

VDI

Second Announcement

-  
Call for Papers

## 15<sup>th</sup> International Conference on the Properties of Water and Steam (15<sup>th</sup> ICPWS)

September 7 – 11, 2008

Berlin, Germany

Water, Steam, and Aqueous Solutions –

Advances in Science and Technology for Power Generation



Organized by

VDI - The Association of German Engineers  
and the

International Association for the  
Properties of Water and Steam (IAPWS)

## About the Conference

The 15<sup>th</sup> International Conference on the Properties of Water and Steam (15<sup>th</sup> ICPWS) continues the series of International Conferences on the Properties of Water and Steam started in 1929. The conference is concerned with the physical and chemical properties of water, steam, and aqueous systems. It has traditionally provided the scientific foundation for the accurate thermophysical properties and water chemistry data used by the thermal power industry. It is expanding into new areas of pure and applied research related to water and aqueous solutions at extreme conditions, sea water and humid gases.

Relevant areas of basic science include spectroscopy, calorimetry, potentiometry, thermo-physical property measurements and modelings, and molecular simulation studies of water and ice, and solvated species in high-temperature or sub-cooled water.

Areas of application include power cycle chemistry, high-temperature aqueous technologies applicable to steam cycles and fuel cells, the use of high-temperature water and supercritical steam in chemical and metallurgical processes, supercritical destruction of toxic wastes, hydrothermal geochemistry, hydrometallurgy, oceanography, power cycles with carbon dioxide capture and storage of carbon dioxide in aqueous environments.

## Scientific Program

The scientific program is organized by an International Program Committee selected by IAPWS, with representatives from a cross section of member countries, spanning industry, universities and national laboratories. The technical program consists of plenary lectures, a workshop and symposia addressing 18 major topics.

### Plenary Lectures

The plenary lectures will be given by the IAPWS Gibbs Award recipient and invited speakers. They will be held after the opening ceremony. The IAPWS Gibbs Award Lecture will be presented by Prof. W. Wagner (Ruhr-University Bochum, Germany). Nominations for invited lectures will be announced at the conference website.

## Symposia

Symposia addressing the following topics are planned:

- **Calculation of Water and Steam Properties for Industrial Use**  
Organizers: Prof. H.-J. Kretzschmar (Zittau/Goerlitz University of Applied Sciences, Germany)  
W. Parry (General Electric, USA)
- **Thermodynamic and Transport Properties of Aqueous Systems**  
Organizers: Dr. A. Harvey (NIST, USA)  
Prof. G. Maurer (University of Kaiserslautern, Germany)
- **Molecular Simulation and Spectroscopy in Aqueous Systems**  
Organizers: Dr. K. Yasuoka (Keio University, Japan)  
Prof. I. M. Svishchev (Trent University, Canada)
- **Nonequilibrium, Metastable and Critical States**  
Organizer: Prof. M. A. Anisimov (University of Maryland, USA)
- **Thermodynamics and Kinetics in Hydrothermal Systems**  
Organizer: Dr. D. A. Palmer (Oak Ridge National Laboratory, USA)
- **Electrochemistry, Corrosion, and Interfaces in High Temperature Water**  
Organizer: Dr. R. Svoboda (Alstom Power, Switzerland)
- **Fuel Cells and Hydrogen Production**  
Organizers: Prof. S. Lvov (Pennsylvania State University, USA)
- **Advanced Techniques and Instruments for Basic Research and Power Plant Applications in High Temperature / High Pressure Water**  
Organizer: Dr. S. Uchida (Japan Atomic Energy Agency, Japan)
- **Apparatus, Materials and Monitoring Instrumentation for Applications at High Temperatures and Pressures**  
Organizer: Prof. M. Ueno (Doshisha University, Japan)
- **Power Cycle Chemistry**  
Organizer: M. Rziha (Siemens Power Generation, Germany)

- **Condensation and Deposition Processes**

Organizer: Dr. J. Bellows (Siemens Power Generation, USA)

- **High Efficiency Power Cycles and New Technologies**

Organizer: Prof. V. Scherer (Ruhr-University Bochum, Germany)

- **Environmental Issues in Power Generation**

Organizer: N. Okita (Toshiba Corporation, Japan)

- **Renewable Energy**

Organizer: Dr. Ch. Sattler (German Aerospace Center, Germany)

- **Hydrothermal Geochemistry**

Organizer: Dr. P. Tremaine (University of Guelph, Canada)  
Dr. D. J. Wesolowski (Oak Ridge National Laboratory, USA)

- **CO<sub>2</sub> in Power Generation – Challenges in Capture, Transportation and Storage**

Organizer: Prof. R. Span (Ruhr-University Bochum, Germany)

- **Thermophysical Properties of Sea Water – Importance for Global Climatic and Oceanographic Modeling and Desalination**

Organizers: Dr. R. Feistel (Baltic Sea Research Institute, Germany)  
Dr. R. Tailleux (University of Reading, United Kingdom)

- **General Topics on Water, Steam and Aqueous Systems**

Organizer: Dr. B. Dooley (Structural Integrity Associates, Canada)

## Workshop

- **Workshop on homogeneous vapor-liquid nucleation in water**

Organizer: Dr. J. Hruby (Academy of Sciences of the Czech Republic, Czech Republic)

Nucleation is an interdisciplinary topic and it is discussed in various scientific and technical communities. IAPWS – traditionally being very open to collaboration with other organizations – would like to establish a coordinated effort in this field. Topics relevant to the workshop are primarily those aiming at quantification of the nucleation rate in pure ordinary and heavy water. Contributions concerning other nucleation processes in water and aqueous systems are also welcome.

Authors are requested to select one of the above themes for their presentation. Authors of papers not related to a topic specifically mentioned are encouraged to submit their abstracts under “General Topics”.

## General Information

### Submission of Abstracts and Papers

Submission of abstracts and full-length papers will be made available through the conference website [www.icpws15.de](http://www.icpws15.de) starting November 1, 2007. At least one author of an abstract must register for the conference by paying appropriate fees.

### Presentation Format

Both oral and poster presentations are available. The final decision will be made by the international program committee.

### Conference Proceedings

Full-length manuscripts are published on CD-ROM as referred proceedings. The CD will be available at the beginning of the conference. Additionally it is intended that papers are published in suitable technical journals. A booklet containing all abstracts will be distributed at the conference.

### Language

The language of the conference is English. Simultaneous interpretation will not be provided.

## Registration / Fees

Registration will be available at the conference website [www.icpws15.de](http://www.icpws15.de) starting November 15, 2007. Registration fees are as follows:

	Before June 15, 2008	After June 15, 2008
Academic <sup>1</sup>	500 €	550 €
Corporate <sup>2</sup>	700 €	750 €
Student / Retired <sup>3</sup>	200 €	250 €

<sup>1</sup> employed by universities (including postdocs), national/public institutions, scientific associations

<sup>2</sup> self-employed or employed by commercially operating entities (industry, engineering/consulting companies, etc.)

<sup>3</sup> registered undergraduate or graduate students, retired persons

Registration fees include all sessions, proceedings, informal get-together, lunches and refreshments. “Academic” and “Corporate” registrations additionally include the prestigious IAPWS banquet. Banquet only tickets will also be available. Additional fees will occur for participation in the excursion and the accompanying persons program.

## Student Awards

All papers submitted by students qualify for the “Invited Student” award. Five of these awards will be given to the most outstanding contributions by students. The final decision will be made by the International Program Committee and the Local Executive Committee. The award winners will be granted free conference attendance (student category) and additional financial support of 500€

## Important Dates

Authors are requested to strictly follow the schedule given below:

November 1, 2007	Start of abstract submission
November 15, 2007	Start of registration
January 15, 2008	Deadline for abstract submission
February 29, 2008	Notification of acceptance
May 31, 2008	Deadline for full-length paper submission
June 15, 2008	Deadline for early registration

Any changes to the schedule will be published on the conference website [www.icpws15.de](http://www.icpws15.de).





## Location

The conference will be held at the Radisson SAS hotel in Berlin:

Radisson SAS Hotel Berlin

Karl-Liebknecht-Strasse 3

10178 Berlin

Germany

phone: +49 30 / 23828 - 0

fax: +49 30 / 23828 - 10

e-mail: [info.berlin@radissonsas.com](mailto:info.berlin@radissonsas.com)

internet: [www.berlin.radissonsas.com](http://www.berlin.radissonsas.com)

The venue is located at the very heart of Berlin and is conveniently accessible by public transportation. The hotels central location provides excellent access to the numerous points of interest in Berlin which attract many visitors from all over the world. Please check the conference website [www.icpws15.de](http://www.icpws15.de) for further local information.



## Conference schedule\*

	Morning	Afternoon	Event
Sunday, Sept. 7	Registration	Registration	Informal Get-Together
Monday, Sept. 8	Opening and Plenary Lectures	Technical Sessions	Gibbs Award Luncheon
Tuesday, Sept. 9	Technical Sessions	Technical Sessions	
Wednesday, Sept. 10	Technical Sessions	Technical Sessions	Banquet
Thursday, Sept. 11	Technical Sessions	Closing	Excursion

\* Subject to change

## Accommodation

A limited contingent of rooms is reserved in the SAS Radisson hotel. The rooms are available at a special conference rate which includes one accompanying person per room free of charge. Please refer to the conference website [www.icpws15.de](http://www.icpws15.de) for booking details. Additional hotel recommendations will also be given at the website, these hotels, however, will in general require commuting by public transportation.

## Accompanying Persons Program

An accompanying persons program will be organized. The trips will cover a carefully elaborated selection of tourist attractions in the Berlin area. Participation in the accompanying persons program will be covered by an additional fee which also includes the IAPWS banquet.

## International Program Committee

**B. Rukes** Conference Chair, Member of WG IRS of IAPWS  
(Siemens Power Generation, Germany)

**J. Cooper** President of IAPWS  
(Queen Mary University of London, United Kingdom)

**B. Dooley** Executive Secretary of IAPWS  
(Structural Integrity Associates, Canada)

**W. Parry** Chair of WG IRS of IAPWS  
(General Electric, USA)

**H.-J. Kretzschmar** Chair of WG TPWS of IAPWS  
(Zittau/Goerlitz University of Appl. Sciences, Germany)

**S. Lvov** Chair of WG PCAS of IAPWS  
(Pennsylvania State University, USA)

**R. Svoboda** Chair of WG PCC of IAPWS  
(Alstom Power, Switzerland)

**A. Harvey** Member of WG TPWS of IAPWS  
(NIST, USA)

**R. Span** Member of WG TPWS of IAPWS  
(Ruhr-University Bochum, Germany)

**I. Weber** Member of WG IRS of IAPWS  
(Siemens Power Generation, Germany)

## Local Executive Committee

**B. Rukes** (Siemens Power Generation, Germany)

**A. Drexler** (Areva, Germany)

**R. Feistel** (Baltic Sea Research Institute, Germany)

**K. Knobloch** (Siemens Power Generation, Germany)

**H.-J. Kretzschmar** (Zittau/Goerlitz University of Applied Sciences, Germany)

**E. Maughan** (College of Knowledge, Germany)

**H.-D. Pflug** (Germany)

**M. Rziha** (Siemens Power Generation, Germany)

**R. Span** (Ruhr-University Bochum, Germany)

**I. Stoecker** (Zittau/Goerlitz University of Applied Sciences, Germany)

**W. Wagner** (Ruhr-University Bochum, Germany)

**I. Weber** (Siemens Power Generation, Germany)

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Advances in Science and Technology for  
Power Generation

## Organisation:

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GET - Society for Energy Technology  
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## Conference Website:

[www.icpws15.de](http://www.icpws15.de)

