The International Association for Transport Properties

The Aims

The International Association for Transport Properties (IATP) is a non-profit group 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 especially significant. These developments consider the underlying science with the intention of improving our understanding.


List of Scientific Meetings

1. 2001 Chalkidiki, Greece
2. 2002 Imperial College, London, U.K.
4. 2004 Pau, France
5. 2005 Bratislava, Slovakia
6. 2006 Boulder, Colorado, U.S.A.
7. 2007 Istanbul, Turkey
8. 2008 Pau, France
10. 2010 Santiago de Compostela, Spain
11. 2011 Thessaloniki, Greece
13. 2013 Bremen, Germany
14. 2014 Porto, Portugal

Books Published


Program

Local Organising Committee
Dr. Richard Perkins (richard.perkins@nist.gov)

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

in honor of Tony Goodwin
09:00 Opening remarks.  
W.A. Wakeham (UK).

Scientific Session A.

09:30 Thermophysical Properties of [C4mpyr][DCA] + H2O and [P6,6,6,14][DCA] + H2O  

09:50 Dynamic Light Scattering for the Determination of Thermal and Mass Diffusivities of Binary and Ternary Fluid Mixtures in Chemical and Energy Engineering.  
A. Heller, Th.M. Koller, M.H. Rausch, A. Leipertz, A.P. Fröba (Germany).

10:10 Correlation and Estimation of the Viscosity and Self-diffusivity of Dialkyl Adipates.  

10:30 Reference Correlation of the Viscosity of Toluene from the Triple Point to 675 K and up to 500 MPa.  
S. Avgeri, M.J. Assael (Greece), M.L. Huber, R.A. Perkins (USA).

10:50 Coffee

Scientific Session B. High-Viscosity Liquids

11:10 Viscosity and Density of Krytox Fluids at Pressure up to 200 MPa  
J.P.M. Trusler, M. Malami (U.K.)


11:50 Proposing TOTM as an Industrial Reference Fluid for Viscosity at High Temperatures and High Pressures  
F.J.P. Caetano, J.C.F. Diogo, H.M.N.T. Avelino, J.M.N.A. Fareleira (Portugal), W.A. Wakeham (UK)

12:10 Update on the High Pressure Viscosity and Thermal Conductivity Measurements at UWA with Pure Fluids and Mixtures  
E. May (Australia)

Scientific Session C.

12:30 On the Enhancement of the Apparent Thermal Conductivity of Liquids Containing Multi-Wall and Double-Wall Carbon Nanotubes.  

12:50 Thermophysical property research at the Helmut-Schmidt-University in Hamburg  
K. Meier (Germany)

13:10 Lunch

Scientific Session D.

15:00 Rheology and Morphology Analysis of Water in Oil Emulsions  
O. Pérez-Sandoval, J.S. Rodríguez-León, S.E. Quiñones-Cisneros (Mexico)

15:20 Announcements.

- Projects Concluded
- Continuing Collaborative Projects

1. Reference correlations for the viscosity and thermal conductivity of fluids over extended temperature and pressure ranges.  

2. High-temperature high-pressure viscosity standards  
J.M.N.A. Fareleira, F. Caetano (Portugal), W.A. Wakeham, J.P.M. Trusler (UK), A.P. Froba, A. Leipertz, B. Rathke (Germany), K. Harris (Australia), A.R.H. Goodwin, A. Laesecke (USA), J. Fernandez (Spain), K. Schmidt (Canada), Chr. Bond (France)

3. Two new volumes on experimental thermodynamics series published under the auspices of IUPAC Editor in Chief, W. Wakeham  
- Vol. X: Nonequilibrium Thermodynamics  
  Eds. S. Kjelstrup, D. Bedaux, J.V. Sengers (USA)  
- Vol. XI  
  Eds. W.A. Wakeham, V. Vesovic, A. Goodwin, M. Huber, E. May.

4. Round Robin project on ionic liquids viscosity, and thermal conductivity measurements.  
J.M.N.A. Fareleira, C.A. Nieto de Castro (Portugal), A. Leipertz, A. Froba, U. Hammerschmidt, B. Rathke (Germany), J. Fernandez (Spain), R. Perkins (USA), K. Harris (Australia), M.J. Assael (Greece)

5. Diffusion nomenclature in the IUPAC Definitions of Symbols & Units  
A.R.H. Goodwin (USA), W.A. Wakeham (UK), C.A. Nieto de Castro (Portugal), J. Fernandez (Spain), K. Harris (Australia), M.J. Assael (Greece)

- New Collaborative Projects

16:30 Coffee

- Future Collaborative Projects: Proposals
- Membership - Future Meetings

17:00 Meeting Adjourn