

Please return before 15 November 2009

Liège Conference 2010

Forschungszentrum Jülich
Conference Service

52425 Jülich
Germany

This address can be used in a window envelope.



Technical and Editorial Board

Lecomte-Beckers J (chief editor)		
Carton M, Montrieux H M	U Liège	Belgium
Allen D	Alstom Power	UK
Kern T U	Siemens PG	Germany
Oakey J	Cranfield U	UK
Hald J	DTU	Denmark
Scarlin B	Alstom Power	Switzerland
Beck T, Kuhn B	Forschungszentrum Jülich	Germany

Local Organisation Committee

Beck T (chairman), Wittig E (co-ordinator), Kuhn B, Singheiser L, Kuhn-Stassar S, Lecomte-Beckers J, Carton M, Montrieux H M, Pirson R,	Forschungszentrum Jülich Université Liège
---	--

International Advisory Committee

V Massaut	SCK-CEN	Belgium
B Raj	IGCAR	India
P Mathieu	ULg	Belgium
J Oakey	Cranfield U	UK
P Barnard	Doosan Babcock	UK
M Mogensen	Risoe DTU	Denmark
F Abe	NIMS	Japan
T Fry	NPL	UK
A Aguero	INTA	Spain
B Scarlin	Alstom Power	Switzerland
K Jochum	Boehler Schweißtechnik	Germany
J Hald	TU Denmark	Denmark
T Kern	Siemens	Germany
X Xie	USTB	China
D Gandy	EPRI	USA
B Bordenet	Alstom Power	Switzerland
D Allen	Alstom Power	UK
R Herzog	MAN-Turbo	Germany
F Delannay	UCL	Belgium
A Scholz	TU Darmstadt	Germany
L Remy	EDM	France
E Charcaluk	Univ. Lille	France
T Beck	FZ Juelich	Germany
V Lupinc	CNR-IENI	Italy
S Holdsworth	EMPA	Switzerland
W Quadackers	FZ Juelich	Germany
P Hernderson	Vattenfall	Sweden

... and how to find us:



Important dates

Extended deadline for submission of abstracts	November 15th, 2009
Acceptance of papers	December 18 th , 2009
Final announcement with programme	May 2010
Manuscripts of accepted papers	January 30 th , 2010
Reviewers' comments	March 31 th , 2010
Final manuscripts	April 30 th , 2010
Final programme	May 2010
Ninth Liège Conference	September 27 th - 29 th , 2010

The extended deadline for submission of abstracts is November 15th, 2009

Mitglied der Helmholtz-Gemeinschaft

9th Liège Conference on Materials for Advanced Power Engineering

September 27th - 29th, 2010
Liège • Belgium



Introduction

The 9th Liège Conference on Materials for Advanced Power Engineering will be held on September 27th – 29th, 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 2009 and 2008, 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 CO₂ - 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 26th 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

Marc Carton
Université de Liège
Département ASMA
Secteur Matériaux Métalliques Spéciaux
Institut de Mécanique et Génie Civil
Chemin des Chevreuils, B52/3
Sart Tilman
4000 Liège, Belgium

9th Liège Conference September 27th – 29th, 2010

Preliminary Programme

Sunday, September 26th

From 18:00 Registration and Ice-Breaker Party

Monday, September 27th

08:30 – 09:15 Registration

09:15 – 10:00 Inaugural Session

10:00 – 12:30 Materials for Advanced Steam Power Plants
Materials, Joining Technology and Future
Perspectives

14:00 – 17:30 Gas Turbine Materials
Nickel Base Superalloys and Thermal Barrier
Coating Systems

18:00 – 20:00 Reception and Poster Session

Tuesday, September 28th

09:00 – 10:30 Nuclear Fission and Fusion
Fast Breeder Technology, Generation IV reactors,
Supply Chain Issues, ITER Materials Research

11:00 – 12:30 Solid Oxide Fuel Cells
Materials for SOFCs and Gas Separation
Membranes
Worldwide Solid Oxide Fuel Cell Development

14:00 – 17:00 General Topics
Corrosion, Thermomechanical Fatigue,
Modeling, Life Assessment

Wednesday, September 29th

09:00 – 12:30 Materials for Zero-Emission Power Plants
Materials, processing and practical experience

12:30 – 13:00 Closing Session

9th Liège Conference on Materials for Advanced Power Engineering Sept. 27th – 29th, 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: