

New Regional Editors



Name: David Bessières
Date and place of birth: 1971, Aureilhan, France
Nationality: French
Education and scientific degrees: Master of Science (Physics) (1995) Ph.D. (1999) both at the Pau University, France
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Mean fields of interest

Thermodynamic properties of condensed matter: measuring and modelling; heat capacity, isobaric thermal expansion coefficient, Joule-Thomson coefficient and inversion curve; Petroleum fluids; High pressure calorimetric techniques: pVT calorimetry (scanning transitionometry).

Awards

Young scientist AFCAT prize (2004)

Number of publications: 25

List of the 5 most important publications

1) D. Bessières, H. Saint-Guirons and J. L. Daridon: Measurement and calculation of heat capacity of heavy distillation cuts under pressure up to 40 MPa. *J. Therm. Anal. Cal.*, 58 (1999) 39.

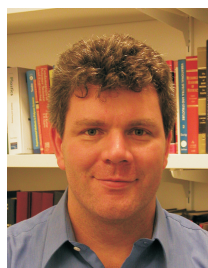
2) D. Bessières, H. Saint-Guirons, J. L. Daridon and J. Y. Coxam: Apparatus for simultaneous determination of the densities and heat capacities of liquids and of liquids with dissolved gas under an extended range of pressure (0.1–100 MPa). *Meas. Sci. Technol.*, 11 (2000) 69.
3) D. Bessières, H. Saint-Guirons and J. L. Daridon: Thermophysical properties of *n*-tridecane from 313.15 to 373.15 K and up to 100MPa from heat capacity and density data. *J. Therm. Anal. Cal.*, 62 (2000) 621.
4) Troncoso, J.; Bessieres, D.; Cerdeirina, C. A.; Carballo, E.; Romani: Automated measuring device of (PVT) data. Application to the 1-hexanol+*n*-hexane system. *L. Fluid Phase Equilibria*, 208(1–2) (2003) 141.
5) J. Vijande, M. M. Pineiro, D. Bessières, H. Saint-Guirons, J. L. Legido: Description of PVT behaviour of hydrofluoroethers using the PC-SAFT EOS. *Phys. Chem. Chem. Phys.*, 6(4) (2004) 766.

Professional activities:

French Association of Thermal Analysis and Calorimetry member (1999–); 37th AFCAT conference chairman (Pau, 2006).

Present position and postal address:

Associate Professor, Université de Pau et des Pays de l'Adour, Complex Fluid Laboratory UMR 5150, BP 1155, 64013 Pau Cedex, France.

**Name:**

Paul Stephen Thomas

Date and place of birth:

20. 12. 1966, Panama City, Panama

Nationality:

British Citizen, Australian Citizen

Education and scientific degrees:

Doctor of Philosophy in Chemical Engineering (1993),

Dissertation: Interface Rheology of Polymeric Solids, B.Sc.(Hons) (1989)

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Research activity

Current research is focused on the development and the physical, chemical and mechanical characterisation of materials. Some current project examples are:

Environmentally Friendly Cements – aim is to reduce carbon dioxide emissions by reducing Portland cement consumption using minerals (e.g. magnesia derived from magnesite) and industrial waste (e.g. clay brick waste, perlite fines) as supplementary cementitious materials.

Consolidation of Sandstone – characterisation of the degradation mechanisms of Sydney's 'yellow block' sandstone and development of consolidants based on montmorillonite dispersed in water soluble polymers.

Australian Opal – characterisation of sedimentary opal as a material in order to understand mechanisms of formation as well as crazing in polished gem opal.

Materials Conservation – characterisation of degradation products as a result of the interaction between pigments, in particular, copper ions with sulphide pigments (e.g. cadmium yellow), in paints used in 18th and 19th Century paintings.

Recently published papers

- 1) K. Friolo, A. S. Ray, B. H. Stuart and P. S. Thomas: Thermal Analysis of Yellow Block Sandstone in Sydney's Heritage Buildings. *J. Therm. Anal. Cal.*, 80 (2005) 559.
- 2) J. Lawry, A. Ray, D. Klimesch, P. Thomas, J-P. Guerbois and J. Harrison: Thermal Characterisation of Portland Cement (OPC)-Magnesia (MgO) Blends *J. Therm. Anal. Cal.*, 80 (2005) 637.
- 3) B. Liu, P. S. Thomas, R. P. Williams, S. W. Donne: Thermal Characterisation of Chemically Reduced Elec-

trolytic Manganese Dioxide. *J. Therm. Anal. Cal.*, 80 (2005) 625.

4) R. E. White, P. S. Thomas, M. R. Phillips and R. Wuhrer: Characterisation of the Effect of Lead Pigments on the Drying of Cold Pressed Linseed Oil by DSC. *J. Therm. Anal. Cal.*, 80 (2005) 237.

5) P. Šimon, Z. Cibulková, P. Thomas: Accelerated Thermooxidative Aging Tests and Their Extrapolation to Lower Temperatures. *J. Therm Anal. Cal.*, 80 (2005) 381.

6) P. Thomas and P. Šimon: A Pseudo-Isothermal Kinetic Analysis of the Recrystallisation of Nickel Sulphide Measured by Non-Isothermal DSC. *J. Therm. Anal. Cal.*, 80 (2005) 77.

7) P. Šimon, P. S. Thomas, J. Okuliar and A.S. Ray: An Incremental Integral Isoconversional Method. Determination of Activation Parameters. *J. Therm Anal.*, 72 (2003) 867.

8) L. D. Brown, A. S. Ray, P. S. Thomas and J. P. Guerbois: Thermal Characteristics of Australian Sedimentary Opals. *J. Therm. Anal. Cal.*, 68, (2002) 31.

9) D. W. Bishop, P. S. Thomas, A. S. Ray and P. Simon: A Two Stage Kinetic Model for the α - β Phase Recrystallisation in Nickel Sulphide. *J. Therm. Anal. Cal.*, 64 (2001) 201.

10) P. S. Thomas, J. P. Guerbois, G. F. Russell and B. J. Briscoe: An FTIR Study of the Thermal Degradation of Poly(vinyl alcohol). *J. Therm. Anal. Cal.*, 64 (2001) 501.

Awards

Bronze Medal for Tribology, The Institute of Mechanical Engineers, UK (1993)

Thomas Stephen Prize, The Institute of Physics, UK (1993)

Other professional activities

Member of the Royal Australian Chemical Society (RACI)
Chair of the Industrial Chemistry Division of the RACI (1999 to 2004)

Treasurer of the Industrial Chemistry Division of the RACI (2004 to present)

Present position

Senior Lecturer Department of Chemistry, Materials and Forensic Science, University of Technology, Sydney, PO Box 123, Broadway, Sydney, NSW 2007, Australia

**Name:**

Tatiana Rudol'fovna Usacheva

Date and place of birth:

23. 07. 1966, Ivanovo, Russia

Nationality: Russian**Education and scientific degrees:**

1983–1988 student of Ivanovo State University of Chemistry and Technology, Faculty of Inorganic Chemistry

1998–2001 Ph.D. Ivanovo State University of Chemistry and Technology

2001– D.Sc. Ivanovo State University of Chemistry and Technology. Inorganic Chemistry.

E-mail: oxt@isuct.ru**Research activity and positions**

1988–2003 Researcher, Ivanovo State University of Chemistry and Technology, Faculty of Inorganic Chemistry, Department of General Chemical Technology.

In 2000 fellowship in University of Łódź, Poland, Department of General Chemistry.

2001–2002 eight months fellowship in University of Turin, Italy, Department of Chemistry IFM.

In 2003 three months fellowship in University of Turin, Department of Chemistry IFM.

In 2003–2004 eight months fellowship in University of Turin, Department of Chemistry IFM.

In 2005 three months fellowship in University of Turin, Department of Chemistry IFM.

At present: Associate Professor of Ivanovo State University of Chemistry and Technology, Faculty of Inorganic Chemistry and Technology, Department of General Chemical Technology.

Sponsors

Research has been supported by the grant of Cooperation Agreement between Ivanovo State University of Chemistry and Technology and University of Łódź, and by several grants of Foreigner Affairs Ministry of Italy (MAE).

Current research interests

Thermodynamic study of mixed solvent influence on complex formation reactions between transit metal ions and macrocyclic ligands and solvation of participants in complex formation equilibrium.

Thermodynamic study of weak interactions and binding associations between polypeptides, model peptides and various ligands (carbohydrates, nucleotides, amides, amino acids and other molecules of biological interest) in water and aqueous-organic solutions.

Calorimetric study of thermodynamic properties of collagen hierarchical structure in the parchment. Assessment of damage in artificially aged and old parchment by DSC.

List of most important publications

1) O. A. Isakova, T. R. Usacheva, V. A. Sharnin and V. A. Shormanov: Solution enthalpies of 2,2'-bipyridine in water-ethanol solution. *Izv. VUZov, Chem. and Chem. Tech., (in Russian)*, 37 (1994) 116.

2) V. A. Sharnin, T. R. Usacheva, A. Grzejdzia, B. Olejniczak, V. A. Shormanov and Y. Y. Fadeev: Complex stability of Ag(I) with pyridine ligands in organic solvents-water solution., *J. Coordin. Chem. (in Russian)*, 24 (1998) 776.

3) V. A. Sharnin, T. R. Usacheva, S. F. Ledenkov and A. Grzejdzia: Thermodynamics of complex formation of Ag(I) with 18C6 crown ether in water-DMSO and water-ethanol solutions. *Izv. VUZov, Chem. and Chem. Tech., (in Russian)*, 43 (2000) 87.

4) V. A. Sharnin, T. R. Usacheva, S. F. Ledenkov and A. Grzejdzia: Influence of water-DMSO mixed solvents on thermodynamics of [Ag18C6]⁺ complex formation. *J. Coordin. Chem., (in Russian)*, 27 (2001) 222.

5) T. R. Usacheva, V. A. Sharnin and S. F. Ledenkov: Thermodynamics of reaction of Ag⁺ - 18C6 crown ether complex formation in water-DMSO solution. *J. Gen. Chem., (in Russian)*, 61 (2001) 754.

6) T. R. Usacheva, V. A. Sharnin and S. F. Ledenkov: Studies of the complex formation of silver (I) ion with 18-crown-6 in H₂O-DMSO mixtures by calorimetric technique. *J. Therm. Anal. Cal.*, 70 (2002) 209.

7) T. R. Usacheva, V. A. Sharnin and S. F. Ledenkov: Complex formation of Ag⁺ with polyether 18-crown-6. Calorimetric and potentiometric methods. *J. Therm. Anal. Cal.*, 70 (2002) 379.

8) G. Della Gatta, E. Badea, R. Ceccarelli, T. Usacheva, A. Mašić and S. Cosuccia: Assessment of damage in old parchments by DSC and SEM. *J. Therm. Anal. Cal., (2005) Online first*, DOI: 10.1007/s10973-005-6883-5

Present position and postal address

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We would like to welcome all of you amongst the Regional Editors

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