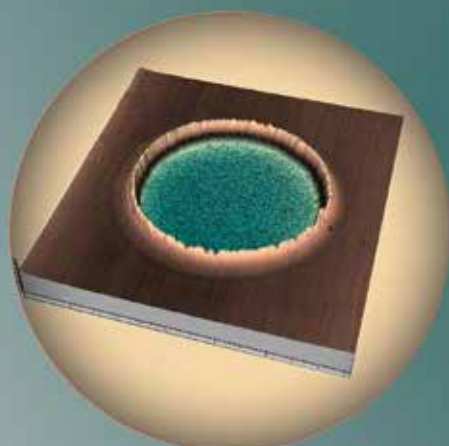
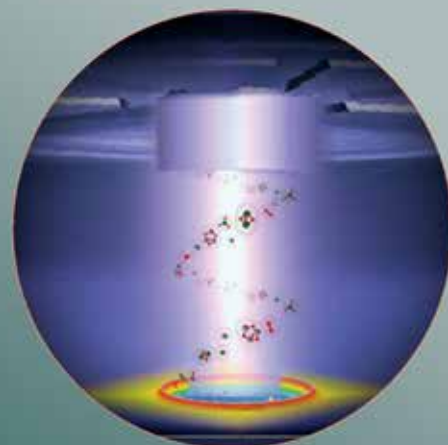
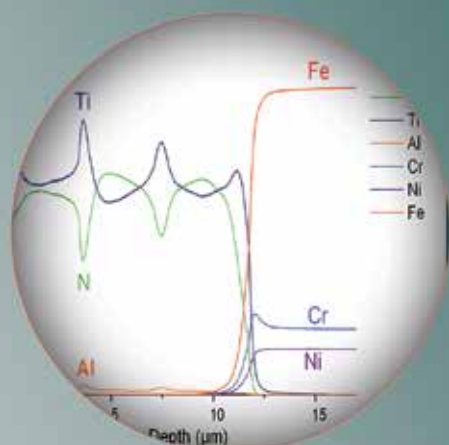
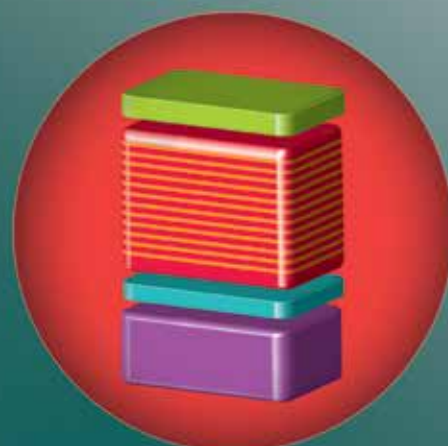


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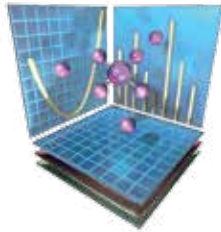
**11 & 12
June 2014
France**



**7th
GD Day**



**For surface and
depth profile
analysis**



GD Day
2014 Symposium

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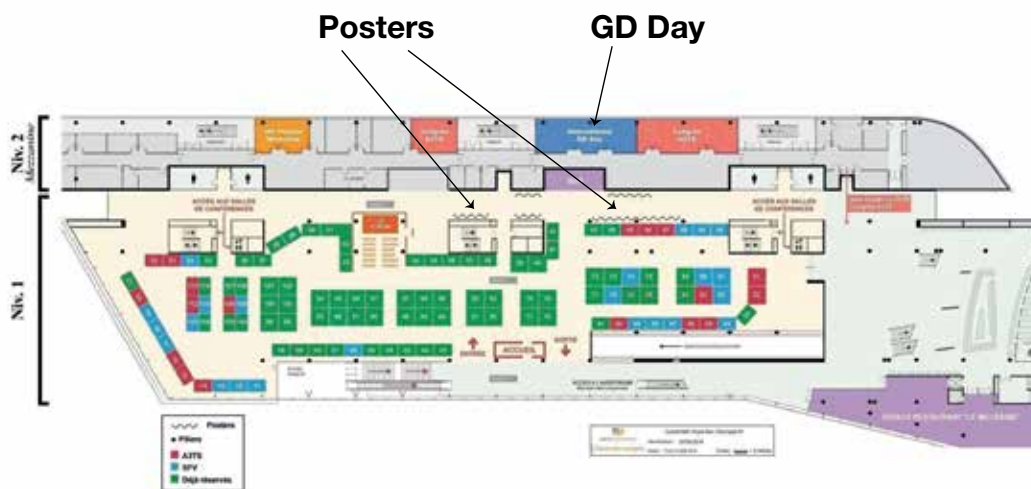
Practical information

Location

Centre des Congrès, 12 bd Général Leclerc - 51722 Reims cedex

Registration <http://www.gd-day.com/register.htm>

The registration will be closed on May, 15th. The invoice will be sent **by the SFV** and you will have the possibility to pay by bank transfer or cheque before the symposium or credit card or cash at door.



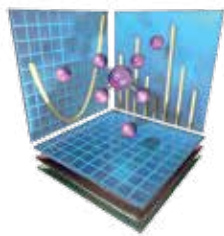
Poster guidelines

Poster boards will be provided for poster presenters to display their posters.
Poster format is A0 vertical.
Posters will be on display during the whole symposium.

Gala Dinner

The historical tour and the gala Dinner will be held from 8 pm.

Palais du Tau
2 Place du Cardinal Luçon
51100 Reims



GD Day 2014 Symposium

Wednesday 11 June 2014

13:30 Welcome to the participants of the GD day

Tiberiu Minea - SFV, Patrick Chapon - HORIBA Scientific, Rony Snyders - IAP

13:45 GD Day - IAP Plenary session

Chair: T. Minea, University of Orsay, France

13:45 Plasma diagnostics with laser and spectroscopic techniques

N. Sadeghi, University of Grenoble, France

14:25 Thin Film and Nanostructured Materials produced by Low Temperature Plasma Processes and their Application to Solar Cells

P. Roca i Cabarrocas, LPICM-CNRS, Ecole Polytechnique, Palaiseau, France

15:05 IAP posters presentation & SFV exhibition

15:45 Coffee break and poster session

16:10 GD Day Session 1

Chair: Patrick Chapon, HORIBA Scientific, Longjumeau, France

16:15 Nitrogen incorporation in metallic alloys by plasma immersion surface treatments at moderate temperature.

L. Pichon, Institut P¹ - CNRS-Université de Poitiers-ENSMA, Chasseneuil-Futuroscope, France

16:35 Rare earth doping of oxides and nitrides for photonics and photovoltaics applications

C. Davesne, L. Dumont, P. Benzo, J. Cardin, P. Marie, C. Labbé, C. Dufour, X. Portier, F. Gourbilleau CIMAP/ CNRS/CEA/ENSICAEN/UCBN, Caen, France

16h55 GD-OES studies of minor alloying elements distribution in the oxide scales and sub-scale areas of high temperature Ni-based superalloys

W. Nowak, A. Jalowicka, D. Naumenko, L. Niewolak, L. Singheiser, and W.J. Quadackers Institute for Energy and Climate Research, IEK-2, Forschungszentrum Jülich GmbH, 52425, Jülich, Germany

17h15 GD & SEM A unique approach of GDOES for improving Scanning Electron Microscopy imaging

K. Kawano, Keio University Japan and Manchester University UK

17h35 Hybrid diffusive/PVD treatments to improve the tribological resistance of Ti-6Al-4V

E. Marin^a, R. Offoia^a, A. Lanzutti^a, M. Regis^b, S. Fus^b, L. Fedrizzi^a

^a Department of Chemistry, Physics and Environment, University of Udine, Udine, Italy

^b LimaCorporate Spa, Villanova di San Daniele, Udine, Italy

17h55 Poster talks (5 min/poster)

P1: Endpoint Control Supervision on Dry etch, Cleaning, PECVD processes

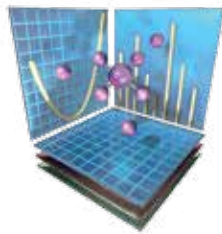
E. Bluem, HORIBA Scientific, Palaiseau, France

P2: Bulk and Thin Films Standards for GDOES

P. Kiryukhantsev-Korneev, National University «MISIS», Moscow, Russian Federation

P3: A common platform for all GD Users , " The GD-Group on LinkedIn"

V. Naik, ASE, India



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P4: Dedicated measurement test bench for study of RF discharge parameters of the GD-source in GD-TOFMS

P. Bulkin, LPICM-CNRS, Ecole Polytechnique, Palaiseau, France

P5: Plasma and gas flow modeling for GD TOFMS instrument

T. Novikova, LPICM-CNRS, Ecole Polytechnique, Palaiseau, France

18:15 End of session

18:30 Cocktail SFV-A3TS-GD Day-IAP



20:00 Walk through the historical Palais du Tau

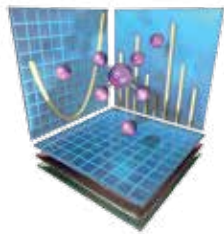
20:30 Gala Dinner at the Palais du Tau

Thursday 12 June 2014

8:30 GD Day Session 2

Chair: V. Naik

- 8:35 Detection of hydrogen absorbed in Mg-based alloys using GD spectrometer.
V. Knotek, Institute of Chemical Technology Prague, Czech Republic
- 8:55 Depth profiling analysis of thin film composite membranes by pulsed glow discharge mass spectrometry: Layer modifications due to oxidation in seawater
N. Bordel, University of Oviedo, Spain
- 9:15 Is GD sputtering modifying the composition of the material ? An XPS study of the surface composition of GD craters
D. Mercier^a, M. Bouttemy^a, J. Vigneron^a, I. Gérard^a, P. Chapon^b, A. Etcheberry^a
^a Institut Lavoisier de Versailles, Versailles, France, ^b HORIBA, Longjumeau
- 9:35 Composition depth profile of electrodeposited alloy and multilayer films
L. Peter^{}, K. Vad, A. Csik, K. Neuróhr, I. Bakonyi and G. Molnár*
Wigner Research Centre for Physics, Hungarian Academy of Sciences, Budapest, Hungary.
- 9h55 Poster talks (5 min/poster)
- P6: Quantitative Depth Profile analysis of Magnetostrictive FeGa Thin Films using Rf-GDOES.
S. S. Kalyan Kama^a, N. D. V. Prasad^a, L. Dura^a and V. Naik^b, ^aDMRL India, ^bASE India
- P7: Depth Profile analysis of Bi-layer thermal barrier surface coating on steel substrate using Rf-GDOES.
P. K. Sahoo^a, N. D. V. Prasad^a, L. Dura^a, V. Naik^b, ^aDMRL India, ^bASE India
- P8: Development of a new GD micro-plasma for analysis of low sample volumes
M. Tabarant, S. Manani, F. Chartier, CEA Saclay, DEN/DANS/DPC/SEARS, Laboratoire d'Ingénierie des Surfaces et Lasers, Saclay, France



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- P9: Rf-GDOES analyses of swelling and Ce migration, on ZrO₂ based sol gel coatings, after different immersion times in no-aggressive media.
A. Lanzutti, F. Andreatta, L. Paussa, E. Marin and L. Fedrizzi
University of Udine, Department of Chemistry, Physics and Environment, Udine, Italy
- P10: Odd Samples and preparation techniques
C. Olivero, HORIBA Scientific, Longjumeau, France
- P11: Continuous Wave Micro-plasma excited by microwaves in capillary tubes. Comparison between noble gas and molecular mixture operation
O. Leroy¹, G.D. Stancu², F. Bacque¹, V. Guerra³, L.L. Alves³, P. Coche³, P. Leprince¹, T. Minea¹
¹ LPGP, UMR 8578: CNRS-University Paris-Sud, Orsay, France, ²Ecole Centrale Paris, Châtenay-Malabry, France, ³Instituto de Plasmas et Fusão Nuclear, Instituto Superior Técnico, Universidade de Lisboa, Lisboa, Portugal
- P12: RF GD-OES analyses of optical multilayers
O. Zywitzki, R. Belau, Fraunhofer Institute for Electron Beam and Plasma Technology FEP, Dresden, Germany,

10:30 Coffee break and poster session

10:50 GD Day Session 3

Chair: A. Tempez, HORIBA Scientific, Palaiseau, France

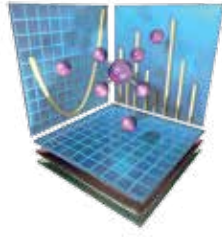
- 10h55 Atom probe tomography: a mass spectrometry technique for 3D characterization of nanomaterials
D. Mangelinck^a, Y. Collignon^a, F. Panciera^{a,b}, K. Hoummada^a, M. El Kousseifi^a, H. Benallal^a, C. Perrin^a, M. Descoins^a, A. Portavoce^a, and X. Tan^a
^a IM2NP, Aix Marseille Université, CNRS, Marseille, France
^b STMicroelectronics, Crolles, France
- 11h15 Ion-plasma modification of reed switch blades
A. Tosltoguzov, CeFITec, New University of Lisbon, Portugal
- 11h35 Morphological changes of tungsten surfaces by low-flux helium plasma treatment and helium incorporation via magnetron sputtering
L. Marot, University of Basel, Department of Physics, Basel, Switzerland
- 11h55 Poster talks (5 min/poster)
P13: Analysis of defects under paintings by GD-OES in accelerated erosion mode using Ar / O plasma gas
E. Niveau, C. Dupuet, Renault, Guyancourt, France

12:00 Lunch and poster session

13:30 GD Day Session 4

Chair: Sébastien Legendre, HORIBA Scientific, Palaiseau, France

- 13h35 Depth profile analysis on Cu(In,Ga)Se₂ solar cells by SIMS/SNMS and GDOES
W. Hempel, ZSW, Stuttgart, Germany
- 13h55 GDOES of Materials for Biomedical Applications
P. Kiryukhantsev-Korneev, National University «MISIS», Moscow, Russian Federation
- 14h15 Effect of annealing temperature on antibacterial activity of silver doped hydroxyapatite thin films
C. S. Ciobanu¹, C.L. Popa^{1,2}, S. L. Iconaru¹, P. Chapon³, R.V. Ghita¹, D. Predoi¹



GD Day 2014 Symposium

Characterization and antibacterial activity of samarium doped hydroxyapatite thin films
C.L. Popa^{1,2}, C. S. Ciobanu¹, S. L. Iconaru¹, P. Chapon³, P. Le Coustumer⁴, D. Predoi^{1*}

¹National Institute of Materials Physics, Magurele, Romania

²Faculty of Physics, University of Bucharest, Bucharest, Romania

³HORIBA Jobin Yvon S.A., Longjumeau Cedex, France

⁴Universite Bordeaux, EA 4592 Géoresources & Environnement, ENSEGID, Pessac Cedex, France

14h40 DBD atmospheric pressure plasma source coupled to OES and a MS
L. Chauvet, P. Guillot, CUFR JF Champollion, Laboratoire DPHE, Albi, France

15h00 Poster talks (5 min/poster)

P14: Spatiotemporal characterization of a DBD atmospheric pressure plasma source
P. Guillot, L. Chauvet CUFR JF Champollion, Laboratoire DPHE, Albi, France

P15: Chemical analysis of Cd_{1-x}Zn_xS/CdTe solar cells by plasma profiling TOFMS
G. Kartopu¹, A. Tempez², S. Legendre², A.J. Clayton¹, V. Barrioz¹, S.J.C. Irvine¹,¹CSER, Glyndwr University, UK, ²HORIBA Scientific, Palaiseau, France

P16 & P17: Characterisation of CZTSSe using Spectroscopic ellipsometry and pulsed RF Glow discharge Optical Emission Spectroscopy -
Optical Characterisation of CIGS using Spectroscopic Ellipsometry and Glow Discharge optical Emission Spectrometry
J.P. Gaston, HORIBA Scientific, Palaiseau, France

15:15 GD Day Final session

Chair: C. Olivero, HORIBA Scientific, Palaiseau, France

15h20 Reserved presentation
S. Richard, HORIBA Scientific, Palaiseau, France

15h40 Dynamic scaling study of the GDOES induced roughness in metal interfaces: material and ion dose effects
R. Escobar Galindo and L. Vazquez, ICMM-CSIC, Spain

16h00 The multiple facets of GD
R. Escobar Galindo, ICMM-CSIC, Spain

16:10 End of the GD Day