

Press Release
14th International Conference on the Properties of Water and Steam
and
International Association for the Properties of Water and Steam
2004 Meeting

Continuing the series of conferences started in 1929, 235 scientists and engineers from 19 countries met in Kyoto, Japan at the 14th International Conference on the Properties of Water and Steam. Over 180 papers were given on thermodynamic and transport properties of pure water and steam, on critical phenomena, on chemistry in subcritical and supercritical water, on chemical processes occurring in power plant equipment, and on power cycle chemistry. The conference connects academic researchers with engineers who use their information. It provides the researcher with guidance on useful problems and provides the engineers with the latest research.

The International Conference on the Properties of Water and Steam (ICPWS) is sponsored every 4 years by the International Association for the Properties of Water and Steam (IAPWS). The General Meeting of IAPWS met at the conference and reviewed the progress since the 13th ICPWS in 1999. Major progress was demonstrated in the scientific understanding of copper transport in power plants, formulation of the thermodynamic properties of the ammonia-water system over the range of interest in power generation and in fast calculation of accurate steam properties. Work continues on properties of metastable steam. IAPWS also produces guidelines, and certified research needs. Information may be found at the IAPWS website: www.iapws.org.

IAPWS has recently completed *Aqueous Systems at Elevated Pressures*, a compendium of thermodynamic and thermochemical properties, techniques for measurement, techniques for representation of data for pure water and steam and for aqueous solutions, including the partition between water and steam. The work stresses applications to the power industry, geochemistry and other hydrothermal industries. This book includes both theory and data and is intended to be used by a graduate chemist or engineer. The book is available from Elsevier.

IAPWS Power Cycle Chemistry Working group maintains a priority list of research concerns for power cycle chemistry. Heading this list is a scientific understanding of the processes that promote transport and deposition of copper and its oxides in steam turbines. Second on the list is an understanding of the sources, formation and decomposition rates, and corrosion consequences of organic chemicals, particularly but not exclusively, carboxylic acids.

IAPWS welcomes scientists and engineers with interest in the thermophysical properties of water, steam, and aqueous systems and in the application of such information to industrial uses. The next IAPWS meeting will be in Greece in July, 2005. The 15th ICPWS will be held in 2008. Further information on both meetings can be found at the IAPWS website, www.iapws.org, as it becomes available.