciplinary.
- O. Faucher, B. Lavorel, members of the molecular spectroscopy network (GDR specMo) of the CNRS
- A. Bouhelier, F. de Fornel, B. Cluzel, Members of the wave network of the CNRS (GDR onde)
- F. Smektala, Member of the COST (European Cooperation in Science and Technology) MP1401, Fiber Laser.
- G. Colas-des-Francs, Member of the COST "plasmonic components and devices", 2008-2012

C. Prizes and awards

- F. de Fornel, Fellow EOS (2011).
- P. Bejot, Vacheron Constantin Prize, University of Geneva, (2011).
- G. Millot, Prize of The iXcore foundation(2011).
- B. Kibler, CNRS Bronze medal for research activities in optics linked to hydrodynamics (2012).
- G. Millot, Fellow OSA (2012).
- Ph. Grelu, Outstanding Reviewer award from the OSA (2013).

D. Recruitment, guest researchers

Recruitments : P. Béjot, CR CNRS (2011), K. Hammani, MCF UB (2013), M. Petit, IE CNRS (2012), J. Marot, Techn UB (2014), O. Demichel, CR CNRS (2014), A. Coillet MCF UB (2015).

Guest researchers : Pr. S. Couris, (University of Patras, Greece, 1 month, 2010), Prof. J.M. Soto-Crespo (CSIC Madrid, 1 month, 2010), Prof. N. Akhmediev (Univ. Canberra, 2 months, 2010 and 2014) ; Pr. K. Shcherbin (Univ. Kiev, 2 month, 2011 and 2013), Dr. C.M. Ngabireng (Univ. Yaoundé, 1 month, 2011), Pr. J.N. Kutz (Univ. of Washington, 1 month, 2012), Pr. B. Sturman (1 month, 2012), Pr. S. Wabnitz (Univ. Brescia, Italy, 4 months, 2013-2014) Pr. S. Trillo (Univ. Ferrara, Italy, 1 month, 2013), Pr. C. Conti (Univ. Roma, Italy, 1 month, 2013), Pr. H. Zeng (East Normal University ; China, 1month, 2014), Dr. M. Conforti (Italy, 1 month, 2013), Dr. A. Chabchoub, (Finland, 1 month, 2014), Dr. A. Mussot (Univ. Lille, 1 month, 2013).

E. Organisation of scientific events

E.1. Organization

- G. Colas-des-Francs, co-organizer of the session "Nanophotonique and Plasmonique", JMC12, Troyes, France, 24-27 August (2010).
- Ph. Grelu, Organizer of the workshop "Advances in nonlinear optical cavity dynamics," PIERS, Marrakesh 20-23 March 2011.
- A. Bouhelier, Organizer of the meeting "wave" Network meeting (GDR ondes), "Numerical modelling from visible to THZ and molecular plasmonic", Troyes, France, (2011).
- G. Colas-des-Francs, co-organizer of the E-MRS symposium "Control of light at the nanoscale", Strasbourg, France, May 14-18, (2012).
- A. Bouhelier, Organizer of the meeting "wave" Network meeting (GDR ondes), "Micro and nano devices, form Optics to micro-waves", Dijon, France, (2012).
- F. de Fornel, Organizer of general assembly of research group "waves" (GDR Ondes), Dijon, France, October 28-30 (2013).
- F. de Fornel Organizer of scientific assembly of URSI France : 'Electromagnetism "Paris, France, March 26-27 (2013).
- O. Faucher, E. Hertz, Organization of ECONOS (European Conference on Non-Linear Optical Spectroscopy), Dôle, France, May 11-14, (2014).

E.2. Scientific committees

- Ph. Grelu, International Conference in Optics, Photonics and Applications, ICOPA'10, Alger, Algeria 13-15 Dec 2010.
- Ph. Grelu, CLEO/Europe-EQEC 2011 « Dynamics, Instabilities, and Patterns » 22-26 May, Münich, Germany (2011).
- O. Faucher, CLEO/Europe-EQEC 2011 « High-field Laser Physics and Attosecond Technologies » 22-26 May, Münich, Germany (2011).
- A. Picozzi, Ecole de Physique des Houches, Wave turbulence, Les Houches, France, Mars 2012.
- Ph. Grelu, Nonlinear Photonics (OSA), Colorado Springs, United States. 17-21 June (2012).
- Ph. Grelu, IQEC 2013, « Dynamics, Solitons, and Patterns », International Quantum Electronics Conference, Munich, CLEO/Europe-IQEC, Germany 12-16 May 2013.
- G. Millot, Workshop on Laser and Quantum Optics since 2002
- G. Millot, CLEO-Europe 2013 and 2015: Applications of non-linear Optics.
- A. Picozzi, International Conference on Coherent and Nonlinear Optics, Moscow, Russian, 18-22 June, 2013
- Ph. Grelu, CSDC 2013, Conférence sur les Systèmes Dynamiques Complexes, Alger 10-13 Juin 2013.
- F. de Fornel : Head of URSI-France 2012-2015
- Ph. Grelu, ICOPA'13, International Conference on Optics, Photonics and their Applications, Alger 9-11 Décembre 2013.
- G. Millot, French-Israeli Symposium in Non-linear and Quantum Optics (FRISNO) since 2014.
- Ph. Grelu, Nonlinear Photonics, Barcelona, Spain, 27 - 31 July 2014.
- Ph. Grelu, " Fiber and Waveguide Devices" Europhoton, Neuchâtel, Switzerland, 24-29 August 2014.
- Ph. Grelu, EQEC 2015, European Quantum Electronics Conference, CLEO/Europe-EQEC, Munich, Germany June 2015.

E.3. Organization committees

- B. Lavorel, O. Faucher, E. Hertz, F. Chaussard, Organization committee of symposium HRMS (High resolution Molecular Spectroscopy), Dijon, France, August 29th -September 2, (2011).
- A. Bouhelier, contribution to the organization of the "wave" network (GDR ondes) meeting, Dijon,France, (2013).
- B. Lavorel, O. Faucher, E. Hertz, F. Chaussard Organization of ECONOS (European Conference on Non-Linear Optical Spectroscopy), Dôle, France, May 11-14, (2014).
- F. Smektala, Summer school "INNOV Fibre 2014", Urrugne, France, June 23-27, (2014).
- B. Lavorel, O. Faucher, E. Hertz, F. Chaussard, Organization committee of symposium HRMS (High resolution Molecular Spectroscopy), Dijon, France, August 24th-28th (2015).

E.4. Editorial boards

- A. Bouhelier, Associate Editor, Optics Express from 2008 to 2014.
- F. de Fornel, J. Zyss : Guest editor for : *"Nanophotonics and near-field »"*, Comptes Rendus de l'Académie des Sciences, Physique, Elsevier, October 2012
- Ph. Grelu, Guest Editor for Optical Fiber Technology, Special Issue on « Short Pulse Fiber Lasers », Vol. 20, Issue 6, December 2014.

- F. de Fornel, Guest editor for : *"Electromagnetism"*, Comptes Rendus de l'Académie des Sciences Physique, Elsevier, 15,5, May 2014.
- F. de Fornel, member of the editorial board of Comptes Rendus Physique de l'Académie des Sciences
- F. de Fornel , member of editorial council of ISTE, Waves collection since 2014.

E.5. Chapters of books

"*Optically probed laser-induced field-free molecular alignment*" by O. Faucher, B. Lavorel, E. Hertz, et F. Chaussard, Progress in Ultrafast Intense Laser Science VII, Springer Series in Chemical Physics, vol. 100 (2011).

"*Optical diagnostics with ultrafast and strong field Raman techniques*" by F. Chaussard, E. Hertz, B. Lavorel, and O. Faucher (Springer), Progress in ultrafast phenomena in molecular sciences, Springer Series in Femtosecond Physics and Chemistry, vol. 107 (2014).

F. Contracts

See summaries in tables I.5 and I.6 in section I.1.4 "Striking facts". The detailed list is in Appendix 7.

Highlights since 2010 (see Table I.5): 2 ERC grants, Participation to 3 European projects, 1 LABEX, 12 ANR projects and 1 regional project

II.6.3.3. Department Nanosciences

A. International and national boards and councils

- N. Millot is member and assessor of **"commission de proposition" for CNU** sections 31, 32, 33 and at the Université de Bourgogne (2014-)
- N. Millot is member of **GDR Imagiv** (2009-)
- P. Senet: member of the **AERES** expert committee for the evaluation of the CNRS UPR 9080 "Laboratoire de Biochimie Théorique" (Université Paris VII) in december 2012
- P. Senet member and assessor of **"commission de proposition" for CNU** sections 28, 29, 30 at the University of Bourgogne (2012-2014)

B. Participation in scientific networks

- A. Dereux is coordinator of the **PIA2 ISITE-BFC** (Initiative for the SITE Bourgogne Franche-Comté) project that was preselected in April 2015 (Final selection in January 2016).
- A. Dereux is coordinator of the regional project **PARI NANO2BIO**
- L. Saviot is local PI in **ANR Fenoptics**
- N. Millot is PI of the project P6 "Nanomaterials for biomedical applications" in the **3MIM (Metal Markers for Medical Imaging) consortium** (CNRS/Université de Bourgogne/Région Bourgogne) (2009-2016)
- N. Millot is PI of the workpackage "Nanoparticles" of **Equipex IMAPPI** (Integrated resonance and positron emission tomography in preclinical imaging) (2011-2019)
- N. Millot is co-PI of a project funded by the **Ligue contre le cancer Grand-Est**
- N. Millot is the initiator and coordinator of the platform **Nanocare-Bourgogne** (2013-)
- **BQR PRES (UB-UFC) Biodistribution of nanoparticles for biomedical applications in cancer therapy (2012-2013) (PI N. Millot)**
- E. Lesniewska is member of ANR MUFFIN coordinated by INRA
- The Dept. contributes to the **LABEX ACTION** (E. Finot, E. Lesniewska, E.Bourillot, PIs of DEMO 4 & 5 and WP4 of LABEX ACTION)
- The Dept. contributes to the **CARNOT ARTS** (SMM project: PIs E. Lesniewska, E. Bourillot)
- **CNRS PEPS « Physique Théorique et ses interactions » (PI: P. Senet) « Capteur à Proteines Universel Quantique**
- The Nano Dept. (local PI, P. Senet) is partner of a high-level **international core-core network** between Belgium (Leuven), France (ENS Lyon, Université Lyon 1, Université de Bordeaux, Université de Bourgogne), Germany (Humboldt Universität Berlin) & Japan (Hokkaido University, Prof. T. Komatsuzaki, Japan) on "Creations and Developments of Molecular Data Science to Represent Complex Chemical Systems in Diverse Micro-environments"
- P. Senet, foreign expert for the National Fund of Research Vlanderen (NFWO, Belgium) in the Chemistry section
- P. Senet: member (visiting scholar) of the Baker laboratory of Chemistry and Chemical Biology, Cornell University, USA, sponsor exception funded by the **NIH grant** (GM-14312) (2007-2015)

C. Prizes and awards

- A. Dereux has been awarded the **2015 Silver Medal of CNRS** (Institut National de Physique)

D. Recruitment, guest researchers

- The Nano Dept. hosted **16 postdocs** : F. Sicard (2011-2012) (CRB), J. Boudon (2010-2011) (CRB), R. Mayap Talom (2011-2012) (CRB), L. Debbichi (2012-2013) (CRB), K. Abdelkebir (2013), K. Messaad (2010-2012) (ANR), M. Baranowska (2010-2011) (ANR), S. Pleskova (2012) (CRB), D. Carriou (2014), T. Courant (2014-2015) (CRB), Houssam Hajjoul (2011-12)(OSEO), A. Papa (2010) (OSEO), V. Bellat (2013) (CRB-Welience), Hélène Yockell-Lelièvre (2011-2012) (EU-SPEDOC), Padmnabh Rai (2012-2013) (EU-SPEDOC), J. Margueritat (2010-2011) (EU-SPEDOC)
- The Nano Dept. hosted **5 invited professors:** Pr. K. Nouneh (2012) (University Ibn Tofail Kenitra, Maroc), Pr. M. Adnane (every year since 2010) (Oran University, Algeria), Pr. V. Meunier (2014) (RPI, USA), Pr. T. Komatsuzaki (2015) (RIES, Hokkaido University, Japan), Pr.Z. Leonenko (2013,Canada).

E. Organisation of scientific events

E.1. Organization

- Members of the Dept. (E. Lesniewska and E. Finot) have organized the 15th International Scanning Probe Microscopy ISPM conference in Dijon 2013 (http://ispm2013.ubourgogne.fr).
- Nadine Millot co-organiser (with Prof. Sylvie Bégin-Colin) of Nanohybrides 7, 2 - 6 mai 2010 à Porquerolles (Var)
- N. Millot was **chairwoman** de l'EMRS Spring Meeting 2013 (Strasbourg)

E.2. Scientific committees

- A. Dereux : Member of Steering Committee of the conference series "Surface Plasmon Photonics » since 2007; chair of this committee during 2007-2013.
- Member of the Scientific committee : Conference BRAMAT 2009 and 2011 (International Conference on Materials Science & Engineering, Brasov, Roumanie) ; Member of the International Advisor Committee : Conference BRAMAT 2013 and 2015 (D. Chaumont)

E.3. Organization committees

- A. Leray member of the organizatio commitee of "5èmes journées scientifiques et techniques du réseau des microscopistes INRA » 12 to 14 November 2014 (Dijon)

E.4. Editorial boards

- P. Senet, review Editor of “Frontiers in Molecular Biosciences” http://journal.frontiersin.org/journal/molecular-biosciences/section/structural-biology
- N. Millot is member of the Editorial Board of "The Scientific World Journal" (2012-)

E.5. Chapters of books

- Ling Hu, Aurélien Percheron, Denis Chaumont, Claire-Hélène Brachais

  « Microwave synthesis of core-shell structured biocompatible magnetic nanohybrids in aqueous medium »,

  in « Microwave Heating », Dr. Usha Chandra (Ed.), 2011, ISBN: 978-953-307-573-0, InTech, DOI: 10.5772/23381.
- Luís Cunha, Denis Chaumont (CO-EDITEUR special issue) and Aldo Craievich, "Nanostructured Materials: Formation, Characterization, and Properties - Latest Advances in 1D, 2D, and 3D Nanostructures”, Advances in Materials Science and Engineering, vol. 2014
- A. Nicolaï, P. Delarue, P. Senet « Chapter 18: Low-frequency, functional, modes of proteins: all-atom and coarse-grained normal mode analysis (46 pages) » in “Computational methods to study the structure and dynamics of biomolecules and biomolecular processes – from bioinformatics to molecular quantum mechanics, Springer Verlag (2014), Editor A. Liwo.
- L. Saviot, A. Mermet & E. Duval, « Acoustic Vibrations in Nanoparticles », in "Nanoparticles and Quantum Dots, Handbook of Nanophysics", edited by K. D. Sattler (CRC Press, 2010) Chap. 11, 17 pages
- J. Boudon, A.L. Papa, J. Paris, N. Millot « Titanate nanotubes as a versatile platform for nanomedicine », in Nanomedicine (One Central Press, UK 2014)
- N. Millot & J.C. Nièpce, «Cristallographie Géométrique – Cours, Exercices et Problèmes corrigés », Editions Lavoisier, Paris (février 2014) 266 pages

F. Contracts

The detailed list is in Appendix 7. Highlights since 2010 are:

- **European FP7 IP PhoxTroT** (with members of the Photonics Dept.) (2012-201, PI A. Dereux)
- **European FP7 STREP Platon** (with members of Photonics Dept.) (2010-2012, PI A. Dereux)
- **European FP7 STREP SPEDOC** (2010-2012, PI A. Dereux)
- **European H2020 STREP Plasmofab** with members of Photonics Dept.) (2016-2019, PI A. Dereux)
- **ANR HS-Bio-Imaging** (2009-2012) (PI E. Lesniewska)
- **ANR HSBioAFM** (PI E. Lesniewska) (2009-2012)

II.6.3.4. Department PMDM

A. Expertise and contribution in university-regional-national boards

- **ICB laboratory,** F. Bernard and P. Sallamand were respectively Directors of NANO and IRM departments (2011-2015).
- S. Chevalier and D. Grevey (who became DRRT in 2014) were respectively **Vice-President of the university of Bourgogne** until 2012 **in charge of Curricula and Professional Insertion of students** and in **charge of Technological Transfer**
- F.Bernard was also **President of "commission de proposition" for CNU** sections 31,32 and 33 during three years (2011-2014)
- S. Chevalier is **member of the Academic board** of the university.
- O. Politano is **member of the Scientific board** of the university.
- S. Chevalier is **scientific leader of a program labelled in the case of the "Investments for the Future"** launched by the French Government in 2012: IDEFI TalentCampus (ANR-11-IDFI-0035) in the field of soft skill development.
- G. Caboche is actually the **director of ESIREM engineering school**
- O. Politano is the responsible of the Simulation and Computing Centre (CCuB) at uB.
- Bernard is in charge of the **coordination for the university of all activities in direct connection with metallurgy** such as the "Maison de la métallurgie" and the Institute of Research and Technology (IRT M2P) located in Lorraine.
- At the level of **Regional institutions** (CRB, PNB Cluster)-P. Sallamand is responsible of the axis "Materials and Process" dealing with the financial support of the Burgundy Regional Council for research.
- PMDM axis is also involved in **the cluster "Pôle de l'Industrie Nucléaire en Bourgogne"** (PNB) in which F. Bernard and T. Montesin are active members of the scientific council.
- V. Vignal manage the **Common Research Laboratory with CEA Valduc (LRC)**,
- V. Vignal is the **scientific advisor for the director** of CEA Valduc.
- S. Chevalier who is **expert for HCERES in the evaluation of universities** (section 1)

B. Participation in scientific networks and projects

- ANR projects (12, **4 ongoing**)
- FUI programs (5, **4 ongoing**)
- DGA (5, **3 ongoing**), ADEME (2)
- CNES (**1 ongoing**)
- Collaboration with industrial partners (more than 100)
- E.Bernard is member of **ANR "ASTRID-DGA"** evaluation committee (2013-2015)
- **"Industrial Chair"** was installed for the recruitment of a Professor at ICB with AREVA NP
- **Common research lab (LRC) between ICB and CEA Valduc** (LIMPE) on electrochemical corrosion
- **Joint laboratory with company LRA (ANR LabCom FLAMme)** for further exploration of dissimilar joining by laser
- **GDR CNRS** (EVAPE, EVACOHT, SAM, ONDE, SPS, MATMOD, Nanoalliages), **GDRI** X-FEL, RNC surfaces), PLASMA FROID, Club EDF surface, association Titane, LIBS community
- P. Sallamand is the leader of Carnot-Arts connexions and development for ICB laboratory

C. Involvement in conference management

- Organizers of Conferences on Materials (2010 at Nantes and 2014 at Montpellier)
- S. Chevalier and O. Politano were chairmen of the 11th International Conference on Diffusion in Materials in 2011 in Dijon, 250 attendees
- S. Le Gallet organized the "Journées du GFC" on March 2015 with more than 150 researchers
- 1st **"France-Japan Symposium on Advanced Materials Key Role in Enabling Best Energy Future: *Towards reliable, durable and safe materials for energy production and storage*"** (Tokyo 2014) chaired by S. Chevalier and Y. Bréchet
- CECAM workshop organized by F. Baras

D. Scientific boards of International conferences

(HTPCM 2012-Les Embiez-France, DIMAT 2014-Muenster-Germany, ISHOC 2014-Hakodate-Japan, PACRIM 2013-San Diego, SHS 2013-South Padre, HIP 2014- Stockholm, …)Active members of scientific societes (SFT, CLP, CEFRACOR, SF2M, GFC, National Network of Metallurgy,…). F. Bernard was member of the SF2M council and also President of the PMF (powders and sintered materials) community (SF2M-GFC) fortwo years

E. Review of articles in international scientific journals

Acta Materialia, Applied Surface Science, Chemical Engineering Journal, Corrosion Sciences, International Journal of Thermal Sciences, Journal of Alloys and Compounds, Journal of American Ceramic Society, Journal of European

Ceramic Society, Journal of Laser Applications, Journal of Materials Research, Journal of Materials Science, Journal of Nuclear Materials, Journal of Physics D: Applied Physics, Journal of Supercritical Fluids, Laser in Engineering, Materials Science and engineering A, Materials Science Forum, Optics & Laser Technology, Oxidation of Metals Surface and Coatings Technology, Philosophical Magazine, Rapid Prototyping Journal, Scripta Metallurgical, Solid State Ionics, ...). Moreover, F. Bernard is the regional editor for « Europe and North Africa » of the journal « International Journal of SHS » edited by Springer

II.6.3.5. Department Interfaces

A. International and national boards and councils

• B. Domenichini (2012-2017): elected member of National Committee for Scientific Research (CoCNRS), sec. 14

• S. Bourgeois (2008-12): nominated member of CoCNRS, member of the board, sec. 14

• J.M. Simon (2011-2015): elected substitute member of National Committee for Universities (CNU), sec. 31

• S. Bourgeois (since 2013): nominated to administration Council of French Vacuum Society (SFV)

• J.P. Bellat (2011-14): member of the board of the Adsorption French Association (AFA)

• J.P. Bellat (since 2011): member of the board of the International Adsorption Society (IAS)

• I. Bezverkhyy (since 2015): member of the board of the Adsorption French Association (AFA)

• R.Oltra (since 2011) WP leader of WP « Matériaux fonctionnalisés» LABEX ACTION

• J. Rossignol (2008-12): member of Scientific Council of Burgundy University, member of the board

B. Participation in scientific networks

• R.Oltra is Chairman of the scientific board of ARC "ENERGIES" – Région Rhône Alpes (since 2010)

• J. Rossignol is member in COST EUNETAIR (Europ. Net. New Sensing Technologies for Air-Pollution Control and Environmental Sustainability) (since 2012)

• P. Pribetich & D. Stuerga: memb. of Electromagnetics Acad. and Who's Who in Electromagnetics of MIT (since 1997)

• D. Stuerga is member of IEEE (Institute of Electrical and Electronics Engineers) since 1997

• J.M. Simon: member of the GDR « Thermodynamics and Processes » (since 2012)
• A. Nonat, C. Labbez, S. Gauffinet: Members of europeen consortium NANOCEM (since 2004)
• C. Labbez, member of the GDR AMC2 « Multiphysics approaches for Concentrated Colloids » (since 2014)
• S. Gauffinet, member of the GFC « French ceramics Group » (since 2013)
• A.Nonat, member of RILEM « Int. union of lab. and Experts in Construction mat., systems & structures » (since 1990)

C. Prizes and awards

• V. Potin: best oral presentation in "Advanced Nanomaterials" conference (ANM 2014)
• J. Lavkova: two "Best student oral presentation" in "EMRS Fall meeting 2014" (at two different sessions)
• A Cacucci: "Best student oral presentation" in 2012"

D. Recruitment, guest researchers

• **Recruitments**: C. Dupont CR2-CNRS, section 14 – 2012; M. Herbst Tech-UB - 2013; C. Borkowski AI-CNRS – 2014

• **Invited Professors or scientists**: Prof. C. R. Natoli (University of Frascati, 6 months, 2012), Prof. A. Verdini (ELETTRA, 2 months, 2010 & 2014), A Navaras (University of Salamanca, 6 months, 2015)

E. Organisation of scientific events

E.1. Organization

• G. Weber and J.P. Bellat: 29th meeting of the French Zeolite Association (GFZ) (March 26-29 2013, Semur en Auxois)
• C. Labbez and A. Nonat: Nanocem workshop «Molecular Simulations in Cement Systems" (Feb. 20-21 2013, Dijon)

• B. Domenichini, S. Bourgeois and V. Potin: 1st Int. Workshop "Low-precious-metal-content catalysts for PEM fuel cells", (june 08-11 2015, Dijon)

• J Rossignol as co-organizer: annual days of CMC2 « club Microcapteurs chimiques » and 'Rencontres Capteurs des Universités de Bourgogne et de Franche-Comté', may 18-19 may 2015, Dijon

R.Oltra: co-organizer of the Symposium 9 "Corrosion and Surface Treatments" at ISE meeting, Niigata Japan, 11-16 Sep. 2011

• R.Oltra: co-organizer of the Ecole Thématique (THEMACorr'2013) ''Mesure de la Corrosion : de la conceptualisation à la méthodologie...'', Ecole Thématique CNRS (Sept. 29 – Oct 04 2013, Bastia)

E.2. Scientific committees

• R.Oltra: 2012 Aluminium Surface Science and Technology, ASST 2012, Sorrento, Italy, 27-31 May 2012

• S. Gauffinet: 1st and 2nd Int. Symposium on Cement-based Materials for Nuclear Wastes, 2011 & 14, Avignon

• A. Nonat: 13th Int. Congress on the Chemistry of Cement, July 2011, Madrid, Spain

• A. Nonat: 1st Int. Conference on the Chemistry of Construction Materials Oct. 7-9, 2013 Berlin, Germany

• A. Nonat: 3rd Int. Workshop Mechanisms and modeling of waste/cement interactions, May 6-8 2013, Guent (B)

• A. Nonat: 2017 symposium cement for the future. Paris 2017

E.3. Organization committees

• L. Imhoff, S. Gauffinet & I. Bezverkhyy: 8th Int. Conference on Diffusion in Materials, DIMAT, July 3-8 2011, Dijon

• C. Dupont: Int. workshop Tailor 2014 April 8-11 2014, St Paul de Vence & 2016

• J. M. Simon: Int. conf. "Nanothermodynamics: For Equilibrium and Non-Equilibrium", Dec. 1-5 2014 Leiden (NL)

• S. Gauffinet, I. Bezverkhyy, B. Domenichini: 20th French-Polish Sem. on the Reactivity of Solids, June 29 - July 1 2015, Dijon

• S. Gauffinet: session « Hydraulic binders » of the annual days of the GFC, Mar. 24-26 2015, Dijon

E.4. Editorial boards

A. Nonat: Cement Wapno Beton (since 2005)

E.5. Institutional contracts based on public fundings: 3.233 M€

Europe (4)

• FP7-NMP-2012-SMALL-6 ChipCAT: Design of Thin-Film Nanocatalysts for On-Chip Fuel Cell Technology. Coord.: Prof. V. Matolin, Department of Surface and Plasma Science, Charles University (Prague, Czech Rep.): *567 392 €*

• FP7-ICT-2009 SPEDOC (coll. with NANO): Surface Plasmon Early Detection & Treatment Follow-up of Circulating Heat Shock Proteins & Tumor Cells. Coord. : Prof. R. Quidant, Institute of Photonic Sciences (Barcelona, Spain): ?

• FP7-CP-SMSFRP-ENERGY-2008-Innovative Dual mEmbrAne fuel Cell (IDEAL Cell) Coordinateur: A. Thorel, (CM, Mines Paris Tech)

• ITN European project TRANSCEND « Understanding Transport for Concrete which is eco friendly, iNnovative and Durable" (2010-14): coord. A. Nonat

ANR (6)

• IMAGINOXE - JCJC « Imagerie chimique de nouveaux oxydes pour l'énergie » (2012-14): coord. V. Potin, *249 k€*

• BRIDGE - JCJC « Control of the cement paste cohesion by the use of polycations: towards a ductile cement » (2010-13): coord. C. Labbez & S. Gauffinet, *185 k€*

• M-SCOT (Multi Scale COrrosion Testing: application to the prediction of the intergranular corrosion rate of a reference aluminium alloy for aeronautic, 2014-18): Coord. ?

• CAPBTX (CAPteur Benzène, Toluène, Xylène, 2010-12): Coord. A. Pauly (U. de Clermont), *46 k€*

• LIMA (Light Interactions Materials Aspect, 2012-15): Coord. A. Paljic (ARMINES, CAOR),

• SOFTCRYSTAB (Hydrothermal and Mechanical Stability of Soft Porous Crystals, 2010-14)

CNRS (3)

• NEEDS-MIPOR « Grand Défi » - MoMArT « Multiscale modeling of the ion adsorption and diffusional transport: application to C-(A)-S-H » (2014-15): C. Labbez, *39.1 k€*

• PhD grant with CRB-ONOV - « E-beam lithography and self-assembly for surface functionalization at nanoscale » (2010-13): *99 k€*

• Investment, computer processor cluster (2x4 nods), with CRB & CRFC (2011-13): *33 488 €*

Foreign fundations & Universities (3)

• SNF/SINERGIA project C-A-S-H « Stable phase composition in novel cementitious systems » in collaboration with PSI, EPFL, EMPA (2010-13): coord. A. Nonat & C. Labbez, *142 738 €*

• Lund University/Wenner-Gren Fundation project: Post-Doc grant « Polyelectrolyte adsorption on cement hydrates » (2010-13): 26.404 k€

• EPFL, EMPA: "Study of anion adsorption on C-S-H" (2014): *15 k€*

CRB-ONOV (7)

• Ph-D grant "Electron microscopy study of nanostructured thin film catalysts for micro-fuel cell application" (2012-15): *49 k€*

• Postdoc grant « Development of new TEM techniques" (2011-12): *42 k€*
• Contrat d'étude ROBUS II (2009-11): *21 k€*
• Investment "un bâti de CVD/ALD » (2011): *200 k€*
• FABER installation contract, C. Dupont: (2013-14): *59 k€*
• Investment « un jeu de filtres pour spectroscopie Raman ultra basses fréquences » (2014): *29 k€*
• Postdoc grant « Modélisation ab-initio de spectres Raman d'oxydes métalliques en phases nouvelles » (2012): *42 k€*

CRB-NANO2BIO (3)
• Acquisition d'un sonde fibrée pour spectroscopie Raman déportée, 2014, *19 k€*
• Ph-D grant: Biomolécules et systèmes nanostructurés : détection et caractérisation par spectroscopie Raman exaltée de surface (SERS) (2010-13): *99 k€*
• Acquisition d'un dispositif micro-Raman destiné aux études par effet SERS (2010) *235 k€*

CRB-MATERIAUX POUR L'ENERGIE (6)
• PhD grant "Thermodynamics and structure of plate-like particle dispersions" with Université of Lund (2008-11): *62.3 k€*
• Study of the retention mechanisms of alcalin ions by cements. Application to the formulation of low pH cements for nuclear waste management (2010): *36 k€*
• Investment "Total organic and nitrogen content analyzer" with CNRS and UB (2009-10): *64 k€*
• Investment "Atomic force microscope" with CNRS (2010-12): *136.875 k€*
• Post-Doc grant "Study of the interaction and growth of C-S-H hydrates by atomic force microscopy" (2012-13): *42 k€*
• Investment "Dynamic mechanical analyzer" with CNRS (2012-15): *151 k€*

CRB-INGÉNIERIE MOLÉCULAIRE POUR L'ENVIRONNEMENT (2)
• Investment "VOC evaporation set up" (2011-12): 20 k€
• Post-Doc grant, "VOC detection: coupling microwave transduction and zeolite" (2013—2014): 42 k€

CRB-VIGNE ET VIN (1)
• Post-Doc grant, "pollutant detection in liquid medium": with AGRO sup Dijon and IUVV (2014—2015): *42 k€*

CRB-MATERIAUX & PROCEDES (1)
• Post-Doc grant, "Ion adsoprtion in cementitious materials for nuclear waste repositories" with CNRS (2013-14): *21 k€*

Others (7)
• **IC ARTS**: Protection des outils de coupe pour le bois : passage à l'échelle industrielle (2012-13): *42 k€*
• **PRES Bourgogne/Franche Comté**: Oxydes nanostructurés pour capteurs (OXYCAP) (2014-2016): *3750 €*
• **LABEX ACTION:** Correlation between sensing PRoperties and free chargec arriers in metal/OXIde periodic nanostructured thin Films (PROXIF) (2015-16): *9750 €*
• **ADEME**: CORTEA CAT: Adsorption and Catalysis Coupling for the Treatment of Formaldehyde Emissions in Industrial Air (2012-15).
• **Program "Samuel de Champlain"**: with University of Montréal and LaBoMaP, Arts & Métiers Paritech, Cluny (2011)
• **BQR Bourgogne University**: Post-Doc grant "Study of the interaction and growth of C-S-H hydrates by atomic force microscopy" (2011-12): *42 k€*
• **Preciput ANR**: Laboratory design for the extension of the plateform of analytical chemistry (2012): *20 189 €*

II.6.4. Products intended for social, economic and cultural stakeholders

The detailed list of contracts is listed in section II.7 and is not repeated here for conciseness so that this section filters the highlights out.

II.6.4.1. Department ICQ

A. Contracts and industrial collaborations:

- Contracts with **CEA** Saclay on the modeling of the spectrum of SF_6 for the detection of atmospheric pollution: 2012, 2013, 2014, 2015.
- Collaboration with **CEA** Saclay and the Synchrotron SOLEIL on the spectroscopy of RuO_4, for the detection of fallouts in case of nuclear accidents: 2014-2015.
- Contract with **ESA** (European Space Agency) in 2013, to define the characteristics of a future instrument conceived to be carried on a satellite for the observation of the Earth (Sentinel-5).

B. Interactions with cultural and social institutions:

- V. Boudon is President of the Section Bourgogne Franche-Comté of the Société Française de Physique (SFP).
- The members of ICQ are regular participants of "*Fête de la Science*" and "*Village des Sciences de Dijon*".
- In collaboration with SFP Bourgogne Franche-Comté, CCSTI de Bourgogne and *Rectorat* de Dijon, we developed the activities "*Questions de Sciences*", which establishes links between scientists and school classes.
- Representation of Bourgogne in the national Committee of the International Year of Light 2015 (V. Boudon).

II.6.4.2. Department Photonics

A. Patents

A.1. 8 recorded patents

- S. Pitois et J. Fatome, « Système de contrôle de polarisation tout-optique a faisceau de pompe contra-propagative » .Brevet N°FR 09/04451 (2009).
- Finot et J. Fatome « Dispositif et procédé de traitement d'un signal optique », Brevet FR n°10/52276 (2010)
- B. Cluzel, J. Dellinger, F. de Fornel, « Microscope en champ proche optique » Pays : France. N°Dépôt/publication 10 58 163 Date de dépôt 07/10/2010.
- S. Pitois, J. Fatome, P. Morin et G. Millot, *Procédé et dispositif pour le contrôle d'un paramètre physique d'un signal optique*, Brevet FR n° 11/02472 (2011)
- J-C Weeber, A. Dereux, « Composants themo-électriques plasmoniques intégrant un système de mesure de la puissance guidée ». Dépôt du brevet en co-propriété CNRS/uB , Brevet N° 67490, (2011).
- A. Bouhelier, P. Rai, A. Hartschuh et N. Hartmann , « Dispositif de génération de plasmons commandé électriquement à base de transistor à effet de champ à nanotube de carbone »
  Brevet FR 12 60525 CNRS Université de Bourgogne, (2012).
- C. Finot, J. Fatome et B. Kibler, *Générateur et procédé pour la génération d'impulsions optiques à haut taux de répétition*, Brevet FR n° 13/50331 (2013).
- C. Pin, B. Cluzel, E. Picard, E. Hadji, « Procédé de caractérisation d'un champ électromagnétique généré par l'interaction d'une onde électromagnétique avec une structure photonique et/ou plasmonique ». N°Dépôt 1459774, (2014).

A.2. 4 patent requests in progress (2015)

- S. Danto, T. Cardinal, J.C. Desmoulin, L. Canioni, F. Désévédavy, F. Smektala, Fibres photosensibles à base de verre de phosphate dopé argent, co-inventors: U. Bordeaux (UPR 9048,UMR5107),U. Bourgogne (UMR 6303)
- S. Danto, T. Cardinal, Y. Petit, L. Canioni, F. Désévédavy, F. Smektala, Fibre optique rubna en verre photosensible, co-inventors: Univ Bordeaux (UPR 9048, UMR5107), Univ Bourgogne (UMR 6303)
- S. Danto, T. Cardinal, T. Billotte, C. Strutynski, F. Désévédavy, F. Smektala, V. Couderc, Electro-endoscope par fibre optique composite verre-métal, co-inventors: Univ Bourgogne (UMR 6303), Univ Bordeaux (UPR 9048) , Univ Limoges (UMR 7252)
- F.Billard, P. Béjot, « *Dispositif et procédé de caractérisation d'une impulsion laser femtoseconde*», N° de dépôt : FR1552704, (2015).

B. Softwares

- Software: « Procédé d'imagerie en champ proche optique par suivi de particule version 1.0 » dated 19 June 2014 - IDDN.FR.001.400001.000.S.P.2014.000.31235
- Software for interfacing a LIBS device allowing for in-situ data acquisition and analysis, Deposited in 2012, IDDN : FR.001.170003.000.S.P.2012.000.10800.

C. Industrial contracts : (276.2k€)

- 2011 Bertin technologie (43.9k€), Manlight, Photline,ixfiber (4.1 k€)
- 2012 Contracts OSIRIS with Wellience (23.3 k€)
- 2013 Valtimet 29.3 k€, Contracts OSIRIS with Welience (24.4 k€), Vallourec (46.5 k€).
- 2014 PRYNEL (30.1k€), Les vielles de la Ronde (2.5k€)
- 2014 FRPA (30 k€), Contract Welience
- 2014 A2IR (32 k€), Contract Carnot
- SDAE SARL contract through Welience (72.1k€).

D. Involvement in disseminating scientific culture (exhibitions, science party, media) (not exhaustive)

- O. Musset, Conference and demonstration of a laser harp, UNESCO heritage days, Auxerre, 04/2011.
- O. Musset, "Laser and Applications", conference at Rotary Club, Dijon, 02/2011.
- O. Musset, Newspaper " Le Bien Public" article on LIBS applied to geology (2012).
- O. Musset, "LIBS (Laser Induced Breakdown Spectroscopy) mission in Iceland" video release at the CNRS research film festival (2012)

- C. Finot, contribution to the exhibitions CCSTI (Centre de culture scientifique, technique et industrielle), "Sadi Carnot : la maitrise de l'énergie", "Henri Navier: Scientifique Dijonnais", (2013).
- O. Musset, *Radio culture* show, "Laser and applications", 2015
- O. Faucher, *Radio culture* show, "Research in the domain of ultrashort lasers", 2015
- P. Béjot, *Radio culture* show, "Laser filamentation", 2015
- Ph. Grelu, *Radio Culture show*, "Fiber lasers", 2015
- C. Finot, Collaborations with the François Bourdon academy, the Science academy of Dijon for dissemination conferences given in several cities around Dijon (Montbard, chatillon-sur –seine, Montceau-les-mines…). 11 conferences given from 2010 to 2015.
- C. Finot, contribution to 3 local radio shows from 2010 to 2015 and realization of up to 50 YouTube videos. The videos are either dissemination programs or address specifically physics topics such as energy transfer, power, field boundary conditions, and fluid mechanics.

E. Partnerships with high schools (not exhaustive)

- O. Musset, Conference and demonstration of a laser harp, at the Science Highschool l'ARC, Le Creusot (02/2011).
- E. Hertz, development of a "laser fountain" for exhibitions during the *Open Door* days at uB (2013-2015).
- O. Musset, Workshop on physics experiment at the Roger Vailland high school, Sanvignes-les-Mines, (2013-2014)
- K. Hammani: Several demonstrations and conferences in local elementary, secondary and high schools in the framework of the "2015 year of light".
- A. Bouhelier, conference at the secondary school A. Camus, Genlis, June 2015.

F. Teaching Partnerships with the Industry

- Ph. Grelu, S. Salaün: teaching partnership with the ELITHIS group (http://www.elithis.fr). ELITHIS is a consultancy and engineering group in the building sector, among the French leaders in energy saving. Establishment of a joined teaching program unit recognized by a Diploma at Univ. Bourgogne ("*D.U. Management de la Performance Energétique*"), centered about Energy Efficiency, which has been running since 2012. This program manages 210 teaching hours per year.

II.6.4.3. Department Nanosciences

A. Interaction with the social and economic environment

See section I.2.3.3. for a detailed description:

- **Healthcare projects**: Nanocare platform & contracts with NVH Medicinal & Ligue contre le cancer (PI N. Millot), Modelisation of proteins as a support to cancer research (PI P. Senet), Label free detection of hHsp70 for cancer diagnostic (PI E. Finot)
- **Materials projects**: development of non-destructive 3D tomography with the "Pole Nucléaire Bourguignon" (E. lesniewska and E. Bourillot), caracterisation of phase transition in nanostructured materials with CEA and Areva company (PI E. Finot)

B. Dissemination of scientific results to the general public

-Visits of the Nanoscience Dept. for young kids (primary to high schools) were organized regularly by E. Lesniewska, E. Bourillot and J. Boudon

-P. Senet and P. Delarue presented their researches to the general public at the « Fête de la science - Biodiversité et Bioéthique : quels défis pour l'avenir ?" in 2010 (title : "La gymnastique des protéines")

-N. Millot gave nine conferences to the general public, namely:

1. *Les nanomatériaux et leurs applications biomédicales,* AG 2011 de la société Française d'Energie Nucléaire, Dijon, 20 mai 2011
2. *Des nanoparticules multifonctionnelles à destination de la santé : les enjeux et quelques exemples dijonnais,* Académie des Sciences de Dijon, 10 octobre 2012
3. *Nanoparticules candidates pour des applications biomédicales de diagnostic et de traitement du cancer,* Journée scientifique dans le cadre du mois de l'Innovation, Bourgogne Innovation, Dijon, 26 octobre 2012
4. *Applications biomédicales des nanomatériaux,* Université pour Tous de Bourgogne (UTB), Chalon sur Saône, 3 mai 2013
5. *Les nanomatériaux : risques ou bénéfices pour la société, de quel côté penchera la balance ?* Fête de la Science, Lycée Jules Renard, Nevers, 11 octobre 2013
6. *Applications des nanoparticules en santé,* Carrefour Jeunes – Chercheurs – Entreprises, Matériaux innovants, Métiers d'avenir, Dijon, 11 avril 2014
7. *Des nanocristaux originaux pour diagnostiquer et guérir du cancer,* Année Internationale de la Cristallographie, Lycée Jules Renard, Nevers, 17 octobre 2014
8. *Des nanoparticules multifonctionnelles pour le diagnostic et de traitement du cancer,* La semaine Perspectives d'avenir de la Corporation des étudiants de Biologie de l'Université de Bourgogne 3 février 2015.
9. *Applications des nanoparticules en santé,* Carrefour Jeunes – Chercheurs – Entreprises, Matériaux innovants, Métiers d'avenir, Dijon, 3 avril 2015

- N. Millot was invited by Radio France Bleu Bourgogne (Dijon) in the framework of « Journée de la Femme », 8 March 2011 ; by Radio Campus (Dijon) in the framework of « Nuit des chercheurs", 26 September 2014; by Radio Bac FM (Nevers) in the framework of «Fête de la science", 17 October 2014
- N. Millot is co-author of a book for undergraduate students: "***Cristallographie Géométrique - Cours, Exercices et Problèmes corrigés***" N. Millot & J.C. Nièpce, Editions Lavoisier, Paris, 2014, **266 pages**
- N. Millot is the author of a video to the general public: "Carrefour Matériaux 2014 - nanomatériaux" : https://www.youtube.com/watch?v=ylMr_xQGssU

II.6.4.4. Department PMDM

A. Dissemination of scientific culture

- J.M. Jouvard and M. Duband take in charge the organisation of "Village of Sciences" for dissemination of scientific research work toward the citizens at Chalon and Le Creusot
- F.Baras is in charge for ICB laboratory of the dissemination of scientific culture toward the society
- Popa is in charge of the "Défi scientifique du Jardin des Sciences" focused on the discovery of sciences for young pupils in association with the city of Dijon
- "Science Fest" organisation in Dijon and Le Creusot
- visits in the laboratory are organised for high-school teenagers
- invited talks are given in non-academic institutions (Académie Bourdon Le Creusot, Académie des Sciences et des Lettres in Dijon,...)
- the Olympiades of Engineer Sciences (40 teams per year composed of 4 high school students present their project and participate to conferences)
- Young researchers Industry meetings based on materials presentation
- **Popular science to celebrate famous physicists**: Exhibition and conferences were focused on the modernity of thermodynamic concepts in handling energy problems (Nolay, Côte d'Or native town of the Carnot Family)
- **Classes in the laboratory**: all along the year, classes are visiting the laboratory, looking at large measuring instruments, playing science with researchers in dedicated activities into the laboratory, becoming familiar with university
- **The International Year of Crystallography 2014** was celebrated in our laboratory with exhibitions, public lectures, fun workshops, smart mathematical games

B. Patents (6)

- « Revêtements protecteurs d'interconnecteur en EHT ou SOFC contre l'oxydation à haute température sous atmosphère riche en H_2O », n° FR 12-54467 (demande internationale PCT/IB2013/053870) (2012)
- Déposants : CEA, APERAM Alloys, Université de Bourgogne
- Inventeurs : A. Brevet, C. Desgranges, R. Laucournet, E. Rigal, V. Parry, S. Chevalier, M. R. Ardigo, I. Popa, P. Girardon, R. Bousquet, F. Perry.
- Procédé de préparation d'une pile a combustible, Brevet N° WO 2014057218 A2, V. Sivasankaran, L. Combemale, G. Caboche (2014).
- « Dispositif de synthèse en continu de nanopoudres en milieu solvothermal sous- ou super critique »,N°E.N. 09/55023, publication internationale WO 2011010056 A1 (20/01/12), F. Bernard, D.Aymes, F.Demoisson, M.Ariane, (ICB UMR 5209 CNRS / Université de Bourgogne) et H. Muhr (ENSIC, Nancy),
- « Device for the selective detection of benzene gas, method of obtaining it and detection of the gas therewith »Publication internationale WO 2011055298A1 (20/01/12), , Llobet, E.; Pireaux, J.-J.; Mansouri, A.; Delgado, M.; Felten, A.; Demoisson, F.; Leghrib, R.; Reniers, F.; Classens, N.; Guillot, J.; Migeon, H.-N., WO

II.6.4.5. Department Interfaces

A. Patents (7)

• « Procédé de préparation de nanoparticules d'oxydes métalliques complexes » : D. Stuerga et C. Lohr, Université de Bourgogne (FR07-05515): extension PCT 2011 (Europe, Chine et Inde). Licence exclusive à Naxagoras Technology SAS

• "Fully solid thin-film batteries and method for producing fully solid thin-film batteries" F. Gaben (I-TEN), F. Bouyer and B. Vuillemin WO 2013/064781 A1 (2013)

• "Method for manufacturing all-solid-state thin-films batteries" F. Gaben (I-TEN), F. Bouyer and B. Vuillemin WO 2013/064779 A1 (2013)

• "Method for the production of thin-film lithium-ion microbatteries and resulting microbatteries" F. Gaben (I-TEN), F. Bouyer and B. Vuillemin WO 2013/064777 A1 (2013)

• "Method for producing dense thin films by electrophoresis" F. Gaben (I-TEN), F. Bouyer and B. Vuillemin WO 2013/064776 A1 (2013)

• "Method for the production of electrodes for fully solid batteries" F. Gaben (I-TEN), F. Bouyer and B. Vuillemin WO 2013/064773 A1 (2013)

• "Method for the production of thin films of solid electrolyte for lithium ion batteries" F. Gaben (I-TEN), F. Bouyer and B. Vuillemin WO 2013/064772 A1 (2013)

B. Seminars or action towards industrial partners

• R.Oltra Action Nationale de Formation CNRS « Métallurgie Fondamentale- La Corrosion» 22-25 Oct. 2012, Aussois

• R.Oltra: Rencontre Journée Thématique Matériaux: Les nouveaux développements de l'aluminium dans l'aéronautique, Association Aéronautique et Astronautique de France, CONSTELLIUM, Voreppe, Nov 22 2011

• C. Labbez: "Le comportement colloïdale des hydrates de C-S-H", LAFARGE, Dec. 2011, Lyon, France

• C. Labbez: "Simulation Perspectives: Mesoscopic Systems", BASF, May 2012, Ludswighafen, Germany

• C. Labbez: « A Model Clay Dispersion: Influence of the Edge Charge », CLAY TECHNOLOGY, Nov. 2011, Lund, Sweden

• S. Gauffinet: « Fabrication-hydratation du ciment » Saint Gobain - Aubervilliers, Nov. 2010 & 2012, june 2014

• S. Gauffinet: "Alite-tricalcium aluminate-gypsum complex system", Swiss Federal Laboratories for Materials Science and Technology, June 2010

• A. Nonat: "Control and Modeling of Calcium Silicate Hydrate (C-S-H) Growth during Tricalcium Silicate Hydration. Crystallization control workshop », BASF, mars 2011, Trotsberg, Germany

• A. Nonat: « Physico-chimie colloïdale et innovation dans les matériaux cimentaires » in the Framework of « mois de l'innovation », nov. 26 2012. Dijon

• A. Nonat: « La recherche scientifique au service de l'innovation dans les matériaux de construction. Conférence annuelle Université des Métiers du Bâtiment de Bourgogne, Dijon nov. 13 2013

• B. Domenichini: "Metal oxide surfaces and films: from fundamentals to applications" CanmetMATERIALS, Hailton, Canada, oct. 24 2014

• B. Domenichini: "Elaboration and characterization of oxide films and surfaces (TiO_2, CeO_2) " SAINT-GOBAIN RECHERCHE, Aubervilliers, march 27 2014

• J Rossignol: "Microwave instrumentation and dielectric heating", HEALTIS MRI safety, march 2014

C. Involvement in disseminating scientific culture (exhibitions, science party, media)

• European researcher's night: "Order and disorder", nov. 23 2011, Dijon: B. Domenichini & P. Paufert; "Participate to experiment", sept. 26 2014, Dijon: B. Domenichini)

• North American researcher's night, "Sustainable city", oct. 28 2014, Hamilton, Canada: B. Domenichini

• Entrez en matière (Exposition Utopies et Innovations, 2010, Le Creusot), Bar des sciences (Café de Paris, Paris, décembre 2010), Soirée nano au Musée d'Histoire naturelle (mai 2011, Autun), Soirée du planétarium de Dijon (Nanomatériaux, septembre 2011): D. Stuerga

• Evening event sur les ondes électromagnétiques et les risques associés aux portables (planétarium de Dijon février 2012, Soirée du Grand Dijon mars 2012, Soirée du Jardin des sciences en partenariat avec l'Université de Bourgogne portables décembre 2013): P. Pribetich and D. Stuerga

• Interview of D. Stuerga, F3 (sept. 2011 et dec. 2013)

• Radio Campus (le microscope et la blouse): D. Stuerga (sep. 2011) & B. Domenichini (oct. 2014)

• Voo TV (interview): S. Gauffinet (oct. 2010)

• Exhibition "AICr 2014" (International Year of Cristallography) organized by G. Weber, oct. 6-10 2014, Dijon

• Organization and participation to the "Fête de la science" (every year, several persons like G. Weber, I. Bezverkhyy, S. Gaufinet, B. Domenichini, …)

• EXPERIMENTARIUM: "Cerium oxide at nanoscale", 2013, S. Bruyère

• Conference within the framework of « Scientifique toi aussi » organized by CEA de Valduc, 2015, Dijon, S. Gauffinet.

• « Carrefours jeune chercheurs », 2014 & 2015, S. Gauffinet

D. Partnerships with high schools

• Un chercheur, une classe: Lycée agricole de Quetigny (2011, D. Stuerga); Collège B. Vian, Tallant (2013, 4 classes, B. Domenichini); Collège R. Schuman (2015, B. Domenichini); Lycée J. Rostand de Quétigny (2010, J.P. Bellat)

• Scientific dessimination for students of secondary school and organization of visits of ICB (15 to 20 classes per year, G. Weber, I. Bezverkhyy, S. Gaufinet, B. Domenichini)

• Nevers, Dijon…) (3 per year, S. Gauffinet,)

• Organization of « Open days in ICB » intended for the secondary school during the « fête de la science » since 2007. S. Gauffinet, G. Weber.

• Member of trials: « Entrepreneuriales », Dijon, 2014; "Olympiades of Ingenior Science", 2012, 2013 & 2014, S. Gauffinet, B. Vuillemin

II.7. Appendix: List of contracts

In the following tables, "CRB" refers to "Conseil Régional de Bourgogne" (Regional government) and "BQR" to funding by UB central budget.

The data of this appendix are consolidated in Table I.6 of section I.4 "Striking facts".

II.7.1. Department ICQ

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
ICQ	FASTQUAST (Overheads)	Europe	H. JAUSLIN/ S.GUERIN	UB	2010	48	84 846,00 €
ICQ	IPERA	Europe	LEROY Claude	CNRS	2011	36	120 990,00 €
ICQ	Projet européen QUAINT	Europe	SUGNY Dominique	UB	2012	36	27 952,00 €
ICQ						Sub-total "Europe"	233 788,00 €
ICQ	Contrôle quantique de grands systèmes moléculaires : application aux intersections coniques - COCONICS	ANR	GUERIN S.	UB	2013	48	31 200,00 €
ICQ	EXPLOSYS	ANR	SUGNY D.	UB	2015	48	177 520,00 €
ICQ						Sub-total "ANR"	208 720,00 €
ICQ	Spectroscopie ab initio à haute résolution : application aux atmosphères planétaires et à l'astrophysique	UB - BQR		UB	2010	12	4 000,00 €
ICQ	Workshop International « Spectroscopie du méthane et planétologie »	UB - BQR		UB	2010	12	10 000,00 €
ICQ	SMT4 2010 / Fonctionnement "gratifications stagiaires + frais de fonctionnement"	CRB	JAUSLIN H.	UB	2010	12	6 600,00 €
ICQ	Tube laser argon	CRB	MATHEY P.	UB	2010	24	21 000,00 €
ICQ	SMT4 2010 / Allocation post-doctorale "propriétés diélectriques et ONL de cristaux de SPS dopés"	CRB	MATHEY P.	UB	2010	12	42 000,00 €
ICQ	SMT4 2010 / Promotion de la recherche "Colloque SMP"	CRB	BOUDON V.	UB	2010	12	10 000,00 €
ICQ	SMT4 2010 / Promotion de la recherche "Colloque du GDR Quantum dynamics"	CRB	JAUSLIN H.	UB	2010	12	8 000,00 €
ICQ	PARI SMT4 FABER 2011 Equipt Info	Region Bourgogne	SCRIBANO	UB	2011	24	30 650,00 €
ICQ	SMT4 2011 / Allocation de thèse en co-tutelle avec l'Arménie "Contrôle de la propagation de la	CRB / CNRS	LEROY C.	UB	2011	18	59 450,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	lumière dans les milieux résonants"						
ICQ	SMT4 2011 / Mobilité sortante "collaboration scientifique sur le contrôle optimal des spins en RMN "	CRB		UB	2011	7	12 600,00 €
ICQ	SMT4 2011 / Promotion de la recherche "Colloque HRMS"	CRB / CNRS / Ville de Dijon/ Inscriptions/ BQR UB	BOUDON V.	CNRS	2011	12	124 000,00 €
ICQ	SMT4 2012 / Allocation post-doctorale "contrôle optimal des systèmes quantiques"	CRB	SUGNY D.	UB	2012	12	42 000,00 €
ICQ	SMT4 2012 / Accueil chercheur invité	CRB	GRABAR A.	UB	2012	12	9 260,00 €
ICQ	BQR 2013 THESE L. VAN DAMME	UB		UB	2013	36	86 000,00 €
ICQ	BQR 2014 PDOC Badr AMYAY	UB	BOUDON V.	UB	2014	12	42 000,00 €
ICQ	BQR 2015 "Explorer les limites physiques des systèmes de spins"	UB	SUGNY D.	UB	2015	12	4 000,00 €
ICQ						Sub-Total "CRB/FEDER/UB"	511 560,00 €
ICQ	PEPS 2010 : Singularités des systèmes dynamiques intégrables	CNRS		CNRS	2010	12	4 784,00 €
ICQ	LIA IRMAS France-Arménie	CNRS INP DRCI		CNRS	2010	36	60 000,00 €
ICQ	CEFIPRA : Dynamique réactionnelle quantique non-adiabatique avec plusieurs surfaces d'énergie potentielle	CEFIPRA	HONVAULT P.	CNRS	2011	48	60 000,00 €
ICQ	PCMI : Etudes théoriques de processus réactifs mettant en jeu l'oxygène moléculaire interstellaire	CNRS	HONVAULT P.	CNRS	2012	12	7 000,00 €
ICQ	LEFE-CHAT : Etude théorique de la réactivité du radical hydroxyle OH avec l'oxygène dans l'atmosphère terrrestre	CNRS	SCRIBANO Y.	CNRS	2012	12	4 000,00 €
ICQ	LEFE-CHAT : Mesure et analyse des bandes de combinaison intervenant dans les bandes chaudes de SF6	CNRS	BOUDON V.	CNRS	2012	12	1 500,00 €
ICQ	OSU THETA (SRO) : Programme et données de spectroscopie moléculaire en accès libre	OSU THETA	BOUDON V.	OSU THETA	2012	12	3 000,00 €
ICQ	OSU THETA (SRO) : Etude	OSU THETA	BOUDON V.	OSU	2013	12	1 800,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	expérimentale et théorique du spectre d'émission du méthane chaud pour les applications astrophysiques			THETA			
ICQ	Projet PEPS 'Physique Théorique et ses interfaces"	CNRS	SUGNY D.	CNRS	2014	12	4 000,00 €
ICQ	PCMI : Chimie des espèces hydrogénées dans l'univers primordial et les milieux diffus	CNRS	HONVAULT P.	CNRS	2014	12	2 000,00 €
ICQ	PHC Tournesol : Mesure et modélisation de l'opacitédes planets extrasolaires de type Jupiter chaud et Neptune chaud	EGIDE	BOUDON V.	PHC/EGIDE	2014	24	1 600,00 €
ICQ	LEFE-CHAT : Mesure et analyse des bandes de combinaison intervenant dans les bandes chaudes de SF6	CNRS	BOUDON V.	CNRS	2014	12	8 000,00 €
ICQ	OSU THETA (SRO) : Spectroscopie hors équilibre thermodynamique pour l'étude des états excités du méthane	OSU THETA	BOUDON V.	OSU THETA	2014	12	1 300,00 €
ICQ	Projet PICS CODYS "Contrôle optimal de la dynamique des spins en résonance magnétique nucléaire" tranche n°1	CNRS	SUGNY D.	CNRS	2014	12	4 000,00 €
ICQ	Projet PICS CODYS "Contrôle optimal de la dynamique des spins en résonance magnétique nucléaire" Tranche n°2	CNRS	SUGNY D.	CNRS	2015	12	4 000,00 €
ICQ						Sub-Total "CNRS"	166 984,00 €
ICQ	Collaboration "Détermination de températures vibrationnelles de la molécule de SF6 dans un jet supersonique"	CEA SACLAY	BOUDON V.	CNRS	2012	12	6 293,00 €
ICQ	Consolidation of Requirements for the Products Derived from the Shortwave-Infrared Channels of the GMES Sentinel-5 UVNS Instrument	Agence spatiale européenne ESA	BOUDON V.	UB	2013	12	6 684,00 €
ICQ	Modélisation et interprétation de spectres d'homo complexes et d'hétéro	CEA SACLAY		CNRS	2014	12	6 293,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	complexes dans différents gaz porteurs						
ICQ						Sub-Total "Other public agencies"	19 270,00 €
ICQ						**GRAND TOTAL**	**1 140 322,00 €**

II.7.2. Department Photonics

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
Photonique	ERC PETAL	EUROPE	FATOME Julien	CNRS	2012	72	1 452 818,00 €
Photonique	Projet ERC SWIFT	EUROPE	BOUHELIER A.	CNRS	2013	60	1 330 807,00 €
Photonique						Sub-Total "Europe"	2 783 625,00 €
Photonique	"PLASTIPS"ANR-09-BLAN-0049-01	ANR BLANC	COLAS DES FRANCS	UB	2009	31/08/13	33 545,74 €
Photonique	"SOLICRISTAL"ANR-10-BLAN-0417-01	ANR	GRELU P.	CNRS	2010	36	150 056,00 €
Photonique	HYNNA "Nanosources hybrides métal/semiconducteur pour la nanooptique" ANR-10-BLAN-1016-3	ANR	COLAS DES FRANCS G.	CNRS	2010	46	157 456,00 €
Photonique	SO FAST "Source optique fibrée pour applications..."	ANR	J.FATOME	UB	2011	36	166 400,00 €
Photonique	MASSTOR "Modulateur électro-optique assisté par plasmon" ANR-2011-NANO-022-02	ANR	WEEBER JC.	CNRS	2011	48	219 388,00 €
Photonique	FIPLANT Nano-pince plasmonique fibrée	ANR	COLAS DES FRANCS Gérard	CNRS	2012	48	161 200,00 €
Photonique	QDOTICS / Contrôle de l'émission de nanocristaux semi-conducteurs à l'aide de structures plasmoniques pour la génération d'états quantiques de la lumière	ANR	COLAS DES FRANCS Gérard	CNRS	2012	60	231 400,00 €
Photonique	PLACORE Circuits Plasmoniques Colloidaux Reconfigurables	ANR	A. BOUHELIER	CNRS	2013	48	188 323,00 €
Photonique	LABEX ACTION 2013 THESE FENG	ANR	C. FINOT	UB	2013	36	86 700,00 €
Photonique	OPTIROC / Optical Rogue Waves in Nonlinear Cavities	ANR	G.MILLOT	CNRS	2013	36	166 406,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
Photonique	Contrôle quantique de grands systèmes moléculaires : application aux intersections coniques	ANR COCONICS	HERTZ E.	UB	2013	48	187 720,00 €
Photonique	HOLIGRALE Verres et vitrocéramiques à base de TeO2 pour fibres optiques innovantes.	ANR	SMEKTALA F.	CNRS	2013	48	150 796,00 €
Photonique	Equipt ICArts 13-PICASSO 2e	ANR	FINOT C.	UB	2014	12	20 000,00 €
Photonique	Equipt ICArts 13-PICASSO M40	ANR	KIBLER	UB	2014	12	28 800,00 €
Photonique	LABEX ACTION 14/THESE M.MEISTERHANS	ANR	F. DE FORNEL	UB	2014	36	87 000,00 €
Photonique	IC ARTS 2014 - Autocorrélateur pour impulsions IR femtoseconde	ANR	BEJOT P.	UB	2014	24	32 400,00 €
Photonique						Sub-total "ANR"	2 067 590,74 €
Photonique	Projet Elit Systems : Emission Laser pour l'iDentification, le Tri et la Séparation Innovante de Structures et Eléments dans les matériaux secondaires	ADEME	MUSSET O.	UB	2009	10/07/12	91 900,00 €
Photonique	Projet Elit Systems : Emission Laser pour 'iDentification, le Tri et la Séparation Innovante de Structures et Eléments dans les matériaux secondaires	CRD	MUSSET O.	UB	2009	10/07/12	49 100,00 €
Photonique	CRB PARI SMT4 PROCCLA Système Laser Femtoseconde	ETAT/FEDER	LAVOREL B.	UB	2010	12	217 000,00 €
Photonique	SMT 2 2010 / Gratifications de stage	CRB	MILLOT G.	UB	2010	12	15 000,00 €
Photonique	SMT2 2010 / Allocation de thèse "Couplage entre Nanocavité optique et nanorésonateur"	CRB / CEA	DE FORNEL F.	UB	2010	36	99 000,00 €
Photonique	SMT2 2010 / Equipements "PICASSO & SINOPTIC"	CRB / FEDER / CPER ETAT	MILLOT G.	UB	2010	24	143 000,00 €
Photonique	SMT2 2010 / Equipements FABER "Table optique, systèmes de couplage pour fibres, analyseur de faisceau à balayage, ...)	CRB	KIBLER B.	UB	2010	12	49 350,00 €
Photonique	SMT2 2010 / Programme "FIVANTECH" Tour de	CRB / CPER ETAT / FEDER	F.SMEKTALA	UB	2010	24	200 000,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	fibrage						
Photonique	SMT4 2010 / Equipement "Système laser femtoseconde amplifié"	CRB / CPER ERAT / FEDER	JAUSLIN H.	UB	2010	12	217 000,00 €
Photonique	Thèse JCE I. EL MANSOURI	CRB	P.TCHOFO DINDA	UB	2010	36	99 000,00 €
Photonique	Production et Optimisation d'alignement planaire permanent post impulsionnel	BQR PRES	HERTZ E.	FCS	2010	12	3 000,00 €
Photonique	Aménagement OMR	Preciput ANR	SMEKTALA	UB	2011	12	36 000,00 €
Photonique	PARI SMT2-2011 C.Etude Projet collaboratif LRC Synoptic	REGION Bourgogne	CLUZEL B./FATOME J.	UB	2011	12	15 000,00 €
Photonique	SMT2 2011 / Allocation de thèse "Fibres optiques spéciales en verres non linéaires pour la génération de supercontinuum entre 1 et 6 um"	CRB / CNRS	MILLOT G.	CNRS	2011	36	99 000,00 €
Photonique	SMT2 2011 / Allocation post-doctorale	CRB	DE FORNEL F.	UB	2011	12	42 000,00 €
Photonique	SMT2 2011 / Allocation post-doctorale	CRB	GRELU P.	UB	2011	12	42 000,00 €
Photonique	SMT2 2011 / CPER Equipements "plate-forme PICASSO"	CRB / ETAT CPER / FEDER ETAT	MILLOT G.	UB	2011	24	363 000,00 €
Photonique	SMT4 2011 / CPER Eqts "Ampli paramétrique optique femtoseconde (OPA)"	CRB	LAVOREL B.	UB	2011	24	65 000,00 €
Photonique	SMT3 2011 / Allocation post-doctorale	CRB	BOUHELIER A.	UB	2011	12	42 000,00 €
Photonique	Contrat Etude FABER	CRB	BEJOT Pierre	UB	2012	12	2 440,00 €
Photonique	Contrat Etude PARI SMT2	CRB	CLUZEL Benoit	UB	2012	12	11 150,00 €
Photonique	Contrat Etude PARI SMT2 -SDAE	CRB	MUSSET Olivier	UB	2012	12	34 745,00 €
Photonique	Equipt FABER	CRB	BEJOT Pierre	UB	2012	24	54 000,00 €
Photonique	Equipt Four	CRB	SMEKTALA Frédéric	UB	2012	24	15 610,00 €
Photonique	SMT2 2012 / Allocation de thèse	CRB / CNRS	PICOZZI A. & MILLOT G.	CNRS	2012	36	99 000,00 €
Photonique	SMT2 2012 / Allocation post-doctorale	CRB	TCHOFO-DINDA P.	UB	2012	12	42 000,00 €
Photonique	SMT2 2012 / Chercheur invité	CRB		UB	2012	12	17 200,00 €
Photonique	SMT2 2012 / Chercheurs invités " Bourse Fondation iXCore"	CRB	MILLOT G.	UB	2012	12	25 000,00 €
Photonique	SMT2 2012 / Equipements	CRB / CPER ETAT / FEDER	MILLOT G.	UB	2012	24	251 036,00 €
Photonique	Oscilloscope (soutien	CRB	J.FATOME	UB	2012	12	178 000,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	labex Action-reliquat 2012)						
Photonique	Conversionde fréquence par des nanostructures métallo-diélectriques	BQR PRES	BOUHELIER A.	FCS	2012	24	15 000,00 €
Photonique	SMT3 2013 / Equipement "Platine de positionnement"	CRB	WEEBER JC.	UB	2013	24	18 510,00 €
Photonique	SMT3 2013 / Equipement "Caméra CCD"	CRB	BOUHELIER A.	UB	2013	24	35 165,00 €
Photonique	SMT3 2013 / Allocation post-doctorale	CRB	BOUHELIER A.	UB	2013	12	42 000,00 €
Photonique	BQR 2012 Post-Doc G.KARRAS	UB	O.FAUCHER	UB	2013	12	42 000,00 €
Photonique	SMT4 2013 / Equipement "Spectroscopie et contrôle par champ laser, manipulation et ralentissement de la lumière"	CRB / ANR	LAVOREL B. / P.MATHEY	UB	2013	24	59 270,00 €
Photonique	SMT4 2013 / Allocation post-doctorale	CRB	FAUCHER O.	UB	2013	12	42 000,00 €
Photonique	PRECIPUT ANR 2012 MAT. OPTIQUE	UB	FATOME J.	UB	2013	12	9 000,00 €
Photonique	SMT2 2013 / Accueil de chercheurs invités - dispositif iXCore"	CRB	MILLOT G.	UB	2013	12	25 000,00 €
Photonique	SMT2 2013 / Allocation post-doctorale	CRB	KIBLER B.	UB	2013	12	42 000,00 €
Photonique	SMT2 2013 / Contrat d'étude "déploiement de la technologies de transmission optique haut débit'	CRB	FINOT C.	UB	2013	12	20 000,00 €
Photonique	SMT2 2013 / Contrat d'étude "Developpement de sources lumineuses cohérentes ultra large bande"	CRB	SMEKTALA F.	UB	2013	12	15 590,00 €
Photonique	Source laser supercontinuum pour les applications dans l'infrarouge moyen et ultraviolet	BQR PRES	SMEKTALA F.	FCS	2013	24	11 000,00 €
Photonique	SMT2 2013 / CPER Equipements "Diagnostic Optique"	CRB/WELIENCE	MILLOT G.	UB	2013	24	15 840,00 €
Photonique	SMT2 2013 / CPER Equipements "Diagnostic optique"	CRB	MILLOT G.	UB	2013	24	131 000,00 €
Photonique	SMT2 2013 CE Réal. Fonctions Opto-fluor.	CRB	CLUZEL B.	UB	2013	12	10 515,00 €
Photonique	SMT2 2013 Post-Doc LABEX ACTION O. DEMICHEL	CRB		UB	2013	12	42 000,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
Photonique	THESE JCE 2013 C.ROUX	CRB	MUSSET O.	UB	2013	36	99 000,00 €
Photonique	PARI 14-PHOTCOM/EQUPT PF Picasso : Mesureur & détecteur	CRB	FATOME J. ET DE FORNEL F.	UB	2014	24	31 690,00 €
Photonique	PARI 14-PHOTCOM/PDOC M.GUASONI	CRB		UB	2014	12	42 000,00 €
Photonique	Preciput ANR 2014/PICASSO	CRB	FATOME	UB	2014	24	29 916,00 €
Photonique	SMT2 2013 / Allocation post-doctorale R.MEJARD	CRB	CLUZEL B.	UB	2014	12	42 000,00 €
Photonique	SMT2 2014 / Allocation post-doctorale "Photonic dAta cOMpression device..." M.GUASONI	CRB	FATOME J.	UB	2014	12	42 000,00 €
Photonique	SMT2 2014 / Contrat d'étude "développement d'un système à déplacement micrométrique motorisé haute résolution pour des applications résolues en temps"	CRB	HERTZ E.	UB	2014	12	6 600,00 €
Photonique	SMT2 2014 / Contrat d'étude "soutien de fonctionnement à la plasmonique non-linéaire sur nano-cristaux"	CRB	BOUHELIER A.	UB	2014	12	5 240,00 €
Photonique	SMT 2 2015 / Allocation post-doctorale "développement d'un démonstrateur LIBS de nouvelle génération"	CRB / FEDER	MUSSET O.	UB	2015	12	42 000,00 €
Photonique	SMT2 2015 / Allocation de thèse "imagerie spectrale ultrarapide à l'aide de peignes de fréquences laser pour des applications biomédicales" (co-tutelle avec Allemagne)	CRB	MILLOT G.	UB	2015	18	49 500,00 €
Photonique	SMT2 2015 / Allocation post-doctorale "développement d'une source térahertz large bande impulsionnelle et application à des procéssus moléculaires"	CRB / FEDER / LABEX ACTION	LAVOREL B.	UB	2015	12	42 000,00 €
Photonique	SMT2 2015 / Allocation post-doctorale "nanophotonique quantique et contrôle cohérent" (co-financement avec CNRS)	CRB / FEDER	COLAS DES FRANCS G.	UB	2015	12	21 000,00 €
Photonique	SMT2 2015 / Chercheur	CRB	KIBLER B.	UB	2015	12	5 300,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	invité : A. CHABCHOUB						
Photonique	SMT2 2015 / Contrat d'étude "fibres non linéaires infrarouges"	CRB / FEDER	SMEKTALA F.	UB	2015	12	8 175,00 €
Photonique	SMT2 2015 / Contrat d'étude "modules optiques pour la mesure temporelle d'impulsions femtosecondes"	CRB / FEDER	HERTZ E.	UB	2015	12	34 988,00 €
Photonique	SMT2 2015 / Promotion de la recherche "année internationale de la lumière en Bourgogne"	CRB	HAMMANI K.	UB	2015	12	7 500,00 €
Photonique	SMT2 2015 / Promotion de la recherche "Colloque HRMS"	CRB	LAVOREL B.	CNRS	2015	12	90 000,00 €
Photonique	Allocation these JCE M.LAMY	CRB	FINOT C.	UB	2015	36	99 000,00 €
Photonique						Sub-Total "CRB/FEDER/UB	3 891 330,00 €
Photonique	Détecteur de fuites	CNRS		CNRS	2010	12	16 744,00 €
Photonique						Sub-Total "CNRS"	16 744,00 €
Photonique	Etude	CEA SACLAY	SMEKTALA	CNRS	2010	12	1 196,00 €
Photonique	Bourse Egide Tchomgo Felenou	EGIDE	P.TCHOFO DINDA	UB	2010	12	5 325,00 €
Photonique	SLIL Spectromètre et laser intégrés pour la LIBS Régime d'appui aux PME pour l'innovation duale - RAPID	SLIL-DGA	MUSSET O.	CNRS	2013	36	218 982,00 €
Photonique	Projet Franco-Indien	CEFIPRA	GRELU P.	CNRS	2014	36	35 745,00 €
Photonique						Sub-Total "Other public agencies"	261 248,00 €
Photonique	Recherche, développement et caractérisation d'une source laser innovante (projet OSIRIS)	S.D.A.E. SARL		UB Filiale WELIENCE	2010	24	72 172,62 €
Photonique	Contrat Etude OSIRIS	WELIENCE	MUSSET O.	UB	2012	12	201 000,00 €
Photonique	Evaluation de la technologie laser femtoseconde pour la micro-structuration de surface de titane en vue de la rendre hydrophobe	VALTIMET	LAVOREL B.	WELIENCE	2012	12	55 000,00 €
Photonique	Evaluation de la technologie laser femtoseconde pour la microstructuration de surface de titane en vue de la rendre hydrophobe	VALLOUREC HEAT EXCHANGER TUBES		WELIENCE	2013	12	32 550,00 €
Photonique	Communication de savoir faire et licence d'exploitation pour une source laser UV	BERTIN Technologies	MUSSET O.	WELIENCE	2013	12	35 000,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
Photonique	Projet VALTIMET	SATT GD EST		UB	2013	12	29 390,85 €
Photonique	SMT2 CE	CRB	MUSSET O.	UB	2013	12	30 000,00 €
Photonique	Travaux de recherche en vue du déploiement de la technologie de transmission optique haut-débit pour des applications industrielles de télésurveillance	PRYNEL	FINOT CH.	WELIENCE	2013	12	12 500,00 €
Photonique	Projet IHM (Interface Homme Machine)	SATT GD EST	MUSSET O.	SATT GD EST	2014	12	60 000,00 €
Photonique	Etude de l'apport de la technologie laser dans la qualité musicale des vielles	LES VIELLES DE LA RONDE		WELIENCE	2014	12	2 450,00 €
Photonique	Source laser compacte pour spectroscopie LIBS	STE IVEA	USSET O.	CNRS	2014	12	2 875,00 €
Photonique	Travaux de recherche en vue du déploiement de la technologie de transmission optique haut débit pour des applications industrielles de télésurveillance	PRYNEL	FINOT CH.	WELIENCE	2014	12	30 100,00 €
Photonique						Sub-Total “Industries”	563 038,47 €
Photonique						**GRAND TOTAL**	**9 583 576,21 €**

II.7.3. Department Nanosciences

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
NANO	FP7 SPEDOC "Surface Plasmon early Detection and Treatment Follow -up of Circulating Heat Shock Proteins and Tumor CellsGrant"	Europe	DEREUX A. FINOT E.	UB	2010	42	361 200,00 €
NANO	FP7 PLATON "Merging Plasmonic and Silicon Photonics Technology towards Tb/s routing in optical interconnects"	Europe	DEREUX A. WEEBER JC	UB	2010	42	364 407,00 €
NANO	FP7 IP PHOXTROT	Europe	DEREUX A. WEEBER JC	CNRS	2012	48	267 315,00 €
NANO	H2020 PLASMOFAB	Europe	DEREUX A. WEEBER JC	UB	2015	36	420 000,00 €
NANO						Sub-Total “Europe”	1 412 922,00 €
NANO	"FENOPTIX" ANR-09-	ANR	SAVIOT L.	UB	2010	36	243 396,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	NANO-023-04 "Fibres optiques sicile dopées par des nanostructures métalliques exploitant la résonance de modes plasmons localisés pour exalter les amplifications et les effets non linéaires"						
NANO						Sub-Total "ANR"	243 396,00 €
NANO	SMT1 2010 / Equipements NANO2BIO	CRB / FEDER	DEREUX A./SENET P.	UB	2010	12	408 000,00 €
NANO	SMT1 2010 / Contrat d'étude "PNANO SPEDOC"	CRB	DEREUX A.	UB	2010	12	178 150,00 €
NANO	SMT1 2010 / Allocation de thèse (M.VARACHE)	CRB	MILLOT N.	UB	2010	36	99 000,00 €
NANO	CRB Allocation de thèse S. PARIS "Nanotubes d'oxydes de titane comme nouveaux nanovecteurs de principes actifs"	CRB / FEDER	MILLOT N.	UB	2010	36	99 000,00 €
NANO	SMT1 2010 / Allocation post-doctorale J. BOUDON "Greffage de protéines sur des oxydes nanométriques pour applications biomédicales"	CRB	MILLOT N.	UB	2010	12	42 000,00 €
NANO	HS-AFM : application de l'imagerie haute résolution ultra rapide à l'étude de l'interaction de molécules et de particules virales	BQR PRES	LESNIEWSKA E.	FCS	2010	24	4 000,00 €
NANO	Marquage de Molecules par les Metaux pour l'imagerie Medicales (3MIM)	CNRS-UB-CRB	MILLOT N.	UB	2010	24	100 942,00 €
NANO	CRB aide a la mobilite sortante pour des sejoursde courte duree a l'Universite Cornell	UB - BQR	SENET P.	UB	2010	12	3 000,00 €
NANO	CRB PARI SMT1 NANO2BIO FONCTIONNEMENT CRB	CRB	DEREUX A.	UB	2010	12	8 150,00 €
NANO	Marquage de Molecules par les Metaux pour l'imagerie Medicales (3MIM)	CRB	MILLOT N.	CNRS	2010	12	169 500,00 €
NANO	SMT5 2011 /	CRB / FEDER	LESNIEWSKA	UB	2011	24	228 000,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	Equipement "Microscope microonde SMM"	ETAT / CPER ETAT	E.				
NANO	SMT1 2011 / Equipements "moyens de calcul des protéines, module mégasonic, boîte à gants, scanner, acces. Optiques et AFM-HS, équipements AFM, HS-AFM, optomécaniques	CRB / FEDER / CPER ETAT	DEREUX A.	UB	2011	24	208 000,00 €
NANO	SMT1 2011 / Allocation post-doctorale	CRB / FEDER ETAT	SENET P.	UB	2011	12	42 000,00 €
NANO	SMT1 2011 / Allocation post-doctorale	CRB	LESNIEWSKA E.	UB	2011	12	42 000,00 €
NANO	SMT3 2011 / Equipement "Gravure ionique réactive"	CRB / FEDER ETAT / CPER ETAT	DEREUX A.	UB	2011	24	302 000,00 €
NANO	SMT3 2011 / Contrat d'étude "fonctionnement de la plate-forme ARCEN"	CRB	DEREUX A.	UB	2011	12	42 000,00 €
NANO	CRB 3MIM / Allocation post-doctorale : R. MAYAP TAlOM	CRB	MILLOT N.	CNRS	2011	12	42 000,00 €
NANO	Aménagement ARCEN (3)	Preciput ANR	DEREUX	UB	2011	12	61 853,68 €
NANO	Equipt Autoclave	CRB	MILLOT N.	UB	2011	12	5 016,72 €
NANO	Analyses ZETASIZER	CNRS	CHAUMONT D.	UB	2011	2	3 710,77 €
NANO	CRB / Projet 3MIM Fonctionnement"Nanobio : nanomatériaux multifonctionnels pour applications biomédicales"	CRB	MILLOT N.	CNRS	2012	12	15 000,00 €
NANO	CRB / Projet 3MIM Equipements année 2012	CRB	MILLOT N.	UB	2012	24	22 500,00 €
NANO	Etude de la biodistribution de nanoparticules candidates pour des applications biomédicales de diagnostic et de traitement du cancer	BQR PRES	MILLOT N.	FCS	2012	24	15 000,00 €
NANO	SMT10 SSTIC / CE "Analyse caractérisation de la dynamique membranaire"	CRB	LESNIEWSKA E.	UB	2012	12	45 495,00 €
NANO	SMT1 2012 / Equipements "Stockage du cluster de calcul des protéines, équipements de microfluidique, AFM	CRB	DEREUX A.	UB	2012	24	80 350,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	et instrumentation optique"						
NANO	SMT1 2012 / Contrat d'étude "FP7 SPEDOC"	CRB	DEREUX A.	UB	2012	12	43 500,00 €
NANO	SMT1 2012 / Equipement FABER	CRB	BOUDON J.	UB	2012	12	24 500,00 €
NANO	SMT1 2012 / Contrat d'étude FABER	CRB	BOUDON J.	UB	2012	12	15 200,00 €
NANO	SMT1 2012 / Allocation post-doctorale P. RAI "Plasmons de surface et détection précoce du cancer"	CRB	FINOT E.	UB	2012	12	42 000,00 €
NANO	SMT3 2012 / Equipements "Jouvence Lithographie Electronique - plate-forme technique ARCEN"	CRB / FEDER / ETAT	DEREUX A./ WEEBER JC.	UB	2012	12	590 000,00 €
NANO	SMT3 2012 / Contrat d'étude "Fonctionnement nanofabrication ARCEN" (poursuite contrat 2011)	CRB	DEREUX A.	UB	2012	12	22 555,00 €
NANO	SMT3 2012 / Allocation post-doctorale	CRB	DEREUX A./ WEEBER JC.	UB	2012	12	42 000,00 €
NANO	SMT1 2012 / Equipements "Nœuds de calcul"	CRB	SENET P.	UB	2012	24	35 000,00 €
NANO	Contrat These Thomas	CNRS/CRB (3MIM)	MILLOT N.	UB	2012	36	99 000,00 €
NANO	SMT1 EQPT 2013 Sonde Raman Fibree	CRB	LESNIEWSKA E.	UB	2013	1	11 930,00 €
NANO	SMT1 CE 2013 NVH Medicinal	CRB	MILLOT N.	UB	2013	1	9 750,00 €
NANO	DSI UB EQPT 2012 Noeuds de Calcul	UB	SENET P,	UB	2013	1	5 000,00 €
NANO	Inscriptions 2013 COLLOQUE ISPM	UB	LESNIEWSKA E.	UB	2013	1	32 000,00 €
NANO	BQR 2013 COLLOQUE ISPMUB	UB	LESNIEWSKA E.	UB	2013	1	2 000,00 €
NANO	SMT1 2013 / Equipements "Upgrade HS-AFM"	CRB	LESNIEWSKA E.	UB	2013	24	40 340,00 €
NANO	SMT1 2013 / Equipement "Potentiostat"	CRB / NVH MEDICINAL	FINOT E.	UB	2013	24	16 480,00 €
NANO	SMT1 2013 / Contrat d'étude "Cinétique de l'agrégation dans le sang"	CRB / NVH MEDICINAL	FINOT E.	UB	2013	12	19 500,00 €
NANO	SMT1 2013 / Contrat d'étude "Nanotubes de	CRB	MILLOT N.	UB	2013	12	10 000,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	titanates comme nouveaux nanovecteurs de molécules radiosensibilisantes"[2]						
NANO	SMT1 2013 / Contrat d'étude "Les nanosciences pour des applications d'avancées récentes en biologie"	CRB	SENET P. / MARCO DE LUCAS C. / LESNIEWSKA E.	UB	2013	12	6 450,00 €
NANO	SMT1 2013 / Equipement FABER "Evaporateur rotatif"	CRB	BOUDON J.	UB	2013	24	14 230,00 €
NANO	SMT1 2013 / Fonctionnement FABER	CRB	BOUDON J.	UB	2013	12	6 070,00 €
NANO	SMT1 2013 / Allocation post-doctorale D. CARRIOU " Etude de la dynamique d'interaction protéine-protéine par HS-AFM et SERS"	CRB / FEDER	LESNIEWSKA E.	UB	2013	12	42 000,00 €
NANO	CRB / Projet 3MIM Fonctionnement"Nanobio : nanomatériaux multifonctionnels pour applications biomédicales"	CRB	MILLOT N.	CNRS	2013	12	13 750,00 €
NANO	CRB / Projet 3MIM Equipemens	CRB	MILLOT N.	UB	2013	24	45 000,00 €
NANO	PRECIPUT ANR "Adaptation de l'ICB aux contraintes ZRR et participation à la restructuration de l'aile D du laboratoire"	ANR	LESNIEWSKA E.	UB	2013	12	2 945,00 €
NANO	PRECIPUT ANR / Equipement "Acquisition d'un groupe de pompage pour dispositif de nanolithographie électrique"	ANR	LESNIEWSKA E.	UB	2014	12	3 220,00 €
NANO	SMT1 2014 / Equipements FABER	CRB	LERAY A.	UB	2014	24	57 913,00 €
NANO	CRB / Projet 3MIM Fonctionnement"Nanobio : nanomatériaux multifonctionnels pour applications biomédicales"	CRB	MILLOT N.	UB	2014	12	15 000,00 €
NANO	SMT1 2014 / Contrat d'étude ARMOR PROTEINES	CRB	LESNIEWSKA E.	UB	2014	12	7 000,00 €
NANO	SMT1 2014 / Contrat d'étude "Collaboration internationale France/USA"	CRB	SENET P.	UB	2014	12	3 500,00 €
NANO	SMT1 2014 / Contrat	CRB	MILLOT N.	UB	2014	12	7 000,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	d'étude "nanoparticules pour la vectorisation de médicaments"						
NANO	SMT1 2014 / Contrat d'étude FABER	CRB	LERAY A.	UB	2014	12	2 087,00 €
NANO	CRB 3MIM / Allocation post- doctorale T.COURANT	CRB	MILLOT N.	UB	2014	12	42 000,00 €
NANO	CRB 3MIM / Fonctionnement	CRB	MILLOT N.	UB	2014	12	9 000,00 €
NANO	Preciput ANR 2014/Pompage NANO	UB	LESNIEWSKA	UB	2014	1	3 220,00 €
NANO	PARI 14-NANO2BIO/THESE J.B.CLEMENT	CRB	FINOT E.	UB	2014	36	99 000,00 €
NANO	HCP 14-3MIM/EQUPT	CRB	MILLOT N.	UB	2014	1	35 000,00 €
NANO	PARI 14-NANO2BIO/CE Nanoparticules	CRB	MILLOT N.	UB	2014	1	1 500,00 €
NANO	SMT1 2015 / Contrat d'étude "étude de protéines alimentaires par technique de microscopie et de spectroscopie haute résolution"	CRB / FEDER	LESNIEWSKA E.	UB	2015	12	25 000,00 €
NANO	SMT1 2015 / Contrat d'étude "caractérisations fines de protéines dans le cadre du projet APACHE	CRB / FEDER / NVH MEDICINAL	MILLOT N.	UB	2015	12	60 000,00 €
NANO	SMT1 2015 / Allocation post-doctorale "fonctionnalisation de nanoparticules de silice mésoporeuse pour la vectorisation de molécules anticancéreuses"	CRB / FEDER	BOUYER F.	UB	2015	12	42 000,00 €
NANO						Sub-Total "CRB/FEDER /UB"	3 870 308,17 €
NANO	CE "Etude de mécanismes d'amorçage en fatigue du tantale"	CEA VALDUC	FINOT E.	CNRS	2010	24	28 000,00 €
NANO	Application de nanostructures d'oxydes de titane dans le domaine cardiovasculaire	OSEO	MILLOT N.	UB	2010	12	52 635,00 €
NANO	Application de nanostructures d'oxydes de titane dans le domaine cardiovasculaire	OSEO	MILLOT N.	UB	2010	12	45 409,21 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
NANO	CARNOT ARTS "Caractérisation par microscopie SMM de l'effet nocif des défauts en volume dans les métaux et alliages"	ARTS	LESNIEWSKA E.	UB	2011	24	36 720,00 €
NANO	Prestation	CEA VALDUC	FINOT E.	CNRS	2011	9	7 000,00 €
NANO	Nanoparticules pour le diagnostic medical	Ligue Contre Cancer	MILLOT N.	CGPL	2012	24	57 000,00 €
NANO	Etude	CEA	FINOT E.	CNRS	2012	10	24 920,00 €
NANO	Fab echantillons+analyses U1054	INSERM	LESNIEWSKA E.	UB	2012	9	9 850,00 €
NANO	Fab échantillons+analyses HADJAR	UTT	LESNIEWSKA E.	UB	2012	2	12 360,00 €
NANO	CARNOT ARTS "Réalisation d'une plateforme CND d'analyse multi-fréquence à l'échelle nanomètrique de défauts en volume dans les métaux (MF-AFM)	ARTS	LESNIEWSKA E.	UB	2014	12	33 750,00 €
NANO						Sub-Total "Other Public Agencies"	307 644,21 €
NANO	Peps « Physique Theorique et ses Interactions »	CNRS	SENET P.	CNRS	2012	12	5 000,00 €
NANO	Analyses ZETASIZER	CNRS	CHAUMONT D.	UB	2014	1	2 146,66 €
NANO						Sub-Total "CNRS"	7 146,66 €
NANO	Contrat de collaboration "Application de nanostructures d'oxydes de titane dans le domaine cardiovasculaire" / Accomp. Thèse V.BELLAT	NVH MEDICINAL	MILLOT N.	UB	2010	36	30 000,00 €
NANO	Prestations "Analyse des interactions à la surface d'un support fonctionnalisé par des protéines recombinantes"	NVH MEDICINAL	LESNIEWSKA E.	UB	2010	12	2 000,00 €
NANO	Etudes de poudres alimentaires laitieres par microscopie a force	ARMOR PROTEINES	LESNIEWSKA E.	Welience	2012	1	10 000,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	atomique a haute vitesse						
NANO	Etude de poudres de lactose par microscopie a force atomique a haute vitesse	ARMOR PROTEINES	LESNIEWSKA E.	Welience	2012	2	10 000,00 €
NANO	Carac.echant. Microscopie AFM	CAPSUGEL	LESNIEWSKA E.	UB	2012	7	6 000,00 €
	Caracterisation d'echantillons par microscopie a sonde locale (OSNC)	CAPSUGEL	LESNIEWSKA E.	UB	2014	1	20 744,68 €
NANO	Contrat de collaboration "Evaluation de la fonction plaquettaire sur sang total et sous flux artériel à l'aide d'un biocapteur microfluidique multicanal" / Accomp. Thèse S. DEBRAND	NVH MEDICINAL	FINOT E.	UB	2011	36	44 100,00 €
NANO	Etudes de poudres alimentaires laitières par microscpie à force atomique à haute vitesse II	ARMOR PROTEINES	LESNIVEWSKA E.	Welience	2011	2	10 000,00 €
NANO	Dispositif microfluidique	OSEO	FINOT E.	UB	2011	12	41 806,02 €
NANO	Prestations d'analyses "Analyse moléculaire de la structure tridimentionnelle de petide d'intérêt"	NVH MEDICINAL	SENET P.	UB	2012		2 730,00 €
NANO	Prestations d'analyses plateforme ARCEN	INSERM / LABOS / INDUSTRIELS	LESNIVEWSKA E.	UB	2012	12	19 469,00 €
NANO	Réalisation de plots d'or sur 5 éprouvettes (OSNC)	SATT GD-EST		UB	2014	12	9 800,00 €
NANO	CE "Mesure de l'effet par AFM du taux de béta lactose et d'amorphe sur les propriétés de compression d'un granulé de lactose monohydrate"	NVH MEDICINAL	LESNIEWSKA E.	UB	2014	6	15 000,00 €
NANO	Prestations d'analyses plateforme ARCEN	LABORATOIRES UB/INDUSTRIELS	LESNIVEWSKA E.	UB	2015	8	8 277,00 €
NANO	CE "Détection et analyse des impuretés de surface d'un lactose pharmaceutique issu de ARMOR PROTEINES par des techniques de microscopie à champ	ARMOR PROTEINES	LESNIEWSKA E.	UB	2015	12	50 000,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	proche et analyses chimiques						
NANO	Prestations d'analyses plateforme ARCEN	INDUSTRIELS	LESNIVEWSKA E.	UB	2015	12	33 736,00 €
NANO						Sub-Total “Industries”	773 480,23 €
NANO						GRAND TOTAL	6 614 897,27 €

II.7.4. Department PMDM

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
PMDM	SISHYFE "Développement d’un outil numérique prédictif : application au cas de la simulation du soudage hybride sur épaisseur moyenne à forte"	ANR	SALLAMAND P.	UB	2010	48	393 288,00
PMDM	SILICARBITUBE " Composite à Matrice Carbure de Silicim Nanostructurée à Renforts Nanotubes de Carbone et Interphase Contrôlée" ANR-2010-BLAN-0948-02	ANR	BERNARD F.	CNRS	2011	43	172 640,00 €
PMDM	PRECIPUT ANR / Chair Ioana POPA	ANR	POPA I.	UB	2011	36	30 000,00 €
PMDM	PRECIPUT ANR "Amélioration de l'environnement de travail de l'équipe LTM"	ANR	SALLAMAND P.	UB	2011	12	11 945,00 €
PMDM	PRECIPUT ANR "Ensemble de visualisation pour les simulations atomiques des propriétés des matériaux"	ANR	POLITANO O.	UB	2011	12	16 085,00 €
PMDM	MF2 "Mécanismes de Frittage Flash dans les matériaux métalliques" ANR-2011-BS09 020 02	ANR	BERNARD F.	CNRS	2012	48	190 840,00 €
PMDM	PRECIPUT ANR / Equipement "Extension des locaux de la plateforme de Frittage Flash" tranche 1	ANR	BERNARD F.	UB	2012	12	25 000,00 €
PMDM	ASSISTENSE "ASSemblages InnovantS des maTériaux (SiC, C/C, SiC/SiC) envisagés pour l'Energie et les	ANR	BERNARD F.	CNRS	2013	42	95 909,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	eNvironnementS Extrêmes" ANR-12-RMNP-0014-04						
PMDM	TESAMI "Titane et ses alliages en milieux irradiants" ANR-12-RMNP-005-06	ANR	MONTESIN T.	CNRS	2013	48	117 406,00 €
PMDM	PRECIPUT ANR / Equipement "Extension des locaux de la plateforme de Frittage Flash" tranche 2	ANR	BERNARD F.	UB	2013	12	25 000,00 €
PMDM	**FLAMME "Faisceaux laser et assemblage de matériaux disseMblablEs"**	ANR	SALLAMAND P.	UB	2014	36	300 000,00 €
PMDM						Sub-Total "ANR"	1 378 113,00 €
PMDM	FUI DECALQ "Découpage, Qualité, Compétitivité) Développement de méthodes et de moyens de contrôle des outils de découpage industriel et de leur usure, et développement de nouveaux outils de découpe plus performants"	BPI France / FEDER / CONSEIL GENERAL	VIGNAL V. & CHASSAGNON R.	UB	2011	48	184 611,50 €
PMDM	FUI ATHENA "Active THErmography for Non-destructive Inspection Automation"	BPI France / CRB	KNEIP JF.	UB	2013	36	145 539,00 €
PMDM	FUI HIPPI "Fabrication de pièces Hydrauliques Innovantes par Procédé Poudre en CIC"	BPI France / FEDER / CRB	BERNARD F.	UB	2013	30	199 430,00 €
PMDM	FUI FRY'IN "Nouvelles technologies de friture pour des appareils domestiques et professionnels permettant de préparer des produits frits plus sains"	BPI France / CRB	BERNARD F.	UB	2014	48	75 595,68 €
PMDM						Sub-Total "FUI"	605 176,18 €
PMDM	PRECIPUT ANR / Fonctionnement "Jouvence d'une tronçonneuse pour découpe de précision d'échantillons métalliques et céramiques"	UB	CHEVALIER S.	UB	2014	12	3 000,00 €
PMDM	CRB / Allocation de thèse M. VARACHE "Encapsulation de dérivés de platine dans	CRB / BQR	BOUYER F.	UB	2010	36	99 000,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	des nanoparticules de silice en vue de ciblage des traitements de chimiothérapie anticancéreuse"						
PMDM	CRB / Allocation de thèse JCE R. PIOLET "Synthèse hydrothermale en continu de nanoparticules de ZnO en milieu supercritique"	CRB / FEDER	BERNARD F.	UB	2010	36	99 000,00 €
PMDM	SMT5 2010 / Allocation de thèse "Impact de l'usinage de superfinition sur la zone affectée par le procédé'	CRB / CEA	VIGNAL V.	UB	2010	36	99 000,00 €
PMDM	SMT5 2010 / Allocation post-doctorale J. PANSIOT "Elaboration de matériaux"	CRB	BERNARD F.	UB	2010	12	42 000,00 €
PMDM	SMR5 2010 / Equipements "Microduromètre, microtronçonneuse, accessoires..."	CRB	GREVEY D.	UB	2010	12	24 500,00 €
PMDM	Assemblage bi-métalliques par frittage flash (INTERREG IV)	CRFC-FEDER	BERNARD F.	UB	2010	36	91 000,00
PMDM	Durabilité des soudures en environnement agressif. Application à l'assemblage TA6V/TA6V	BQR PRES	MONTESIN T.	FCS	2010	12	3 500,00 €
PMDM	SMT5 2011 / Equipements EM2B Chalon " tronçonneuse-enrobeuse-polisseuse, capteurs CND à courants de Foucault, RX)	CRB / FEDER ETAT / GRAND CHALON / IUT CHALON	BERTHELIN-BOUSQUET C.	UB	2011	24	92 266,00 €
PMDM	SMT5 2011 / Contrat d'étude (accompagnement de thèse)	CRB / ARCELOR	VIGNAL V.	UB	2011	12	18 000,00 €
PMDM	SMT5 2011 / Equipement FABER "Outils de calcul"	CRB	DEJARDIN S.	UB	2011	24	20 700,00 €
PMDM	SMT5 2011 / Allocation de thèse JCE (M. Brusson)	CRB / FEDER Région	ROSSIGNOL J.	UB	2011	36	99 000,00 €
PMDM	SMT5 2011 / Allocation de thèse (D. BA)	CRB / ARCELOR	VIGNAL V.	UB	2011	36	99 000,00 €
PMDM	SMT5 2011 / Promotion de la recherche "Colloque DIMAT"	CRB	CHEVALIER S.	CNRS	2011		9 000,00 €
PMDM	SMT5 2012 / Equipements "Presse de frittage, système de mesure électro-chimiques locales à haute résolution,	CRB / FEDER / CPER ETAT	BERNARD F. , VIGNAL V., OLTRA R.	UB	2012	12	252 000,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	système de caractérisation d'électrolyses"						
PMDM	SMT5 2012 / Contrat d'étude "contribution à la compréhension de l'effet des éléments d'alliage sur la résistance à la corrosion...." (poursuite contrat 2011)	CRB / INDUSTEEL	VIGNAL V.	UB	2012	12	18 000,00 €
PMDM	SMT5 2012 / Equipement FABER	CRB	DEJARDIN S.	UB	2012	12	36 800,00 €
PMDM	SMT5 2012 / Allocation post-doctorale N. CONIGLIO "Reconstruction 3D de surfaces spéculaires liquides"	CRB	MATTEI S. & MATHIEU A.	UB	2012	12	42 000,00 €
PMDM	SMT5 2014 / Contrat d'étude "simulation des phénomènes thermohydrauliques et de leurs influences sur la microstructure dans le cas du soudage d'aciers de nouvelle génération"	CRB	MATTEI S.	UB	2014	12	4 120,00 €
PMDM	SMT5 2014 / Contrat d'étude " compréhension des phénomènes associés à la maîtrise de la microstructure des poudres	CRB / WELIENCE	BERNARD F.	UB	2014	12	9 000,00 €
NANO	CRB / Allocation thèse JCE	CRB	BERNARD F. & DEMOISSON F.	UB	2014	36	99 000,00 €
PMDM	SMT5 2015 / Contrat d'étude "fonctionnement de l'espace didactique Maison de la Métallurgie"	CRB / FEDER	CHEVALIER S.	UB	2015	12	2 000,00 €
PMDM	SMT5 2015 / Contrat d'étude "molélisation de la diffusion dans la couche de corrosion de l'alliage 690"	CRB / FEDER	POLITANO O.	UB	2015	12	4 200,00 €
PMDM	SMT5 2015 / Chercheur invité : H.KRAWIEC	CRB	VIGNAL V.	UB	2015	12	2 500,00 €
PMDM	CRB PLATEFORME FLAIR / Equipement "laser de forte puissance"	CRB	SALLAMAND P.	UB	2015	24	167 000,00 €
PMDM						Sub-Total "CRB/FEDER /UB"	1 435 586,00 €
PMDM	Frittage par SPS de différents composites à base de carbure de silicium	CNRS CENTRE EST DR06 ICB	BERNARD Frédéric	WELIENCE	2012	2	10 000,00 €
PMDM	Prestation de formation	CNRS	CICALA M.	CNRS	2013	1	2 250,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	M. CICALA						
PMDM	Réalistion de frittages SPS sur différentes poudres métalliques dans le cadre du programme ANR-MF2	CNRS CENTRE EST DR06 ICB		WELIENCE	2014	12	15 000,00 €
PMDM	Caractérisations physico-chimiques de brasures, de dépôts à base de carbure de silicium et réalisation de cibles par pulvérisation par SPS dans le cadre du programme ANR-12-RMNP-0014-04	CNRS CENTRE EST DR06 ICB		WELIENCE	2014	12	15 000,00 €
PMDM						Sub-Total "CNRS"	42 250,00 €
PMDM	CE " Caractérisations microstructurales et électrochimiques de soudure"	CEA VALDUC	VIGNAL V.	CNRS	2010	25	137 000,00 €
PMDM	CE "Etude de la corrosion microstructurale et du vieillissement de l'APX4, rôle de l'hydrogène et des contraintes	CEA VALDUC	VIGNAL V.	CNRS	2010	38	197 600,00 €
PMDM	CE " Etude du vieillissement et du retraitement de bains de sels usés"	CEA VALDUC	CHEVALIER S. - CRETON N. - MONTESIN T.	CNRS	2010	5	8 200,00 €
PMDM	CE " Etude de différents systèmes MIC"'	CEA VALDUC	BERNARD F.	CNRS	2010	10	35 000,00 €
PMDM	CE "Etude du potentiel et de l'intérêt de la méthode CALPHAD pour la modélisation du comportement thermodynamique d'alliages du plutonium stabilisés en phase'	CEA VALDUC	POPA I.	CNRS	2010	4	19 711,40 €
PMDM	CE "Caractérisation de la surface d'échantillons en acier 304L par analyses XPS et par essais électrochimiques"	CEA VALDUC	VIGNAL V. & HEINTZ O.	CNRS	2010	7	15 000,00 €
PMDM	CE " Modélisation du comportement mécanique de soudures intégrant un critère de ruine et la prise en compte des défauts"	CEA VALDUC	MONTESIN T.	CNRS	2010	8	43 390,00 €
PMDM	SMT5 2011 / Contrat d'étude FABER "fonctionnement post-doc CEA"	CEA			2011	24	70 000,00 €
PMDM	CE "Définition d'un protocole d'analyse des largeurs de raie de DRX	CEA VALDUC	POPA I.	CNRS	2011	7	23 144,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	en vue d'extraire les informations microstructurales"						
PMDM	CE "'encadrement thèse JD COUDERT"	CEA VALDUC	VIGNAL V.	CNRS	2011	36	40 450,00 €
PMDM	CE "ABAQUS"	CEA VALDUC	MONTESIN T., OPTASANU V., DEJARDIN S.	CNRS	2011	14	70 000,00 €
PMDM	CE " LIMPE"	CEA VALDUC	VIGNAL V.	CNRS	2011	24	3 000,00 €
PMDM	CE "Etude de l'hydrolyse de lithium sous très faible pression de vapeur saturante"	CEA VALDUC	BOUYER F.	CNRS	2011	9	35 000,00 €
PMDM	Contrat de collaboration "Etude des propriétés de surface pour la réalisation de joints soudés par diffusion : applications aux échangeurs de chaleurs compacts" (accomp. Thèse N. BOUQUET)	CEA GRENOBLE	BERNARD F.	CNRS	2011	36	18 500,00 €
PMDM	CARNOT ARTS "Comportement de matériaux en présence d'hydrogène"	CARNOT	MONTESIN T.	UB	2011	24	28 560,00 €
PMDM	CARNOT ARTS "Compréhension et maîtrise des phénomènes physiques mis en jeu lors de l'assemblage de matériaux dissimilaires"	CARNOT	SALLAMAND P.	UB	2011	24	47 200,00 €
PMDM	CE "Corrosion de matériaux utilisés pour la fabrication de conteneurs de bains de sels usés"	CEA VALDUC	CHEVALIER S. - CRETON N. - MONTESIN T.	CNRS	2012	24	19 900,00 €
PMDM	CE " Etude par DRX et techniques associées de la structure cristalline de matériaux métalliques soumis à différentes contraintes et environnement"	CEA VALDUC	POPA I.	CNRS	2012	12	8 120,00 €
PMDM	CE "accomp. Thèse D. COTTON"	CEA VALDUC	VIGNAL V.	CNRS	2012	36	20 225,00 €
PMDM	Contrat de collaboration "Analyses microstructurales et étude du comportement en corrosion d'échantillons en acier inoxydable"	CEA VALDUC	VIGNAL V.	CNRS	2012	24	148 000,00 €
PMDM	Contrat de collaboration "Etude de l'hydrolyse de lithium sous très faible pression de vapeur d'eau"	CEA VALDUC	BERNARD F.	CNRS	2012	36	90 000,00 €
PMDM	Evaluation des	ARTS	Dominique	WELIENCE	2012	2	17 400,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	potentialités du procédé laser hybride pour le soudage des bras TRAIC et détermination des conditions limites d'accostage		Grevey				
PMDM	Elaboration de matériaux à gradient de propriétés fonctionnelles pour les composants face au plasma des machines de fusion thermonucléaire	CEA CADARACHE	BERNARD Frédéric	WELIENCE	2012	30	23 200,00 €
PMDM	Etude du frittage flas par SPS de matrices céramiques pour le conditionnement spécifique de l'iode et du carbone : changement d'échelle	CEA MARCOULE	BERNARD Frédéric	WELIENCE	2012	12	9 500,00 €
PMDM	Etude de l'Hydrolyse de LiH : recherche bibliographique et mise en œuvre d'un dispositif expérimental permettant l'application de faibles pressions partielles d'H2O pour le compte du service TFU du Centre de Valduc	CEA VALDUC	BERNARD Frédéric	WELIENCE	2012	5	26 000,00 €
PMDM	CE "Etude des relations entre les procédés d'usinage et la durabilité des matériaux usinés"	CEA VALDUC	VIGNAL V.	CNRS	2013	36	24 000,00 €
PMDM	CE "Etude de la tenue en environnement d'une structure en APX4 optimisé intégrant une soudure homogène réalisée par faisceau d'électrons"	CEA VALDUC	VIGNAL V.	CNRS	2013	36	36 600,00 €
	Contrat de collaboration "Synthèse hydrothermale en conditions supercritiques de Li2MnSoP4 envisagé comme matériau d'électrode positive dans les batteries Li-ion"	CEA GRENOBLE	BERNARD F.	CNRS	2013	6	3 933,00 €
PMDM	Contrat de collaboration "Simulation thermodynamique et cinétique d'un acier inoxydable austénitique stabilisé au niobium"	CEA VALDUC	VIGNAL V.	CNRS	2013	5	24 600,00 €
PMDM	Contrat de collaboration "Etude de la corrosion	CEA VALDUC	VIGNAL V.	CNRS	2013	12	65 405,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	microstructurale et du vieillissement de l'APX4, facteur accélérateur et essai bi-axial"						
PMDM	IC CARNOT ARTS / USI COR FURF	CARNOT	VIGNAL V.	UB	2013	12	24 000,00 €
PMDM	Prestation "caratérisation mécanique et électrochimique" Commande 4600256236	CEA VALDUC	VIGNAL V.	CNRS	2013	1	3 000,00 €
PMDM	Contrat d'étude	CEA VALDUC	VIGNAL V.	CNRS	2014	36	3 000,00 €
PMDM	CE "Influence du procédé de fabrication ou d'un traitement thermique sur les procédés métallurgiques de différents alliages"	CEA VALDUC	VIGNAL V.	CNRS	2015	9	22 730,00 €
PMDM	CE "Mise en œuvre d'un dispositif de dissipation d'énergie"	CEA VALDUC	MONTESIN T.	UB	2015	8	54 600,00 €
PMDM	Marché "Etude de l'évaluation de céramiques renforcées par des nanotubes de carbone pour application aux blindages légers"	DGA	BERNARD F.	UB	2015	42	145 986,00 €
PMDM						Sub-Total "Other Public Agencies"	1 561 954,40 €
PMDM	CE "Contribution à la modélisation du couplage mécanique/chimique de l'évolution de l'interface pastille/gaine sous irradiation"	EDF	OPTASANU V. & MONTESIN T.	CNRS	2011	36	13 500,00 €
PMDM	Accompagnement phase expérimentale programme de recherche ANR SISHYFE (SImulation du Soudage HYbride par Faisceau de haute Energie)	Welience	Dominique Grevey	WELIENCE	2012	6	5 100,00 €
PMDM	Analyses par spectroscopie Micro-Raman	Welience		WELIENCE	2013	1	518,00 €
PMDM	Evaluation de la technologie laser femtoseconde pour la microstructuration de surface de titane en vue de la rendre hydrophobe	VALTIMET	Dominique Grevey	WELIENCE	2012	7	46 500,00 €
PMDM	Etude et réalisation d'un démonstrateur de matériaux nouveau pour pénétrateurs cinétiques	NEXTER MUNITIONS	BERNARD Frédéric	WELIENCE	2010	36	474 069,00

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	de haute performance						
PMDM	CE "D2termination de la concentration en soufre sur des revêtements alumino-formeurs NiAlPt"	SNECMA	CHEVALIER S.	CNRS	2010	12	6 000,00 €
PMDM	Etude et analyse par thermogravimétrie de nanopoudres sous atmosphère controlée	MARION TECHNOLOGIES	BERNARD F.	UB	2010		1 948,00 €
PMDM	Etude des phénomènes d'usure et de rupture des lignes de vie continues	AFFORPAH		UB Filiale WELIENCE	2010	5	4 650,00
PMDM	Développement d'un détecteur de micro trou pour des feuilles d'aluminium très minces sur les séparateurs de feuilles	ARCK SENSOR		UB Filiale WELIENCE	2010	2	1 794,00
PMDM	Assemblage hybride en chanfrein étroit d'un acier ferritique	AREVA		UB Filiale WELIENCE	2010	3	15 703,48
PMDM	Mesure de champs de température à l'aide d'imagerie infrarouge	AREVA		UB Filiale WELIENCE	2010	4	2 906,28
PMDM	Etude de soudage de la passe racine en position à plat pro-procédé laser et laser hybride sur l'acier et acier inoxydable	AREVA		UB Filiale WELIENCE	2010	4	24 706,97
PMDM	Microscopie par micro onde	AREVA NP		UB Filiale WELIENCE	2010	2	11 960,00
PMDM	Etude des potentialités du rechargement par procédé CMT pour l'élaboration de préformes	ASTRIUM SAS - Space Transportation		UB Filiale WELIENCE	2010	2	6 841,12
PMDM	Etude de la microstructure de cordons de soudure	CEA VALDUC		UB Filiale WELIENCE	2010	2	7 818,25
PMDM	Etude des potentialités du procédé CMT pour le rechargement de couteaux destinés à l'industrie agro-	COZZINI EUROPE		UB Filiale WELIENCE	2010	6	15 787,20
PMDM	Etude par shère intégrante de la reflectivité	ELECTROMER		UB Filiale WELIENCE	2010	1	2 810,60
PMDM	Pistes d'amélioration des simulations numériques du comportement d'assemblages hétérogènes acier/aluminium réalisés par soudo-brasage laser	RENAULT SAS	V. OPTASANU	UB Filiale WELIENCE	2010	3	8 730,00
PMDM	Etude de faisabilitédu	SOCIETE		UB Filiale	2010	2	7 702,24

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	soudage innovant de cuve de compresseur	D'EMBOUTISSAGE PRECIS		WELIENCE			
PMDM	Etude de soudabilitépar faiceau laserd'un acier à haute teneur en soufre	SOCIETE D'EMBOUTISSAGE PRECIS		UB Filiale WELIENCE	2010	2	6 912,88
PMDM	Analyse par radiographie X de silencieux de compresseur	SOCIETE D'EMBOUTISSAGE PRECIS		UB Filiale WELIENCE	2010	1	717,60 €
PMDM	Etude des conditions opératoires de rechargement dur par procédé laser avec fils fourrés	SOUDOKAY		UB Filiale WELIENCE	2010	5	25 666,16
PMDM	Etude et développement du soudage laser appliqué à l'assemblage de rubans fins en alliage d'aluminiu	STIRAL	Dominique Grevey	UB Filiale WELIENCE	2010	9	113 620,00
PMDM	Etude paramétrique relative au soudage par procédé laser d'une bague en acier	XENIA SARL		UB Filiale WELIENCE	2010	1	1 040,52
PMDM	Recherche, développement et caractérisation d'une source laser innovante (projet OSIRIS)	S.D.A.E. SARL	Dominique Grevey	WELIENCE	2010	3	201 150,00 €
PMDM	FUI ENERPOUDRES (Compaction isostatique à chaud (CIC))	BPI France	F. BERNARD	UB	2010	48	133 754,00
PMDM	Réalisation d'outils de coupe en carbure de tungstène pur par procédé SPS et expérimentation pour usinage du titane	ASSOCIATION TITANE	BERNARD Frédéric	WELIENCE	2010	16	24 500,00 €
PMDM	CE "Caractérisation de la corrosion locale dans des composites métalliques par microcapillaire"	MICHELIN	VIGNAL V.	CNRS	2011	9	3 500,00 €
PMDM	CE "Evaluer la possibilité de produire en condition eau-supercritique l'oxyde de Molybdène MoO3"	IFP ENERGIES NOUVELLES	BERNARD F. & DEMOISSON F.	CNRS	2011	7	11 000,00 €
PMDM	Etude "état de l'art du titane en milieu irradié"	ASSOCIATION TITANE	Tony MONTESIN/Virgil OPTASANU	WELIENCE	2011	3	18 000,00
PMDM	Frittage SPS de poudres métalliques amorphes - Phase 1 : Etude de faisabilité	TAG HEUER	BERNARD Frédéric	WELIENCE	2011	1	54 000,00 €
PMDM	Evaluation de soudage par laser Yb : YAG dans la fabrication de tubes inox	VALTIMET	Dominique Grevey	WELIENCE	2011	8	74 700,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
PMDM	Evaluation des potentialités du marquage par laser dans la fabrication de tubes en acier inoxydable	VALTIMET	Dominique Grevey	WELIENCE	2011	17	28 515,00 €
PMDM	CE " accomp. Thèse V. RAULT"	MICHELIN	VIGNAL V.	CNRS	2012	36	50 000,00 €
PMDM	Développement d'une solution d'assemblage pour la réalisation d'un démonstrateur relatif à une nouvelle conception d'échangeur dans le cadre du projet IHX	ALFA LAVAL VICARB SAS	Dominique Grevey	WELIENCE	2012	12	192 692,00 €
PMDM	Elaboration de compositions ultra-réfractaires par frittage flash pour des applications à très haute température	ONERA	BERNARD Frédéric	WELIENCE	2012	34	32 000,00 €
PMDM	Evaluation de technologies laser pour l'assemblage (passe racine) de tubes de pipelines en acier revêtu	SERIMAX	Dominique Grevey	WELIENCE	2012	7	85 400,00 €
PMDM	Contrat de collaboration "étude de la dissolution d'anodes en titane dans le chauffe-eau"	Cie INDUSTRIELLE DES CHAUFFE-EAU (CICE)	VIGNAL V.	CNRS	2013	9	14 607,00 €
PMDM	Etude de la soudabilité par laser continu sur acier inoxydable - caractér. Mécaniques et en corrosion...	SATT GD EST APERAM		WELIENCE	2013	12	3 330,00 €
PMDM	Etude du frittage flash par SPS de matrices céramiques pour le conditionnement de l'iode...	SATT GD EST CEA		WELIENCE	2013	12	1 189,50 €
PMDM	Prestation de traitement thermique	SATT GD EST Pôle matériaux		WELIENCE	2013	1	550,00 €
PMDM	CE " Phénomènes de diffusion à l'état solide dans les réactions hétérogènes gaz-solides"	IFP ENERGIES NOUVELLES	CHEVALIER S. & POLITANO O.	CNRS	2014	36	25 000,00 €
PMDM	CE "Etude du comportement en corrosion à haute température d'alliages métalliques pour applications verrières contenant de l'yttrium3	SAINT-GOBAIN SEVA	CHEVALIER S.	CNRS	2014	13	21 520,00 €
PMDM	Etude de la soudabilité par laser continu sur acier inoxydable sous environnement azote - Caratérisations mécanique et en corrosion des	APERAM STAINLESS FRANCE		WELIENCE	2014	12	11 800,00

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	assemblages						
PMDM	Simulation numérique des phénomènes thermohydrauliques et de diffusion des espèces lors d'un assemblage par fusion laser, d'aciers de nature différente	ARCELORMITTAL ATLANTIQUE		WELIENCE	2014	12	7 450,00
PMDM	Etude priliminaire sur la différence de comportement à la surtension entre un matériau ASB et un matériau ASB et un matériau de référence	ASB		WELIENCE	2014	12	9 950,00
PMDM	Elaboration de ZnS dense de qualité IR multi-spectrale en une seule étape par SPS	COORSTEK ADVANCED MATERIALS FR		WELIENCE	2014	24	142 000,00
PMDM	Etude préliminaire de déformulation des composés d'un minerai en fonction des étapes du process de traitement	ERAMET		WELIENCE	2014	12	12 000,00
PMDM	Etude et évaluation d'un composite gradient nano céramique-métal	NEXTER SYSTEM	BERNARD Frédéric	WELIENCE	2014	34	206 300,00 €
PMDM	CE " Etude de l'influence de la présence de nitrures de chrome Cr2N sur le comportement en corrosion d'une nuance d'aciers inoxydables austéno-férritiques"	APERAM STAINLESS France	VIGNAL V.	CNRS	2015	12	18 000,00 €
PMDM	Contrat d'étude	Cie INDUSTRIELLE DES CHAUFFE-EAU (CICE)	VIGNAL V.	CNRS	2015	10	10 000,00 €
PMDM	Contrat CIFRE "Effet des éléments d'alliage sur la résistance à la corrosion de nuances super-duplex exposées à des environnements simulant leur marché d'application par le biais d'approches locales"	INDUSTEEL France	VIGNAL V.	UB	2015	36	27 000,00 €
PMDM						Sub-Total “Industries”	2 226 909,80 €
PMDM						**GRAND TOTAL**	**7 249 989,38 €**

II.7.5. Department Interfaces

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
Interfaces	Action Marie Curie - Echanges, collaborations scientifques : PROJET "SICCATALYSIS"	Europe	BEZVERKHYY I.	UB	2012		12 635,00 €
Interfaces	FP7 Chipcat	Europe	S. BOURGEOIS	UB	2012	48	567 392,00 €
Interfaces						Sub-Total "Europe"	580 027,00 €
Interfaces	SOFT-CRYSTAB "Stabilité mécanique et hydrothermale des solides poreux flexibles" ANR-10-BLAN-0822-04	ANR	BELLAT JP.	CNRS	2010	48	165 360,00 €
Interfaces	CAPBTX "microsystème capteur à base d'une structure sensible composite dédié à la mesure sélective de benzène, toluène, sylène" ANR-10-BLAN-917-04	ANR	ROSSIGNOL J.	CNRS	2010	36	70 584,00 €
Interfaces	BRIDGE "Control of cement past cohesion by the use of polycations : towards a ductile cement" ANR-2010-JCJC-0809-01	ANR	POCHARD I.	UB	2011	36	185 000,00 €
Interfaces	IMAGINOXE "IMAGgerie chimique de Nouveaux OXydes pour l'Energie"	ANR	POTIN V.	UB	2012	36	249 000,00 €
Interfaces	M-SCOT "Tests multi-échelles en corrosion" ANR-14-CE07-0027-01	ANR	OLTRA R.	CNRS	2014	54	227 768,00 €
Interfaces	LABEX ACTION CDD F.PELTIER	ANR	OLTRA R.	UB	2014	12	12 500,00 €
Interfaces						Sub-Total "ANR"	910 212,00 €
Interfaces	PRECIPUT ANR "Climatisation du laboratoire de Thermodynamique d'adsorption"	UB	BELLAT JP.	UB	2011	12	9 332,00 €
Interfaces	PRECIPUT ANR "Installation d'une sorbonne de manip dans le plateau technique ARCEN"	UB	MARCO DE LUCAS C.	UB	2011	12	6 232,00 €
Interfaces	SMT6 2011 / Allocation post-doctorale I. TSIAOUSSIS "développement de nouvelles techniques MET pour l'étude d'oxydes complexes nano-structurés"	CRB	POTIN V.	UB	2011	12	42 000,00 €
Interfaces	PRECIPUT ANR "CAPBTX" - Frais de personnel	UB	ROSSIGNOL J.	UB	2011	12	23 000,00 €
Interfaces	PRECIPUT ANR	UB	NONAT A.	UB	2012	12	16 000,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	"Aménagement de locaux pour l'extension d'une plateforme d'analyses chimiques						
Interfaces	PRECIPUT ANR "Mise aux normes d'une sorbonne"	UB	OLTRA R.	UB	2013	12	6 000,00 €
Interfaces	PRECIPUT ANR / Equipement "Acquisition d'un cluster de calcul pour la simulation numérique de l'adsorption dans des matériaux nano structurés"	ANR	SIMON JM.	UB	2014	12	7 506,00 €
Interfaces	SMT6 2010 / Allocation de thèse	CRB	BERNARD F. & DEMOISSON F.	UB	2010	36	99 000,00 €
Interfaces	SMT6 2010 / Fonctionnement "gratifications stagiaires"	CRB	BOURGEOIS S.	UB	2010	12	2 600,00 €
Interfaces	SMT6 2010 / Equipement "Dispositif MOCVD"	CRB / FEDER	BOURGEOIS S.	UB	2010	24	209 372,00 €
Interfaces	SMT9 2010 / Equipement "Réalisation de la synthèse par voie microonde et caractérisation électrochimique"	CRB / GRAND CHALON	BOUSQUET-BERTHELIN C.	UB	2010	12	20 000,00 €
Interfaces	SMT9 2010 / Allocation de thèse V. SIVASANKARAN "Mise en forme et caractérisation de mono-cellule ITSOFC pour système APU appliqué au transport (co-direction avec Mme PERA)	CRB	COMBEMALE L.	UB	2010	36	99 000,00 €
Interfaces	SMT6 2010 / Allocation post-doctorale "Synthèse hydrothermale de nanoparticules" A. LEYBROS	CRB	DEMOISSON F.	UB	2010	12	42 000,00 €
Interfaces	SMT6 2010 / Allocation post-doctorale "Modélisation ab initio de spectres raman" L. DEBBICHI 1ère année	CRB	KRUGER P.	UB	2010	12	42 000,00 €
Interfaces	SMT9 2010 / Equipement "microscope à force atomique"	CRB	NONAT A.	UB	2010	12	75 000,00 €
Interfaces	CRB / Coopération inter-régionale "Fonctionnalisation de surfaces par texturation laser"	CRB	OLTRA R.	UB	2010	12	12 560,00 €
Interfaces	SMT5 2010 / Frais de	CRB	OLTRA R.	UB	2010	12	12 500,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	fonctionnement						
Interfaces	SMT5 2012 / Contrat d'étude "modélisation de la corrosion stucturale des alliages légers" (poursuite contrat 2011)	CRB / ALCAN	OLTRA R.	UB	2010	36	37 500,00 €
Interfaces	SMT6 2011 / Contrat d'étude "accompagnement thèse JCE et post-doc 2010"	CRB	BERNARD F.	UB	2011	12	5 000,00 €
Interfaces	SMT6 2011 / Equipements "réacteur autoclave batch, spectrophotomètre, electrodes"	CRB	BERNARD F.	UB	2011	24	37 000,00 €
Interfaces	SMT6 2011 / Chercheur invité : Renzo NATOLI "Modélisation des spectres de perte d'énergie"	CRB	BOURGEOIS S.	UB	2011	3	18 000,00 €
Interfaces	SMT6 2011 / Contrat d'étude "PRES OXICAP"	CRB	BOURGEOIS S.	UB	2011	12	54 850,00 €
Interfaces	SMT9 2011 / Contrat d'étude "efficacité énergétique pour véhicule hybride"	CRB / UNIV. FRANCHE-COMTE	COMBEMALE L.	UB	2011	12	12 864,00 €
Interfaces	SMT9 2011 / Equipement "cluster de calcul"	CRB	NONAT A.	UB	2011	24	15 000,00 €
Interfaces	SMT5 2011 / Contrat d'étude 2ème tranche (accompagnement de thèse)	CRB / ALCAN	OLTRA R.	UB	2011	12	16 700,00 €
Interfaces	SMT5 2011 / Allocation de thèse (F.PELTIER)	CRB / DASSAULT	OLTRA R.	UB	2011	36	99 000,00 €
Interfaces	SMT5 2011 / Contrat d'étude (accompagnement de thèse)	CRB / DASSAULT	OLTRA R.	UB	2011	12	16 000,00 €
Interfaces	SMT6 2011 / Contrat d'étude "consommables : polymères, silicones)	CRB / NAXAGORAS	STUERGA D.	UB	2011	12	20 374,00 €
Interfaces	SMT6 2012 / Equipement "presse de frittage"	CRB	BERNARD F.	UB	2012	24	75 000,00 €
Interfaces	SMT9 2012 / Equipement "Boîte à gants"	CRB / GRAND CHALON	BOUSQUET-BERTHELIN C.	UB	2012	24	4 600,00 €
Interfaces	SMT9 2012 / Contrat d'étude "Efficacité énergétique pour véhicule hybride-unité de puissance autonome. Accomp. Thèse PARI 2010)	CRB / UNIV. FRANCHE-COMTE	COMBEMALE L.	UB	2012	12	6 600,00 €
Interfaces	SMT6 2012 /	CRB	IMHOFF L.	UB	2012	24	6 000,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	Equipements "source ALD, spectrophotomètre"						
Interfaces	SMT6 2012 / allocation post-doctorale "Modélisation ab-initio de la structure électronique d'oxydes métalliques" - L. DEBBICHI 2ème année	CRB	KRUGER P. & SAVIOT L.	UB	2012	12	42 000,00 €
Interfaces	SMT9 2012 / Allocation post-doctorale A. MONTAGNE "Mise en œuvre de la microscopie à force atomique pour l'étude de la croissance des hydrates et de leurs interactions dans des ciments modèles"	CRB	NONAT A.	UB	2012	12	42 000,00 €
Interfaces	SMT5 2012 / Contrat d'étude " Caractérisation de capteurs de corrosion" (poursuite contrat 2011)	CRB / DASSAULT	OLTRA R.	UB	2012	12	16 000,00 €
Interfaces	SMT6 2012 / Allocation de thèse (co-tutelle internationale) J. LAVKOVA "Electron microscopy study of nano-structured thin film catalysts for micro-fuel cell application"	CRB / UNIV. PRAGUE	POTIN V.	UB / UNIV. PRAGUE	2012	36	49 500,00 €
Interfaces	PARI AGRALE / Equipement "Acquisition d'un spectromètre de masse"[2]	CRB	BELLAT JP.	UB	2013	24	12 000,00 €
Interfaces	Développement et caractérisation de micro-préconcentrateurspour l'analyse de composés organiques volatils considérés comme des biomarqueurs du cancer du poumon	BQR PRES	BELLAT JP.	FCS	2013	20	10 000,00 €
Interfaces	SMT8 2013 / Equipement "Dôme en béryllium"	CRB	BELLAT JP.	UB	2013	20	10 524,00 €
Interfaces	SMT6 2013 / Allocation post-doctorale L. AVRIL "Recherche de matériaux fonctionnels répondant à des propriétés d'actionneurs"	CRB	BERNARD F. & IMHOFF L.	UB	2013	12	42 000,00 €
Interfaces	SMT6 2013 / Equipements "Synthèses hydrothermales"	CRB	BEZVERKHYY I.	UB	2013	24	5 000,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
Interfaces	SMT6 2013 / Contrat d'étude FABER "installation C. DUPONT"	CRB	DUPONT C.	UB	2013	12	8 000,00 €
Interfaces	SMT6 2013 / Equipements FABER "Clusters de calcul"	CRB	DUPONT C.	UB	2013	24	40 700,00 €
Interfaces	SMT9 2013 / Allocation de thèse G. BAREIGTS "Gélification et auto-organisation de nano-particules discoïdes chargées dispersées dans des solutions acqueuses"	CRB / CNRS	LABBEZ C. & SIMON JM.	UB	2013	36	99 000,00 €
Interfaces	SMT1 2013 / Equipement "Sonde Raman fibrée"	CRB	MARCO DE LUCAS C.	UB	2013	24	11 930,00 €
Interfaces	SMT6 2013 / Equipements "filtres pour raman ultra basses fréquences"	CRB	MARCO DE LUCAS C.	UB	2013	24	23 180,00 €
Interfaces	SMT9 2013 / Equipement "Viscoélastissimètre"	CRB	NONAT A.	UB	2013	24	101 000,00 €
Interfaces	SMT5 2013 / Contrat d'étude "caractérisation de capteurs de corrosion"	CRB / DASSAULT	OLTRA R.	UB	2013	12	13 380,00 €
Interfaces	SMT8 2013 / Allocation post-doctorale B. DE FONSECA "Détection de gaz par adsorption et mesure de permitivité diélectrique"	CRB FEDER	ROSSIGNOL J. & BELLAT JP.	UB	2013	12	42 000,00 €
Interfaces	Evaluation et caractérisation des peformances de traitements de surface innovants destinés aux alliages d'aluminium et plus respectueux de l'environnement	BQR PRES	ZIMMER A.	FCS	2013	24	10 000,00 €
Interfaces	SMT5 2014 / Equipement "rénovation et mise aux normes de sécurité d'une thermobalance d'adsorption"	CRB	BELLAT JP.	UB	2014	24	6 580,00 €
Interfaces	SMT5 2014 / Equipement "hotte sécurisée pour la manipulation des poudres"	CRB / WELIENCE	BERNARD F.	UB	2014	24	8 600,00 €
Interfaces	SMT6 2014 / Equipement FABER "Logiciel SPIP"	CRB	DUPONT C.	UB	2014	24	2 848,00 €
Interfaces	SMT6 2014 / Fonctionnement FABER	CRB	DUPONT C.	UB	2014	12	7 653,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
Interfaces	SMT5 2014 / Allocation post-doctorale L. PEGADO "adsorption des ions dans les matériaux cimentaires pour le stockage"	CRB	LABBEZ C.	UB	2014	12	21 000,00 €
Interfaces	SMT5 2014 / Contrat d'étude "rôle d'un traitement de surface dans la résistance à la corrosion d'un joint de recouvrement"	CRB / WELIENCE	OLTRA R.	UB	2014	12	40 000,00 €
Interfaces	Oxydes complexes nanostructurés en couches minces pour capteurs - OXYCAP	BQR PRES	POTIN V.	FCS	2014	24	7 500,00 €
Interfaces	FUI OCTAVE "Nouveaux obturateurs et expertises à haute valeur ajoutée pour un meilleur vieillissement des vins blancs"	BPI France / CRB / FEDER	BELLAT JP.	UB	2015	47	119 600,00 €
Interfaces	SMT5 2015 / Contrat d'étude "séparation des isotopes de l'hydrogène par adsorption sélective"	CRB / FEDER	BELLAT JP.	UB	2015	12	10 000,00 €
Interfaces	SMT5 2015 / Equipement "transformateur pour Maison de la Métallurgie"	CRB / FEDER	BERNARD F.	UB	2015	24	89 150,00 €
Interfaces	SMT5 2015 / Contrat d'étude "compréhension des phénomènes associés à la maitrise de la microstructure des poudres"	CRB / FEDER / WELIENCE	BERNARD F.	UB	2015	12	9 000,00 €
Interfaces	CRB / Allocation JCE 2015 /M. LAMY	CRB	FINOT C.	UB	2015	36	99 000,00 €
Interfaces	SMT5 2015 / Allocation post-doctorale "caractérisaton expérimentale du plasma d'arc généré lors de la fermeture des contacts électriques"	CRB / FEDER	JOUVARD JM.	UB	2015	12	42 000,00 €
Interfaces	SMT5 2015 / Contrat d'étude "influence des fonctionnalités de molécule organiques sur la réactivité et la durabilité du ciment"	CRB / FEDER	LABBEZ C.	UB	2015	12	9 000,00 €
Interfaces	SMT5 2015 / Contrat d'étude "simulation des phénomènes thermohydrauliques..."	CRB / FEDER / WELIENCE	MATTEI S.	UB	2015	12	11 391,00 €
Interfaces	SMT5 2015 / Equipement "Dispositif	CRB / FEDER	POTIN V.	UB	2015	24	13 800,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	ion cleaner"						
Interfaces	SMT5 2015 / Allocation post-doctorale "capteurs de gaz associant physisorption et transduction"	CRB / FEDER	ROSSIGNOL J.	UB	2015	12	42 000,00 €
Interfaces						Sub-Total "CRB/FEDER /UB"	2 265 926,00 €
Interfaces	Thermogravimétrie et calorimétrie	CNRS	BELLAT JP.	CNRS	2010	12	20 000,00 €
Interfaces	Projet NEEDS-MIPOR "MoMart : modélisation multi-échelle de l'adsorption et du transport diffisif des ions"	Mission pour l'interdisciplinarité du CNRS	LABBEZ C.	CNRS	2014	24	5 000,00 €
Interfaces	Projet NEEDS-MIPOR "MoMart : modélisation multi-échelle de l'adsorption et du transport diffisif des ions" Contrat Post-doctoral L. PEGADO	Mission pour l'interdisciplinarité du CNRS	LABBEZ C.	CNRS	2014	6	22 500,00 €
Interfaces						Sub-Total "CRB/FEDER /UB"	47 500,00 €
Interfaces	Accompagnement de thèse de E. LAFOND "Etude de l'évolution chimique et dimentionnelle de résines échangeuses d'ions en milieu cimentaire"	CEA MARCOULE	GAUFFINET S.	CNRS	2010	36	21 360,00 €
Interfaces	Projet CORTEA "CAT"	ADEME	BELLAT Jean-Pierre	CNRS	2011	48	54 437,72 €
Interfaces	Prestations d'analyses MET réalisées par l'équipe SIOM	ENSAM	IMHOFF L.	UB	2011	1	4 149,00 €
Interfaces	CARNOT ARTS "Protection des outils de coupe pour le bois : passage à l'échelle industrielle"	CARNOT	IMHOFF L. & NOUVEAU C.	UB	2011	24	34 286,00 €
Interfaces	Contrat de collaboration " Séparation des isotopes de l'hydrogène sur matériaux absorbants"	CEA VALDUC	BELLAT JP.	CNRS	2013	26	153 588,00 €
Interfaces	Accompagnement de thèse de H. LAHALLE "Etude des ciments phospho-magnésiens pour le conditionnement de l'aluminium métallique"	CEA MARCOULE	GAUFFINET S.	CNRS	2013	36	18 480,00 €
Interfaces	Subvention pour	VILLE DE DIJON	BELLAT JP.	UB	2015	1	1 000,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	colloque "Journées annuelles du Groupe Français de la Céramique - 24 au 26 mars 2015)						
Interfaces						Sub-Total "Other Public Agencies"	287 300,72 €
Interfaces	Contrat de collabotion " détection d'emdommagement dans les composites à l'aide d'une technologie basée sur les micro-ondes et les circuits micro-rubans"	EDF SUEZ / ARMINES	J. ROSSIGNOL	CNRS	2011	12	15 650,00 €
Interfaces	Prestations d'analyses sur ICP et thermogravimétrie H3B03 réalisées par l'équipe ASTER	LABORATOIRES UB / INDUSTRIELS	NONAT A. et BELLAT JP.	UB ET CNRS	2011	1	4 761,00 €
Interfaces	Prestations d'analyses sur ICP réalisées par l'équipe ASTER	LABORATOIRES UB / WELIENCE	NONAT A.	UB	2012	1	19 074,00 €
Interfaces	Contrat post-doctoral M. TURESSON "Polyelectrolyte adsoption on cement hydrates"	UNIVERSITE DE LUND	LABBEZ C.	CNRS	2013	6	26 404,00 €
Interfaces	Prestations d'analyses sur ICP réalisées par l'équipe ASTER	LABORATOIRES UB / WELIENCE	NONAT A.	UB	2013	1	8 858,00 €
Interfaces	Prestations d'analyses sur ICP réalisées par l'équipe ASTER	CEA SACLAY	NONAT A.	CNRS et UB	2014	1	5 337,00 €
Interfaces	Contrat de prestation "Etude de l'adsorption de composés soufrés et d'hydrocarbures par des Zéolithes et des alumines"	AXENS	BELLAT JP.	CNRS	2010	18	38 280,10 €
Interfaces	Convention de mise à disposition de moyens de fonctionnement (locaux et matériels scientifiques) à la Sté NAXAGORAS pour son activité	NAXAGORAS	DEREUX A.	UB	2010	60	30 389,00 €
Interfaces	CE "Caractérisation de surfaces par spectrométrie micro-Raman sur clinker"	LAFARGE	MARCO DE LUCAS C.	UB	2010	21	12 542,00 €
Interfaces	Prestations d'analyses RAMAN réalisées par l'équipe SIOM	WELIENCE	MARCO DE LUCAS C.	UB	2010	1	310,00 €
Interfaces	Consortium NANOCEM	Plusieurs industries	NONAT A.	UB	2010	66	298 000,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
Interfaces	Thèse G. PLUSQUELLEC + accompagnement "Stable phase composition in novel sementitious systems"	EMPA & Fond National Suisse	NONAT A.	CNRS	2010	36	142 738,00 €
Interfaces	CE "Influence de la sinétique d'hydratation des phases aluminates en présence de sulfates de calcium sur celle des phases silicates"	LAFARGE	NONAT A.	CNRS	2010	36	50 730,00 €
Interfaces	Prestations d'analyses sur ICP réalisées par l'équipe ASTER	WELIENCE	NONAT A.	UB	2010	1	5 339,00 €
Interfaces	Accompagnement de thèse de F. DALAS "Influence des paramètres structuraux d'adjuvants fluidifiants sur l'hydratation de la pâte de ciment au jeune âge"	LAFARGE	POURCHET S.	CNRS	2010	36	53 400,00 €
Interfaces	Contrat de collaboration "étude des mécanismes régissant la fluidité initiale de la pâte de ciment lorsqu'elle est adjuventée de PCP"	LAFARGE	POURCHET S.	CNRS	2010	8	7 500,00 €
Interfaces	Prestation THERMO	Welience UB-Filiale	BELLAT JP.	CNRS	2011	1	1 708,00 €
Interfaces	CE "Intéractions entre l'eau et le sulfate de calcium"	LAFARGE	JM.SIMON	CNRS	2011	12	6 000,00 €
Interfaces	Contrat de collaboration "Contrôle de la réactivité d'un mélange ternaire sulfualuminate de calcium-ciment portland-anhydrite"	CTG	NONAT A.	CNRS	2011	8	10 000,00 €
Interfaces	Tests d'endommagement en milieu confiné d'alliages d'aluminium. L'objectif de cette étude consiste à valider le meilleur protocole expérimental pour étudier le comportement de plusieurs familles d'alliages d'aluminium dans des conditions d'assemblage par recouvrement	CONSTELLIUM CRV	OLTRA Roland	Welience	2011	6	12 000,00 €
Interfaces	Tests de corrosion sur tubes. L'objectif du programme consiste à définir par des mesures du potentiel de piqûre, la résistance à la	VALTIMET	OLTRA Roland	Welience	2011	4	10 000,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	corrosion localisée de la peau interne d'un tube après soudure.						
Interfaces	Etude sur l'électrochimie de la corrosion de l'aluminium	DASSAULT AVIATION	OLTRA Roland	Welience	2011	1	40 877,00 €
Interfaces	Réalisation de dépôts en couches minces à l'aide de méthodes électrophorétiques	I-TEN	VUILLEMIN Bruno	Welience	2011	4	10 000,00 €
Interfaces	Contrat de prestation "Adsorption-désorption isotherme et isobare du mono-propylène glycol sur la zéolithe 4A"	GAZTRANSPORT & TECHNIGAZ SAS (GTT)	BELLAT JP.	CNRS	2012	6	23 073,00 €
Interfaces	Contrat de collaboration "Etude du dépôt de platine sur gyroscope émisphérique"	SAFRAN (SAGEM)	DOMENICHINI B.	CNRS	2012	12	111 000,00 €
Interfaces	Prestations d'analyses RAMAN réalisées par l'équipe SIOM	EXPERBUY (SAGEM)	MARCO DE LUCAS C.	UB	2012	1	4 647,00 €
Interfaces	Contrat de collaboration "Simulation de la compétition entre la corrosion généralisée et la corrosion localisée du surconteneur ou du chemisage en acier non allié dans un milieu argileux	ANDRA	OLTRA R.	UB	2012	24	93 280,00 €
Interfaces	Accompagnement de stage ingénieur (W. CHEBBI) "Etude de la cinétique de carbonatation des silicates de calcium hydratés"	ST GOBAIN	POCHARD I.	CNRS	2012	6	6 964,00 €
Interfaces	Etude de composés à propriétés luminescentes contrôlées	DUNCAN PROSPECTIVE	STUERGA D.	UB	2012	1	4 708,00 €
Interfaces	Optimisation des conditions de fabrication d'électrodes de batteries en couches et caractérisation fonctionnelles associées	I-TEN	VUILLEMIN Bruno	Welience	2012	3	10 000,00 €
Interfaces	Réalisation de cellules batteries en couches minces sur des feuillards métalliques	I-TEN	VUILLEMIN Bruno	Welience	2012	8	13 108,00 €
Interfaces	CE "Study of alkalonamines on hydration of blended cements"	W.R. GRACE (USA)	NONAT A.	CNRS	2013	3	13 200,00 €
Interfaces	Accompagnement d'un stage M2 (N. ZEITER) "Influence de la	ST GOBAIN	POCHARD I.	CNRS	2013	6	6 319,00 €

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
	cristallinité du silicate de calcium hydraté sur sa cinétique de carbonatation et sur les variations dimentionnelles résultantes"						
Interfaces	Prototypage d'un dispositif expérimental permettant de réaliser des électrodes en couches minces par le procédé développé par I-TEN.	I-TEN	VUILLEMIN Bruno	Welience	2013	4	44 187,00 €
Interfaces	Etablissement de modèles de comportement de batteries tout solide	I-TEN	VUILLEMIN Bruno	Welience	2013	4	60 057,20 €
Interfaces	Analyse de thermodesorption par ATG-DSC sous flux de 5 échantillons de zéolithes	STE CECA	BELLAT JP.	UB	2014	1	2 439,00 €
Interfaces	Prestations d'analyses sur sORPTOMETRE réalisées par l'équipe ASTER	WELIENCE / INDUSTRIELS	BELLAT JP.	UB	2014	1	2 799,00 €
Interfaces	Prestations d'analyses RAMAN réalisées par l'équipe SIOM	SWATCH GROUP	MARCO DE LUCAS C.	UB	2014	1	808,00 €
Interfaces	CE "Etude complémentaire de l'adsorption d'anions sur silicate de calcium hydraté incluant la mise au point d'un dispositif expérimental de titrage automatisé"	EMPA Fond National Suisse	NONAT A.	CNRS	2014	4	15 000,00 €
Interfaces	Simulation numérique de la déposition de particules par électrophorèse sur substrat métallique	I-TEN SA	VUILLEMIN Bruno	Welience	2014	6	50 000,00 €
Interfaces	Prestations d'analyses RAMAN réalisées par l'équipe SIOM	SWATCH GROUP	MARCO DE LUCAS C.	UB	2015	1	1 617,00 €
Interfaces	Accompagnement de stage ingénieur (M. BERTHOMIER) "Impact de germes d'ettringite sur la réactivité des ciments sulfoalumineux"	ST GOBAIN	NONAT A.	CNRS	2015	6	8 000,00 €
Interfaces						Sub-total "Industries"	1 281 103,30 €
Interfaces						**GRAND TOTAL**	5 372 069,02 €

II.7.6. TECHNICAL SUPPORT DEPARTMENT DTAI

Note: Services invoiced by DTAI to other UB laboratories or offices have been included in the category “Industries”.

Dpt ICB	Title (in French)	Received from	ICB scientist in charge	Managed by	Start date	Duration (months) or end date	Amount (Not including taxes)
DTAI	PRECIPUT ANR "Acquisition d'une valise de transfert - réactivité et analyse de surface"	ANR	HEINTZ O.	UB	2011	12	14 296,00 €
DTAI	SMT10 2011 / Equipement "Porosimètre"	CRB	CHAUMONT D.	UB	2011	24	58 600,00 €
DTAI	EQT Taraudeuse pour PF Ressources Méca	CRB	MULLER JM	UB	2011	12	5 840,00 €
DTAI	SMT3 2013 / Equipement "Centre d'usinage" tranche 2	CRB	DE FORNEL F.	UB	2013	24	84 240,00 €
DTAI	SMT5 2013 / Equipement "Diffractomètre"	CRB / ETAT	GEOFFROY N.	UB	2013	24	303 350,00 €
DTAI	PLATEFORME ARCEN CARNOT / Equipement "MEB FEG"	CRB / INRA / CNRS	HEINTZ O. & HERBST F.	UB	2015	24	646 333,00 €
DTAI	Rénovation 1ère tranche SI	Préciput ANR	SINARDET B	UB	2011	12	41 806,02 €
DTAI						Sub-total “CRB/FEDER /UB”	1 154 465,02 €
DTAI	Prestation de formation	CNRS FORMATION	HEINTZ O.	CNRS	2013	1	1 548,00
DTAI						Sub-total “CNRS”	1 548,00 €
DTAI	Diverses prestations de service réalisées par le CRM aile C	LABORATOIRES UB	HEINTZ O.	UB	2010	12	743,00 €
DTAI	Diverses prestations d'analyses réalisées par le sce MEB	LABORATOIRES UB / WELIENCE	HERBST F.	UB	2010	12	14 130,00
DTAI	Diverses prestations d'analyses réalisées par le sce DRX	LABORATOIRES UB / WELIENCE	GEOFFROY N.	UB	2010	12	11 355,00
DTAI	Diverses prestations d'analyses réalisées par le sce DRX	LABORATOIRES UB	GEOFFROY N.	UB et CNRS	2011	12	3 394,00
DTAI	Diverses prestations d'analyses réalisées par le sce MET	LABORATOIRES UB	CHASSAGNON R.	UB	2013	12	2 010,00
DTAI	Diverses prestations d'analyses réalisées par le sce C2MD2	WELIENCE	GUERINEAU M.	UB	2010	12	1 570,00
DTAI	Diverses prestations d'analyses réalisées par le sce SIMS-XPS	WELIENCE	HEINTZ O.	UB	2010	12	8 960,00
DTAI	Diverses prestations d'analyses réalisées par le sce SIMS-XPS	COPPERCEEF	HEINTZ O.	UB et CNRS	2011	12	5 095,00
DTAI	Diverses prestations d'analyses réalisées par le sce MEB	LABORATOIRES UB / WELIENCE	HERBST F.	UB	2011	12	7 715,00

DTAI	Diverses prestations d'analyses réalisées par le sce C2MD2	LABORATOIRES UB / WELIENCE	GUERINEAU M.	UB	2011	12	1 068,00
DTAI	Diverses prestations de service réalisées par le CRM aile C	LABORATOIRES UB / WELIENCE	HEINTZ O.	UB	2011	12	2 193,00
DTAI	Diverses prestations d'analyses réalisées par le sce MET	LABORATOIRES UB + EXTERIEURS	CHASSAGNON R.	UB	2011	12	5 265,00
DTAI	Diverses prestations d'analyses réalisées par le sce MEB	LABORATOIRES UB / WELIENCE	HERBST F.	UB	2012	12	22 396,00
DTAI	Diverses prestations d'analyses réalisées par le sce MET	LABORATOIRES UB / WELIENCE	CHASSAGNON R.	UB	2012	12	1 109,00
DTAI	Diverses prestations d'analyses réalisées par le sce C2MD2	LABORATOIRES UB / WELIENCE	GUERINEAU M.	UB	2012	12	19 521,00
DTAI	Diverses prestations de service réalisées par le CRM aile C	LABORATOIRES UB / WELIENCE / INDUSTRIELS	HEINTZ O.	UB	2012	12	2 407,00
DTAI	Diverses prestations d'analyses réalisées par le sce SIMS-XPS	WELIENCE	HEINTZ O.	UB	2012	12	2 640,00
DTAI	Diverses prestations d'analyses réalisées par le sce DRX	WELIENCE / LABORATOIRES UB / INDUSTRIELS	GEOFFROY N.	UB et CNRS	2012	12	28 855,00
DTAI	Diverses prestations d'analyses réalisées par le sce MEB	LABORATOIRES UB / INDUSTRIELS	HERBST F.	UB et CNRS	2013	12	19 957,00
DTAI	Diverses prestations d'analyses réalisées par le sce C2MD2	LABORATOIRES UB / WELIENCE	GUERINEAU M.	UB	2013	12	9 848,00
DTAI	Diverses prestations de service réalisées par le CRM aile C	LABORATOIRES UB / WELIENCE /	HEINTZ O.	UB	2013	12	6 836,00
DTAI	Diverses prestations d'analyses réalisées par le sce SIMS-XPS	LABORATOIRES UB / WELIENCE / INDUSTRIELS	HEINTZ O.	UB	2013	12	19 028,00
DTAI	Diverses prestations d'analyses réalisées par le sce DRX	WELIENCE / LABORATOIRES UB	GEOFFROY N.	UB et CNRS	2013	12	20 919,00
DTAI	Diverses prestations d'analyses réalisées par le sce MEB	LABORATOIRES UB / INDUSTRIELS	HERBST F.	UB	2014	12	5 990,00
DTAI	Diverses prestations d'analyses réalisées par le sce C2MD2	LABORATOIRES UB / WELIENCE	GUERINEAU M.	UB	2014	12	16 576,00
DTAI	Diverses prestations de service réalisées par le CRM aile C	LABORATOIRES UB / WELIENCE /	HEINTZ O.	UB	2014	12	3 430,00
DTAI	Diverses prestations d'analyses réalisées par le sce SIMS-XPS	LABORATOIRES UB / WELIENCE / INDUSTRIELS	HEINTZ O.	UB et CNRS	2014	12	6 584,00
DTAI	Diverses prestations d'analyses réalisées par le sce DRX	WELIENCE / INDUSTRIELS	GEOFFROY N. & POPA I.	UB et CNRS	2014	12	32 881,00

DTAI	Diverses prestations de service réalisées par le CRM aile C	LABORATOIRES UB / WELIENCE /	HEINTZ O.	UB	2015	8	646,00 €
DTAI	Diverses prestations d'analyses réalisées par le sce DRX	LABORATOIRES UB / WELIENCE / INDUSTRIELS	GEOFFROY N.	UB et CNRS	2015	8	1 005,00
DTAI	Diverses prestations d'analyses réalisées par le sce C2MD2	LABORATOIRES UB / WELIENCE / INDUSTRIELS	GUERINEAU M.	UB	2015	8	17 002,00
DTAI	Diverses prestations d'analyses réalisées par le sce SIMS-XPS	LABORATOIRES UB / WELIENCE / INDUSTRIELS	HEINTZ O.	UB	2015	8	5 843,00
DTAI						Sub-total “Industries”	306 971,00 €
DTAI						**GRAND TOTAL**	**1 462 684,02 €**