

## Symposium : A21 - Hard and Soft Magnetic Materials

### New Nanocrystalline Soft Magnetic FeSiBPCu Alloys for Energy-saving and Conserving Earth's Resources

A21-O-3-1-K

14/09/2011 - akihiro makino, Institute for Material Research, Tohoku Univ.  
Antigone 1 - takeshi kubota, North Japan Research Institute for Sustainable Energy, Hirosaki Univ.  
14:00 - akira urata, NEC TOKIN Corporation  
- hiroyuki matsumoto, NEC TOKIN Corporation

### Toward the development of high coercivity permanent magnets for hybrid electric vehicles

A21-O-5-2-K

15/09/2011 - K. Hono, National Institute for Materials Science (NIMS)  
Antigone 1 - T. Ohkubo, National Institute for Materials Science (NIMS)  
10:50 - H. Sepheri-Amin, National Institute for Materials Science (NIMS)

## Symposium : A23 - Magnetocalorics

### The magnetocaloric effect in amorphous and multiphase materials: phenomenological models to describe its field dependence

A23-O-1-1-K

13/09/2011 - Victorino Franco, Sevilla University  
Joffre B - Alejandro Conde, Sevilla University  
14:00

## Symposium : A24 - Magnetic Nanostructures and Particles

### Towards electron holography of magnetic fields in nanometer-sized crystals in the transmission electron microscope

A24-O-1-1-K

13/09/2011 - Rafal Dunin-Borkowski, Center for Electron Nanoscopy, Technical University of Denmark  
Pasteur - Takeshi Kasama, Center for Electron Nanoscopy, Technical University of Denmark  
14:00 - Marco Beleggia, Center for Electron Nanoscopy, Technical University of Denmark  
- Thomas Hansen, Center for Electron Nanoscopy, Technical University of Denmark  
- Jakob Wagner, Center for Electron Nanoscopy, Technical University of Denmark

### PREPARATION AND CHARACTERIZATION OF CORE/SHELL SELF-ASSEMBLED MULTIFUNCTIONAL NANOPARTICLES

A24-O-4-1-K

14/09/2011 - Benjamin Martinez, ICMAB - CSIC  
Pasteur - Carlos Martinez-Boubeta, IN2UB, Departament d'Electrònica, Universitat de Barcelona  
14:00 - Lluís Balcells, ICMAB - CSIC  
- Rosa Cristofol, IIBB, CSIC-IDIBAPS  
- Coral Sanfeliu, IIBB, CSIC-IDIBAPS  
- Felip Sandiumenge, ICMAB - CSIC  
- Jose Santiso, CIN2-CSIC  
- David Serantes, Depto. de Física Aplicada, U. de Santiago de Compostela  
- Daniel Baldomir, Depto. de Física Aplicada, U. de Santiago de Compostela  
- Claude Monty, CNRS/Procédés, Matériaux et Energie Solaire (PROMES)

### Magnetism on the timescale of the exchange interaction

A24-O-8-1-K

15/09/2011 - Theo RASING, Radboud University Nijmegen  
Pasteur  
16:40

## Symposium : A31 - Carbon nanotubes and graphene

### Selective elimination of metal catalyst from single walled carbon nanotube samples

A31-O-3-1-K

14/09/2011  
Sully 1  
16:40

- Brigitte VIGOLO, Institut Jean Lamour
- Guillaume MERCIER, Institut Jean Lamour
- Claire HEROLD, Institut Jean Lamour
- Jean-François MARECHE, Institut Jean Lamour
- Sebastien CAHEN, Institut Jean Lamour

### Understanding Chiral-Selective Growth of Carbon Nanotubes: In-Situ Raman Studies of Individual Single Walled Carbon Nanotube Growth

A31-O-5-1-K

15/09/2011  
Sully 1  
14:00

- Benji Maruyama, US Air Force Research Laboratory, Materials & Manufacturing Directorate
- Rahul Rao, National Academy of Sciences
- Tonya Cherukuri, National Academy of Sciences
- Lee Semiatin, US Air Force Research Laboratory, Materials & Manufacturing Directorate
- Gordon Sargent, UES, Inc.
- David Liptak, UES, Inc.
- Boris Yakobson, 4Department of Mechanical Engineering and Department of Chemistry, Rice University

## Symposium : A32 - Beyond mesoporous materials

### Mesoporous silica particles (MSNPs) as an attractive platform for targeted drug delivery and enhanced therapeutic efficacy.

A32-O-1-1-K

13/09/2011  
Joffre 1  
16:40

- CECILIA SAHLGREN,

### Scaling Beyond Lithographic Limits – Polymer Self-Assembly Mediated Sub-10 nm

A32-O-4-1-K

14/09/2011  
Joffre 1  
16:40

- Michael MORRIS, University College Cork AND CRANN, Trinity College Dublin

## Symposium : A41 - Biopolymers and biocomposites

### Cellulose nanofibril-modified wood adhesive bonds

A41-O-3-1-K

14/09/2011  
Barcelone  
14:00

- Wolfgang Gindl-Altmatter, BOKU-Vienna, Dept. of Materials Science and Process Engineering
- Stefan Veigel, BOKU-Vienna, Dept. of Materials Science and Process Engineering

## Symposium : A42 - Functional Polymeric Hybrid Materials

### Inorganic-Organic Class II Sol-Gel Hybrids - ORMOCER®s – Multifunctionality for Tuning of Properties and Better Processing

A42-O-1-1-K

14/09/2011  
Rondelet  
1+2  
10:30

- Michael POPALL, Fraunhofer Institute for Silicate Research - ISC

## Symposium : A53 MEMS, NEMS for Sensorial and actorial materials

### Structural Health Monitoring (SHM) – The way to best aircraft design and operability

A53-O-1-1-K

14/09/2011  
Barthez 1  
16:40

- Clemens BOCKENHEIMER, Airbus, Materials & Processes

## Symposium : A54 - Shape Memory Alloys (SMA) – Materials and Devices

### The increase of the martensitic deformation during shape memory effect in deformed TiNi A54-O-1-2-K

14/09/2011  
Sully 3  
10:50

- Georgiy Firstov, G.V. Kurdyumov institute for Metal Physics of the National Academy of Sciences of Ukraine, Phase transformations Department
- Yuri Koval, G.V. Kurdyumov institute for Metal Physics of the National Academy of Sciences of Ukraine, Phase transformations Department
- Aleksandr Lotkov, Institute of Physics of Strength and Materials Science, Siberian branch of the Russian Academy of Sciences, Laboratory of Shape Memory Alloys
- Victor Grishkov, Institute of Physics of Strength and Materials Science, Siberian branch of the Russian Academy of Sciences, Laboratory of Shape Memory Alloys
- Jan Van Humbeeck, Catholic university of Leuven, Department of Metallurgy and Materials Engineering

### Crystallography and Morphology of Self-accommodation in B19' Ti-Ni Martensite A54-O-4-3-K

15/09/2011  
Sully 3  
11:10

- Minoru NISHIDA, Department of Engineering Science for Electronics and Materials, Kyushu University
- Tomonari Inamura, Precision and Intelligence Laboratory, Tokyo Institute of Technology
- Masatoshi Mitsuhara, Department of Engineering Science for Electronics and Materials, Kyushu University
- Hideto Kawano, Interdisciplinary Graduate School of Science and Engineering, Kyushu University
- Masaru Itakura, Department of Engineering Science for Electronics and Materials, Kyushu University

## Symposium : B11 - Intermetallics

### Solid phase transformation mechanisms in TiAl-based intermetallics alloys B11-O-2-1-K

12/09/2011  
Einstein  
14:00

- Alain HAZOTTE, LEM3 CNRS-UPVM, Metz

## Symposium : B13 - Novel steels and steel matrix composites

### Mechanical stability of retained austenite grains in TRIP steels studied by synchrotron X-ray diffraction during deformation B13-O-1-1-K

12/09/2011  
Joffre A  
10:30

- Romain Blondé, Department of Radiation, Radionuclides & Reactors, Delft University of Technology
- Enrique Jimenez-Melero, Department of Radiation, Radionuclides & Reactors, Delft University of Technology
- Niels van Dijk, Department of Radiation, Radionuclides & Reactors, Delft University of Technology
- Lie Zhao, Department of Materials Science and Engineering, Delft University of Technology
- Jilt Sietsma, Department of Materials Science and Engineering, Delft University of Technology
- Jonathan Wright, European Synchrotron Radiation Facility
- Ekkes Brück, Department of Radiation, Radionuclides & Reactors, Delft University of Technology
- Sybrand van der Zwaag, Department of Novel Aerospace Materials, Delft University of Technology

### Dislocation-based Constitutive Model for TWIP Steel B13-O-2-1-K

12/09/2011  
Joffre A  
14:00

- Jinkyung Kim, POSTECH, GIFT
- Yuri Estrin, Monash University, Department of Materials Engineering
- Seok-Jae Lee, POSTECH, GIFT
- Sungkyu Kim, POSCO, Technical Research Laboratories
- Kwang-Geun Chin, POSCO, Technical Research Laboratories
- Bruno C. De Cooman, POSTECH, GIFT

## **Symposium : B14 - Magnesium Alloys**

### **In-situ analysis of deformation and recrystallization mechanisms**

B14-O-3-2-K

14/09/2011 - Carl Boehlert, Michigan State University / Polytechnic University of Madrid  
Joffre C - Javier Llorca, IMDEA Materials Institute  
10:50 - Iván Gutierrez-Urrutia, Max Planck Institute for Iron Research  
- María Teresa Pérez-Prado, IMDEA Materials Institute

## **Symposium : B15 - Ultrafine-grained Materials processed by Severe Plastic Deformation**

### **Mg segregations along grain boundaries in an aluminium alloy processed by SPD**

B15-O-1-1-K

12/09/2011 - Xavier Sauvage, University of Rouen, CNRS, GPM UMR 6634  
Barthez 2 - Nariman Enikeev, Institute of Physics of Advanced Materials, Ufa State Aviation Technical  
10:30 University  
- Maxim Murashkin, Institute of Physics of Advanced Materials, Ufa State Aviation Technical  
University

## **Symposium : B24 - Fracture and Reliability of Ceramics and Hybrid Materials**

### **Mechanical and tribological properties of ceramic-metal composites. From nanometer to micrometer Length Scale**

B24-O-1-1-K

14/09/2011 - Jose S. Moya, Instituto de Ciencia de Materiales de Madrid-CSIC, Cantoblanco, 28049 Madrid,  
Joffre 4 Spain  
16:40 - Teresa Rodriguez-Suarez, Centro de Investigación en Nanomateriales y Nanotecnología-  
CSIC-Universidad de Oviedo, Principado de Asturias, Parque Tecnológico de Asturias, 33428 L  
- Jose F. Bartolome, Instituto de Ciencia de Materiales de Madrid-CSIC, Cantoblanco, 28049  
Madrid, Spain

## **Symposium : B31 - Composites containing Nano-particles and Nano-fibres**

### **The use of chemical nanotechnology to produce tailor made nanocomposites based on polymer matrices**

B31-O-1-1-K

12/09/2011 - Thomas BURKHART,  
Antigone 1 - Klaus Friedrich,  
10:30

### **Fatigue Crack Growth in Ti/SiC at room and elevated temperature**

B31-O-4-1-K

13/09/2011  
Antigone 1 - Philip WITHERS,  
10:30

## **Symposium : B32 - Hybrid and Metal-Organic Framework Materials**

### **Metal organic frameworks - Towards applications in medicine**

B32-O-4-1-K

13/09/2011  
Joffre 1 - Russell Morris, School of Chemistry, University of St Andrews  
10:30

## Symposium : B33 - Highly Porous Metals and Ceramics

### in situ experiments in tomography for the study of the physics and mechanics of porous materials

B33-O-1-1-K

13/09/2011  
Louisville  
16:40

- eric maire, MATEIS INSA Lyon Université Lyon, CNRS
- sylvain deville, CREE saint Gobain Cavaillon
- audrey lasalle, CREE Saint Gobain Cavaillon
- jerome adrien, Mateis - insa lyon - université de Lyon, CNRS
- olivier caty, Mateis - insa lyon - université de Lyon, CNRS

### Aluminium foams – scientific challenges and industrial applications

B33-O-4-1-K

14/09/2011  
Louisville  
16:40

- John BANHART, TU Berlin and Helmholtz-Centre Berlin
- F. Garcia-Moreno,
- H.-W. Seeliger,

## Symposium : B41 - Bioinspired materials

### Autonomous and Intrinsic Behaviors in Non-living Biological Materials

B41-O-2-1-K

13/09/2011  
Barcelone  
10:30

- Matthew HARRINGTON, Max Planck Institute of Colloids and Interfaces, Dept. of Biomaterials

## Symposium : B45 - Self healing, self cleaning materials

### Biomimetics: Lessons from Nature

B45-O-2-3-K

12/09/2011  
Sully 3bis  
14:40

- Bharat Bhushan, The Ohio State University

## Symposium : C11 - Solidification

### In Situ and Real-Time Synchrotron X-Ray Imaging of Grain Structure Formation in Solidification Processing of Metallic Alloys

C11-O-1-1-K

13/09/2011  
Einstein  
16:40

- Bernard BILLIA, CNRS, IM2NP
- Henri Nguyen-Thi, Université Paul Cézanne - Aix-Marseille III, IM2NP
- Nathalie Mangelinck-Noël, CNRS, IM2NP
- Guillaume Reinhart, Université Paul Cézanne - Aix-Marseille III, IM2NP
- Nathalie Bergeon, Université Paul Cézanne - Aix-Marseille III, IM2NP
- Aziz Bogno, Université Paul Cézanne - Aix-Marseille III, IM2NP
- Adeline Buffet, ESRF
- Jose Baruchel, ESRF
- Thomas Schenk, ESRF

### Dissimilar welding: an experimental study of the Cu-Ni model system

C11-O-6-5-K

15/09/2011  
Einstein  
15:20

- Julien Zollinger, Department of Metallurgy and Materials Science and Engineering, Institut Jean Lamour
- Dominique Daloz, Department of Metallurgy and Materials Science and Engineering, Institut Jean Lamour

## Symposium : C12 - Solid State Transformations

### Where are the Carbon Atoms in Martensite?

C12-O-2-1-K

14/09/2011  
Sully 2  
10:30

- George Smith, Oxford University, Department of Materials

## **Symposium : C13 - Metallic glasses and related composites: new routes for functional and strong materials**

### **Changes in atomic structure of supercooled Pd-Ni-Cu-P glass-forming liquid during in-situ vitrification on cooling established by synchrotron-radiation X-ray diffraction**

C13-O-1-5-K

12/09/2011  
Sully 2  
11:50

- Dmitri Louzguine, WPI Advanced Institute for Materials Research, Tohoku University, Aoba-Ku, Sendai 980-8577, Japan
- Konstantinos Georgarakis, SIMAP-CNRS, Institut Polytechnique de Grenoble, BP 75, St-Martin-d'Hères Campus, 38402 France
- Jerzy Antonowicz, Faculty of Physics, Warsaw University of Technology, Koszykowa 75, 00-662 Warsaw, Poland
- Gavin Vaughan, European Synchrotron Radiation Facility, 38042, Grenoble, France
- Alain R. Yavari, SIMAP-CNRS, Institut Polytechnique de Grenoble, BP 75, St-Martin-d'Hères Campus, 38402 France
- Takeshi Egami, Oak Ridge National Laboratory, Oak Ridge, TN 37831, USA
- Akihisa Inoue, WPI Advanced Institute for Materials Research, Tohoku University, Aoba-Ku, Sendai 980-8577, Japan

### **Bulk Metallic Glasses Form Like Plastics**

C13-O-4-5-K

13/09/2011  
Sully 2  
11:50

- Jan Schroers,
- Golden Kumar,

## **Symposium : C21 - Wetting, soldering and brazing**

### **The wetting mechanism in the TiB<sub>2</sub>/Me (Me = Cu, Au) systems**

C21-O-1-1-K

13/09/2011  
Joffre A  
16:40

- Michael Aizenstein,
- Natalie Froumin,
- Nachum Frage ,

## **Symposium : C22 - Diffusion bonding and characterization**

### **Current Problems in Lead-free Soldering, Materials for High-Temperature Lead-free Solders**

C22-O-1-1-K

14/09/2011  
Joffre D  
16:40

- Ales KROUPA, Institute of Physics of Materials, AS CR, Zizkova 22, Brno, Czech Republic

## **Symposium : C32 - Powder Processing to Controlled Porosity and Microstructure and near-net complex shape**

### **From Titanium to Magnesium – Processing by Advanced Metal Injection Moulding**

C32-O-3-1-K

14/09/2011  
Joffre D  
10:30

- Karl Ulrich Kainer, Helmholtz-Zentrum Gesthacht, Magnesium Innovation Centre
- Thomas Ebel, Helmholtz-Zentrum Gesthacht, Magnesium Innovation Centre

## Symposium : C41 - Thin film coatings

### Extreme high temperature nanoindentation for optimising coating performance in harsh applications

C41-O-4-1-K

15/09/2011  
Antigone 3 - Ben Beake, Micro Materials Ltd  
10:30

### Erosion-resistant Nickel-based coatings for composite materials

C41-O-5-1-K

15/09/2011  
Antigone 3  
14:00

- Patricia Lammel, EADS Innovation Works, Germany/ CEST, Austria/ University of Paderborn - Technical and Macromolecular Chemistry, Germany
- Helena Simunkova, CEST, Austria
- Lidija Rafailovic, CEST, Austria
- Adam Whitehead, CEST, Austria
- Oliver Rohr, EADS Innovation Works, Germany
- Guido Grundmeier, University of Paderborn - Technical and Macromolecular Chemistry, Germany
- Bernard Gollas, CEST, Austria / Graz University of Technology - Institute of Chemistry and Technology of Materials, Austria

## Symposium : C42 - Advances in surface treatments of light alloys

### Effect of geometrical and electrical parameters on the "soft" plasma electrolytic oxidation processing of aluminium alloys

C42-O-1-1-K

15/09/2011  
Barthez 2  
10:30

- gerard henrion, Institut jean Lamour - Department CP2S
- amer melhem,
- julien martin,
- thierry czerwiec,
- teresa duchanoy,
- frederic brochard,
- jean-luc briancon,
- thierry belmonte,

## Symposium : C51 - Sustainable Processes in Ionic Liquids and Molten Salts for Materials

### The energy implications of lithium and its salts

C51-O-1-1-K

12/09/2011  
Joffre 4 - Derek FRAY, University of Cambridge  
10:30

## Symposium : C54 - Additive Manufacturing with advanced materials

### Three-dimensional printing of MAX phase ceramics

C54-O-1-1-K

14/09/2011  
Sully 3bis  
14:00

- Xiaowei Yin, National Key Laboratory of Thermostructure Composite Materials, Northwestern Polytechnical University, Xi'an, Shaanxi 710072, PR China
- Nahum Travitzky, Materials Science III-Glass and Ceramics, University Erlangen-Nuremberg Martensstr.5 D-91058 Erlangen, Germany
- Peter Greil, Materials Science III-Glass and Ceramics, University Erlangen-Nuremberg Martensstr.5 D-91058 Erlangen, Germany

## **Symposium : D11 - Novel Diffraction and Scattering Techniques for Materials Characterization**

### **Combining neutron diffraction and imaging for residual stress analysis in single crystal turbine blades**

D11-O-2-1-K

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|---------------------------------|--|
| 15/09/2011<br>Joffre C<br>10:30 | <ul style="list-style-type: none"><li>- Stephane Pierret, ASQ/NUM – Materials Science and Simulation, Paul Scherrer Institut, 5232 Villigen, Switzerland; Ecole Polytechnique Fédérale de Lausanne (EPFL), Insti</li><li>- Alexander Evans, ASQ/NUM – Materials Science and Simulation, Paul Scherrer Institut, 5232 Villigen, Switzerland</li><li>- Paradowska Ania, ISIS, Rutherford Appleton Laboratory, Chilton, Didcot, Oxfordshire, UK</li><li>- Kaestner Anders, ASQ/NUM – Neutron Imaging Group, Paul Scherrer Institut, CH-5322 Villigen</li><li>- Etter Thomas , ALSTOM (Switzerland) Ltd – TTTM.M Department, Brown Boveri Str. 7, 5401 Baden, Switzerland</li><li>- Helena Van Swygenhoven, ASQ/NUM – Materials Science and Simulation, Paul Scherrer Institut, 5232 Villigen, Switzerland; Ecole Polytechnique Fédérale de Lausanne (EPFL), Insti</li></ul> |
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## **Symposium : D12 - Tomographic 3D imaging with hard X-rays and neutrons**

### **3D imaging of complex materials: the case of cements**

D12-O-1-1-K

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|----------------------------------|--|
| 13/09/2011<br>Barthez 2<br>14:00 | <ul style="list-style-type: none"><li>- Gilberto Artioli, Università di Padova, Dipartimento di Geoscienze</li><li>- Matteo Parisatto, Università di Padova, Dipartimento di Geoscienze</li><li>- Maria Chiara Dalconi, Università di Padova, Dipartimento di Geoscienze</li><li>- Giorgio Ferrari, MAPEI S.p.a.</li></ul> |
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### **Neutron imaging in materials research**

D12-O-3-1-K

- |                                  |   |
|----------------------------------|---|
| 14/09/2011<br>Barthez 2<br>10:30 | <ul style="list-style-type: none"><li>- Nikolay Kardjilov, Helmholtz-Zentrum Berlin (HZB)</li><li>- Ingo Manke, Helmholtz-Zentrum Berlin (HZB)</li><li>- André Hilger, Helmholtz-Zentrum Berlin (HZB)</li><li>- Markus Strobl, Helmholtz-Zentrum Berlin (HZB)</li><li>- Williams Scott, Helmholtz-Zentrum Berlin (HZB)</li><li>- John Banhart, Helmholtz-Zentrum Berlin (HZB)</li></ul> |
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## **Symposium : D13 - Nanotomographic Techniques and 3D Material Microstructures**

### **Applications of ultraviolet laser atom probe**

D13-O-1-1-K

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| 13/09/2011<br>Barthez 1<br>10:30 | <ul style="list-style-type: none"><li>- Kazuhiro Hono, National Institute for Materials Science</li><li>- Ohkubo Tadakatsu, National Institute for Materials Science</li></ul> |
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## **Symposium : D21 - Macro/meso-mechanical characterization of materials and microstructural effects**

### **3D Characterisation of Fatigue Damage Mechanisms In Structural Materials Using Synchrotron X-rays**

D21-O-4-1-K

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|--------------------------------|--|
| 13/09/2011<br>Sully 1<br>10:30 | <ul style="list-style-type: none"><li>- Jean-Yves BUFFIERE, INSA Lyon</li><li>- Wolfgang LUDWIG, INSA Lyon ESRF</li><li>- Michael HERBIG, INSA Lyon</li><li>- Henry PROUDHON, Ecole des Mines Paris</li><li>- Ian SINCLAIR, Southampton University</li></ul> |
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## **Symposium : D22 - Mechanical characterization of small-scale structures and advanced nanostructured materials**

### **Dislocation kinetics in Fe and Fe alloys investigated by in situ TEM straining experiments** D22-O-1-1-K

12/09/2011  
Rondelet  
1+2  
10:30

- Daniel Caillard, CEMES-CNRS Toulouse France

### **Mechanical Behavior of Au Nanowires** D22-O-3-1-K

12/09/2011  
Rondelet  
1+2  
16:40

- Cynthia VOLKERT, Institute for Materials Physics, University of Göttingen, Germany  
- B. Roos, Institute for Materials Physics, University of Göttingen, Germany  
- B. Kapelle, Institute for Materials Physics, University of Göttingen, Germany  
- G. Richter, Max Planck Institute for Metals Research, Stuttgart, Germany

## **Symposium : D31 - Ab initio based modeling, designing new materials with electronic structure calculations**

### **Ab initio based modeling of structural materials with superior properties: From a predictive thermodynamic description to tailored mechanical properties** D31-O-2-1-K

12/09/2011  
Joffre B  
14:00

- Jörg Neugebauer, Max-Planck-Institut für Eisenforschung GmbH  
- Blazej Grabowski, Max-Planck-Institut für Eisenforschung GmbH  
- Fritz Körmann, Max-Planck-Institut für Eisenforschung GmbH  
- Johann von Pezold, Max-Planck-Institut für Eisenforschung GmbH  
- Tilmann Hickel, Max-Planck-Institut für Eisenforschung GmbH

## **Symposium : D32 - Modelling of Materials Properties at the nano and microscales**

### **Microstructural effects in atomic scale dynamics of dislocations in metals** D32-O-1-1-K

12/09/2011  
Joffre 5  
10:30

- Yury Osetskiy, ORNL, Materials Science and Technology  
- Roger Stoller, ORNL, Materials Science and Technology  
- David Bacon, University of Liverpool, Department of Engineering

### **Plasticity in thin metallic wires under torsion: a three-dimensional discrete dislocation dynamics investigation** D32-O-4-1-K

13/09/2011  
Joffre 5  
10:30

- Daniel Weygand, Karlsruhe Institute of Technology, IAM  
- Jochen Senger, Karlsruhe Institute of Technology, IAM  
- Oliver Kraft, Karlsruhe Institute of Technology, IAM  
- Peter Gumbsch, Karlsruhe Institute of Technology, IAM

## **Symposium : D34 - Thermodynamics and kinetics: modelling of phase diagrams and microstructure evolution**

### **Phase-field simulations coupled with thermodynamic and kinetic databases applied to Ni-base Superalloys** D34-O-3-1-K

15/09/2011  
Joffre 5  
10:30

- Nils Warnken, University of Birmingham, Metallurgy and Materials

### **Coupling of linear irreversible thermodynamics with the reactive and interdiffusion for multi-component alloys** D34-O-5-1-K

15/09/2011  
Joffre 5  
16:40

- Marek Danielewski, AGH Univ. of Science and Technology, Mat. Sci. & Ceramics  
- Bartek Wierzba, AGH Univ. of Science and Technology  
- Ryszard Filip, Rzeszow Univ. of Technology,  
- Witold Kucza, AGH Univ. of Science and Technology, Mat. Sci. & Ceramics  
- Zbigniew Grzesik, AGH Univ. of Science and Technology, Mat. Sci. & Ceramics  
- Pawel Manikowski, AGH Univ. of Science and Technology, Mat. Sci. & Ceramics

## Symposium : E11 - Materials for Nuclear Applications

### Preparation and Sintering of Actinide-based Mixed Oxides : Benefits from Hydrothermal Methods E11-O-2-1-K

12/09/2011  
Sully 3  
14:00

- Nicolas Clavier, ICSM - LIME
- Nicolas Dacheux, ICSM - LIME
- Nicole Barré, IPNO - Radiochemistry Group
- Murielle Rivenet, ENSCL - UCCS
- Francis Abraham, ENSCL - UCCS

### Further basic studies needed to specify materials for sodium cooled fast reactors E11-O-4-5-K

13/09/2011  
Sully 3  
11:50

- emmanuel HOROWITZ, (EDF, Generation Nuclear Department)

## Symposium : E13 - Materials for Thermal Management (heat sink materials)

### Thermal Conductance of Material Interfaces E13-O-1-1-K

15/09/2011  
Sully 3bis  
10:30

- David Cahill, University of Illinois, Department of Materials Science and Engineering

## Symposium : E21 - Materials for Photovoltaics

### Sustainable materials for large-scale photovoltaics: high-efficiency kesterites by hybrid solution-nanoparticle ink processing E21-O-1-1-K

12/09/2011  
Barthez 1  
10:30

- Teodor Todorov, IBM T. J. Watson Research Center
- D. Aaron Barkhouse, IBM T. J. Watson Research Center
- Oki Gunawan, IBM T. J. Watson Research Center
- Santanu Bag, IBM T. J. Watson Research Center
- Thomas Goislard de Monsabert, IBM T. J. Watson Research Center
- S. Jay Chey, IBM T. J. Watson Research Center
- David B. Mitzi, IBM T. J. Watson Research Center

## Symposium : E22 - Materials for energy storage and conversion (fuel cells, hydrogen production, batteries etc.)

### Photoelectrochemical Solar Energy Conversion E22-O-1-1-K

12/09/2011  
Antigone 3  
10:30

- Leone Spiccia, School of Chemistry, Monash University

### Characterization of catalytically-active Pt-alloy surfaces and core-shell nanoparticles using atom probe tomography E22-O-5-1-K

13/09/2011  
Antigone 3  
14:00

- Paul Bagot, University of Oxford, Department of Materials
- Tong Li, University of Oxford, Department of Materials
- Emmanuelle Marquis, University of Michigan, Department of Materials Science and Engineering
- Edman Tsang, University of Oxford, Chemistry Research Laboratory
- George Smith, University of Oxford, Department of Materials

## Symposium : E23 - Thermoelectrics

### Effect of the structure on the thermoelectric properties of $\text{Ti}_{0.37}\text{Zr}_{0.37}\text{Hf}_{0.26}\text{NiSn}$ half Heusler compounds E23-O-1-1-K

13/09/2011  
Sully 3bis  
10:30

- Sascha Populoh,
- Myriam Aguirre,
- Zudaire Sagarna Zudaire,
- Krzysztof Galazka,
- Oliver Brunko,
- Matthias Trottmann,
- Ye Lu,
- Anke Weidenkaff,

## **Symposium : E31 - Advanced materials for transportation**

**Composites in Transportation - Potential and Costs**  
E31-O-1-1-K

13/09/2011

Joffre 4 - Axel HERRMANN, University Bremen, Germany

10:30