

First Announcement

15th International Conference on the Properties of Water and Steam (15th ICPWS)

**Water, Steam, and Aqueous Solutions
—
Advances in Science and Technology
for Power Generation**

**September 7 - 13, 2008
Berlin, Germany**



Organized by the International Association for the Properties of Water and Steam (IAPWS) and VDI - The Association of German Engineers.

About the Conference

The 15th 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 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

Typical topics include:

- Calculation of Water and Steam Properties for Industrial Use
- Thermodynamic and Transport Properties of Aqueous Systems
- Molecular Simulation and Spectroscopy in Aqueous Systems
- Nonequilibrium, Metastable and Critical States
- Thermodynamics and Kinetics in Hydrothermal Systems

- Electrochemistry, Corrosion, and Interfaces in High Temperature Water
 - Fuel Cells and Hydrogen Production
 - Advanced Techniques and Instruments for Basic Research and Power Plant Applications in High Temperature / High Pressure Water
 - Apparatus, Materials and Monitoring Instrumentation for Applications at High Temperatures and Pressures
 - Power Cycle Chemistry
 - Condensation and Deposition Processes
 - High Efficiency Power Cycles and New Technologies
 - Environmental Issues in Power Generation
 - Geothermal Systems and Renewable Energy
 - CO₂ in Power Generation – Challenges in Capture, Transportation and Storage
 - Thermophysical Properties of Sea Water – Importance for Global Climatic and Oceanographic Modeling
- and
- General Topics on Water, Steam and Aqueous Systems

Presentation Format

Both oral and poster presentations are available.

Conference Proceedings

Papers are intended to be published in suitable technical journals. All presented papers will be available on CD-ROM and as hard copies.

Location

The technical sessions will be held in Berlin, Germany. Centrally located in Europe, Berlin is easily accessible by any means of transportation. Its numerous points of interest attract many visitors from all over the world.

Social and other Events

Besides an informal reception and the traditional ICPWS dinner an accompanying persons program will be offered.

General Information

The scientific program is organized by a Program Committee selected by IAPWS, with representatives from a cross section of member countries, spanning industry, universities and national laboratories.

Language

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

Important Dates

Prospective authors are requested to follow the regularly updated schedule published on the conference website www.icpws15.de. Currently important dates are:

- October 1, 2007
Second Announcement and Call for Papers
- December 1, 2007
Abstract submission
- February 1, 2008
Notification of acceptance
- June 1, 2008
Final manuscript

International Program Committee

- B. Rukes (Conference Chair;
Siemens Power Generation, Germany)
- J. Cooper (President of IAPWS;
Queen Mary University of London, United Kingdom)
- B. Dooley (Executive Secretary of IAPWS;
EPRI, USA)
- 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)
- R. Feistel (Baltic Sea Research Institute, Germany)
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- H.-J. Kretzschmar (Zittau/Goerlitz University of Applied
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Sciences, Germany)
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Conference Website

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