

16TH INTERNATIONAL CONFERENCE ON THE PROPERTIES OF WATER AND STEAM (ICPWS16).

**Water, Steam, and Aqueous Solutions
Working for the Environment and Industry**

First Announcement.

1–5 September 2013
University of Greenwich, London, UK

www.ICPWS16.org



Organised on behalf of the International Association for the Properties of Water and Steam (IAPWS) by the British & Irish Association for the properties of Water and Steam (BIAPWS) and The Institution of Mechanical Engineers (IMechE).

ABOUT THE CONFERENCE

The 16th ICPWS is the continuation of the sequence of International Conferences on the Properties of Water and Steam started in 1929. Initially these conferences were about the thermodynamic properties of water and steam for the electric power industry and other aqueous systems. They traditionally provide the forum for the presentation of the scientific foundation of the accurate thermophysical properties and water chemistry data used by the thermal power industry. It has expanded into new areas of pure and applied research related to water and aqueous solutions at extreme conditions along with sea water and humid gases.

Relevant areas of basic science include spectroscopy, calorimetry, potentiometry, thermo-physical property measurements and modelling also molecular simulation studies of water and solvated species in high-temperature and 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 synthesis of new materials and destruction of toxic wastes, hydrothermal geochemistry, hydrometallurgy, oceanography, power cycles with carbon dioxide capture and storage of carbon dioxide in aqueous environments.

Incorporated within the program will be a one day event on power cycle chemistry including a tutorial on the IAPWS Technical Guidance Documents.

SCIENTIFIC PROGRAM

Proposed topics include:

- Calculation of Water and Steam Properties for Industrial Applications
- Thermodynamic and Transport Properties of Aqueous Systems
- Molecular Simulation and Spectroscopy in Aqueous Systems
- Critical and Metastable States, Including Supercooled liquid
- Thermodynamics and Kinetics in Hydrothermal Systems
- Electrochemistry and Corrosion in High Temperature Water
- Apparatus, Materials and Monitoring Instrumentation for Applications at High Temperatures and Pressures
- Power Cycle Chemistry in Plant with Fossil and Renewable Energy Sources
- Design and Power Cycle Chemistry in Plant with Nuclear Energy Sources. Considerations for safety, in Existing Plant, New Build and Research Reactors
- Water Purification and Associated Chemistry for Power Plant and other Applications
- Thermophysical Properties for Carbon Capture and Storage
- Hydrothermal Geochemistry
- Super Critical Water for Advanced Materials Synthesis, Waste Treatment etc.
- The Atmosphere and the Oceans, Thermophysical Properties of Air and Sea Water for Global Climatic and Oceanographic Modelling and Desalination and
- General Topics on Water, Steam and Aqueous Systems

PRESENTATION FORMAT

Both oral and poster presentations will be available.

CONFERENCE PROCEEDINGS

Papers presented will be available on USB memory stick.

LOCATION

The conference venue is in London at the University of Greenwich, the centre of Maritime Greenwich UNESCO World Heritage Site. Accommodation is available in adjacent hotels or student halls of residence. It is easily accessible by public transport and centrally located to reach the numerous points of interest in London that attract many visitors from all over the world. Further information on the venue and Greenwich can be found at www.gre.ac.uk/venue or www.visitgreenwich.org.uk.

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 organised 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 should follow the schedule which will available in the near future on the conference website www.ICPWS16.org.

International Program Committee

Jeff Cooper	(Chair, Queen Mary University of London, UK)
Tamara Petrova	(President Elect. of IAPWS, Moscow Power and Engineering Institute, Russia)
Barry Dooley	(Executive Secretary of IAPWS; Structural Integrity Associates, USA)
Ingo Weber	(Chair of WG IRS of IAPWS; Siemens Power Generation, Germany)
Allan Harvey	(Chair of WG TPWS of IAPWS; NIST, USA)
Masaru Nakahara	(Chair of WG PCAS of IAPWS; Kyoto University, Japan)
Michael. Rziha	(Chair of WG PCC of IAPWS; Siemens Power Generation, Germany)
Rainer Feistel	(Chair of SCSW of IAPWS; Baltic Sea Research Institute, Germany)
Roland Span	(Member of WG TPWS of IAPWS; Ruhr-University Bochum, Germany)

Local Organising Committee

Eric Huff	BIAPWS (Chair, UK)
Peter Calver	IMechE (Siemens Energy, UK)
Jeff Cooper	BIAPWS (University of London, UK)
Hugh Lloyd	BIAPWS (ABB Measurement Products UK)
Stephanie Love	(Conference Secretariat, UK)
Corhyn Parr	IMechE (Nuclear Enterprise, UK)

Conference Enquires

Stephanie Love

ICPWS XVI Conference Secretariat

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Conference Website

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