

The 55th Workshop of Calorimetry and Thermal Analysis on Nano Structure and Thermal Properties on Solutions and Liquids

The workshop on calorimetry and thermal analysis of condensed molecular matters was organized by the research center for structural thermodynamics (RCST), Osaka University and JSCTA (Japan Society of Calorimetry and Thermal Analysis) on February 1st at Nambu Yoichiro Hall in J-building of Department of Science. The main topics of the workshop was “Nano Structure and Thermodynamics Properties of Solutions and Liquids”. Prof. Watson Loh in UNICAMP, Brazil, who was staying as a specially appointed professor of RCST from Jan. 11th to Feb. 14th gave a plenary lecture on various structures of surfactants and polymers combined with nano-particles in solutions. Six invited speakers who are working actively on thermal studies of polymers and solutions have presented interesting results and scientific idea. Fifty people from Osaka University and JSCTA have attended the workshop and enjoyed discussion. The banquet of the workshop was arranged at G103 room after the workshop and we enjoyed foods and drinks with successive discussion on calorimetry and thermal analysis.

(by Y. Nakazawa)

ISST-JSCTA Workshop Program

Feb. 1st, 2019 Nambu Yoichiro Hall, Osaka University

13:00–13:10	Opening remarks	Yasuhiro Nakazawa (Osaka University)
13:10–14:00	Plenary lecture	
	Calorimetry is not color blind: Molecular information on association colloids from calorimetric measurements	
		Watson Loh (Dept. Appl. Chem., UNICAMP, Brazil)
14:00–14:30	Enthalpic discrimination of chiral compounds in solutions	
		Takayoshi Kimura (Kindai University)
14:30–15:00	Acid-base equilibrium-based nanoparticle dispersion in ionic liquids	
		Ryo Kanzaki (Kagoshima University)
Break		
15:20–15:50	Systematic understanding of effects of hydrophobic molecules on properties of phospholipid bilayers and competition of their effects	
		Masafumi Hishida (University of Tsukuba)
15:50–16:20	Gibbs-Thomson and thermal Gibbs-Thomson plots of crystalline polymers examined by fast-scan calorimetry and SAXS	
		Akihiko Toda (Hiroshima University)
16:20–16:50	Microscopic measurements of phase transition behavior of monolayers prepared at liquid/liquid interface	
		Satoshi Tsukahara (Osaka University)

Break

- 17:00–17:30 Evaluation of influence of stirring stress on proteins in isothermal titration calorimetry measurement Susumu Uchiyama (Osaka University)
- 17:30–18:00 Glass transition and solvation structure for amine and alcohol solutions with inorganic salts Yukio Terashima (Naruto University of Education)
- 18:15–20:00 Banquet (G103)

