

# Posters

(Keynote and Invited Lectures have two numbers)

## P-1

Isothermal Acid-Titration Calorimetry: A New Tool for Evaluating the Thermodynamic Stability of Protein Molecules and Its Applications  
S. Kidokoro, S. Nakamura (Nagaoka Univ. Technol.)

## P-2 (K-8)

Thermodynamics of DNA Conformations and Interactions in Transcription  
F.P. Schwarz, J. Ramprakash, S. Krueger (Natl. Inst. Std. Technol.)

## P-3

Energetic Analysis for Hydration of Oligosaccharides  
M. Fujisawa, T. Kimura (Kinki Univ.)

## P-4 (K-9)

Thermodynamic Database for Proteins  
A. Sarai (Kyushu Inst. Technol.)

## P-5

Bulk and Mesoscopic Thermodynamic Studies of the Glass-Ceramics Biocompatible Materials Utilised for Mimetic Bone Tissue Substitution  
J. Sestak, Z. Strnad, J. Strnad, N. Koga, R.O. Suzuki (Acad. Sci. Czech Rep., LASAK, Hiroshima Univ. & Kyoto Univ.)

## P-6 (I-5)

Stability and Folding Cooperativity of a Designed Miniature Protein, Chignolin  
S. Honda (Natl. Inst. Adv. Ind. Sci. Technol.)

## P-7

Proton rearrangement rates in the ice formed in a bovine-serum-albumin aqueous solution  
H. Kusukawa, K. Yagi, K. Kawai, T. Suzuki, M. Oguni (Tokyo Inst. Technol. & Tokyo Univ. Marine Sci. Technol.)

P-8

Thermal Fluctuation and Magnetization of Ni-Zn Ferrite Nanoparticles Depending on the Particle Size

Y. Ichiyangai, T. Uehashi, S. Yamada, Y. Kanazawa, T. Yamada (Yokohama Natl. Univ.)

P-9

Heat Controlled Size Selective Synthesis of Gold and Silver Nanoparticles

M. Kanehara, T. Teranishi (Univ. Tsukuba)

P-10 (K-4)

The Effect of Particle Size on the Heat Capacity of TiO<sub>2</sub> Nanoparticles

B.F. Woodfield, R. Stevens, B.E. Lang, S. Doot, T. F. Walker, G. Li, S. Liu, A. Navrotsky, J. Boerio-Goates (Brigham Young Univ. & Univ. California, Davis)

P-11

Mapping Measurement of Glass Transition Temperature of Positive-Type Photoresist Using Micro Thermal Analysis

K. Nakanishi, H. Ichikawa, T. Hosoi, T. Yamane, K. Ishikiriyama (Toray Res. Center, Inc.)

P-12

Calorimetric Study on Self-Assembling of Two Kinds of Monometallic Nanoparticles in Solution

M. Kanemaru, Y. Shiraishi, Y. Koga, N. Toshima (Tokyo Univ. Sci. & Univ. British Columbia)

P-13

Thermal Transport Studies of Electrically Conducting Materials Using the Transient Hot-Strip Technique

B.R. Maharjan (OM Academy)

P-14 (K-10)

Temperature Wave Analysis for Thermal Diffusivity Measurement

T. Hashimoto (Tokyo Inst. Technol.)

P-15 (I-6)

Dynamics of Supercooled and Glassy Water Studied by Neutron Scattering

O. Yamamuro (Univ. Tokyo)

P-16 (K-5)

On Statistical Mechanical Foundation of Nonequilibrium Thermodynamics  
K. Kitahara (Intel. Christian Univ.)

P-17

Conformation Isomers as the prove of the Relaxation in Amorphous Molecular Systems  
K. Sakai, Y. Kobayashi, H. Nakayama, K. Ishii (Gakushuin Univ.)

P-18

Do the Periodic Chemical Reactions Reveal Furth's Diffusion Limit?  
J. Sestak, J.J. Marek, J. Stavek, H. Seveikova, J. Kristofik, V. Sestakova, P. Hubik, R. O. Suzuki (Acad. Sci. Czech Rep., Inst. Chem. Technol. & Kyoto Univ.)

P-19

Crystal Growth from Supercooled Binary Liquids of Chlorobenzene and Ethylbenzene  
M. Takei, H. Nakayama, K. Ishii (Gakushuin Univ.)

P-20

Thermal Studies of Glass Transitions in Lithium Silicate  
H. Anwar, S. Kojima, M. Kodama, B. Whittington, M. Olesiak, M. Affatigato, S.A. Feller (Univ. Tsukuba, Sojo Univ. & Coe College)

P-21

Glass Transition Phenomena of 2-Butoxyethanol Isomers Studied by Heat Capacity Measurements and Molecular Dynamics Simulation  
T. Ueno, T. Tojo, H. Kawaji, T. Atake (Tokyo Inst. Technol.)

P-22

Thermal Studies of Microporous Compound; Mononuclear Copper(II) Terephthalate-Pyridine  
K. Takahashi, M. Inoue, T. Tojo, H. Kawaji, T. Atake (Tokyo Inst. Technol.)

P-23

Efficient Thermal Conversion of Polyyne-Type Conjugated Polymers to Nano-Structures Porous Carbon Materials  
M. Kijima, D. Fujiya, T. Oda, M. Ito (Univ. Tsukuba)

P-24

Thermal Studies on Absorption/Desorption of Carbon Tetrachloride in Copper(II) trans-1,4-Cyclohexanedicarboxylate

M. Inoue, T. Tojo, H. Kawaji, T. Atake (Tokyo Inst. Technol.)

P-25 (I-1)

Micro-Combustion Calorimetry for Materials Science

Y. Nagano (Osaka Univ.)

P-26

Dynamics Porous Frameworks: Cooperative Guest Adsorption Based on Square Grids Connected by Amid-Amide Hydrogen Bonds

K. Uemura, S. Kitagawa, K. Saito, K. Fukui, K. Matsumoto (Kyoto Univ., Waseda Univ., Univ. Tsukuba & Regional Joint Res. Project Yamagata Prefecture)

P-27 (K-3)

Femtosecond Pump Probe Spectroscopy or Calorimetry? The Effects of Some Salts on H<sub>2</sub>O: Towards Understanding the Hofmeister Series

Y. Koga (Univ. British Columbia)

P-28 (I-3)

Significance of Reaction Rate Control on the Thermal Decomposition of Solids

N. Koga (Hiroshima Univ.)

P-29 (I-2)

Development and Application of a High Temperature and High Pressure Flow Calorimeter for Enthalpy of Mixing

H. Ogawa, S. Murakami (Tokyo Denki Univ.)

P-30

Development of the Temperature Calibration Reference Materials for Thermal Analyzers in Lower Temperature Region

Y. Shimizu, R. Iwasawa, Y. Ohte, T. Ihara, T. Maeda, A. Nomura (Natl. Inst. Adv. Ind. Sci. Technol.)

P-31 (K-2)

Physicochemical Characteristics of Room Temperature Molten Salts

J.W. Magee (Natl. Inst. Std. Technol.)

P-32

Enthalpies of Formation of Inclusion Compounds of Deoxycholic Acid  
T. Kimura, K. Noguchi, T. Kamiyama (Kinki Univ.)

P-33 (K-1)

Water Adsorption at Temperatures to 250 °C as a Tool for Characterization of Porous Solids  
M.S. Gruszkiewicz, D.R. Cole, J. M. Simonson (Oak Ridge Natl. Lab.)

P-34

Structure and Phase Transition of Amphiphilic Polymers Obtained by Self-Assemble Polymerization Using Two-Dimensional Reaction Field  
T. Yamada, T. Tanaka, A. Shina, H. Yoshida (Tokyo Metro. Univ.)

P-35

Structural Transformation of Hydrogen-Bonded Supramolecular Assembly Consisting of Amphoteric Molecules  
D. Ishii, T. Yamada, M. Nakagawa, T. Iyoda, H. Yoshida (Tokyo Inst. Technol., Tokyo Metro. Univ. & CREST-JST)

P-36

Nano-Scale Order Structure of Amphiphilic Block Copolymer/Homopolymer Blends  
S. Jung, T. Yamada, H. Yoshida, T. Iyoda (Tokyo Metro. Univ., Tokyo Inst. Technol. & CREST-JST)

P-37

Pressure Dependence of The Cubic-Smectic C Phase Transition of Thermotropic Liquid Crystalline Hydrazine Compounds BABH(n)  
Y. Maeda, T. Ito, S. Kutsumizu, K. Saito, M. Sorai(Natl. Inst. Adv. Ind. Sci. Technol., Gifu Univ., Univ. Tsukuba & Osaka Univ.)

P-38

Structural Disorder in MMX Complexes  $\text{Ni}_2(n\text{-RCS}_2)_4\text{I}$  (R: Pr, Bu)  
S. Ikeuchi, Y. Yamamura, K. Saito, M. Mitsumi, K. Toriumi, A. Inaba (Osaka Univ., Univ. Tsukuba & Univ. Hyogo)

P-39

X-ray Study on Structural Disorder in the Room-Temperature Phase of *p*-Methylbenzyl Alcohol  
H. Saitoh (Saitama Univ.)

P-40 (I-4)

Investigation of New Phase in Functional Oxide Materials by Thermal Analyses  
T. Hashimoto (Nihon Univ.)

P-41

Low Temperature Heat Capacity of  $12\text{CaO}\cdot7\text{Al}_2\text{O}_3$

Y. Kohama, T. Tojo, H. Kawaji, T. Atake, S. Matuishi, H. Hosono (Tokyo Inst. Technol.)

P-42

Microstructural Study of Yttria-Stabilized Zirconia Ceramics by Thermal Analysis  
T. Tojo, H. Kawaji, T. Atake (Tokyo Inst. Technol.)

P-43

Thermal Conductivity of Oxides Containing Face- or Edge-Sharing  $\text{CoO}_6$  Polyhedra  
K. Iwasaki, T. Takeuchi, T. Matsui, T. Nagasaki, Y. Arita (Nagoya Univ.)

P-44

Phase Modification of Potassium Nitrate by Potassium Salts  
X.-J. Zhang, D.-L. Cao (North Univ. China)

P-45

Calorimetric Study of Order-disorder Phase Transition in Negative Thermal Expansion Material  $\text{Zr}_{1-x}\text{Sc}_x\text{W}_2\text{O}_{8-y}$   
Y. Yamamura, T. Tsuji (Univ. Tsukuba & Japan Adv. Inst. Sci. Technol.)

P-46

Giant Particle-Size Effects and the Thermal Hysteresis of Phase Transitions in  $\text{CsZnPO}_4$   
Y. Kodera, H. Kawaji, T. Tojo, T. Atake (Tokyo Inst. Technol.)

P-47

Structures and Phase Transitions in  $(K_{1-x}Rb_x)_2SeO_4$

H. Shigematsu, Y. Akishige, T. Matsui, T. Tojo, H. Kawaji, T. Atake (Shimane Univ., Nagoya Univ. & Tokyo Inst. Technol.)

P-48

Specific Heat on  $Sr_2Nb_2O_7$  and  $Sr_2Ta_2O_7$

Y. Akishige, H. Shigematsu, T. Tojo, H. Kawaji, T. Atake (Shimane Univ. & Tokyo Inst. Technol.)

P-49

Low Temperature Calorimetric Study in  $CuInP_2S_6$ ,  $CuInP_2Se_6$  and  $CuCrP_2S_6$

K. Moriya, N. Kariya, A. Inaba, T. Matsuo, I. Pritz, Y.M. Vysochanskii (Gifu Univ., Uzhgorod Univ. & Osaka Univ.)

P-50

Diffuse Scattering of Superionic Phase of  $CuAgSe$

K. Basar, T. Shimoyama, D. Hosaka, XianLian, T. Sakuma, M. Arai (Ibaraki Univ. & Japan Atomic Energy Res. Inst.)

P-51

Molecular Dynamics Simulation of the Phase Behavior of  $AgI_{1-x}Cl_x$

S. Hamakawa, M. Aniya, F. Shimojo (Kumamoto Univ.)

P-52

Formation of Amorphous LiCl Aggregate Aegions within  $Li^+$ -Ion Conducting Glasses of  $LiCl-Li_2O-P_2O_5$  Studied by Dielectrimetry and  $^{7}Li$  MAS NMR

Y. Ogiwara, K. Goto, K. Echigo, M. Hanaya (Gunma Univ.)

P-53

Proton Solubility in Proton Conductors  $SrZr_{0.95}M_{0.05}O_{3-\alpha}$  (  $M = Ga, Sc, Y$  and  $Nd$  )

T. Ito, K. Iwasaki, T. Nagasaki, T. Matsui (Nagoya Univ.)

P-54

Magnetic-Field Dependent Heat Capacity of the Singlemolecule Magnet,  
[Mn<sub>12</sub>O<sub>12</sub>(O<sub>2</sub>CPh)<sub>16</sub>(H<sub>2</sub>O)<sub>4</sub>]  
K. Miwa, Y. Miyazaki, T. Nakamoto, M. Nakano, K. Saito, A. Inaba (Osaka Univ. & Univ. Tsukuba)

P-55

Calorimetric Study of Unusual Spin Crossover Phenomena in [Fe<sup>II</sup>(DAPP)(abpt)](ClO<sub>4</sub>)<sub>2</sub>:  
Mechanochemical-Like Behavior  
Y. Miyazaki, T. Nakamoto, S. Ikeuchi, K. Saito, A. Inaba, M. Sorai, T. Tojo, T. Atake, G.S. Matouzenko, S. Zein, S.A. Borshch (Osaka Univ., Univ. Tsukuba, Tokyo Inst. Technol. & Ecole Normale Superieure, Lyon)

P-56

Structural and Thermal Properties of the Unfilled Skutterudite CoSb<sub>3</sub> and the Partially-Filled Ln<sub>x</sub>Co<sub>4</sub>Sb<sub>12</sub> (Ln = La, Ce / x = 0.05-0.15) Studied by Synchrotron Radiation X-ray Diffraction  
K. Akiyama, T. Tojo, H. Kawaji, T. Atake (Tokyo Inst. Technol.)

P-57

Thermoelectric Power of a Superconducting Salt, (DODHT)<sub>2</sub>AsF<sub>6</sub>  
H. Nishikawa, Y. Yamamura, K. Saito, T. Kodama, K. Kikuchi, I. Ikemoto, J. Yamada, H. Oshio (Univ. Tsukuba, Tokyo Metro. Univ. & Univ. Hyogo)

P-58 (K-6)

The Heat Capacities of Two Unusual Superconductors, MgB<sub>2</sub> and Na<sub>0.3</sub>CoO<sub>2</sub>·1.3H<sub>2</sub>O  
N.E. Phillips, N. Oeschler, R.A. Fisher, M.L. Foo, R.J. Cava, J.E. Gordon (Univ. California, Berkeley, Princeton Univ. & Amherst College)

P-59

Thermodynamic Studies of BEDT-TTF Based Organic Superconductors under Magnetic Fields  
T. Ishikawa, S. Yamashita, Y. Nakazawa, K. Kawamoto, M. Oguni (Tokyo Inst. Technol. & Hokkaido Univ.)

P-60 (K-7)

Heat Capacity of Unconventional Superconductors at High Magnetic Fields and High Pressure for Unconventional Superconductors

A. Junod, Y. Wang, R. Lortz, S. Abe (Univ. Geneva)

P-61

Specific Heat of PbMo<sub>6</sub>S<sub>8</sub>

S. Abe, B. Seeber, R. Lortz, Y. Wang, R. Flukiger, A. Junod (Univ. Geneva)

P-62

Heat Capacities of the 2D Triangular Spin System based on BEDT-TTF Dimers

S. Yamashita, Y. Nakazawa, Y. Shimizu, K. Kanoda, M. Oguni (Tokyo Inst. Technol. & Univ. Tokyo)

P-63

Single Crystal Growth and Heat Capacity of Chromium Chalcogenide Spinels

M. Yoshizawa, M. Tachibana, T. Tojo, H. Kawaji, T. Atake (Tokyo Inst. Technol.)

P-64

Spin Fluctuations in The Geometrically Frustrated and Strongly Correlated Pyrochlore

Y<sub>2-x</sub>Bi<sub>x</sub>Ru<sub>2</sub>O<sub>7</sub>

M. Tachibana, T. Tojo, H. Kawaji, T. Atake (Tokyo Inst. Technol.)