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 - 2006 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

- **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).

6th

Meeting of the International Association for Transport Properties

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

Saturday, 29th July 2006

Engineering Building (Room ECCR 200)
University of Colorado, Boulder, USA

Programme

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

09:00 Opening Remarks.
W.A. Wakeham (UK).

Scientific Session A.

09:10 Viscosity of S2O and DIDP
A.R.H. Goodwin (*UK*), *K.N. Marsh, M. Kandil (New Zealand), K. Harris* (*Australia*)

09:30 Viscosity of Cyclopentane from 273 to 352 K at Pressures up to 45 MPa
K.N. Marsh, M. Kandil, (New Zealand), A.R.H. Goodwin, K. Kurihara (*UK*)

09:50 Viscosity of Ionic Liquids by Surface Light Scattering.
A.P. Froeba, H. Kremer, C. Botero, and A. Leipertz (*Germany*)

10:10 On the Steady-State Hot-Strip Technique
U. Hammerschmidt, V. Meier (*Germany*)

10:30 Transport Properties Research Activities at Jiaotong University in Xi'an
J.T. Wu (*China*)

10:50 Prediction of Viscosity and Thermal Conductivity of Humid Air in Large Temperature and Density Ranges
E. Vogel, V. Teske (*Germany*)

11:10 Coffee

Scientific Session B.

11:40 Computer Simulations of Transport Properties of a Binary Liquid Mixture near the Critical Point.
J.V. Sengers, S.K. Das, M.E. Fisher, J. Horbach, K. Binder (*USA*)

12:00 High Pressure-High Temperature Electrical Conductivity.
G. Watson, A. Baylaucq, Chr.Boned (*France*)

12:20 Thermal Diffusivity of Cement Paste
M. Banish, A. Hernandez (*U.S.A.*)

12:40 Thermal Diffusivity of Liquid Metals
M. Banish, Y.Y. Khine (*U.S.A.*)

13:00 Further Developments of a Vibrating-Wire Instrument for Moderately High Viscosity Measurements
F.J.P Caetano, J.L. Correia da Mata, J.M.N.A. Fareleira; C. M.B.P. Oliveira (*Portugal*)

13:20 Lunch.

Business Session.

15:00 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. Viscosity of D_2O
     M.J. Assael (Greece), J. Millat (Germany), A. Nagashima (Japan), D. Friend, J.V. Sengers (USA)
  6. Preliminary Investigation for Recommended Values for Viscosity and Density of Molten Metals.
     M.J. Assael (Greece), Y. Sato (Japan)
- Future Collaborative Projects: Proposals.
- Membership.
- Future Meetings.

17:30 Adjourn.