

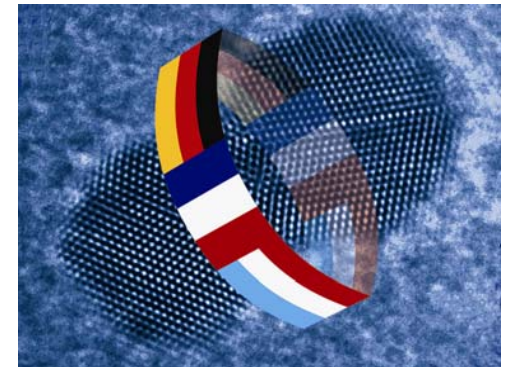
**FINAL PROGRAM**

# 2<sup>nd</sup> Saar-Lor-Lux Forum

on Nanotechnology, New  
Materials and Coatings

## PROCESSING, CHARACTERIZATION AND MODELLING OF NEW MATERIALS

École Nationale Supérieure d'Arts et Métiers,  
Metz, France, June 9 – 10, 2005



Organized by CC-NanoChem, Network of Excellence  
for Chemical Nanotechnology, and ENSAM Metz



### Organizing Committee

Marcel BERVEILLER (ENSAM Metz)  
Jürgen BREME (Saarland University, Saarbrücken)  
Jean-Marie DUBOIS (Ecole des Mines, Nancy)  
Henri-Noel MIGEON (LAM, CRPGL, Luxembourg)

### Venue

Ecole Nationale Supérieure d'Arts et Métiers  
CENTRE DE METZ - TECHNOPOLE  
4, rue Augustin Fresnel  
F-57078 METZ Cedex 3  
France  
Tel: +33 3 87375430  
Internet: [www.metz.ensam.fr](http://www.metz.ensam.fr)

### Registration

Please register **online** at  
<http://www.cc-nanochem.de/metz2005/register.html>  
or return **fax** registration form to +49 681 9300 223

### Call for Posters

Participants of the meeting are invited to present posters on their current activities in the fields of nanotechnology, new materials, coatings, surface and materials analysis, biomaterials, networking, education and commercialization. Distribution of information material on activities and products is also welcome.

### Information for Exhibitors

Limited space is available for exhibitors. For details please contact the organizing secretariat.

### Language

The conference languages are English, français, Deutsch.

### Organizing Secretariat

CC-NanoChem  
Leibniz-Institut für Neue Materialien  
Im Stadtwald – G 43  
D-66123 Saarbrücken, Germany

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E-Mail: [metz2005@cc-nanochem.de](mailto:metz2005@cc-nanochem.de)  
Internet: [www.cc-nanochem.de/metz2005/](http://www.cc-nanochem.de/metz2005/)

### Scope of the Event

The general objectives of a regional network for nanotechnology, new materials and coatings are manifold:

- to promote interdisciplinary and intercultural approaches
- to facilitate the integration of excellence and knowledge
- to generate synergies between the network members
- to attract the scientific offspring to the institutions of the region

Suggested instruments to achieve these goals are, among others

- providing information about the expertise of the various partners by means of the internet, joint seminars, working groups, thematic summer schools
- collaboration at the level of graduate studies (double diploma, creation of an integrated French-German master in the respective fields of research)
- joint research projects of regional network members in response to calls of German, French or European funds or in response to requests from industry
- generating a database of expertise and equipment available in the region

The 2<sup>nd</sup> Forum will focus on

- presenting Lorraine as a center of materials science
- developing transnational cooperation
- demonstrating the expertise of the regional scientific community in solving the problems of industries and small and medium sized enterprises
- visiting academic and industrial R&D sites in Metz

Students are invited to make themselves familiar with the universities and research institutes of the region and the opportunities of conducting their PhD or postdoctoral studies in a neighboring country.

The list of participants will be published one week ahead of the Forum in order to facilitate appointments for bilateral talks.

Collected presentations of the Forum will be made available online for all participants of the event.

The Saar-Lor-Lux Forum addresses itself to everybody in France, Germany, Luxembourg and beyond who wants to get an overview of the outstanding concentrated expertise in materials research and development in this European region.

Thursday, June 9

08.00 – 09.00 am

Registration

09.00 am – 11.35 am

General Oral Presentations

**Godefroy Kugel**

Directeur du CER ENSAM, Metz

*Welcome*

**Jean-Yves Le Deaut**

Vice-président du Conseil Régional Lorraine

*Politique de Recherche et d'Innovation dans la Région Lorraine*

**Pascal Aimé**

Délegué régional du CNRS

*La politique de valorisation du CNRS – le CNRS en Lorraine*

**Gérard Michaux**

Vice Président CEVU Metz

*Recherche et Formation à l'université de Metz*

**Gérard Labbe**

Directeur de la recherche, ASCOMETAL

*Activité de recherche dans une grand société sidérurgique d'acières spéciaux*

**Alain Hautcoeur**

Président, NIMESIS

*Applications industrielles des alliages à mémoire de forme*

**Etienne Patoor**

Directeur, LPMM, ENSAM Metz

*Pôle de Compétitivité en Lorraine – Matériaux innovants et produits intelligents*

11.35 am – 12.35 am

Tools of Cross-Border Networking – Talks and Open Discussion

**Frédérique Genton**

Secrétaire Générale, Université Franco-Allemande

*Soutien de l'UFA aux Jeunes Chercheurs et à la formation doctorale*

**Silke Stahl-Rolf**

VDI Technologiezentrum, Düsseldorf

*International Cooperation in Cross-Border Networks – Rationale, Good Practice and Public Support*

**Siegfried Kraus**

Fraunhofer-Institut für Zerstörungsfreie Prüfverfahren,

Saarbrücken

*Research in the Fraunhofer Society and Collaboration with French Institutes*

12.35 am – 02.00 pm

Lunch

02.00 pm – 05.30 pm

*Paving the Way to the Market – Conference on Best Practice in Technology Transfer in the Saar-Lor-Lux Materials Community*

**Francis Wagner**

Directeur LETAM, Université de Metz

*Orientation Stereology – Application to Study the Microstructure and Properties of Coatings*

**Daniel Dudzinski**

Professeur, LPMM, ENSAM Metz

*Dry Machining of Difficult-to-Cut Materials with Nanocomposite Carbide coated Tools*

**Abdallah Ougazzaden**

Professeur, Laboratoire MOPS, Université de Metz

*Submicron Characterization of Selective Area Grown Semiconductor Heterostructure Devices*

**Thomas Müller**

Leibniz-Institut für Neue Materialien, Saarbrücken

*Photocatalysis – New Application Fields by the Nanotechnology Approach*

**Nico Niegisch**

Interver Special Glass Ltd., Meggen/Seingbouse

*Nanotechnology for Fire-Resistance - Industrial Conversion in the Saar-Lor-Lux Area*

**Frank Tiefensee**

Fraunhofer-Institut für Biomedizinische Technik, St.

Ingbert

*Ultrasound Technology at IBMT – from Prototype to Product*

05.30 pm – 07.00 pm

Poster Session and Partnering Event

08.00 pm Dinner, Hôtel-restaurant MERCURE, Metz

Friday, June 10

09.00 – 11.30

*Paving the Way to the Market – Conference on Best Practice in Technology Transfer in the Saar-Lor-Lux Materials Community*

**Frédéric Meyer**

Novelis Inc., Dudelange, Luxembourg

*Public-Industrial R&D Collaboration in the Field of Novel Aluminum Products (tentative)*

**Marc Botreau**

Centre de Recherche Public Gabriel Lippmann, Esch, Luxembourg

*Industrial Research Activities at the CRPGL – a Synergy within the Framework of the National and European Programs*

**Stephane Berbenni**

LPMM, ENSAM, Metz

*On the Mechanics of Size Scale Plasticity Relevant to the Design of Micro and Nanodevices: Examples from Northwestern University, USA*

**Francois Xavier Royer, Joachim Sukmanowski**

LPMD, Université de Metz

*Nanotechnology in Photovoltaics*

**Alain Billard**

LSGS, Ecole des Mines, Nancy

*From SOFC towards IT-SOFC thanks to PVD processes*

11.30 am – 12.30 am

Final Discussion and Decisions Concerning the Next Saar-Lor-Lux Forum

12.30 – 02.00 pm

Lunch

02.00 pm – 05.00 pm

Visit to R&D sites near Metz

- ISGMP, the Mechanical and Production Engineering Institute (Presentation: E. PATOOR)
- ARCELOR Research, R&D centre of the French steel industry (Talk by J. M. STEILER: "Grandes problématiques de recherche d'ARCELOR Research dans le domaine de aciers plats de carbone")