

The 45th Japanese Conference on Calorimetry and Thermal Analysis

Dates: September 28 - 30, 2009 Place: Tokyo Metropolitan University

September 28			September 29			September 30		
Room A	Room B	Room C	Room A	Room B	Room C	Room A	Room B	Room C
10:00~11:00 Organic Materials and Polymers (1)	10:00~11:00 Solutions and Liquids (1)	10:00~11:00 Instrumentation and Theoretical Aspects (1)	9:40~10:50 Symposium Sustainable Materials and Energy (1)	9:40~11:00 Magnetic Materials and Molecular Complexes (1)	9:40~11:00 Biological Thermodynamics, Pharmaceutical Materials and Foods (1)	9:30~11:20 Symposium Nano-materials and Nano-calorimetry (1)	9:30~11:10 Solutions and Liquids (4)	9:30~11:10 Metals and Inorganic Solids (1)
11:10~12:00 Plenary Lecture 1S1110 (Room A)			11:10~12:00 Plenary Lecture 2S1110 (Room A)			11:30~12:00 LectureAW1 (Room A)		
12:00~13:20 Lunch			12:00~13:20 Lunch			12:00~13:20 Lunch		
13:20~15:00 Poster Session I (Odd Numbers)			13:20~15:00 Poster Session II (Even Numbers)			13:20~14:10 Plenary Lecture 3S1320 (Room A)		
15:20~16:20 Organic Materials and Polymers (2)	15:20~16:20 Solutions and Liquids (2)	15:20~16:20 Instrumentation and Theoretical Aspects (2)	15:20~16:40 Symposium Sustainable Materials and Energy (2)	15:20~16:40 Magnetic Materials and Molecular Complexes (2)	15:20~16:40 Biological Thermodynamics, Pharmaceutical Materials and Foods (2)	14:20~15:40 Symposium Nano-materials and Nano-calorimetry (2)		14:20~15:40 Metals and Inorganic Solids (2)
16:30~17:50 Organic Materials and Polymers (3)	16:30~17:50 Solutions and Liquids (3)	16:30~17:50 Mini Symposium Thermal Analysis and Calorimetry in Industry	16:50~17:50 JSCTA the 36th Annual General Meeting (Room A)					
18:00~18:55 Young Member's Meeting (the 8 pavilion, 1F)			18:30~20:30 Conference Dinner					

September 28, 2009

Room A	Room B	Room C
Organic Materials and Polymers (1)	Solutions and Liquids (1)	Instrumentation and Theoretical Aspects (1)
<p>1A1000 Total Thermal Analysis of Synthetic Fibers (4 - The Peculiarity of Polymer Crystals Observed from Their Melting Behavior II -) (^ANihon Thermal Consulting Inc., ^BToray Research Center Inc.) ○M. Todoki^A, T. Hosoi^B</p> <p>1A1020 Micro-scale thermal diffusivity measurement with thermal wave by thermo-electric linear sensor array (Tokyo Institute of Technology) ○A. Orié, J. Morikawa, T. Hashimoto</p> <p>1A1040 Development of Skimmer Type Interface TG-DTA-Photoionization Mass Spectrometry, PIMS (Rigaku Corp.) ○K. Motomura, Y. Amagasa, T. Arii</p>	<p>1B1000 Low Temperature Heat Capacity of Ionic Liquid [bmp][Tf2N] (^ANMIJ/AIST, ^BUniv. of Tsukuba, ^CRICS/AIST) ○Y. Shimizu^A, Y. Ohte^A, Y. Yamamura^B, S. Tsuzuki^C, K. Saito^B</p> <p>1B1020 Heat Capacity and Thermal Gelation in Aqueous Solution of Methylcellulose (^ATokyo Denki Univ., ^BUniv. of Tokyo) ○ N. Onoda-Yamamuro^A, M. Hayashi^A, M. Naruse^A, O. Yamamuro^B</p> <p>1B1040 Gelation and dielectric dispersion measurement of 12-hydroxystearic acid solution (Gunma Univ.) ○A. Takei, T. Mochizuki, K. Yoshiba, S. Kondo, H. Takeno</p>	<p>1C1000 Enthalpy of mixing, of binary mixtures containing hexane, cyclohexane, benzene at high temperature and high pressure (^AGraduate School of Science and Engineering, Tokyo Denki Univ., ^BSchool of Science and Engineering, Tokyo Denki Univ.) ○Y. Sugawara^A, F. Kimura^B, H. Ogawa^B</p> <p>1C1020 Development of Temperature Modulated Dielectric Spectroscopy and its Application to the Glass Transition (Kyoto Institute of Technology) H. Harada, H. Yao, ○Y. Saruyama</p> <p>1C1040 Development of Specific Heat Capacity Reference Material by Adiabatic Calorimeter (NMIJ, AIST) ○H. Abe, H. Kato, T. Baba</p>
<p>11:10~12:00 Plenary Lecture (Room A) 1S1110 Nanoscale Thermal Analysis (^AAnasys Instruments Inc., ^BUniv. of Illinois at Urbana-Champaign) ○K. Kjoller^A, K. Sahagian^A, C. Prater^A, W. King^B</p>		
<p>12:00~13:20 Lunch</p>		
<p>13:20~15:00 Poster Session I Odd Numbers</p>		

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Room A	Room B	Room C
<p>Organic Materials and Polymers (2)</p> <p>1A1520 Thermodynamics of Crystals and Glass in Polyethylene lamella (Gunma Univ.) ○N. Tanaka</p> <p>1A1540 Gelation mechanism of methylcellulose by DSC (ANagasaki Univ., BLignocel Research, CFukui Univ. of Technology) ○ M. Iijima^A, T. Hatakeyama^B, H. Hatakeyama^C</p> <p>1A1600 Meling behavior of oxaalkanols and oxaalkanoic acids (Hiroshima Univ.) ○ K. Fukuhara, T. Nakamura, K. Murakami, T. Ebata</p>	<p>Solutions and Liquids (2)</p> <p>1B1520 Excess Partial Molar Absorptivity in Near Infrared Spectra: An Additional Insight into the Mixing Schemes in Aqueous Acetonitrile and Acetone (^AThe Univ. of British Columbia, ^BChiba Univ., ^CHiroshima Univ., ^DPRESTO) ○ Y. Koga^A, F. Sebe^B, T. Minami^B, K. Otake^B, K. Saitow^{C,D}, K. Nishikawa^B</p> <p>1B1540 Experimental Determination of Third Derivative of G (II): Differential Pressure Perturbation Calorimetry (^AThe Univ. of British Columbia, ^BRoskilde Univ., ^COsaka Univ., ^DChiba Univ.) ○Y. Koga^A, P. Westh^B, A. Inaba^C, K. Sou^D, K. Tozaki^D</p> <p>1B1600 Hydrophobicity/Hydrophilicity of 1-Butyl-2,3-dimethyl and 1-Ethyl-3-methylimidazolium Ions: Towards Characterization of Room Temperature Ionic Liquids (^AChiba Univ., ^BNihon Univ., ^CKeio Univ., ^DThe Univ. of British Columbia) H. Kato^A, K. Miki^{A,B}, T. Mukai^{A,C}, K. Nishikawa^A, ○Y. Koga^D</p>	<p>Instrumentation and Theoretical Aspects (2)</p> <p>1C1520 New Melting Point Systems (^AMettler Toledo K.K., ^BMettler Toledo AG) ○ J. Sawada^A, T. Usui^A, M. Wagner^B, R. Riesen^B</p> <p>1C1540 Two-dimensional micro-scale thermal analysis and modulated spot heating with a high-speed infrared camera (Tokyo Institute of Technology) ○J. Morikawa, T. Hashimoto</p> <p>1C1600 Thermal diffusivity in the rotator phase of the odd-numbered n-alkanes C₂₃H₄₈ and C₂₅H₅₂ (^ATokyo Inst. Tech., ^BRigaku Corp.) ○J. Morikawa^A, M. Yasaka^B, A. Kishi^B, T. Hashimoto^A</p>
<p>Organic Materials and Polymers (3)</p> <p>1A1630 Phase Behavior and Heat Capacity of Liquid Crystalline Material BBOA (^AOsaka Univ., ^BThe H. Niewodnicza ski Instytute of Nuclear Phisics) ○E. Juszy ska^{A,B}, D. Takajo^A, A. Inaba^A, M. Jasiurkowska^B, M. Massalska-Arod ^B</p> <p>1A1650 Phase transition of 4'-alkyl-4-isothiocyanatobiphenyl (nBT) under pressure (^ATokyo Polytechnic Univ., ^BJagiellonian Univ.) ○Y. Maeda^A, S. Urban^B</p> <p>1A1710 Orientational Disorder Introduced by Partial Deuteration of Methyl Groups in Solid Toluene and Its Ordering (Osaka Univ.) ○H. Suzuki, A. Inaba</p> <p>1A1730 Orientational Disorder Introduced by Partial Deuteration of Methyl Groups in Solid 2,6-dibromotoluene and Its Ordering (Osaka Univ.) ○K. Yoshida, H. Suzuki, A. Inaba, M. Yamamoto, T. Oishi, M. Murata</p>	<p>Solutions and Liquids (3)</p> <p>1B1630 Thermodynamic properties for binary mixtures o- / m- / p-isomers: III (Kinki Univ.) ○H. Liu, T. Kamiyama, S. Kido, M. Fujisawa, T. Kimura</p> <p>1B1650 Excess enthalpies of chiral limonene in polar solution (Kinki Univ.) ○ S. Kido, H. Liu, T. Kamiyama, M. Fujisawa, T. Kimura</p> <p>1B1710 Hydration characteristics of surrounding ions in aqueous solution of sodium acetate by 1P-Probing Methodology (^AOsaka Univ., ^BThe Univ. of British Columbia) ○T. Kondo^A, Y. Miyazaki^A, A. Inaba^A, Y. Koga^B</p> <p>1B1730 The affinity of cold shock protein homologue from extreme thermophile to oligothymidine and its temperature dependence (Nagaoka Univ. of Technology) ○R. Satoh, S. Kidokoro</p>	<p>Mini Symposium Thermal Analysis and Calorimetry in Industry</p> <p>1MS1630 Application of thermogravimetry-mass spectrometry and thermogravimetry-infrared spectroscopy for the analysis of organic powders in cosmetic products (Shiseido Research Center) ○E. Nakamura, N. Yoshikawa, M. Hayashi</p> <p>1MS1650 The method for determing thermal history of polymer (PBT, PA6) with DSC (^ASumitomo Wiring Systems, Ltd., ^BTokyo Metropolitan Univ.) ○N. Manabe^A, H. Minami^A, M. Ishikawa^A, H. Yoshida^B</p> <p>1MS1710 Deterioration Behavior of Crosslinked Polyethylene Pipe for Hot-water (^APerkinElmer Japan, ^BOsaka Gas, ^CKyoto Institute of Technology) ○T. Tsujii^A, T. Suzuki^A, K. Okada^A, T. Seko^A, K. Igawa^B, H. Nishimura^B, H. Hamada^C, Y. Fujii^C</p> <p>1MS1730 DSC of solders solidification behavior and fluctuation of bonding strength (Panasonic Mobile Communications Co., Ltd.) ○M. Yasui, A. Nakagawa, Y. Saitou, M. Fukuyama, Y. Miyamoto</p>
<p>18:00~18:55 Young Member's Meeting</p>	<p>(3)</p>	

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Room A	Room B	Room C
Symposium Sustainable Materials and Energy (I)	Magnetic Materials and Molecular Complexes (I)	Biological Thermodynamics, Pharmaceutical Materials and Foods (I)
<p>2MS0940 Recent issues of urban atmospheric environment (Tokyo Metropolitan Univ.) ○S. Kato</p> <p>2MS1005 Electrode Design for Low Temperature Operation of Solid Oxide Fuel Cells (Tokyo Metropolitan Univ.) ○H. Munakata, M. Otani, Y. Katsuki, K. Kanamura</p> <p>2MS1030 Measurement of Thermal Conductivity of Polymeric Thermal Insulation Materials with Contact-type Temperature Wave Analysis (Tokyo Institute of Technology) ○ T. Hashimoto, J. Morikawa</p>	<p>2B0940 High-Field Ordered State in the $S = 1$ Spin Dimmer Compound $Ba_3Mn_2O_8$ (^ANational High Magnetic Field Lab., Los Alamos National Lab., ^BStanford Univ., ^CTheoretical Div., Los Alamos National Lab.) ○Y. Kohama^A, E. C. Samulon^B, R. D. McDonald^A, M. C. Shapiro^B, K. A. Al-Hassanieh^C, C. D. Batista^C, M. Jaime^A, I. R. Fisher^B</p> <p>2B1000 Heat Capacities and Magnetic Phase Transitions of the Molecule-Based Magnets (AMe)₃TOT^{·+} · FeBr₄⁻ (A = S, Se) (^AOsaka Univ., ^BShandong Agr. Univ., ^COsaka City Univ.) ○ Y. Miyazaki^A, X.-Z. Lan^B, T. Ezaki^C, M. Kuratsu^C, S. Suzuki^C, M. Kozaki^C, D. Shiomi^C, K. Sato^C, T. Takui^C, K. Okada^C, A. Inaba^A</p> <p>2B1020 Thermodynamic Investigations of the Electron States of Pd(dmit)₂ Salts by Low-Temperature Heat Capacity Measurements (^AOsaka Univ., ^BTokyo Univ. of Science, ^CToho Univ., ^DRIKEN) ○ S. Yamashita^A, T. Yamamoto^A, Y. Nakazawa^A, M. Tamura^B, Y. Nishio^C, R. Kato^D</p> <p>2B1040 Low temperature heat capacity measurements of an organic conductor based on BETS molecule (^AOsaka Univ., ^BNihon Univ., ^CInstitute for Molecular Science) ○S. Fukuoka^A, S. Yamashita^A, T. Yamamoto^A, Y. Nakazawa^A, A. Kobayashi^B, H. Kobayashi^B, K. Yakushi^C</p>	<p>2C0940 Observing Early Development of Xenopus Laevis by Single Embryo Calorimetry (^ARes. Cntr. Stru. Thermodyn., Grad. Sch. Sci., Osaka Univ., ^BDept. Biol. Sci., Grad. Sch. Sci., Osaka Univ.) ○Y. Nagano^A, K. Ode^B</p> <p>2C1000 The stabilization mechanism of a highly stabilized cold shock protein mutant by introducing a disulfide bond on its molecular surface (Nagaoka Univ. of Technology) ○S. Kidokoro, A. Hasegawa, N. Hirose</p> <p>2C1020 Consideration on relationship between minimum sustainable energy of dissipative structure and information ○K. Amaya</p> <p>2C1040 Analysis of thermodynamical basis of organism of a typical model of sustainability employing the molecular anvil model of an enzyme ○K. Amaya</p>
<p>11:10~12:00 Plenary Lecture (Room A)</p> <p>2S1110 Nano-environments surrounding molecular systems and their photo-function (Tokyo Metropolitan Univ., SORST/JST) ○H. Inoue</p>		
<p>12:00~13:20 Lunch</p>		
<p>13:20~15:00 Poster Session II Even Numbers</p>		

September 29, 2009

Room A	Room B	Room C
Symposium Sustainable Materials and Energy (2)	Magnetic Materials and Molecular Complexes (2)	Biological Thermodynamics, Pharmaceutical Materials and Foods (2)
<p>2MS1520 DSC analysis of water condition in 3DOM silica composite membrane (Tokyo Metropolitan Univ.) ○ K. Sasajima, H. Munakata, K. Kanamura</p> <p>2MS1540 Thermal Stability on the Cathode Materials of Lithium Ion Battery (Toray Research Center) ○Y. Furushima, C. Yanagisawa, K. Takahashi, H. Hosomi, M. Oishi</p> <p>2MS1600 Structures and Electrochemical Properties of Si-O-C Composite Anodes for Rechargeable Lithium Ion Batteries (^ADow Corning Toray Co., Ltd., ^BTokyo Metropolitan Univ.) ○H. Fukui^A, H. Ohsuka^A, T. Hino^A, K. Kanamura^B</p> <p>2MS1620 Thermal Decomposition Behaviors of Positive Electrodes of Lithium-ion Batteries (^AEnergy Technology Research Institute, AIST, ^BResearch Institute for Ubiquitous Energy Devices, AIST) ○Y. Saito^A, H. Nitani^B, M. Shikano^B</p>	<p>2B1520 Thermodynamic Measurements of Organic Conductors by Micro-Chip Devices (^AFaculty of Science, Osaka Univ., ^BGraduate School of Science, Osaka Univ.) ○Y. Muraoka^A, Y. Inoue^B, Y. Nakazawa^B</p> <p>2B1540 Heat capacity measurements of low-dimensional organic conductor under pressures (Osaka Univ.) ○N. Tokoro, O. Kubota, T. Yamamoto, Y. Nakazawa</p> <p>2B1600 Magnetic properties of spinel type compounds ACr_2X_4 ($A = Zn, Cd; X = O, S$) (^AMaterials and Structures Lab., Tokyo Institute of Technology, ^BGeneral Safety Management Center, Tokyo Institute of Technology) ○K. Mizushima^A, H.i Kawaji^A, T. Atake^B</p> <p>2B1620 Heat Capacities and Phase Transitions of Hydroxyethyl Copper Rubeanate Hydrates (^AUniv. of Tokyo, ^BKyusyu Univ., ^CKyoto Univ., ^DJST-CREST) ○T. Yamada^{A,D}, R. Yonamine^A, T. Yamada^{B,D}, H. Kitagawa^{C,B,D}, O. Yamamuro^{A,D}</p>	<p>2C1520 Inclusion Mechanism for Complexation between Amoxicillin and β-cyclodextrin in Strong Acidic Solution (Fukuoka Univ.) ○T. Murakami, M. Yukawa, H. Ikeda, Y. Iwase, T. Yoshihara, H. Moriwaki, H. Aki</p> <p>2C1540 Evaluation of difference in physical properties of powders containing magnesium stearate hydrates by thermal effusivity (Toho Univ.) ○M. Sato, Y. Yoshihashi, E. Yonemochi, K. Terada</p> <p>2C1600 Model Study of Molecular Structures and Vitrification of Late Embryogenesis Abundant Proteins (^ACenter for Biological Resources and Informatics, Tokyo Institute of Technology, ^BNational Institute of Agrobiological Science, ^CGraduate School of Bioscience and Biotechnology, Tokyo Institute of Technology) ○T. Furuki^A, T. Shimizu^A, T. Kikawada^B, T. Okuda^B, T. Takahashi^C, H. Mihara^C, M. Sakurai^A</p> <p>2C1620 Investigation off condensation mechanism between DNA and oligoarginine by calorimetric study (^ADoshisha Women's Univ., ^BDoshisha Univ.) ○S. Negi^A, J. Taniguchi^B, Y. Sugiura^A</p>
<p>16:50~17:50 JSCTA the 36th Annual General Meeting (Room A)</p> <p>18:30~20:30 Conference Dinner</p>		

September 30, 2009

Room A	Room B	Room C
Symposium Nano-materials and Nano-calorimetry (1)	Solutions and Liquids (4)	Metals and Inorganic Solids (1)
<p>3MS0930 How well-controlled experiments under extreme conditions can contribute to a better understanding of polymer crystallization during processing ? (Mines ParisTech) ○S. A. E. Boyer</p> <p>3MS0955 Detailed Analysis of Structural Formation Process during Polymer Crystallization (^AYamagata Univ., ^BKyoto Univ.) ○G. Matsuba^A, K. Nishida^B, T. Kanaya^B</p> <p>3MS1020 Effect of stereocomplex formation on the crystallization behavior of poly(L-lactic acid) (^AGunma Univ., ^BKyoto Univ., ^CYamagata Univ., ^DToyota Central R&D Lab., Inc., ^EToyota Motor Corp.) ○T. Kawai^A, N. Rahman^B, K. Nishida^B, T. Kanaya^B, G. Matsuba^C, M. Kato^D, H. Okamoto^D, A. Usuki^D, M. Matsuda^E, K. Nakajima^E, N. Honma^E</p> <p>3MS1040 Nonisothermal crystallization of polymers: From the kinetics law prediction to the understanding of adhesion mechanisms during extrusion coating (^AMines ParisTech, ^BPerkinElmer LAS, ^CCatalyse, ^DPerkinElmer SAS) ○S. A. E. Boyer^A, P. Robinson^B, P. Ganet^C, J.-P. Melis^D, J.-M. Haudin^A</p> <p>3MS1100 Local thermal analysis for melting temperature distribution and higher-order structure of poly(L-lactic acid) spherulite (^ATokyo Instruments Inc., ^BNihon Thermal Consulting Co., Ltd., ^CAnasys Instruments Inc.) ○Y. Yano^A, Y. Hikima^A, J. Morikawa^A, T. Hashimoto^A, N. Urayama^B, K. Kjoller^C</p>	<p>3B0930 Structure and Dynamics of Water Molecule Cluster Stabilized in Molecule-Based Zeolite (^ATokyo Univ. of Science, ^BBruker AXS K.K., ^CTokyo Institute Technology) ○M. Tadokoro^A, T. Suda^A, T. Saitoh^A, S. Taiki^A, Y. Kimura^A, T. Sugiyama^B, K. Hiraishi^B, M. Oguni^C</p> <p>3B0950 Hydrogen-Bond Network and Glass Transition Behavior of Two Dimensional Nano Layer Water (Tokyo Institute of Technology) ○K. Watanabe, M. Oguni</p> <p>3B1010 Characteristics of a series of glass transitions in a binary alkane system (Tokyo Institute of Technology) ○N. Miwa, M. Oguni</p> <p>3B1030 Calorimetric characterization of the glasses prepared by vapor deposition immediately below the glass-transition temperature (^ATokyo Institute of Technology, ^BGakushuin Univ.) ○S. Ramos^A, M. Oguni^A, K. Ishii^B, H. Nakayama^B</p> <p>3B1050 Construction of an adiabatic calorimeter for low-temperature vapor-deposition and heat capacities of simple molecular glasses (ISSP, Univ. of Tokyo) ○S. Tatsumi, S. Aso, Y. Moriya, D. Hosaka, O. Yamamuro</p>	<p>3C0930 Heat capacity of hafnium hydrides and deuterides (^ANagoya Univ., ^BUniv. of Fukui) ○T. Ogawa^A, Y. Arita^B, T. Matsui^A</p> <p>3C0950 Study of Vaporization Behavior of LiCl-KCl Eutectic Salt at High Temperature (^ANagoya Univ., ^BUniv. of Fukui) ○M. Otsuka^A, Y. Arita^B, T. Matsui^A</p> <p>3C1010 Analysis of structural phase transition of low thermal expansion material, Al₂(WO₄)₃ by synchrotron X-ray diffraction and thermal analyses (^ANihon Univ., ^BOsaka Pref. Univ.) ○T. Hashimoto^A, K. Omoto^A, T. Sugimoto^A, H. Ishibashi^B</p> <p>3C1030 Investigation of nitridation mechanism of β-Ga₂O₃ to GaN by thermogravimetric analysis in NH₃ atmosphere and microstructural observations (Hokkaido Univ.) ○H. Kiyono, T. Sakai, S. Shimada</p> <p>3C1050 Calcination Conditions and Thermal Reduction Behavior in Preparatio of Gold Nanoparticulate Catalysts (^ATokyo Metropolitan Univ., ^BCREST, ^CJASRI) ○T. Takei^{A,B}, N. Kawakita^{A,B}, M. Horikawa^{A,B}, H. Oji^C, T. Honma^C, H. Ohashi^{A,B}, T. Ishida^{A,B}, M. Haruta^{A,B}</p>
<p>11:30~12:00 JSCTA Research Encouragement Award Lecture (Room A)</p> <p>AW1 Thermal analysis of physical state of crystalline/glassy pharmaceuticals (Biomaterials Center, NIMS and International Center for MANA) ○K. Kawakami</p>		
<p>12:00~13:20 Lunch</p>		

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Room A

Room B

Room C

13:20~14:10 Plenary Lecture (Room A)

3S1320 Electron Correlation Effects in Molecular Compounds Studied by Relaxation Calorimetry Technique
 – Superconductivity, Metal-Insulator Transitions, Spin-Liquids –
 (Dept. of Chemistry, Graduate School of Science, Osaka Univ.) ○Y. Nakazawa

**Symposium
 Nano-materials and Nano-calorimetry
 (2)**

3MS1420 Formation Process and Defect Exclusion of Microphase Separation Structure of Block Copolymer Film with Liquid Crystalline Side Chain (Tokyo Institute of Technology) ○M. Komura, A. Tsugueda, T. Iyoda

3MS1440 Softening temperature measurement of photoresist thin film by scanning thermal microscopy (SII Nanotechnology Inc.) ○M. Iwasa, T. Yamaoka, K. Ando

3MS1500 Variable temperature AFM observation of fatigue process of NR/BR blends with nano particles (^AYokohama Rubber Co., Ltd., ^BTokyo Metropolitan Univ.) ○Y. Inoue^A, H. Yoshida^B

3MS1520 Effect of cross linking on micro phase separated structure in IR/BR blend (Tokyo Metropolitan Univ.) ○W. Yamada, H. Yoshida

Metals and Inorganic Solids (2)

3C1420 Tunnel Levels of Ammonium Ion in a Crystal Field of Td Symmetry and Deuteration-induced Phase Transitions in (ND₄)₂MCl₆ as Their Consequence (^AOsaka Univ., ^BAzabu Univ.) ○T. Matsuo^A, Y. Kume^B

3C1440 A phase transition in beta pyrochlore oxide KOs₂O₆ studied by calorimetry and neutron diffraction (^AISSP, Univ. of Tokyo, ^BOsaka Univ., ^CRAL) ○M. Kofu^A, K. Sasai^A, O. Yamamuro^A, K. Hirota^B, R. Ibberson^C, J. Yamaura^A, Z. Hiroi^A

3C1500 Heat capacity of PbZn_{1/3}Nb_{2/3}O₃-PbTiO₃ solid solutions at low temperatures (^AMaterial and Structures Lab., Tokyo Institute of Technology, ^BNational Institute for Materials Science, ^CGeneral Safety Management Center, Tokyo Institute of Technology) ○ K. Sasame^A, M. Tachibana^B, H. Kawaji^A, T. Atake^C

3C1520 Heat Capacity of Ni-Nb-Zr Glassy Alloy (^AMaterial and Structures Lab., Tokyo Institute of Technology, ^BGeneral Safety Management Center, Tokyo Institute of Technology, ^CTohoku Univ.) ○A. Uchida^A, H. Kawaji^A, T. Atake^B, M.. Fukuhara^C, A. Inoue^C

Poster Session

- P01** Development of the reaction rate measuring system for a sample that be hardened after a reaction (^ATokyo Riko Co., Ltd., ^BTokyo Institute of Technology, ^CUbe Industries, Ltd., ^DTokyo Denki Univ.) ○H. Sato^{A,D}, E. Sakai^B, E. Maruya^C, S. Iida^A, S. Hagiwara^A
- P02** Evaluation of Air Influence to Cantilever type Calorimeter (^AGraduate School, Meiji Univ., ^BMeiji Univ.) ○T. Sugimoto^A, Y. Miyagawa^A, O. Nakabeppu^B
- P03** Transition Temperature Microscopy Using Technique for Probing Nanoscale Thermal Properties Measurement (^ANihon Thermal Consulting Co., ^BAnasys Instruments Copr.) ○N. Urayama^A, K. Kjoller^B
- P04** Development of differential bio-calorimeter with MEMS thermopile sensor (^AGraduate School of Meiji Univ., ^BMeiji Univ.) ○M. Yamamoto^A, O. Nakabeppu^B
- P05** Development of Certified Reference Material (Cyclohexane for Thermal Analysis), (NMIJ/AIST) ○Y. Shimizu, Y. Ohte, K. Kato
- P06** Electronic Structure of Pressure-Sensitive Organic Crystals Studied by Relaxation Calorimetry Technique (Osaka Univ.) ○T. Moriura, Y. Inoue, S. Yamashita, Y. Nakazawa
- P07** Heat Capacity and Magnetic Phase Transition of the Organic Radical Magnet B1MN (^AOsaka Univ., ^BKeio Univ.) ○Y. Miyazaki^A, N. Kashima^B, N. Yoshioka^B, A. Inaba^A
- P08** Heat anomalies of liquid 2-biphenylmethanol and 1,1-diphenylethanol (Univ. Tsukuba) ○M. Nobuhira, Y. Yamamura, S. Yasuzuka, K. Saito
- P09** Energetic consideration for dilute aqueous solution of amphipathic compounds (^ADept. of Biotechnological Science, Kinki Univ., ^BKagoshima Univ., ^CDept. of Chemistry, Kinki Univ.) ○M. Fujisawa^A, R. Kanzaki^B, T. Kimura^C
- P10** Gel network formation and sol-gel transition of 12-hydroxystearic acid solutions (^AGumna Univ., ^BRitsumeikan Univ.) ○K. Yoshiba^A, A. Takei^A, S. Kondo^A, H. Takeno^A, N. Nakamura^B
- P11** Excess Enthalpies of Sulfoxides + Second Aliphatic Alcohols at 298.15 K (Kinki Univ.) T. Kimura, ○T. Ota, H. Nakanishi, T. Kamiyama, M. Fujisawa
- P12** Associated state of butanols + butylamines II (Kinki Univ.) T. Kimura, ○A. Okuno, A. Soga, T. Kamiyama, M. Fujisawa
- P13** Coupled Modulated Monolayers in Lipid Bilayers (Tokyo Metropolitan Univ.) ○Y. Hirose, S. Komura, T. Kato
- P14** Structure and Properties of Water Molecule Cluster Confined to Molecular Nanoporous Crystal (^ATokyo Univ. of Science, ^BBruker AXS K.K.) ○M. Tadokoro^A, C. Iida^A, T. Saitoh^A, M. Horii^A, Y. Shimazaki^A, S. Nagasawa^B, Y. Yasuno^B
- P15** Morphology of lamellar domains formed below the Krafft temperature in a surfactant solution (Tokyo Metropolitan Univ.) ○Y. Kawabata, T. Shinoda, T. Kato
- P16** Excess partial molar enthalpies of butanol and pentanol isomers + water at 298.15 K (Kinki Univ.) ○S. Fujie, S. Inui, T. Kamiyama, M. Fujisawa, T. Kimura
- P17** Thermal expansibility, isothermal compressibility, and heat capacity of cyclodextrins (Kinki Univ.) ○E. Kanaoka, T. Kamiyama, R. Ishii, K. Sibuya, E. Aoki, T. Kimura
- P18** DSC study of water confined in mesoporous silica and organosilica (Nihon Univ.) ○K. Oodo, T. Masuda, H. Fujimori
- P19** Heat Capacities and Glass Transitions of 1-Propanol and Its Concentrated Solutions (^AOsaka Univ., ^BThe H. Niewodnicza ski Instyute of Nuclear Phisics, ^CTokai Univ.) ○E. Juszy ska^{A,B}, T. Kondo^A, Y. Miyazaki^A, S. Sudo^C, N. Shinyashiki^C, S. Yagihara^C, A. Inaba^A
- P20** Lamellar-to-Onion Transition with Increasing Temperature under Shear Flow (Tokyo Metropolitan Univ.) M. Ito, Y. Kawabata, ○T. Kato
- P21** Selective synthesis of calcium carbonate polymorphs and their thermal behaviors (Hiroshima Univ.) ○T. Kimura, Y. Yamane, N. Koga
- P22** Kinetic behaviors of the thermal decompositions of synthetic zinc carbonate and hydroxide (Hiroshima Univ.) ○Y. Tanaka, N. Koga
- P23** Thermodynamic study on hydrolysis of calcium phosphate composite materials (^AOsaka Sangyo Univ., ^BOsaka Univ., ^CKinki Univ.) ○K. Sakamoto^A, I. Fujihara^A, K. Satoh^A, S. Yamaguchi^B, J. Ichihara^B, T. Kimura^C
- P24** Thermal conductivity and heat capacity of relaxor ferroelectric Pb(Mg_{1/3}Nb_{2/3})O₃-PbTiO₃ (National Institute of Materials Science) ○M. Tachibana, E. Takayama-Muromachi

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- P25** Low-temperature Heat Capacity and Boson Peaks of Alkali Borate Binary Glasses (^AUniv. of Tsukuba, ^BTokyo Institute of Technology) ○Y. Matsuda^A, M. Kawashima^A, H. Kawaji^B, T. Atake^B, S. Kojima^A
- P26** Structural phase transition of Cd₂Nb₂O₇ and Cd₂Re₂O₇ (^ATokyo Institute of Technology, ^BNational Institute for Materials Science) ○N. Taira^A, M. Tachibana^B, H. Kawaji^A
- P27** Magnetic effect on the phase transitions of Hg using a nW-stabilized DSC (^AChiba Univ., ^BUniv. of Tokyo, ^CYokohama National Univ.) ○H. Hayashi^A, M. Minohara^{A,B}, K. Tozaki^A, H. Inaba^A, S. Ozawa^C, I. Yamamoto^C
- P28** Effect of temperature and humidity conditions on the ZnO sheet formation from chlorine included zinc hydroxide compound (^AKochi Univ., ^BRigaku Corp.) K. Yanagisawa^A, T. Kozawa^A, Y. Masuda^B, ○A. Kishi^B
- P29** Thermal analysis of BaTiO₃ precursor solution including polyvinylpyrrolidone (Gunma Univ.) ○T. Kyomen, M. Hanaya
- P30** Suitability of growth models for analyzing microbial-calorimetric data (Mie Univ.) ○A. K. Sakamiya, A. Tanaka
- P31** Analysis of carbohydrate binding and catalytic reaction of endo-1,3-β-glucanase using isothermal titration calorimetry (Kyoto Pref. Univ.) ○Y. Tanabe, M. Oda
- P32** The prediction of the physical stability of amorphous naproxen in solid dispersion of HPMC-AS of the different grade (Toho Univ.) ○Y. Yoshihashi, M. Fujinaga, H. Oshima, E. Yonemochi, K. Terada
- P33** Role of hydrophobic amino acid residues in the starch binding domain of glucoamylase (^AMie Univ., ^BKwansei Gakuin Univ.) ○Y. Masuda^A, H. Sugimoto^B, H. Miyake^A, A. Tanaka^A
- P34** Effects of cyclodextrins on thermal stability of biopolymers (Kinki Univ.) ○M. Sato, T. Kamiyama, E. Aoki, D. Takeuchi, T. Kimura
- P35** Dilution enthalpies of cyclodextrins and cyclodextrins-protein interactions by ITC (Kinki Univ.) ○Y. Konishi, T. Kamiyama, T. Kimura
- P36** Behavior of Monolayer of Amines having long alkyl chain (Tokyo Metropolitan Univ.) ○E. Kishimoto, H. Yoshida
- P37** Water State Analysis in Thermo Reversible Hydrogel Containing Polyethylene Oxide (^AKanagawa Univ., ^BTA Instruments) ○Y. Iitaka^A, I. Takenoshita^B, T. Aikawa^B, Y. Nishimoto^A
- P38** Application of Thermal Decomposition of Polymers by skimmer type TG-DTA-PIMS (RIGAKU Corp.) ○Y. Amagasa, K. Motomura, T. Arie
- P39** The complex heat capacity in the rotator phase of *n*-alkane crystals II (Kyoto Institute of Technology) ○Y. Shimada, H. Yao, Y. Saruyama
- P40** Light hardening reaction and thermal evaluation analysis of nanoimprint material (^ASII Nanotechnology Inc., ^BToyo Gosei Co., Ltd.) ○Y. Kasai^A, T. Nakamura^A, N. Sakai^B
- P41** The dynamic heat capacity for drawn chloroprene rubber (^AFaculty of Engineering, Tokyo City Univ., ^BFaculty of Knowledge Engineering, Tokyo City Univ.) ○R. Sugimoto^A, M. Iijima^B, K. Takagi^A
- P42** Thermal Analysis of control humidity of thermal decomposition for polymer (RIGAKU Corp.) ○S. Yamaguchi, Y. Masuda, T. Arie
- P43** Phase Behavior and Defect Exclusion of Microphase Separation Film of Block Copolymer with Liquid Crystalline Side Chain/Low Molecular Liquid Crystal Blend (Tokyo Institute of Technology) ○A. Tsugueda, T. Iyoda, M. Komura
- P44** Crystallization behavior of Poly(lactic acid) containing a nucleation agent (Tokyo Metropolitan Univ.) ○Y. Kudo, M. Yamato, H. Yoshida
- P45** Observation on thermal behavior of magnetically aligned micro phase separated structure using DSC-SAXS concurrent measurement (^ATokyo Metropolitan Univ., ^BEhime Univ.) ○J. Morohashi^A, M. Yamato^A, T. Ito^B, H. Yoshida^A
- P46** Analysis of curing process of photo-curable resin using DSC with ultraviolet-visible irradiation system (Toray Research Center) ○R. Ota, T. Nakamoto, H. Hosomi, T. Yamane, M. Oishi
- P47** Thermal study of 2,5-dichlorothiophene with plural crystalline phases (Nihon Univ.) ○N. Tanimoto, H. Fujimori
- P48** Structural analyses of the semi-crystalline PET by fast scan DSC (^AFaculty of Engineering, Tokyo City Univ., ^BFaculty of Knowledge Engineering, Tokyo City Univ.) ○K. Takayanagi^A, S. Takasugi^A, R. Sugimoto^A, S. Sakai^A, M. Iijima^B
- P49** Analysis for thermal degradation of chloroprene rubber by dielectric spectroscopy and TGA (^AGraduate School of Engineering, Tokyo City Univ., ^BFaculty of Knowledge Engineering, Tokyo City Univ.) ○H. Kuwahara^A, S. Sudo^B, M. Iijima^B, S. Ooya^A
- P50** Rigid amorphous fraction and mechanical property for iPP (^AGraduate School of Engineering, Tokyo City Univ., ^BFaculty of Knowledge Engineering, Tokyo City Univ.) ○S. Sakai^A, M. Iijima^B, K. Takagi^A

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- P51** Solvent induced crystallization of poly(ethylene-2,6-naphthalate) (Gunma Univ.) ○Y. Kono, T. Kawai, S. Kuroda
- P52** Effect of Plasticizer on the Crystallization Behavior of Poly(L-lactic acid) (^AGunma Univ., ^BKyoto Univ., ^CYamagata Univ., ^DToyota Central R&D Labs., Inc., ^EToyota Motor Corp.) ○S. Koido^A, T. Kawai^A, S. Kuroda^A, H. Asakawa^B, K. Nishida^B, T. Kanaya^B, G. Matsuba^C, M. Kato^D, H. Okamoto^D, M. Matsuda^E, K. Nakajima^E, N. Honma^E, T. Kurose^E
- P53** DSC and TMA Analyses of Thin Polymeric Multilayer Films (^AMettler-Toledo K.K., ^BMettler-Toledo AG) ○T. Usui^A, A. Hammer^B, R. Reisen^B
- P54** Structure formation and crystal orientation in polypropylene nanocomposites with montmorillonite after shear induced nonisothermal crystallization (^APolish Academy of Sciences, ^BMines ParisTech) E. Szkudlarek^A, ○S. A. E. Boyer^B, J.-M. Haudin^B, E. Piorowska^A
- P55** Interaction of dyes and nano layered material - Thermodynamic equilibrium and temperature effect - (^ATokyo Metropolitan Univ., ^BPRESTO/JST, ^CSORST/JST) ○S. Konno^A, S. Takagi^{A,B}, H. Tachibana^A, T. Shimada^A, H. Inoue^{A,C}
- P56** Crystallization behavior of poly(4-methyl-1-pentene) (Tokyo Metropolitan Univ.) ○T. Kikuchi, M. Yamato, H. Yoshida
- P57** An investigation on measurement accuracy of specific heat capacity using a heat-flux differential scanning calorimeter - In the case of polyethylene, acrylic resin and plastic composite - (Fukuoka Univ.) ○J. Fujino, T. Honda
- P58** Calorimetric Analysis of the Effects of Soil Stress Compound on Soil-Microbial Activity (Mie Univ.) A. K. Sakamiya, ○N. Origuchi, A. Tanaka
- P59** VOC adsorption and desorption properties of woodceramics prepared from waste wood (^AKanagawa Univ., ^BAIIST, ^CAomori Prefectural Industrial Technology Research Center) ○S. Onuki^A, T. Tsugoshi^B, T. Okabe^C, Y. Nishimoto^A
- P60** Thermal Properties of MA-g-Engage (ethylene octene copolymer)/dimethyldioctadecyl quaternary ammonium chloride-modified montmorillonite clay nanocomposites (^ASONY Institute of Higher Education, ^BWestern Kentucky Univ.) ○R. Ozao^A, G. Latta^B, W.-P. Pan^B
- P61** Miscibility Evaluation of Nylon 66/Nylon 6/Sulfonated Polystyrene Ionomer Blends Investigated by Crystallization Dynamics (^ABeijing Institute of Technology, ^BTokyo Metropolitan Univ.) G. Zhang^A, X. Fan^A, ○H. Yoshida^B