

# The 44th Japanese Conference on Calorimetry and Thermal Analysis

Dates: October 16 - 18, 2008    Place: Tsukuba International Congress Center

October 16			October 17			October 18		
Room A	Room B	Room C	Room A	Room B	Room C	Room A	Room B	Room C
10:00~11:00 Liquids, Solutions, Organized Systems and Interfaces (1)	10:00~11:00 Instrumentation and Theoretical Aspects (1)	10:00~11:00 Magnetic Materials and Molecular Complexes (1)	9:20~11:00 Liquids, Solutions, Organized Systems and Interfaces (4)	9:20~10:20 Environment and Energy	9:20~11:00 Biological Thermodynamics, Pharmaceutical Materials and Foods (2)	9:20~10:10 JSCA Award Lecture AW1 (Room A)		
10:00~11:00 Liquids, Solutions, Organized Systems and Interfaces (1)	10:00~11:00 Instrumentation and Theoretical Aspects (1)	10:00~11:00 Magnetic Materials and Molecular Complexes (1)	9:20~11:00 Liquids, Solutions, Organized Systems and Interfaces (4)	10:20~11:00 Metals, Inorganic Solids and Ceramics (1)		10:10~11:00 JSCA Award Lecture AW2 (Room A)		
11:10~12:00 Plenary Lecture 1S1110 (Room A)			11:00~12:00 Poster Session II (Even Numbers)			11:10~11:40 JSCA Research Encouragement Award Lecture AW3 (Room A)		
12:00~13:20 Lunch			12:00~13:10 Lunch			11:40~12:10 JSCA Research Encouragement Award Lecture AW4 (Room A)		
13:20~14:10 Plenary Lecture 1S1320 (Room A)			13:10~13:50 Plenary Lecture 2S1310 (Room A)			12:10~13:20 Lunch		
14:20~15:40 Liquids, Solutions, Organized Systems and Interfaces (2)	14:20~15:40 Instrumentation and Theoretical Aspects (2)	14:20~15:40 Magnetic Materials and Molecular Complexes (2)	13:55~16:50 Mini Symposium	14:00~15:20 Metals, Inorganic Solids and Ceramics (2)	14:00~15:20 Magnetic Materials and Molecular Complexes (3)	13:20~15:20 Liquids, Solutions, Organized Systems and Interfaces (5)	13:20~15:00 Metals, Inorganic Solids and Ceramics (4)	13:20~15:20 Polymers and Organic Materials (2)
15:50~16:50 Liquids, Solutions, Organized Systems and Interfaces (3)	15:50~16:50 Instrumentation and Theoretical Aspects (3)	15:50~16:50 Biological Thermodynamics, Pharmaceutical Materials and Foods (1)		15:30~16:50 Metals, Inorganic Solids and Ceramics (3)	15:30~16:50 Polymers and Organic Materials (1)			
16:55~17:55 Poster Session I (Odd Numbers)	16:55~18:55 Senior Member's Meeting		16:55~17:55 JSCA the 35th Annual General Meeting (Room A)					
17:55~18:55 Young Member's Meeting			18:00~20:00 Conference Dinner					

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<b>Room A</b>	<b>Room B</b>	<b>Room C</b>
Liquids, Solutions, Organized Systems and Interfaces (1)	Instrumentation and Theoretical Aspects (1)	Magnetic Materials and Molecular Complexes (1)
<p><b>1A1000</b> Structure and Phase Transition of Perfluoro-alkane Monolayers Adsorbed on Graphite (Graduate School of Science, Osaka Univ.) ○K. Shimada, A. Inaba</p> <p><b>1A1020</b> withdrew</p> <p><b>1A1040</b> Crystallization of Nematic Liquid Crystal Mixtures (<sup>A</sup>Materials Research Lab., Hitachi, Lab., <sup>B</sup>Hitachi Displays, Ltd.) ○K. Araya<sup>A</sup>, K. Igeta<sup>B</sup>, M. Shimura<sup>B</sup></p>	<p><b>1B1000</b> Specific Heat Capacity Measurement by DSC I - The Homogeneity Study of Single Crystalline Silicon (NMIJ, AIST) ○ H. Abe, T. Baba</p> <p><b>1B1020</b> Examination for raising reliability of heat capacity measurement by using heat flux DSC (III) (<sup>A</sup>Nagoya Municipal Industrial Research Institute, <sup>B</sup>JASRI/SPring-8) ○ K. Oda<sup>A</sup>, F. Takahashi<sup>A</sup>, I. Hatta<sup>B</sup></p> <p><b>1B1040</b> Micro-scale thermal analysis by a high-speed IR camera (Tokyo Institute of Technology) ○J. Morikawa, T. Hashimoto</p>	<p><b>1C1000</b> Thermodynamic Study on Spin Liquid State in Dimer Mott Triangular System EtMe<sub>3</sub>Sb[Pd(dmit)<sub>2</sub>]<sub>2</sub> (<sup>A</sup>Graduate School of Science, Osaka Univ., <sup>B</sup>Faculty of Science and Technology, Tokyo Univ. of Science, <sup>C</sup>RIKEN) ○ S. Yamashita<sup>A</sup>, T. Yamamoto<sup>A</sup>, Y. Nakazawa<sup>A</sup>, M. Tamura<sup>B</sup>, R. Kato<sup>C</sup></p> <p><b>1C1020</b> Heat Capacity and Magnetic Phase Transition of the Metal-Assembled Complex Cu<sup>II</sup><sub>2.97</sub>{Cu<sup>II</sup><sub>4</sub>[W<sup>V</sup>(CN)<sub>8</sub>]<sub>2.06</sub>[W<sup>IV</sup>(CN)<sub>8</sub>]<sub>1.94</sub>} · 4H<sub>2</sub>O (<sup>A</sup>Grad. Sch. Sci., Osaka Univ., <sup>B</sup>Inst. Nuclear Phys., Krakow, <sup>C</sup>Jagiellonian Univ.) ○Y. Miyazaki<sup>A</sup>, M. Czaplak<sup>B</sup>, A. Budziak<sup>B</sup>, R. Podgajny<sup>C</sup>, M. Bałanda<sup>B</sup>, P. Zieliński<sup>B</sup>, B. Sieklucka<sup>C</sup>, T. Wasiutyński<sup>B</sup>, A. Inaba<sup>A</sup></p> <p><b>1C1040</b> Heat Capacities and Magnetic Phase Transitions of the Molecule-Based Magnets TOTNN · + · MCl<sub>4</sub><sup>-</sup> (M = Fe, Ga) (<sup>A</sup>Grad. Sch. Sci., Osaka Univ., <sup>B</sup>Grad. Sch. Sci., Osaka City Univ.) ○ X.-Z. Lan<sup>A</sup>, Y. Miyazaki<sup>A</sup>, M. Kuratsu<sup>B</sup>, S. Suzuki<sup>B</sup>, M. Kozaki<sup>B</sup>, K. Okada<sup>B</sup>, A. Inaba<sup>A</sup></p>
<p><b>11:10~ 12:00 Plenary Lecture (Room A)</b></p> <p><b>1S1110</b> The use of calorimetry for the design of drugs that inhibit protein-protein interactions (Dept. of Biology, The Johns Hopkins Univ.) ○A. Sch ö n</p>		
<p><b>12:00~ 13:20 Lunch</b></p>		
<p><b>13:20~ 14:10 Plenary Lecture (Room A)</b></p> <p><b>1S1320</b> Thermodynamic and Structure Studies of Interfaces (Faculty of Science, Kyushu Univ.) ○M. Aratono</p>		

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<b>Room A</b>	<b>Room B</b>	<b>Room C</b>
Liquids, Solutions, Organized Systems and Interfaces (2)	Instrumentation and Theoretical Aspects (2)	Magnetic Materials and Molecular Complexes (2)
<p><b>1A1420</b> Inversion of the Cub-SmC phase sequence of BABH-n homologous cubic liquid crystals under pressure (<sup>A</sup>Tokyo Polytechnic Univ., <sup>B</sup>Gifu Univ.) ○Y. Maeda<sup>A</sup>, H. Mori<sup>B</sup>, S. Kutsumizu<sup>B</sup></p> <p><b>1A1440</b> Heat Capacity and Thermal Gelation in Aqueous Solution of Methylcellulose (<sup>A</sup>Tokyo Denki Univ., <sup>B</sup>Univ. of Tokyo) ○ N. Onoda-Yamamuro<sup>A</sup>, M. Hayashi<sup>A</sup>, M. Naruse<sup>A</sup>, O. Yamamuro<sup>B</sup></p> <p><b>1A1500</b> The effect of additive salts on glass transition and hydrogen bond structure in 1,2-propanediamine (Naruto Univ. of Education) ○Y. Terashima, K. Takeda</p> <p><b>1A1520</b> Low temperature heat capacities of ices crystallized from metastable glycerol aqueous matrices (Osaka Univ.) ○O. Camacho, A. Inaba</p>	<p><b>1B1420</b> Structural changes with 2D high speed X-ray detector taking simultaneous XRD-DSC measurements at several second intervals (Rigaku Corp.)○ A. Kishi, M. Sasaki, Y. Taniguchi, T. Kubo</p> <p><b>1B1440</b> Thermal Radiation Calorimeter in the range 300 K to 1000 K (<sup>A</sup>Kanazawa Institute of Technology, <sup>B</sup>Heatrad) ○K. Hisano<sup>A,B</sup></p> <p><b>1B1500</b> Measurements of Heat Content for Co-Cr-Mo Alloys by Drop Calorimetry (Faculty Engineering, Iwate Univ.) ○S. Fujiwara, U. Asou, K. Yamaguchi</p> <p><b>1B1520</b> The development of high accuracy adiabatic calorimeter (<sup>A</sup>Tokyo Riko Co., Ltd., <sup>B</sup>Tokyo Institute of Technology, <sup>C</sup>Tokyo Denki Univ.)○H. Sato<sup>A</sup>, E. Sakai<sup>B</sup>, S. Iida<sup>A</sup>, S. Hagiwara<sup>A,C</sup></p>	<p><b>1C1420</b> Heat Capacity and Magnetic Phase Transition of the Molecule-Based Magnet NNDPP · + · FeBr<sub>4</sub><sup>-</sup> (<sup>A</sup>Osaka Univ., <sup>B</sup>Osaka City Univ.) ○X.-Z. Lan<sup>A</sup>, Y. Miyazaki<sup>A</sup>, Y. Masuda<sup>B</sup>, M. Kuratsu<sup>B</sup>, S. Suzuki<sup>B</sup>, M. Kozaki<sup>B</sup>, K. Okada<sup>B</sup>, A. Inaba<sup>A</sup></p> <p><b>1C1440</b> Synthesis Condition Dependence of Magnetic Property of Ni(OH)<sub>2</sub> Nanocluster Synthesized from Sodium Metasilicate (<sup>A</sup>Osaka Univ., <sup>B</sup>Yokohama National Univ., <sup>C</sup>Tokyo Institute of Technology) ○T. Maruoka<sup>A</sup>, Y. Miyazaki<sup>A</sup>, Y. Ichianagi<sup>B</sup>, H. Kawaji<sup>C</sup>, T. Atake<sup>C</sup>, A. Inaba<sup>A</sup></p> <p><b>1C1500</b> Heat Capacity and Magnetic Phase Transition of the Organic Radical Magnet F4BImNN (<sup>A</sup>Osaka Univ., <sup>B</sup>Tokyo Univ. Sci., <sup>C</sup>Univ. Massachusetts) ○Y. Miyazaki<sup>A</sup>, H. Murata<sup>B</sup>, A. Paduan-Filho<sup>C</sup>, V. Bindilatti<sup>C</sup>, N. F. Oliveira Jr.<sup>C</sup>, Z. Delen<sup>C</sup>, P. M. Lahti<sup>C</sup>, A. Inaba<sup>A</sup></p> <p><b>1C1520</b> Heat capacity measurement of a strongly correlated electrons system in organics with applying electric currents (Osaka Univ.) ○K. Hino, Y. Nakazawa</p>
Liquids, Solutions, Organized Systems and Interfaces (3)	Instrumentation and Theoretical Aspects (3)	Biological Thermodynamics, Pharmaceutical Materials and Food (1)
<p><b>1A1550</b> Measuring unfrozen water content in porous media using DSC (Graduate School of Engineering, Hokkaido Univ.) ○G. Iwahana, S. Akagawa</p> <p><b>1A1610</b> Thermal Properties of Heavy Water within Nano-Pores of MCM-41 (Graduate School of Science and Engineering, Tokyo Institute of Technology) ○A. Nagoe, T. Kojima, M. Oguni</p> <p><b>1A1630</b> The Ordering Behavior and the Glass Transition of the Nano-Channel Water Inside the Crystal [Ru(H<sub>2</sub>bim)<sub>3</sub>](TMA) · 20H<sub>2</sub>O (<sup>A</sup>Tokyo Inst. Tech., <sup>B</sup>Tokyo Univ. Sci.) ○K. Watanabe<sup>A</sup>, M. Oguni<sup>A</sup>, C. Iida<sup>B</sup>, T. Suda<sup>B</sup>, M. Tadokoro<sup>B</sup></p>	<p><b>1B1550</b> Heat Capacity Measurements of Liquid Samples on Relaxation Calorimeter (PPMS) (Grad. Sch. Sci., Osaka Univ.) ○H. Suzuki, O. Camacho, A. Inaba</p> <p><b>1B1610</b> Heat Capacity Measurements around the Phase Transition Temperature on Relaxation Calorimeter (PPMS) (<sup>A</sup>Osaka Univ., <sup>B</sup>Forschungszentrum Karlsruhe) ○H. Suzuki<sup>A</sup>, A. Inaba<sup>A</sup>, C. Meingast<sup>B</sup></p> <p><b>1B1630</b> Development of a MEMS device to measure thermal conductivity of submillimeter single crystals at low temperatures (<sup>A</sup>Osaka Univ., <sup>B</sup>Technology Research Institute of Osaka Prefecture) ○Y. Okada<sup>A</sup>, M. Uno<sup>A,B</sup>, J. Takeya<sup>A</sup>, Y. Nakazawa<sup>A</sup></p>	<p><b>1C1550</b> Molecular Motions in Bovine Serum Albumin - Water System (<sup>A</sup>Tokyo Institute of Technology, <sup>B</sup>Hiroshima Univ.) ○H. Niwano<sup>A</sup>, K. Kawai<sup>B</sup>, M. Oguni<sup>A</sup></p> <p><b>1C1610</b> Characterization of multi-component frozen solutions by thermal analysis and freeze-drying microscopy (<sup>A</sup>Toho Univ., <sup>B</sup>National Institute of Health Sciences)○K. Fujii<sup>A</sup>, K. Izutsu<sup>B</sup>, C. Yomota<sup>B</sup>, T. Kawanishi<sup>B</sup>, C. Katori<sup>A</sup>, Y. Yoshihashi<sup>A</sup>, E. Yonemochi<sup>A</sup>, K. Terada<sup>A</sup></p> <p><b>1C1630</b> Effects of drying history on the survival ability and vitrification of <i>polypedilum vanderplanki</i> (<sup>A</sup>Tokyo Institute of Technology, <sup>B</sup>National Institute of Agrobiological Sciences) ○T. Furuki<sup>A</sup>, Y. Nakahara<sup>B</sup>, M. Watanabe<sup>B</sup>, A. Fujita<sup>B</sup>, T. Kikawada<sup>B</sup>, M. Sakurai<sup>A</sup>, T. Okuda<sup>B</sup></p>
<b>16:55 ~ 17:55 Poster Session I Odd Numbers</b>		
<b>17:55 ~ 18:55</b> Young Member's Meeting	<b>16:55 ~ 18:55</b> Senior Member's Meeting	

**October 17, 2008**

<b>Room A</b>	<b>Room B</b>	<b>Room C</b>
<p>Liquids, Solutions, Organized Systems and Interfaces (4)</p>	<p>Environment and Energy</p>	<p>Biological Thermodynamics, Pharmaceutical Materials and Food (2)</p>
<p><b>2A0920</b> Glass Transitions and Low-energy Excitations of Imidazolium-based Ionic Liquids (<sup>A</sup>ISSP, Univ. of Tokyo, <sup>B</sup>Yokohama Nat. Univ., <sup>C</sup>Grad. Sch. of Sci., Univ. of Tokyo) ○O. Yamamuro<sup>A</sup>, Y. Moriya<sup>A</sup>, T. Someya<sup>A</sup>, Y. Inamura<sup>A</sup>, M. Nakakoshi<sup>B</sup>, H. Hamaguchi<sup>C</sup></p> <p><b>2A0940</b> Thermodynamic properties and polymorphism of ionic liquid 1-ethyl-3-methylimidazolium bis(trifluoromethylsulfonyl) imide (<sup>A</sup>Chiba Institute of Technology, <sup>B</sup>Tokyo Institute of Technology) ○M. Ichikawa<sup>A</sup>, I. Tsukushi<sup>A</sup>, H. Kawaji<sup>B</sup>, T. Atake<sup>B</sup></p> <p><b>2A1000</b> Thermodynamics of Autoprotolysis in Protic Ionic Liquid, Ethylammonium Nitrate (Kyushu Univ.) ○R. Kanzaki, X. Song, Y. Umebayashi, S. Ishiguro</p> <p><b>2A1020</b> Net Interactions in Aqueous Solutions of Some 1-ethyl-3-methylimidazolium based Ionic Liquids (<sup>A</sup>Grad. Sch. Sci. Tech., Chiba Univ., <sup>B</sup>Grad. Sch. Adv. Integr. Sci., Chiba Univ., <sup>C</sup>Aichi Univ. Educ., <sup>D</sup>Univ. British Columbia) H. Kato<sup>A</sup>, K. Nishikawa<sup>B</sup>, H. Murai<sup>C</sup>, T. Morita<sup>C</sup>, ○Y. Koga<sup>D</sup></p> <p><b>2A1040</b> An attempt at experimental determination of a 3<sup>rd</sup> derivative quantity of <i>G</i> (<sup>A</sup>NSM, Res. Unit Biofunc. Mater., Roskilde Univ., <sup>B</sup>Res. Inst. Mol. Thermodyn., Osaka Univ., <sup>C</sup>Chem. Univ. British Columbia) P. Westh<sup>A</sup>, A. Inaba<sup>B</sup>, ○Y. Koga<sup>B,C</sup></p>	<p><b>2B0920</b> Importance of Thermodynamic Point of View in Education for Sustainable Society (Ex- Gunma Univ.) ○K. Amaya</p> <p><b>2B0940</b> CO<sub>2</sub> adsorption on active carbon in the presence of H<sub>2</sub>O (<sup>A</sup>SONY Institute of Higher Education, <sup>B</sup>Western Kentucky Univ.) ○ R. Ozao<sup>A</sup>, Y. Zhang<sup>B</sup>, W.-P. Pan<sup>B</sup></p> <p><b>2B1000</b> VOC adsorption and desorption properties of wood charcoal carbonized at 800 °C (<sup>A</sup>Kanagawa Univ., <sup>B</sup>AIIST) ○Y. Nishimoto<sup>A</sup>, T. Tsugoshi<sup>B</sup></p> <p align="center"><b>Metals, Inorganic Solids and Ceramics (1)</b></p> <p><b>2B1020</b> Catalytic Effect of Water Vapor on the Thermal Decomposition of Synthetic Hydrozincate (<sup>A</sup>Graduate School of Education, Hiroshima Univ., <sup>B</sup>R&amp;D Center for Higher Education, Kyushu Univ.) N. Koga<sup>A</sup>, T. Tatsuoka<sup>A</sup>, ○Y. Tanaka<sup>A</sup>, S. Yamada<sup>B</sup></p> <p><b>2B1040</b> Influence of Atmospheric Water Vapor on the Crystallization of Zirconia Gel (Chemistry Lab., Graduate School of Education, Hiroshima Univ.) ○T. Tatsuoka, N. Koga</p>	<p><b>2C0920</b> Thermodynamic evaluation method for protein-ligand interaction by using differential scanning calorimetry and deconvolution method (Dept. of Bioengineering, Nagaoka Univ. of Technology) ○ S. Kidokoro, A. Yamamoto</p> <p><b>2C0940</b> Comparison of substrate recognition by catalytic antibodies 7C8 and 6D9 (<sup>A</sup>Kyoto Prefectural Univ., <sup>A</sup>Osaka Prefecture Univ., <sup>C</sup>Hirosaki Univ.) ○M. Oda<sup>A</sup>, T. Tsumuraya<sup>B</sup>, M. Saito<sup>C</sup>, I. Fujii<sup>B</sup></p> <p><b>2C1000</b> Studies on the structural transition of long-chain and short-chain phospholipids mixed assemblies by DSC and fluorescence measurement (<sup>A</sup>Kyushu Univ., <sup>B</sup>The Univ. of Tokushima) ○Y. Takajo<sup>A</sup>, H. Matsuki<sup>B</sup>, M. Aratono<sup>A</sup>, M. Yamanaka<sup>A</sup></p> <p><b>2C1020</b> Gel-to-liquid crystal transition enthalpy of asymmetric chain length sphingomyelins evaluated by chain-chain van der Waals interaction energy (Okayama Univ. of Science) ○M. Kodama, S. Yagi, A. Kuboki, S. Ohira, H. Aoki</p> <p><b>2C1040</b> A New System of Bicelles Composed with Naturally Occurring Sphingomyelin and Ganglioside GM1 in Extremely Dilute Aqueous Medium (Okayama Univ. of Science) ○H. Aoki, M. Fukuike, M. Kodama</p>
<p><b>11:00 ~ 12:00 Poster Session II Even Numbers</b></p>		
<p><b>12:00 ~ 13:10 Lunch</b></p>		
<p><b>13:10 ~ 13:50 Plenary Lecture (Room A)</b></p> <p><b>2S1310</b> The Role of IACT in Promoting Thermodynamics (Secretary, International Association of Chemical Thermodynamics) ○J. H. Dymond</p>		

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Room A	Room B	Room C
<p style="text-align: center;"><b>Mini Symposium</b></p> <p><b>2MS1355</b> Recent Development of Nonequilibrium Statistical Physics (Graduate School of Pure and Applied Sciences, Univ. of Tsukuba) ○K. Miyazaki</p> <p><b>2MS1425</b> Education of the Thermodynamic Concepts as a Civic Science Literacy ○T. Takizawa</p> <p><b>2MS1455</b> Current Status and Future Perspective for Chemical Thermodynamics - Utilization of Thermodynamics in Material Processing - (Faculty Engineering, Iwate Univ.) ○K. Yamaguchi</p>	<p style="text-align: center;"><b>Metals, Inorganic Solids and Ceramics (2)</b></p> <p><b>2B1400</b> Thermally optimized design of a twin calorimeter with isothermal control for higher accuracy and its uncertainty analyses (AIST) ○K. Amemiya, T. Inoue, D. Fukuda, T. Zama</p> <p><b>2B1420</b> Thermal Oxidation of TiN-AlN composite films prepared by thermal plasma CVD (Graduate School of Engineering, Hokkaido Univ.) ○S. Shimada, Y. Terao</p> <p><b>2B1440</b> Electric and magnetic properties and low temperature heat capacity of <math>TbFe_xMn_{1-x}O_3</math> (Tokyo Institute of Technology) ○K. Saito, H. Kawaji, T. Atake</p> <p><b>2B1500</b> Thermodynamic and kinetic stability of wide gap p-type conducting oxides (Nihon Univ.) ○Y. Kumekawa, M. Hirai, Y. Kobayashi, S. Endoh, E. Oikawa, T. Hashimoto</p>	<p style="text-align: center;"><b>Magnetic Materials and Molecular Complexes (3)</b></p> <p><b>2C1400</b> Heat Capacities and Phase Transitions of Proton Conductive Copper Rubenate Hydrates (<sup>A</sup>Univ. of Tokyo, <sup>B</sup>Kyushu Univ., <sup>C</sup>JST-CREST) ○T. Yamada<sup>A,C</sup>, R. Yonamine<sup>A</sup>, T. Yamada<sup>B,C</sup>, H. Kitagawa<sup>B,C</sup>, O. Yamamuro<sup>A,C</sup></p> <p><b>2C1420</b> Heat Capacities and Phase Transitions of Clathrate Compounds <math>[N(CH_3)_4][MCu(CN)_4] \cdot X</math> (M=Zn, Cd, X=H<sub>2</sub>CCl<sub>2</sub>, HCCl<sub>3</sub>) (<sup>A</sup>ISSP, Univ. of Tokyo, <sup>B</sup>Grad. Sch. of Arts and Sci., Univ. of Tokyo) ○S. Aso<sup>A</sup>, T. Yamada<sup>A</sup>, Y. Minamimoto<sup>B</sup>, H. Dan<sup>B</sup>, S. Nishikiro<sup>B</sup>, O. Yamamuro<sup>A</sup></p> <p><b>2C1440</b> Heat capacity in low temperature of (BEDT-TTF)(TCNQ) (Osaka Univ.) ○Y. Iwasaki, T. Yamamoto, Y. Nakazawa</p> <p><b>2C1500</b> Heat capacity measurements of organic superconductors under pressures (Osaka Univ.) ○N. Tokoro, O. Kubota, S. Yamashita, Y. Nakazawa</p>
<p><b>2MS1535</b> What does calorimetry find out in living organisms? (Res. Ctr. Mol. Thermodyn., Grad. Sch. Sci., Osaka Univ.) ○Y. Nagano</p> <p><b>2MS1605</b> Present Status and Prospect of JSCTA (President of JSCTA, Osaka Univ.) ○A. Inaba</p> <p><b>2MS1630</b> Thermodynamics in the 21st Century and ICCT-2010 (Mater. and Struct. Lab., Tokyo Inst. of Technol.) ○T. Atake</p>	<p style="text-align: center;"><b>Metals, Inorganic Solids and Ceramics (3)</b></p> <p><b>2B1530</b> Formation of Nano-crystalline Thin Films of BaTiO<sub>3</sub> by RF Magnetron Sputtering (Gunma Univ.) ○M. Hanaya, T. Kyomen, Y. Matsumoto</p> <p><b>2B1550</b> Metal-Insulator Transition and Heat Capacity of BaTiO<sub>3-d</sub> (<sup>A</sup>Tokyo Institute of Technology, <sup>B</sup>NIMS) ○K. Takada<sup>A</sup>, T. Kolodiazhnyi<sup>B</sup>, M. Tachibana<sup>B</sup>, Y. Kohama<sup>A</sup>, H. Kawaji<sup>A</sup>, T. Atake<sup>A</sup></p> <p><b>2B1610</b> Heat capacity of PbZn<sub>1/3</sub>Nb<sub>2/3</sub>O<sub>3</sub>-PbTiO<sub>3</sub> solid solutions and phase transition properties (<sup>A</sup>Tokyo Institute of Technology, <sup>B</sup>NIMS) ○K. Sasame<sup>A</sup>, M. Tachibana<sup>B</sup>, H. Kawaji<sup>A</sup>, T. Atake<sup>A</sup></p> <p><b>2B1630</b> Heat capacity of solid solutions, PbZrO<sub>3</sub>-PbTiO<sub>3</sub> and Pb(Mg<sub>1/3</sub>Nb<sub>2/3</sub>)O<sub>3</sub>-PbTiO<sub>3</sub> (<sup>A</sup>Tokyo Institute of Technology, <sup>B</sup>NIMS, <sup>C</sup>The Univ. of Tokyo) ○T. Yoshida<sup>A</sup>, J. Yamazaki<sup>A</sup>, M. Tachibana<sup>B</sup>, Y. Moriya<sup>C</sup>, H. Kawaji<sup>A</sup>, T. Atake<sup>A</sup></p>	<p style="text-align: center;"><b>Polymers and Organic Materials (1)</b></p> <p><b>2C1530</b> Synergistic effect of polysaccharide blends studied by DSC and AFM (<sup>A</sup>Lignocel Research, <sup>B</sup>Nagasaki Univ., <sup>C</sup>Fukui Univ. Technol.) ○T. Hatakeyama<sup>A</sup>, M. Iijima<sup>B</sup>, T. Onishi<sup>C</sup>, H. Hatakeyama<sup>C</sup></p> <p><b>2C1550</b> Effects of cyclodextrin on thermal stability of lysozyme (Kinki Univ.) ○T. Kamiyama, T. Nojiri, H. Liu, T. Kimura</p> <p><b>2C1610</b> Characterization of Thermal Decomposition of Polymers by Evolved Gas Analysis using Photoionization Mass Spectrometry, EGA-PIMS : Part-II (RIGAKU Corp.) ○K. Motomura, S. Otake, T. Arii</p> <p><b>2C1630</b> Thermal change of organic light-emitting Alq<sub>3</sub>, Tris(8-hydroxyquinolino) aluminum(III) thin film (<sup>A</sup>Tokyo Polytechnic Univ., <sup>B</sup>Rigaku Corp., <sup>C</sup>Chinese Academy of Science) ○M. Wang<sup>A</sup>, T. Konya<sup>B</sup>, M. Yahata<sup>A</sup>, K. Motomura<sup>B</sup>, T. Kondo<sup>A</sup>, Y. Seki<sup>A</sup>, H. Lei<sup>A</sup>, T. Uchida<sup>A</sup>, Y. Hoshi<sup>A</sup>, T. Arii<sup>B</sup>, A. Kishi<sup>B</sup>, Y. Sawada<sup>A</sup>, L. Sun<sup>C</sup></p>
<p><b>16:55 ~ 17:55 JSCTA the 34th Annual General Meeting (Room A)</b>  <b>18:00 ~ 20:00 Conference Dinner</b></p>		

**October 18, 2008**

**Room A**

**Room B**

**Room C**

**9:20~10:10 JSCTA Award Lecture** (Room A)

**AW01** Thermal Studies on Structural Relaxation and Ordering in Disordered Molecular-Arrangement Systems  
(Graduate School of Science and Engineering, Tokyo Institute of Technology) ○M. Oguni

**10:10~11:00 JSCTA Award Lecture** (Room A)

**AW02** Microcalorimetric study on the molecular recognition in solutions  
(Dept. of Chemistry, Kinki Univ.) ○T. Kimura

**11:10~11:40 JSCTA Research Encouragement Award Lecture** (Room A)

**AW03** Exploration of novel electronic and magnetic phase diagram in transition metal oxides by  
heat capacity measurements  
(National Institute for Materials Science) ○M. Tachibana

**11:40~12:10 JSCTA Research Encouragement Award Lecture** (Room A)

**AW04** Thermal properties of polysaccharide physical hydrogels  
(Nagasaki Univ.) ○M. Iijima

**12:10~13:20 Lunch**

October 18, 2008

Room A	Room B	Room C
<p>Liquids, Solutions, Organized Systems and Interfaces (5)</p>	<p>Metals, Inorganic Solids and Ceramics (4)</p>	<p>Polymers and Organic Materials (2)</p>
<p><b>3A1320</b> The crystal-liquid phase diagrams and mixing heats of binary solutions of water/alcohol solutions (Graduate School of Engineering, Gunma Univ.) ○A. Takei, T. Seki, K. Yoshiba, M. Naoki</p>	<p><b>3B1320</b> Analysis of crystal structure and phase transitions of <math>\text{BaCe}_{1-x}\text{Y}_x\text{O}_{3-\delta}</math> (Dept. of Integrated Sciences in Physics and Biology, CHS, Nihon Univ.) ○M. Shimizu, S. Hasegawa, T. Ohzeki, T. Hashimoto</p>	<p><b>3C1320</b> PEO melting in confined nano-space (Graduate School of Urban Environmental Science, Tokyo Metropolitan Univ.) ○T. Shiraishi, H. Yoshida</p>
<p><b>3A1340</b> Urea-H<sub>2</sub>O System Revisited: A Differential Approach in Solution Thermodynamics (<sup>A</sup>Chem., Univ. British Columbia, <sup>B</sup>Res. Inst. Mol. Thermodyn., Osaka Univ.) ○ Y. Koga<sup>A,B</sup>, Y. Miyazaki<sup>B</sup>, Y. Nagano<sup>B</sup>, A. Inaba<sup>B</sup></p>	<p><b>3B1340</b> Analysis of crystal structure and phase transitions of <math>\text{Ba}_{1-x}\text{Sr}_x\text{CeO}_3</math> (Dept. of Integrated Sciences in Physics and Biology, CHS, Nihon Univ.) ○S. Hasegawa, M. Shimizu, T. Ohzeki, T. Hashimoto</p>	<p><b>3C1340</b> Total Thermal Analysis of Synthetic Fibers (3) The Peculiarity of Polymer Crystals Observed from Their Melting Behavior (<sup>A</sup>Fukui Univ., <sup>B</sup>Nihon Thermal Consulting Inc., <sup>C</sup>Toray Research Center Inc.) ○M. Todoki<sup>A,B</sup>, T. Hosoi<sup>C</sup></p>
<p><b>3A1400</b> The crystal-liquid phase diagrams and mixing heats of binary alcohol solutions (Graduate School of Engineering, Gunma Univ.) ○ A. Konishi, T. Seki, K. Yoshiba, M. Naoki</p>	<p><b>3B1400</b> Valence state and positional off-centering of cerium ions in <math>\text{Ce}_x\text{Eu}_{1-x}\text{CoO}_3</math> crystal (<sup>A</sup>Tokyo Institute of Technology, <sup>B</sup>Faculty of Science, Niigata Univ.) ○S. Ramos<sup>A</sup>, M. Oguni<sup>A</sup>, Y. Masuda<sup>B</sup></p>	<p><b>3C1400</b> Complex heat capacity of the n-alkane crystals in the rotator phase (Div. of Macromolecular Science and Engineering, Kyoto Institute of Technology) Y. Shimada, H. Yao, ○Y. Saruyama</p>
<p><b>3A1420</b> Enthalpic discrimination of chiral limonenes in hexane solution (Dept. of Chemistry, Kinki Univ.) ○S. Kido, T. Kamiyama, T. Kimura</p>	<p><b>3B1420</b> Low-Temperature Heat Capacity and Boson Peak of Lithium Borate Binary Glasses (<sup>A</sup>Univ. of Trukuba, <sup>B</sup>Tokyo Institute of Technology) ○ Y. Matsuda<sup>A</sup>, Y. Fukawa<sup>A</sup>, M. Kawashima<sup>A</sup>, S. Kojima<sup>A</sup>, Y. Yamamura<sup>A</sup>, S. Yasuzuka<sup>A</sup>, K. Saito<sup>A</sup>, H. Kawaji<sup>B</sup>, T. Atake<sup>B</sup></p>	<p><b>3C1420</b> Thermal Properties of Planar Modification of Oxaalkane Derivatives (Graduate School of Science, Hiroshima Univ.) ○K. Fukuhara, Y. Hokamoto, T. Nakamura, T. Ebata</p>
<p><b>3A1440</b> Thermodynamic study on <i>o</i>-, <i>m</i>- and <i>p</i>-isomers at 298.15 K (Dept. of Chemistry, Kinki Univ.) ○H. L. Liu, T. Kamiyama, M. Fujisawa, T. Kimura</p>	<p><b>3B1440</b> Low temperature heat capacity of rapid quenched and annealed glassy alloy, <math>\text{Zr}_{0.55}\text{Al}_{0.10}\text{Ni}_{0.05}\text{Cu}_{0.30}</math> (<sup>A</sup>Mater. Struct. Lab., Tokyo Inst. Technol., <sup>B</sup>Dept. Chem. Sys. Eng., Univ. of Tokyo, <sup>C</sup>Inst. Mater. Res., Tohoku Univ.) ○A. Uchida<sup>A</sup>, T. Yoshida<sup>A</sup>, Y. Moriya<sup>B</sup>, H. Kawaji<sup>A</sup>, T. Atake<sup>A</sup>, M. Fukuhara<sup>C</sup>, H. Kimura<sup>C</sup>, A. Inoue<sup>C</sup></p>	<p><b>3C1440</b> Phase Behavior and Crystal Statutes of Phosphoric Acid Diphenyl Ester (<sup>A</sup>Tokyo Institute of Technology, <sup>B</sup>Kobe Univ., <sup>C</sup>Ochanomizu Univ.) ○K. Ueda<sup>A</sup>, C. Morikawa<sup>A</sup>, M. Oguni<sup>A</sup>, K. Eda<sup>B</sup>, Y. Mori<sup>C</sup>, Y. Fukuda<sup>C</sup></p>
<p><b>3A1500</b> Enthalpies of solution of polyvinylpyrrolidone into 1-metyl-2-pyrrolidone and water and alkanols (<math>n=1\sim 4</math>) (<sup>A</sup>Graduate School of Advanced Science and Tehnology, Tokyo Denki Univ., <sup>B</sup>School of Science and Engineering, Tokyo Denki Univ.) ○T. Sugiura<sup>A</sup>, H. Ogawa<sup>B</sup></p>		<p><b>3C1500</b> Phase Behavior and Heat Capacity of Liquid Crystalline Material 6O2OCB (<sup>A</sup>Graduate School of Science, Osaka Univ., <sup>B</sup>Institute of Nuclear Physics PAN, Krakow) P. M. Zieliński<sup>A,B</sup>, ○A. Inaba<sup>A</sup>, H. Suzuki<sup>A</sup>, J. Ściesiński<sup>B</sup>, M. Massalska-Arodź<sup>B</sup></p>

## Poster Session

- P01** Thermal effusivity measurements under cooling state using a thermoreflectance technique (<sup>A</sup>Material Science Group, Research Dept. NISSAN ARC, LTD., <sup>B</sup>Hudson Lab., Bethel Co., Ltd.) ○T. Okamura<sup>A</sup>, T. Goto<sup>A</sup>, Y. Miyata<sup>A</sup>, T. Awatani<sup>A</sup>, J. Ye<sup>A</sup>, T. Totsuki<sup>B</sup>, G. Matsui<sup>B</sup>
- P02** Development of measurement technique of thermophysical property in thin film using periodic heating method (Ulvac-Riko, Inc.) ○S. Ikeuchi, K. Shimada
- P03** Evaluation of graded materials by distribution measurement instrument of thermal property using thermal probe (<sup>A</sup>Ulvac-Riko, Inc., <sup>B</sup>AIST) ○M. Yoshiizumi<sup>A</sup>, S. Ikeuchi<sup>A</sup>, K. Shimada<sup>A</sup>, Y. Takasaki<sup>A</sup>, Y. Ishii<sup>A</sup>, A. Yamamoto<sup>B</sup>
- P04** Fisheye Evaluation for Polymer Film by Nano-Thermal Analysis (Nihon Thermal Consulting Co.) ○N. Urayama
- P05** Mass and Thermal Analysis with Cantilever type Chip-Calorimeter (Meiji Univ.) ○Y. Miyagawa, T. Sugimoto, O. Nakabeppu
- P06** Bio Calorimetry with MEMS thermopile sensor (Meiji Univ.) ○M. Yamamoto, O. Nakabeppu
- P07** Development of an Ultra High Pressure AC Calorimeter for Measuring Heat Capacity of Protein (Kyoto Institute of Technology) ○M. Wada, Y. Saruyama, H. Yao
- P08** Development of a New Sensor for TG-DTA Recorded as the Macro DTA and the Micro DTA (PerkinElmer Japan Co., Ltd.) ○T. Suzuki, T. Tsujii, K. Okada, T. Ito, N. Niiya
- P09** Thermal decomposition of NH<sub>4</sub>H<sub>2</sub>PO<sub>4</sub> by EGA-EI/PIMS (<sup>A</sup>Thermal Analysis Application Lab., RIGAKU Corp., <sup>B</sup>SBU Thermal Analysis Group, RIGAKU Corp.) ○S. Yamaguchi<sup>A</sup>, Y. Masuda<sup>A</sup>, T. Arii<sup>B</sup>
- P10** Application to DSC using the high-pressure crucible for purity determination of semi-volatile environmental pollutants (NMIJ/AIST) ○N. Hanari, R. Iwasawa, S. Otsuka, N. Fujiki, K. Ishikawa, T. Yarita
- P11** Thermal properties of ionic liquid (bmim)PF<sub>6</sub> - Measurement with an adiabatic calorimeter using cryo-refrigerator (Faculty of Sci., Fukuoka Univ.) ○K. Negita, H. Nakashima, K. Sekine
- P12** Development of an Ultramicro Cell for adiabatic Calorimeter (Graduate School of Science, Osaka Univ.) ○S. Arai, Y. Miyazaki, A. Inaba
- P13** Growth of La<sub>1-x</sub>Sr<sub>x</sub>CoO<sub>3</sub> single crystals and their magnetic properties (Graduate School of Engineering, Gunma Univ.) ○T. Kyomen, Y. Murachi, M. Hanaya
- P14** Synthesis Condition Dependence of Magnetic Property of Ni(OH)<sub>2</sub> Nanocluster Synthesized from Sodium Orthosilicate (<sup>A</sup>Graduate School of Science, Osaka Univ., <sup>B</sup>Dept. of Physics, Yokohama National Univ., <sup>C</sup>Materials and Structures Lab., Tokyo Institute of Technology) ○T. Maruoka<sup>A</sup>, Y. Miyazaki<sup>A</sup>, Y. Ichianagi<sup>B</sup>, H. Kawaji<sup>C</sup>, T. Atake<sup>C</sup>, A. Inaba<sup>A</sup>
- P15** Heat Capacity and Magnetic Phase Transition of the Molecule-Based Magnet DOT<sup>·+</sup>·GaCl<sub>4</sub><sup>-</sup> (<sup>A</sup>Grad. Sch. Sci., Osaka Univ., <sup>B</sup>Grad. Sch. Sci., Osaka City Univ.) ○X.-Z. Lan<sup>A</sup>, Y. Miyazaki<sup>A</sup>, M. Kuratsu<sup>B</sup>, S. Suzuki<sup>B</sup>, M. Kozaki<sup>B</sup>, K. Okada<sup>B</sup>, A. Inaba<sup>A</sup>
- P16** Heat Capacity and Magnetic Phase Transition of the Molecule-Based Magnet TOT<sup>·+</sup>·FeBr<sub>4</sub><sup>-</sup> (<sup>A</sup>Grad. Sch. Sci., Osaka Univ., <sup>B</sup>Grad. Sch. Sci., Osaka City Univ.) ○X.-Z. Lan<sup>A</sup>, Y. Miyazaki<sup>A</sup>, M. Kuratsu<sup>B</sup>, S. Suzuki<sup>B</sup>, M. Kozaki<sup>B</sup>, K. Okada<sup>B</sup>, A. Inaba<sup>A</sup>
- P17** Deuteration-induced Phase Transition in Bromodeuteroxyphenalenone Crystal : The Dipole-dipole Interaction Mechanism (Graduate School of Science, Osaka Univ.) ○T. Matsuo
- P18** Alkyl-chain length dependence of thermodynamic properties of ionic liquid [C<sub>n</sub>mim][Tf<sub>2</sub>N] (<sup>A</sup>AIST, <sup>B</sup>Univ. of Tsukuba) ○Y. Shimizu<sup>A,B</sup>, Y. Ohte<sup>A</sup>, Y. Yamamura<sup>B</sup>, K. Saito<sup>B</sup>
- P19** Thermodynamic properties of inclusion of deoxycholic acid with alkyl alcohols (Dept. of Chem., Kinki Univ.) ○C. Seki, T. Kamiyama, T. Kimura
- P20** Thermophysical Properties about Protein and Bioprotectant (Graduate School of Pure and Applied Sciences, Univ. of Tsukuba) ○E. Hashimoto, K. Sasanuma, Y. Seshimo, Y. Aoki, H. Kanazawa, Y. Ike, S. Kojima
- P21** Excess enthalpy and excess volume of benzene+cyclohexane mixture at high temperature and high pressure (<sup>A</sup>Graduate School of Science and Engineering, Tokyo Denki Univ., <sup>B</sup>School of Science and Engineering, Tokyo Denki Univ.) ○Y. Sugawara<sup>A</sup>, F. Kimura<sup>B</sup>, H. Ogawa<sup>B</sup>
- P22** Excess molar volumes and isentropic compressibilities of ringed fluorine organic liquid+alcohols (<sup>A</sup>Graduate School of Science and Engineering, Tokyo Denki Univ., <sup>B</sup>School of Science and Engineering, Tokyo Denki Univ., <sup>C</sup>Sharp Manufacturing Systems Co.) ○K. Asahi<sup>A</sup>, H. Kimura<sup>B</sup>, T. Minamihounoki<sup>C</sup>, H. Ogawa<sup>B</sup>
- P23** Calorimetric study of lower alcohols adsorbed on activated carbon fiber (School of Science and Engineering, Tokyo Denki Univ.) ○S. Nobusawa, M. Ruike
- P24** Temperature dependence of inclusion mechanism for Cyclodextrin in dilute aqueous solutions (<sup>A</sup>Dept. of Chem., Kinki Univ., <sup>B</sup>Grad. School of Life and Environmental Science, Osaka Prefecture Univ.) ○T. Yukiya<sup>A,B</sup>, S. Kitamura<sup>B</sup>, T. Kimura<sup>A</sup>



## Poster Session

- P25** Associated state of butanols+butylamines (Dept. of Chem., Kinki Univ.) ○A. Soga, T. Kamiyama, M. Fujisawa, T. Kimura
- P26** Enthalpy and entropy changes on molecular inclusion of halogenated butane into  $\alpha$ -cyclodextrin cavity in aqueous solutions (<sup>A</sup>Dept. of Chem., Kinki Univ., <sup>B</sup>Grad. School of Life and Environmental Science, Osaka Prefecture Univ.) ○S. Fujie<sup>A</sup>, T. Yukiya<sup>B</sup>, M. Fujisawa<sup>A</sup>, T. Kamiyama<sup>A</sup>, T. Kimura<sup>A</sup>
- P27** Excess Enthalpies of Sulfoxides+Second Aliphatic Alcohols at 298.15 K (<sup>A</sup>Dept. of Chem., Kinki Univ., <sup>B</sup>Dept. of Biotech. Sci., Kinki Univ.) ○T. Kimura<sup>A</sup>, H. Nakanishi<sup>A</sup>, T. Yabugami<sup>A</sup>, T. Kamiyama<sup>A</sup>, M. Fujisawa<sup>B</sup>
- P28** Excess molar enthalpies for *S*- and *R*- fenchone in ethanol solutions (Dept. of Chemistry, Kinki Univ.) ○H. L. Liu, T. Kamiyama, M. Fujisawa, S. Kido, T. Kimura
- P29** Dielectric relaxation of LiTFSI contained within a molecular matrix (Tokyo Institute of Technology) ○H. Hirowatari, S. L. Ramos, M. Oguni
- P30** Low temperature heat capacities of tricyclohexylmethanol and dicyclohexylmethanol (Univ. of Tsukuba) ○Y. Suzuki, Y. Yamamura, S. Yasuzuka, K. Saito
- P31** Thermal behavior of aluminum titanate at high temperature (Graduate School of Integrated Basic Sciences, Nihon Univ.) ○Y. Nakamura, H. Fujimori
- P32** Thermodynamic approach in a design for negative thermal expansion compounds (Univ. of Tsukuba) ○Y. Yamamura, S. Ikeuchi, K. Saito
- P33** Thermodynamic study on hydrolysis of  $\alpha$ - or  $\beta$ -tricalcium bis (orthophosphate) in the presence of fluoride ions (<sup>A</sup>Dept. of Chemistry, Osaka Sangyo Univ., <sup>B</sup>ISIR, Osaka Univ., <sup>C</sup>Faculty of Science and Technology, Kinki Univ.) ○K. Sakamoto<sup>A</sup>, I. Fujihara<sup>A</sup>, K. Satoh<sup>A</sup>, S. Yamaguchi<sup>B</sup>, T. Kimura<sup>C</sup>
- P34** Composition Dependence of Fragility of Lithium Borate Glasses Studied by Modulated-Temperature DSC (Graduate School of Pure and Applied Sciences, Univ. of Tsukuba) ○Y. Fukawa, Y. Matsuda, M. Kawashima, S. Kojima
- P35** The Glass Transition and Non-Debye Nature of Alkali Borate Glasses Studied by Modulated-Temperature DSC (Graduate School of Pure and Applied Sciences, Univ. of Tsukuba) ○M. Kawashima, Y. Matsuda, Y. Fukawa, S. Kojima
- P36** Thermal transition intermediate of lysozyme-inhibitor complex (Dept. of Bioengineering, Nagaoka Univ. of Technology) ○A. Yamamoto, S. Kidokoro
- P37** Investigation of solvent-mediated transformation of crystal forms on DSC (National Institute for Materials Science, Biomaterials Center) ○K. Kawakami
- P38** The evaluation of oxidation for oils, fats and processed food (SII NanoTechnology Inc.) ○Y. Nishiyama, Y. Kasai, Y. Ichimura
- P39** Existence of  $L_X$  Phase in DC11PC (Kyoto Institute of Technology) ○F. Okazaki, Y. Saruyama, H. Yao
- P40** Structural Analysis to the Nucleating Effect of Biodegradable and Crystalline Fluorinated Polymers (<sup>A</sup>Faculty of Engineering, Yamagata Univ., <sup>B</sup>Graduate School of Science and Engineering, Yamagata Univ.) ○O. Isawa<sup>A</sup>, S. Yamana<sup>A</sup>, A. Fujimori<sup>B</sup>
- P41** Phase transition with conformational change in 1,3-dithiole-2-thione-4,5-dialkyldithiolate (<sup>A</sup>Univ. of Tsukuba, <sup>B</sup>Tokyo Univ. of Science) ○H. Koga<sup>A</sup>, S. Yasuzuka<sup>A</sup>, Y. Yamamura<sup>A</sup>, E. Tomiyama<sup>B</sup>, K. Miyamura<sup>B</sup>, K. Saito<sup>A</sup>
- P42** Phase transition of monolayer and multilayer of Primary Amines having long alkyl chain (Graduate School of Urban Environmental Science, Tokyo Metropolitan Univ.) ○E. Kishimoto, H. Yoshida
- P43** Thermodynamic study on melting process of alkylbiphenyl and its related compounds (Univ. of Tsukuba) ○K. Horiuchi, Y. Yamamura, S. Yasuzuka, K. Saito
- P44** Water State Analysis in Methylcellulose Hydrogel Containing Polyethylene Oxide (<sup>A</sup>Kanagawa Univ., <sup>B</sup>TA Instruments) Y. Nishimoto<sup>A</sup>, ○Y. Iitaka<sup>A</sup>, K. Atsuta<sup>A</sup>, I. Takenoshita<sup>B</sup>, T. Aikawa<sup>B</sup>
- P45** Thermogravimetry and Molecular Mass of Aromatic Oligoamides (National Defense Academy, Applied Chemistry) N. Warashina, M. Tsuchiya, ○T. Kojima
- P46** Size effect of silica nanoparticles on thermal decomposition of polymethacrylate esters (Graduate School of Urban Environmental Science, Tokyo Metropolitan Univ.) ○D. Zou, H. Yoshida
- P47** Thermal degradation behavior on high-polymer materials with Thermo gravimeter (Chubu Univ.) ○T. Mizuno, E. Nakashima, Y. Murasawa, M. Yukumoto, K. Takeda
- P48** Rigid amorphous fraction and mechanical property for iPP (<sup>A</sup>Faculty of Engineering, Musashi Institute of Technology, <sup>B</sup>Faculty of Knowledge Engineering, Musashi Institute of Technology, <sup>C</sup>SunAllomer Ltd.) ○S. Sakai<sup>A</sup>, T. Sato<sup>A</sup>, K. Yamada<sup>C</sup>, M. Iijima<sup>B</sup>, K. Takagi<sup>A</sup>, S. Oya<sup>A</sup>
- P49** Phase Transition of Au Doped Amphiphilic Di-block Copolymer Thin Film (Graduate School of Urban Environmental Science, Tokyo Metropolitan Univ.) ○Y. Kudo, K. Takahashi, J. Morohashi, H. Yoshida

## Poster Session

- P50** The dynamic heat capacity and the mechanical property for chloroprene rubber with carbon black (<sup>A</sup>Faculty of Engineering, Musashi Institute of Technology, <sup>B</sup>Faculty of Knowledge Engineering, Musasahi Institute of Technology) ○R. Sugimoto<sup>A</sup>, A. Nakano<sup>A</sup>, M. Iijima<sup>B</sup>, K. Takagi<sup>A</sup>, M. Minagawa<sup>A</sup>
- P51** Analysis for thermal degradation of rubber by dielectric relaxation measurement (<sup>A</sup>Faculty of Engineering, Musashi Institute of Technology, <sup>B</sup>Faculty of Knowledge Engineering, Musasahi Institute of Technology) ○H. Kuwahara<sup>A</sup>, S. Sudo<sup>B</sup>, M. Iijima<sup>B</sup>, S. Ooya<sup>A</sup>
- P52** Higher-order structure and thermal property of Poly (L-lactic acid) (Graduate School of Science and Engineering, Tokyo Institute of Technology) ○Y. Yano, J. Morikawa, T. Hashimoto
- P53** FTIR imaging of orientation function of polymer chain in fiber-reinforced polyethylene (Tokyo Institute of Technology) ○Y. Hikima, J. Morikawa, T. Hashimoto
- P54** Thermomechanical analysis of super fiber (Shimadzu Corp.) ○M. Ohta, A. Naganishi
- P55** Thermal diffusivity of polymers at a low temperature (Dept. of Organic and Polymeric Materials, Tokyo Institute of Technology) ○Y. Yoshihara, J. Morikawa, T. Hashimoto
- P56** Measurement of thermal diffusivity of polymeric thermal insulation materials by temperature wave analysis (Graduate School of Science and Engineering, Tokyo Institute of Technology) ○S. Sano, J. Morikawa, T. Hashimoto
- P57** Excess Heat Capacity at Low Temperature Induced by Partial Deuteration of Methyl Groups in 2,6-Dichlorotoluene (Grad. Sch. Sci., Osaka Univ.) ○H. Suzuki, A. Inaba, Y. Matsuo, T. Oishi, M. Murata
- P58** Stabilization processes of meta-stable crystalline phases in 2,5-dichlorothiophene (Graduate School of Integrated Basic Sciences, Nihon Univ.) ○N. Tanimoto, H. Fujimori
- P59** An investigation on measurement accuracy of specific heat capacity using a heat-flux differential scanning calorimeter - In the case of rutile, copper, molybdenum and silver disk specimens - (Fukuoka Univ.) ○J. Fujino, T. Honda
- P60** Thermal Properties of Ma-g-Engage® (ethylene/octene copolymer)/M-MMT Nanocomposites (<sup>A</sup>SONY Institute of Higher Education, <sup>B</sup>Institute for Combustion Science and Environmental Technology, Western Kentucky Univ.) ○R. Ozao<sup>A</sup>, G. Latta<sup>B</sup>, W.-P. Pan<sup>B</sup>
- P61** Many-body interactions of chiral solutions (<sup>A</sup>Dept. of Biotechnological Science, Kinki Univ., <sup>B</sup>Dept. of Chemistry, Kinki Univ.) ○M. Fujisawa<sup>A</sup>, T. Kimura<sup>B</sup>
- P62** Optical Techniques Combined with Differential Scanning Calorimetry (<sup>A</sup>Mettler-Toledo GmbH, <sup>B</sup>Mettler-Toledo K.K.) ○M. Schubnell<sup>A</sup>, M. Hattori<sup>B</sup>, K. Takahashi<sup>B</sup>, J. Sawada<sup>B</sup>
- P63** Stochastic Temperature Modulated DSC Technique and Its Use with Adhesives (<sup>A</sup>Mettler-Toledo GmbH, <sup>B</sup>Mettler-Toledo K.K.) ○M. Schubnell<sup>A</sup>, M. Hattori<sup>B</sup>, K. Takahashi<sup>B</sup>, J. Sawada<sup>B</sup>