

ICOPS 2008

35th IEEE International Conference on Plasma Science
June 15-19, 2008
Congress Center Karlsruhe, Germany



Conference Chair: Manfred Thumm icops2008@fzk.de

http://www.fzk.de/icops2008

<u>Important Deadlines</u>

Abstract Submission Advance Registration Minicourse Registration Student Travel Hotel Booking 31 January 2008 30 April 2008 30 April 2008 29 February 2008 16 May 2008







The conference site, the Congress Center Karlsruhe, is located near the Baroque Palace in the center of Karlsruhe, Germany. Karlsruhe is a hospitable city, in the State of Baden-Württemberg, beautifully located in the upper Rhine valley between the wooded mountains of the Black Forest, the vineyards of the Palatinate (Pfalz), and the Vosges in France with a mild climate. Heinrich Hertz conceived and performed his brilliant fundamental experiments confirming Maxwell's theory at the University of Karlsruhe (1886-1888). The University of Karlsruhe has close scientific and academic relations to the Research Center Karlsruhe (Forschungszentrum Karlsruhe) with the aim of founding the Karlsruhe Institute of Technology (KIT).

ICOPS 2008

The 35th IEEE International Conference on Plasma Science June 15-19, 2008 http://www.fzk.de/icops2008 icops2008@fzk.de

Objective and Topics

The 35th IEEE International Conference on Plasma Science (ICOPS 2008) will feature an exciting technical program with reports from around the globe about new and innovative developments in the field of plasma science and engineering.

1. Basic processes in fully and partially ionized plasmas

- 1.1 Basic phenomena
- 1.2 Computational plasma physics
- 1.3 Space plasmas
- 1.4 Partially ionized plasmas
- 1.5 Dusty plasmas

2. Microwave generation and plasma interactions

- 2.1 Intense beam microwave generation
- 2.2 Fast-wave devices
- 2.3 Slow-wave devices
- 2.4 Vacuum microelectronics
- 2.5 Codes and modelling
- 2.6 Non-fusion microwave systems
- 2.7 Microwave plasma interaction

3. Charged particle beams and sources

- 3.1 Plasma, ion and electron sources
- 3.2 Intense electron and ion beams

4. High energy density plasmas applications

- 4.1 Fusion (inertial, magnetic and alternate concepts)
- 4.2 Particle acceleration with laser and beams
- 4.3 Radiation physics
- 4.4 High energy density matter
- 4.5 Laser produced plasmas
- 4.6 Fast Z-pinches, X-ray lasers

5. Industrial, commercial and medical plasma applications

- 5.1 Nonequilibrium plasma applications
- 5.2 High-pressure and thermal plasma processing
- 5.3 Plasma thrusters
- 5.4 Plasmas for lighting
- 5.5 Flat-panel displays
- 5.6 Medical, biological and environmental applications

6. Plasma diagnostics

- 6.1 Optical and X-ray diagnostics
- 6.2 Microwave and FIR diagnostics
- 6.3 Particle diagnostics

7. Pulsed power and other plasma applications

- 7.1 Insulation and dielectric breakdown
- 7.2 Switching
- 7.3 Plasma lasers
- 7.4 Compact pulsed power and applications

Conference Chair Manfred Thumm

Co-Chair Hansjoachim Bluhm

Program Chair Günter Dammertz

Local Organizing Committee

Gabriela Bertsch (Conference Co-ordinator, Social Program)

Lambert Feher (Minicourse)
Wolfgang Frey (Exhibition)
Roland Heidinger (Cultural Program)

Martina Huber (Conference Co-ordinator, Conference Website)

Stefan Illy (Conference Abstracts)
Guido Link (Laboratory Visits)
Georg Müller (Finance Chair)
Bernhard Piosczyk (Poster Sessions)

ICOPS 2008 Secretariat

Research Center Karlsruhe

Institute for Pulsed Power and Microwave Technology

Hermann-von-Helmholtz-Platz 1 76344 Eggenstein-Leopoldshafen

Phone: +49 7247-82 2883 (Gabriela Bertsch) e-mail: gabriela.bertsch@ihm.fzk.de
Phone: +49 7247-82 3623 (Martina Huber) e-mail: martina.huber@ihm.fzk.de

Topics Organizers

H. Akiyama (Japan), V. Engelko (Russia), D.H.H. Hoffmann (Germany), M. Laroussi (USA), M.Q. Tran (Switzerland), B. Weber (USA), K.-D. Weltmann (Germany)

Session Organizers

I. Alexeff (USA), T. Antonsen (USA), M. Auweter-Kurtz (Germany), J. Bailey (USA), K. Blankenbach (Germany), J. Booske (USA), G. Conway (Germany), M. Cuneo (USA), G.G. Denisov (Russia), C. Deutsch (France), J. Dickens (USA), P. Flesch (Germany), A. Goertler (Germany), J. Heberlein (USA), J.-P. Hogge (Switzerland), W. Jiang (Japan), B. Jones (USA), M.G. Kong (UK), F. Krasik (Israel), M. Laroussi (USA), C. Li (USA), A. Lunk (Germany), A. Melzer (Germany), G. Müller (Germany), G.-D. Munz (Germany), A.D.R. Phelps (UK), A. Pukhov (Germany), G.-H. Rim (South Korea), S. Rose (UK), M. Roth (Germany), R. Schlickeiser (Germany), F. Skiff (USA), D. Whaley (USA)

Conference Digest Editors

Manfred Thumm, Hansjoachim Bluhm and Günter Dammertz

Submission of Abstracts

Papers will be selected on the basis of the content of the abstract. The abstract should be a self-contained description of the contribution of the paper and why it would be of interest to conference attendees. Abstracts will be reviewed by the Technical Program Committee. Notices will be sent by e-mail confirming receipt of all abstracts.

Co-Sponsoring

The ICOPS 2008 is sponsored by the IEEE, the Research Center Karlsruhe and the University of Karlsruhe.

Hotel Information

The Congress Center Karlsruhe has reserved a sufficient number of rooms at a reduced rate in several hotels located in Karlsruhe for ICOPS 2008 participants.

A link for booking and a hotel reservation form will be provided by January 2008 (see Conference Website). In case of questions, please contact:

Roberto Alcaide

Phone: +49 721- 3720 5393 e-mail: roberto.alcaide@kmkg.de

Please refer to the group name of ICOPS2008.

Exhibits

ICOPS 2008 also provides opportunities for companies to exhibit their products in the lobby of the Congress Center. Please contact icops2008@fzk.de regarding the exhibition.

Social Program

Sunday, June 15, 2008

• Registration, Welcome Party

Monday, June 16, 2008

• Reception in the City Hall of Karlsruhe

Tuesday, June 17, 2008

• Organ Recital in the Church of Karlsruhe-Durlach

Wednesday, June 18, 2008

Conference Dinner (Schwetzingen Palace)

Thursday, June 19, 2008

Laboratory visits at the Research Center Karlsruhe

Tours for accompanying persons will be organized.