

Please return before 16 September 2009

Liège Conference 2010

Forschungszentrum Jülich  
Conference Service

52425 Jülich  
Germany

This address can be used in a window envelope.



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#### Important dates

Deadline for submission of abstracts	September 15 <sup>th</sup> , 2009
Acceptance of papers	November 2009
Second Announcement with provisional programme	October 2009
Manuscripts of accepted papers	January 30 <sup>th</sup> , 2010
Reviewers' comments	March 31 <sup>th</sup> , 2010
Final manuscripts	April 30 <sup>th</sup> , 2010
Final programme	May 2010
Ninth Liège Conference	September 27 <sup>th</sup> - 29 <sup>th</sup> , 2010

The deadline for submission of abstracts is  
September 15<sup>th</sup>, 2009

Mitglied der Helmholtz-Gemeinschaft

9<sup>th</sup> Liège Conference on Materials  
for Advanced Power Engineering

September 27<sup>th</sup> - 29<sup>th</sup>, 2010  
Liège • Belgium



## Introduction

The 9<sup>th</sup> Liège Conference on Materials for Advanced Power Engineering will be held on September 27<sup>th</sup> – 29<sup>th</sup>, 2010 at the Palais des Congrès in Liège, Belgium. The achievements of the European materials development projects carried out in the COST Actions 536 ‘Alloy Development for Critical Components of Environmentally Friendly Power Plant’ and 538 ‘High Temperature Plant Lifetime Extension’ which are ended in 2008 and 2009, respectively, will be reviewed. In addition, the broad field of current materials research for high efficiency, low-emission and zero emission power plants are reported.

The topics that will be covered in the conference are:

- Ferritic, martensitic, and austenitic steels as well as Nickel base alloys for high temperature steam power plants
- Coatings for protection against fire-side and steam-side corrosion in steam power plants
- High performance Nickel base alloys for gas turbines
- Innovative thermal barrier coatings for high efficiency gas turbines
- Membrane materials for CO<sub>2</sub> - separation in zero emission power plants
- Materials for nuclear fusion reactors and advanced nuclear fission power plants
- Materials issues for alternative power plant processes (IGCC, Oxyfuel) as well as for combustion of low grade fuels, biomass and waste
- Production of components, including casting, hot and cold working, heat treatment and welding
- Novel materials (intermetallics, composites) and processes for energy conversion
- Cross cutting topics in research on high temperature materials, especially:
  - High temperature corrosion
  - Thermomechanical fatigue
  - Modeling and lifetime prediction tools

Following the well established format of previous Liège conferences, a series of review papers will describe the European materials developments carried out in the COST Actions 536 and 538. Invited lectures by internationally recognized experts will present the status within the other topics mentioned above. Sessions concerning new energy technologies and materials perspectives for the next decade are planned. Contributions on all issues to be presented at the conference are welcome. They will be presented in the form of posters combined with reviewed proceedings.

## Language

The official language will be English.

## Proceedings

The papers and poster contributions will be reviewed and published in the Conference Proceedings, which will be available at the Conference.

## Social and Guest Programmes

The social programme will include an ice-breaker party on Sunday September 26<sup>th</sup> and a Conference Dinner. An attractive guest programme with visits to Liège, Maastricht and Aachen will be organised. Further details will be given in the Second Announcement.

## Accommodation

A list of hotels and guest houses in Liège and surroundings will be provided.

## Travel Information

Liege is easily reached by road or train from Germany, France and the Netherlands. The nearest airports are Brussels International (Zaventem) with frequent train services to Liège Guillemins Railway Station; and Brussels South (Charleroi) for low cost airlines, with shuttle bus to Charleroi train station and connections to Liège Guillemins.

## Call for Papers

Contributions related to any of the Conference topics may be submitted for presentation as posters. The reviewed manuscripts of poster presentations will be published in the Proceedings. If you wish to submit a poster presentation, please send the title and a halfpage abstract, as soon as possible, either by e-mail or post to: Marc.Carton@ulg.ac.be

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## 9<sup>th</sup> Liège Conference September 27<sup>th</sup> – 29<sup>th</sup>, 2010

### Preliminary Programme

#### Sunday, September 26<sup>th</sup>

From 18:00      Registration and Ice-Breaker Party

#### Monday, September 27<sup>th</sup>

08:30 – 09:15      Registration  
09:15 – 10:00      Inaugural Session  
10:00 – 12:30      Materials for Advanced Steam Power Plants  
14:00 – 15:30      Materials for Nuclear Fission and Fusion  
16:00 – 17:30      Materials for SOFCs  
18:00 – 20:00      Reception and Poster Session

#### Tuesday, September 28<sup>th</sup>

09:00 – 12:30      Gas Turbine Materials  
14:00 – 17:00      General Topics: High-Temperature  
Corrosion, Thermomechanical Fatigue,  
Modeling  
17:00 – 18:30      Poster Session  
19:30                Conference Dinner in Liège

#### Wednesday, September 29<sup>th</sup>

09:00 – 12:30      Materials for Zero-Emission Power Plants  
12:30 – 13:00      Closing Session

## 9<sup>th</sup> Liège Conference on Materials for Advanced Power Engineering Sept. 27<sup>th</sup> – 29<sup>th</sup>, 2010 • Liège • Belgium Preliminary Registration

I am interested in the meeting. Please put me on your mailing list.

I would like to submit a poster

Name: .....

First name: .....

Institution: .....

Address: .....

Telephone: .....

Telefax: .....

E-mail: .....

Title of contribution: .....

Authors: .....

Return this before September 15<sup>th</sup>, 2009 to the address overleaf to make sure you get the 2<sup>nd</sup> Announcement.