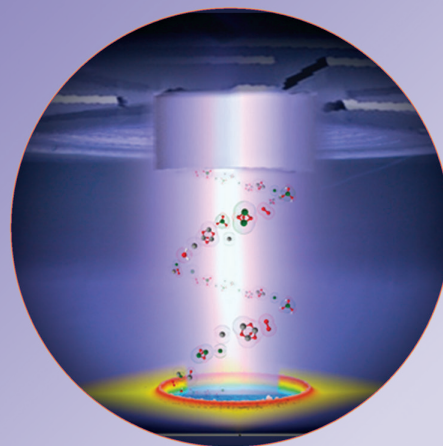
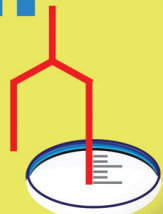


# GD Day 2016

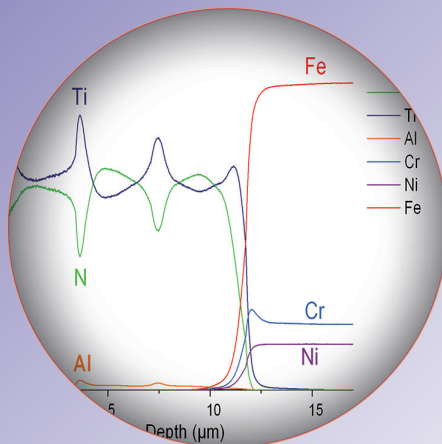
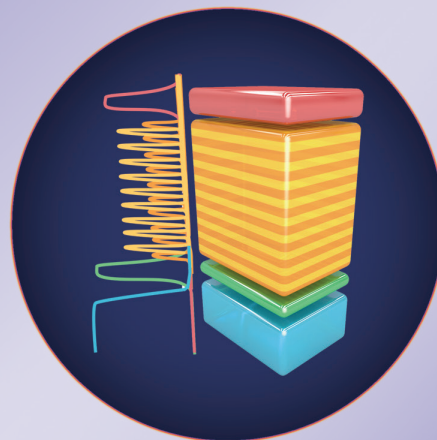
**15 afternoon  
& 16  
September 2016**



**DiP**



**8th  
GD Day**



**For surface and  
depth profile  
analysis**

## GD Day 2016

[www.gd-day.com](http://www.gd-day.com)

### Practical information

#### Registration

On-line registration to the GD Day is mandatory at [www.gd-day.com](http://www.gd-day.com).

#### Location

Synchrotron SOLEIL  
L'Orme des Merisiers  
Rond point du Golf de Saint Aubin  
91190 Saint Aubin

An identity card or a passport is mandatory to enter the site.

#### Poster guidelines

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

#### Synchrotron visit

A visit of the Synchrotron SOLEIL is organised on Thursday 15th afternoon. The visit is forbidden to people with pacemaker.

#### Gala Dinner

The Gala Dinner will be held at the Synchrotron Soleil on Thursday evening.  
At 10:30 pm, bus will be ready for pick up and transfer to the RER stations.

## Thursday 15 September 2016

### 13:30 GD Day - Session 1

Chair: Patrick Chapon, HORIBA Scientific, Longjumeau, France

- 13:30 **O1** Introduction of the GD Day  
*P. Chapon, HORIBA Scientific, France*
- 13:50 **O2** Possibilities and limitations for analysis of chemical depth profiles in CdTe thin film solar cells  
*O. Zywitski, FEP, Germany*
- 14:10 **O3** Development and characterization of coatings on selected metals and alloys obtained by plasma electrolytic oxidation  
*K. Rokosz, University of Koszalin, Poland*
- 14:30 **O4** Plasma profiling TOFMS analysis for microelectronic applications  
*Y. Mazel, CEA Leti, France*

### 14 : 50 GD Day - Session 2

Chair: Yuri Popov, HORIBA, Moscow, Russian Federation

Poster talks (3 min/poster) and workshops presentation

- P1** Breakthrough on GDOES analysis applied to rough metal surfaces  
*S. Cremer, Arcelor Mittal, France*
- P2** Influence of CIGS surface conditioning on GDOES depth profile measurement results  
*W. Hempel, ZSW, Germany*
- P3** Depth profiling protective coating titanium nitride based on glow discharge optical emission spectrometry  
*A. Batrakov, MPEI, Russia (Presented by A. Kuznetsov)*
- P4** Depth profiling of Zr-Nb alloy after plasma immersion Titanium implantation and Hydrogen saturation  
*T. Priamuskhov, University of Tomsk, Russia*
- P5** Use of complementary techniques for depth profiling of mobile screen protection covers  
*B. Bleisteiner, HORIBA Scientific, Germany (Presented by S. Gaiaschi)*
- P6** The use of GDOES in failure analysis and quality control  
*A. Raffaelli, University of Udine, Italy*
- P7** Ferroelectric materials with Tetragonal Tungsten Bronze (TTB) type structure: Synthesis and characterization  
*A. Laaraj, LIMAT University of Casablanca, Maroc*
- P8** Pulsed radiofrequency glow discharge time of flight mass spectrometry for VOCs analysis: Development of a new source  
*N. Bordel, University of Oviedo, Spain*
- P9** Improvement of inorganic gas diffusion barriers by a low energy Ar plasma treatment  
*J.E. Bouree, PICM, France*
- W1** DIP workshop  
*S. Gaiaschi, HORIBA Scientific, France*

# 8th International GD Day

- P10** Bulk analysis of trace elements in pure Au and Ag by Profiler HR  
*V. Galuschenko, Moscow Mint, Russia*
- P11** Smart solid sample analysis - Some examples for direct analysis by electrothermal vaporisation as add-on for ICP  
*P. Perzl, Spectral Systems, Germany*
- P12** Surface sample preparation for EPMA using GDOES  
*S. Khromov, NTNU, Norway*
- P13** Optical characterization of thin films by spectroscopic ellipsometry  
*J.P. Gaston, HORIBA Scientific, France*
- P14** A new film thickness measurement technique: Differential Interferometric profiling - Similarities and complementarities with ellipsometry  
*O. Acher, HORIBA Scientific, France*
- P15** Characterization of CIGS solar cells through glow discharge optical emission spectrometry and differential interferometry profiling  
*S. Gaiaschi, HORIBA Scientific, France*
- P16** Synergy of GD-OES & DIP with EDXRF techniques for layers thickness and elemental composition determination  
*J. Marciano, HORIBA Scientific, France*
- P17** Antifungal activity against *Candida albicans* biofilm of composite layers based on silver doped hydroxyapatite-polydimethylsiloxanes  
*C.S. Ciobanu, NIMP, Romania*
- P18** Structural and antimicrobial properties of silver doped hydroxyapatite thin films deposited on PDMS/Si  
*C.L. Popa, NIMP, Romania*
- W2** HORIBA Device Monitor (HDM) applied to GDS  
*Y. Popov, HORIBA, Russia*
- P19** Using power coupling efficiency for ALD thin film oxides quantification.  
*D. Frey, EMPA, Switzerland*
- P20** Presentation of a calibration kit for GDOES  
*N. Higa, HORIBA, Japan*
- P21** Preparation of nanoparticle-based composite coatings  
*O. Sublemontier, CEA, France*
- P22** Evaluation of inhibitory effect of glycerol-iron oxide layers on MRSA  
*S.L. Iconaru, NIMP, Romania*
- P23** XPS analysis of native oxide layers on GaSb (100) surface – Application to depth profiling of AuGeNi/n-GaSb  
*R.V. Ghita, NIMP, Romania*
- P24** Neon plasma jet at atmospheric pressure. Spatio-temporal distribution of ambient air species  
*L. Chauvet, University of Toulouse, France*
- P25** Neon plasma jet at atmospheric pressure. Application to mass spectrometry detection of volatile samples  
*L. Thérèse, University of Albi, France*

- P26** Structural and biological evaluation of iron oxide-dextran nanostructures thin films  
*A.M. Prodan, Hopital Floreasca Bucharest, Romania*
- P27** Improving layer thickness determination by the combination of depth profile modeling and DIP  
*M. Laquitaine, ENSSAT, Lannion, France*
- P28** Optimizing GDOES sputtering of metal/polymer multilayer systems by plasma gas switching during the test  
*A. François-Heude, Vallourec Research Center France, France*
- W3** HJY Service for GD  
*R. Toutain, HORIBA Scientific, France*
- P29** New strategies to improve the analytical performance of pulsed glow discharge time of flight mass spectrometry  
*L. Lobo, University of Oviedo, Spain*
- P30** Glow discharge optical emission spectrometry and differential interferometry profiling for thickness determination of SiO<sub>x</sub>N<sub>y</sub> layers  
*S. Gaiaschi, HORIBA Scientific, France*
- P31** Characterization and corrosion behaviour of pure titanium in sulfuric medium  
*S. Dubent, CNAM Paris, France*
- P32** GD-OES crater engineering: the challenge of wet chemical and/or Ar cluster sputtering curing for nanometric XPS analyzes  
*A. Loubat, ILV, France*
- P33** GD group on LinkedIn.  
*V. Naik, ASE India*
- P34** Scaling laws between mono and multi-point configuration in positive DC corona discharge in air  
*D. Raouti, University of Saida, Algeria*
- P35** Measurement of homogeneity of reference materials of special alloys by GD - atomic emission spectrometry  
*I. Ermakova, Vniiofi Russia.*
- P36** Corrosion product films on Mg alloys  
*P. Volovitch, ENSCP, Paris, France*
- P37** Local electrochemical techniques used for spatially-resolved surface analysis  
*S. Verret, Bio-Logic SAS, Seyssinet-Pariset, France*
- P38** On-line measurement of the reactivity of Al-Li alloy during a surface pretreatment sequence  
*O. Gharbi, Institut de Recherche de Chimie Paris, France*
- P39** Reserved

**17:30 Coffee break, poster session and Synchrotron visit**

**19:20 Cocktail**

**19:45 Gala Dinner at the Synchrotron Restaurant**

## Friday 16 September 2016

### 9:00 GD Day Session 3

Chair: *Sofia Gaiashi, HORIBA Scientific, Longjumeau, France*

9:05 **05** Novel use of glow discharge optical emission spectroscopy (GDOES) to study corrosion of AA2024 T3 in the presence and absence of inhibitors  
*R. Bingham, University of Manchester, UK*

9:30 **06** Challenge on depth profiling characterizations by combining GD-DIP and XPS: The absolute GGI determination!  
*A. Loubat, ILV, France*

9:55 **07** Electrochemical analyses of intermetallic layers in Zn/Mg coating exposed by controlled GD sputtering of the coating  
*A. Lanzutti, University of Udine, Italy*

10:20 **08** Ionic migration of perovskite film studying by GDOES system  
*H. Lee, PICM, France*

### 10:45 Coffee break and poster session

### 11:15 GD Day Session 4

Chair: *O. Acher, HORIBA Scientific, Palaiseau, France*

11h20 **09** Applications of GD-TOFMS for direct analysis of innovative materials  
*J. Pisonero, University of Oviedo, Spain*

11h45 **010** Characterization of zinc-rich layers on aluminium  
*M. Stepanova, NTNU, Norway*

12h10 **011** GDOES studies of minor alloying elements incorporation into oxide scales during high temperature oxidation of Ni-based superalloys  
*W. Nowak, Rzeszow, Poland*

### 12:35 Lunch and poster session

# 8th International GD Day

## 14:40 GD Day Session 5

*Chair: S. Richard, HORIBA Scientific, Palaiseau, France*

14h45 **O12** Hydrogen PEM electrolysis: Used of GD-OES for fast characterization of innovative coating  
*N. Queromes, Areva, France*

15h05 **O13** Magnetically boosted glow discharge optical emission spectroscopy for analytical applications: Pros and cons  
*N. Bordel, University of Oviedo, Spain*

15h25 **O14** Characterization of thin films on glass by GD-OES  
*H. Montigaud, St Gobain, France*

15h45 Round Up & Conclusion of the 8th GD Day.

## 16h00 End of the 8th GD Day