The International Association for Transport Properties

- **The Aims**

The International Association for Transport Properties (IATP) is a non-profit grouping of scientists devoted to the advancement of the transport properties of materials. In particular, the association is engaged in the preparation of representations of the transport properties that are of value to engineering process design, and to the description of natural processes in the environment where international collaboration and agreement is specially significant. These developments will be carried out in the context of the underlying science and with the intention of improving understanding.

IATP was formerly known as the Subcommittee on Transport Properties of the International Union of Pure and Applied Chemistry (1981 - 2001).

Further info at : http://transp.cheng.auth.gr

2001 - 2008 Chairman : Professor W.A. Wakeham

- **List of Scientific Meetings**

1. 2001 Chalkidiki, Greece
2. 2002 Imperial College, London, U.K.
3. 2003 Boulder, Colorado, U.S.A.
4. 2004 Pau, France
5. 2005 Bratislava, Slovakia
6. 2006 Boulder, Colorado, U.S.A.
7. 2007 Istanbul, Turkey

- **Books Published (as STP/IUPAC)**

1. *Experimental Thermodynamics. Vol. III. Measurement of the Transport Properties of Fluids.*
   Eds. A. Nagashima, J.V. Sengers and W.A. Wakeham.
   Blackwell Scientific Publications (1991).
2. *Transport Properties of Fluids. Their Correlation, Prediction and Estimation.*
   Eds. J.H. Dymond, J. Millat and C.A. Nieto de Castro.
   Cambridge University Press (1996).

8th

Meeting of the International Association for Transport Properties

(former Subcommittee on Transport Properties of IUPAC Commission I.2: Thermodynamics)

Thursday 4th September, 2008

"Amphi de la Présidence"
Universite de Pau et des Pays de l' Adour
Pau, France

Program

Local Organising Committee
Prof. C. Boned (christian.boned@univ-pau.fr)
Dr. A. Baylaucq (antoine.baylaucq@univ-pau.fr)

- All presentations are informal and are followed by a discussion period.

15:00 Opening Remarks.
W.A. Wakeham (UK).

Scientific Session A.

15:10 Molecular Dynamics Simulations of Fluids Thermophysical Properties. Case of Hydrogen Sulfide.
C. Boned, G. Galliero (France)

15:30 Predicting the Viscosity of Liquid Mixtures: New Developments
A. de Wijn, N. Riesco, J.P.M. Trusler, G. Jackson, V. Vesovic (UK)

15:50 Calculation of the Second Pressure Virial Coefficient, Viscosity, and Thermal Conductivity of Methane from an ab initio Potential
E. Vogel, R. Hellmann, E. Bich (Germany), A.S. Dickinson, V. Vesovic (UK)

16:10 On the Application of the Transient Hot-Wire Technique in the Measurement of the Thermal Conductivity of Solids
M.J. Assael, D.Tzetzis, K. Antoniades (Greece)

16:30 Coffee

Scientific Session B.

16:50 Improved Understanding of the Resonance Frequency of Vibrating-Wire Sensors
J.P.M. Trusler, F. Ciotta, V. Vesovic (UK)

17:10 Dynamic Light Scattering (DLS) for the Characterization of Ionic Liquids
A. Froeba, H. Kremer, A. Leipertz (Germany)

17:30 The Fractional Stokes-Einstein Equation: Its Utility for Liquids at High Pressure
K. Harris (Australia)

17:50 Pressure-Viscosity Coefficients for Molecular and Ionic Liquids through a thermodynamic scaling.
A.S. Pensado, M.J. Comuñas, (Spain), A.A.H. Padua (France), J. Fernandez (Spain)

Business Session.

18:10 Announcements.

- Continuing Collaborative Projects

    1. Viscosity and Thermal Conductivity of Water & Steam
    M.J. Assael (Greece), E. Vogel, J. Millat (Germany), A. Nagashima (Japan), D. Friend, J.V. Sengers (USA)

    2. Investigation of a New High-Viscosity Standard
    J.M.N.A. Fareleira, C.M.B.P. Oliveira (Portugal), M.J. Assael (Greece), A. Leipertz, H. Bauer (Germany), A. Nagashima (Japan)

    3. On the Book on the Properties of Water, Air and Sea Water
    A. Nagashima (Japan), M.J. Assael (Greece), J. Millat (Germany).

    4. Feasibility Study on Properties of Ionic Fluids
    E. Vogel (Germany), KN.. Marsh (New Zealand), A. Padua (France), J.M.N.A. Fareleira (Portugal)

    5. Preliminary Investigation for Recommended Values for Viscosity and Density of Molten Metals.
    M.J. Assael (Greece), Y. Sato (Japan)

    6. Diffusion coefficients on Liquid Systems
    J. Winkelmann (Germany)

- Future Collaborative Projects: Proposals.
- Membership.
- Future Meetings.

19:00 Adjourn.