



**T**HE 104TH  
ICR ANNUAL  
SYMPOSIUM

**S**EMINARS

**M**EETINGS AND  
SYMPOSIUMS



# THE 104TH ICR ANNUAL SYMPOSIUM

(3 December 2004)

## ORAL PRESENTATIONS

TANAKA, Seigo (Molecular Clinical Chemistry)  
“Molecular Mechanisms of Regulating Life and Death of the Cells”

MAMITSUKA, Hiroshi (Proteome Informatics)  
“Mining from Carbohydrate Data”

- The ICR Award for Young Scientist -  
TSUJI, Hayato (Organic Main Group Chemistry)  
“Conformation Control of Oligosilanes Based on Bicyclic Structure”

HIRATAKE, Jun (Chemistry of Molecular Biocatalysts)  
“Design of Enzyme Inhibitors to Probe Enzyme Structure and Mechanism”

OKAZAKI, Masaaki (Organotransition Metal Chemistry)  
“Stepwise Bromination of Two Acetylene Molecules on a Tetrairon Core. Formation and Reactivity of Bromoacetylene - and Dibromoacetylene - Coordinated Clusters”

YOSHIDA, Hiroyuki (Molecular Aggregation Analysis)  
“Deposition of Acrylonitrile Cluster Ions on Solid Substrates”

NEMOTO, Takashi (Electron Microscopy and Crystal Chemistry)  
“Crystal Growth and Nano-fabrication at Liquid/solid Interface”

SHIRAI, Toshiyuki (Particle Beam Science)  
“Beam Physics in Electron Storage Ring, KSR”

## POSTER PRESENTATIONS

**LW** : Laboratory Whole Presentation  
**LT** : Laboratory Topic  
**GE** : General Presentation

- The ICR Award for Students -  
SHINOHARA, Akihiro (Organoelement Chemistry)  
“Synthesis of Kinetically Stabilized Silaaromatic Compounds and Their Properties”

- The ICR Award for Students -  
SAITO, Shigeki (Chemistry of Molecular Biocatalysts)  
“*Arabidopsis* CYP707As Encode (+)-Abscisic Acid 8'-Hydroxylase, a Key Enzyme in the Oxidative Catabolism of Abscisic Acid”

### — Organoelement Chemistry —

**LW** “Synthesis of Novel Organic Compounds Containing Heavier Elements Utilizing Kinetic Stabilization and Their Properties”

**GE** MIZUHATA, Yoshiyuki  
“Synthesis of Stable Tin-Carbon Double-Bond Compounds and Stannaromatics Utilizing Kinetic Stabilization”

**GE** SUGIYAMA, Yusuke  
“Synthesis of a Dibromodigermene Derivative Utilizing Kinetic Stabilization and Its Reactions”

**GE** SHIMIZU, Daisuke  
“Synthesis of Novel Polythioether Ligands Bearing Bulky Substituents and Their Complexation with Late Transition Metals”

### — Structural Organic Chemistry —

**LT** OGAWA, Kohei; KITAGAWA, Toshikazu; KOMATSU, Koichi  
“Generation and Properties of a Cyclopentadienyl Cation Annelated with Homoadamantene Frameworks”

**GE** LEE, Yangsoo; MASAOKA, Naoki; KITAGAWA, Toshikazu; KOMATSU, Koichi  
“Alkylfullerenyl Cations: Their Generation, Isolation, and Stability”

**GE** ISHIDA, Shintaro; NISHINAGA, Tohru; WEST, Robert; KOMATSU, Koichi  
“NMR Observation of 2-Silaimidazolium Cation and Properties of the Related Compounds”

**GE** MAEDA, Shuhei; MURATA, Michihisa; MURATA, Yasujiro; KOMATSU, Koichi  
“Encapsulation of Molecular Hydrogen into an Open-Cage C<sub>70</sub> Derivative”

— Synthetic Organic Chemistry —

- GE TANIMA, Daisuke  
“Temperature Dependent Visual Enantiomeric Recognition by Phenolphthalein Derivatives”
- GE MONGUCHI, Daiki  
“Asymmetric Cyclization Based on Dynamic Chirality of Enolates”

— Chemistry of Polymer Materials —

- LT OHKURA, Masahiro  
“Material Design Using Fine Particles Coated with High Density Polymer Brushes”
- GE KWAK, Yungwan; GOTO, Atsushi; FUKUDA, Takeshi  
“Kinetic Studies on Activation Processes in Organotellurium- and Organostibine-Mediated Living Radical Polymerizations”
- GE KOH, Kyoungmo  
“Precision Synthesis and Applications of Tadpole-Shaped Polymers with a Fluorine-Carrying Silsesquioxane”

— Chemistry of Polymeric Functionality Materials —

- LW “Recent Studies in the area of Chemistry of Polymeric Functionality Materials”
- GE YOSHIOKA, Taiyo; FUJIMURA, Takashi; TSUJI, Masaki; KOHJIYA, Shinzo  
“Morphological Study on Crystalline Thin Films of PBT”
- GE MATSUDA, Shota; SENOO, Kazunobu; KOHJIYA, Shinzo  
“Physical Gelation of Syndiotactic Polystyrene in the Presence of Poly(ethylene oxide)”

— Inorganic Photonics Materials —

- LT KUNIYOSHI, Minoru  
“Preparation of Organic-Inorganic Hybrid Polysiloxane Low-Melting Glasses with High Ultraviolet Transparency”
- GE IKAWA, Hiroyuki  
“Optical Characterization of the Space Charge Layer in Thin Film TiO<sub>2</sub> Electrodes”
- GE MASAI, Hirokazu  
“Effect of the Organic Groups on the Formation of Siloxane Network through Gel-Melting Method”
- GE HIDAKA, Kenji  
“Preparation of Sandwich-type TiO<sub>2</sub>/M<sub>m</sub>O<sub>n</sub>/TiO<sub>2</sub> (M=V and Cr) Multilayer Thin Film Electrodes Via Sputtering Method”

— Magnetic Materials —

- LW “Spin Induced Transport Phenomena in Nano-scale Ferromagnets”
- LT HIMENO, Atsushi  
“Ratchet Effect of a Magnetic Domain Wall in Submicron Magnetic Wires with Asymmetric Periodical Notches”

— Biofunctional Design-Chemistry —

- LT HIRATA, Tsuyoshi  
“50 Base Pairs Recognition and Altered DNA Binding Mode by the Longest Artificial 15-Zinc Finger Protein”
- GE MASUI, Yumi  
“Improvement of Transfection Efficiency by the Addition of pH-sensitive Peptide”

— Chemistry of Molecular Biocatalysts —

- LT SHIMIZU, Bun-ichi; TAMAI, Michiko; KAI, Kosuke; SAKATA, Kanzo  
“Tracer Analysis of the Oxidation Steps in Biosynthesis of Coumarins in Sweet Potato Using <sup>18</sup>O<sub>2</sub>”
- LT FUJITA, Satomi; OHNISHI, Toshiyuki; WATANABE, Bunta; MIZUTANI, Masaharu; SAKATA, Kanzo  
“Biochemical Analysis of Plant Cytochrome P450 Monooxygenases in Brassinosteroid Biosynthesis”

— Molecular Biology —

- LT OKA, Atsuhiko; AOYAMA, Takashi; YASUDA, Keiko; TANIGUCHI, Masatoshi  
“Function and Target Gene Analyses of the *Arabidopsis* Response Regulator ARR1 Capable of Transactivation”
- GE TSUGE, Tomohiko; OKA, Atsuhiko  
“CSN: The Key Complex Linking Environmental Signals to Morphogenesis in Plants”
- GE IMAI, Kumiko  
“Function Analysis of AtCYCA2;3 in Regulation of Endoreduplication”

— Molecular Clinical Chemistry —

- GE TAKAGI, Junpei; TAKEHASHI, Masanori; TANAKA, Seigo  
“Mitochondrial Impairment Induced by Poly(ADP-ribose) polymerase-1 Activation after Cerebral Ischemia”
- GE TAKEHASHI, Masanori; TANAKA, Seigo  
“Expression and Complex-formation of Brain-specific Protein Septin 3”

— Molecular Materials Chemistry —

- LT YAMADA, Tomonori; TSUKAMOTO, Naoki; KUSAKA, Yasunari; KAJI, Hironori; HORII, Fumitaka  
“Precise Structure Analysis of Organic EL Materials by Solid-State NMR and Quantum Chemical Calculations”
- LT SUZUKI, Furitsu; TSUJITANI, Kouji; HIRAI, Asako; HORII, Fumitaka  
“Structure and Structural Change of Sub-elementary Fibrils of Bacterial Cellulose in an Initial Period of Layered System Organization”

— **Hydropheric Environment Analytical Chemistry** —

LT NORISUE, Kazuhiro  
“Distribution of Trace Metals in the Sulu Sea and Its Adjacent Basins”

GE SASAKI, Yoshihiro  
“Minimal Mode Simulated in Kicked Oscillators”

— **Solution and Interface Chemistry** —

LT OKAMURA, Emiko; WAKAI, Chihiro; MATUBAYASI, Nobuyuki; NAKAHARA, Masaru  
“Molecular Dynamics in Lipid Membranes and Drug Delivery by NMR”

GE NAGAI, Yasuharu; MOROOKA, Saiko; MATUBAYASI, Nobuyuki; NAKAHARA, Masaru  
“Noncatalytic Reactions of Aldehyde and Ether in Supercritical Water”

— **Molecular Microbial Science** —

LT KUROKAWA, Suguru  
“Physiological Function of Selenocysteine Lyase”

GE KAWAMOTO, Jun  
“Proteome Analysis of a Psychrotrophic Bacterium, *Shewanella* sp. Ac10, to Elucidate Its Cold-adaptation Mechanism”

— **Polymer Materials Science** —

LW “Accurate Analysis for Higher Order Polymer Structure”

GE KAWAI, Takahiko; STROBL, Gert; KANAYA, Toshiji  
“Crystallization of a Poly(ethylene-co-octene): A Precursor Phase and two Competing Mechanisms”

— **Molecular Rheology** —

LW “Perspective of Molecular Rheology”

GE KIKUCHI, Toshimitsu  
“Electric Birefringence of Amorphous Polymers”

— **Molecular Aggregation Analysis** —

LT YAMAGUCHI, Takayuki  
“Molecular Photoelectron Spectroscopy of BMDCM”

GE ASAMI, Koji  
“Dielectric Relaxation in Microemulsions Near Temperature-dependent Phase Inversion”

— **Supramolecular Biology** —

LT TAKAHARA, Keigo; TAKEUCHI, Ken-ichi; UMEDA Masato  
“The Role of Fatty Acid Desaturase in Energy Metabolism of Organisms”

LT TANIUCHI, Kentaro; INADOME, Hironori; KATO, Utako; TAKEUCHI, Ken-ichi; UMEDA, Masato  
“Regulation of Cell Morphology and Cell Size in Multicellular Organisms”

— **Particle Beam Science** —

GE YAMAZAKI, Atsushi  
“Generation of a Monoenergetic Electron Beam Using a Single Laser Pulse”

GE FUJIMOTO, Shinji  
“Non-destructive Beam Monitor Development for a Small Ion Storage Ring S-LSR”

GE TAKEUCHI, Takeshi  
“Magnetic Field Measurement of Quadrupole Magnets and Accelerator Alignment for S-LSR”

GE TONGU, Hiromu  
“Improvement of Beam Lifetime in the Electron Storage Ring, KSR”

GE TANABE, Mikio; SHIRAI, Toshiyuki; IKEGAMI, Masahiro; TONGU, Hiromu; NODA, Akira  
“Design of the Deflection Elements for Dispersion Control”

— **Laser Matter Interaction Science** —

GE SHIMIZU, Seiji  
“Desorption/ionization Induced by an Intense Short Pulse Laser”

— **Electron Microscopy and Crystal Chemistry** —

LW “Research Topics in Our Laboratory”

GE MINARI, Takeo  
“Organic Field-effect Transistor Based on Single-grain Pentacene”

— **Structural Molecular Biology** —

LT FUJII, Tomomi; HATA, Yasuo  
“Structure of the Complex between Carboxypeptidase Y and its Protein Proteinase Inhibitor IC”

— **Organic Main Group Chemistry** —

GE MATSUNAGA, Tadafumi  
“Cross-coupling Reaction of Aryl- and Alkenyl-trifluorosilanes with 1-aryltriazenes Using a Palladium Catalyst”

GE SASE, Shohei  
“Synthesis of Disilatriptycene Oligomers”

— **Advanced Solid State Chemistry** —

LW “Transition Metal Oxides - Functions and Synthesis -”

GE KAN, Daisuke  
“Fabrication and I-V Characteristics of p-n Junctions Composed of High-Tc Superconductors and La-doped SrTiO<sub>3</sub>”

GE YAMADA, Ikuya  
“Synthesis, Structure of  $\text{Ca}_{2-x}\text{CuO}_2\text{Cl}_x$ ”

— **Organotransition Metal Chemistry** —

LT “International Research Center for Elements Science,  
Organotransition Metal Chemistry: Research Topics in  
2004”

GE KATAYAMA, Hiroyuki  
“(Z)-Selective Cross-dimerization of Arylacetylenes with  
Silylacetylenes Catalyzed by Vinylideneruthenium Com-  
plexes”

— **Bioknowledge Systems** —

LW “Bioknowledge Database KEGG and Its Application to  
Bioinformatics”

GE KOTERA, Masaaki  
“Development of the EC Number Prediction System Based  
on Changes of Reactant Structures”

— **Biological Information Network** —

LW “Computational Analysis of Structures of Biological Infor-  
mation Networks and Chemical Compounds”

— **Bioinformatics Training Unit** —

LT KATO, Kazutaka  
“Multiple Sequence Alignment Program MAFFT”

# SEMINARS

Prof ASANO, Tsutomu

Faculty of Science, Shizuoka University, Japan  
“Initial Stage of Crystallization of Polymer or Crystallizable Material”  
28 June 2004

Prof BANKAITIS, Vytas A.

Department of Cell & Developmental Biology, School of Medicine, University of North Carolina, USA  
“Phosphatidylinositol Transfer Proteins: Novel Signaling Functions in Higher Eukaryotic Membrane Trafficking”  
26 April 2004

Prof BEN-NAIM, Arieh

The Hebrew University of Jerusalem, Israel  
“Cooperativity in Biochemical Binding Systems”  
10 March 2004

Prof BOPP, Philippe A.

Universite Bordeaux I, France  
“Modeling Time-Resolved Spectroscopies HDO in D<sub>2</sub>O or A Very Simple Model of Intermolecular Energy Relaxation in Order to Study Energy Flows in Liquids”  
10 June 2004

Prof CHHABRA, Raj P.

Indian Institute of Technology, Kanpur, India  
“Flow of Power Law Fluids Past a Square Bar”  
6 July 2004

Prof CLAYDEN, Jonathan

Department of, University of Manchester, England  
“Controlling the Stereochemistry of Tertiary Amides and Their Lithio Derivatives”  
26 March 2004

Prof DIBO, Gabor

Institute of Chemistry, Eotvos L. University, Hungary  
“A New Approach for High-Throughput Screening”  
22 October 2004

Prof FERRE, Jacques

Laboratoire de Physique des Solides, Université Paris-Sud, Orsay, France  
“Magneto-optical Study of the Magnetization Reversal Dynamics in Ultrathin Films and Patterned Structures”  
13 May 2004

Dr FLEISCHMANN, Hans-Peter

Institute of Food Chemistry Technical University of Braunschweig, Germany  
“Carotenoid Degradation and Flavor in Japanese Green Tea from Shizuoka Area”  
12 October 2004

Dr FOKINE, Michael A.

Toyota Technological Institute, Japan  
“Fiber Based Components: Modulators, Filters and Sensors”  
10 December 2004

Dr FRIEDLEIN, Rainer

Department of Physics, Linköping University, Linköping,

Sweden

“Photoelectron Spectroscopy on Li-Intercalation Compounds of Aromatic Molecules: Can We Optimize the Carbon-Based Electrode in Li-Ion Batteries?”  
7 September 2004

Prof FUKUI, Kiyoshi

Institute for Enzyme Research, University of Tokushima, Tokushima, Japan  
“Molecular Enzymology of D-Amino Acid Oxidase and a New Apoptosis-Inducing Molecule Nucling”  
9 February 2004

Prof FURUYA, Hidemine

Tokyo Institute of Technology, Tokyo, Japan  
“Correlation between Molecular Dynamics and Local Structure in Amorphous Polymers”  
25 October 2004

Prof GASPAR, Peter P.

Washington University, USA  
“Learning from Silylenes and Supersilylene”  
4 November 2004

Dr GRIESER, Manfred

Max Planck Institute für Kernphysik, Heidelberg, Germany  
“The Accelerator Facility at MPI for Nuclear Physics in Heidelberg - TSR, CSR and USR (Contribution to Flair) -”  
9 November 2004

Prof HAESSENDONCK, Chris Van

Laboratory of Solid-State Physics and Magnetism, Katholieke Universiteit Leuven, Belgium  
“Studying Ferromagnetism with Combined Magnetic Force Microscopy and Magnetoresistance Measurements”  
21 May 2004

Prof HAN, Yanchun

Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, China P. R.  
“Micro/Nano-Patterning of Thin Polymer Films with Reversibly Switchable Properties”  
17 November 2004

Dr HANAGURI, Tetsuro

Magnetic Materials Laboratory, RIKEN, Wako, Japan  
“STM/STS Studies on a Lightly-doped Cuprate Ca<sub>2-x</sub>Na<sub>x</sub>CuO<sub>2</sub>Cl<sub>2</sub>”  
2 November 2004

Prof HERGES, Rainer

Universität Kiel, Germany  
“Approaching the Rational Synthesis of Carbon Nanotubes”  
30 September 2004

Prof HIROI, Zenji

Institute of Solid State Physics, University of Tokyo, Tokyo, Japan  
“Chemistry and Physics of Transition Metal Oxides”  
17 February 2004

Prof Em HORIE, Kazuyuki

The University of Tokyo, Tokyo, Japan

“Microscopic Light Scattering of Polymer Gels and Optical Control of Polymer Gels and Liquid Crystals”  
9 December 2004

Prof HUDECZ, Ferenc  
Research Group for Peptide Chemistry, Hungarian Academy of Sciences, Hungary  
“Oligo- and Polypeptide Targeting of Drugs, Epitopes and Reporter Molecules”  
25 October 2004

Dr JEONG, Young Uk  
Korea Atomic Energy Research Institute, Daejeon, Korea  
“Compact Terahertz-range Free-Electron Laser and its Application”  
5 January 2004

Prof KAGAN, Henri Boris  
Institut de Chimie Molculaire et des Materiaux, Universite de Paris-Sud, France  
“Double Asymmetric Catalytic Reactions, Principle and Application”  
19 November 2004

Dr KIKUTANI, Eiji  
High Energy Accelerator Research Organization, Tsukuba, Japan  
“Status and Future of KEKB”  
2 March 2004

Prof KISHIO, Koji  
Graduate School of Engineering, University of Tokyo, Tokyo, Japan  
“Magneto-science and Magnetochemistry”  
12 March 2004

Dr KRAKOVSKY, Ivan  
Charles University, Czech Republic  
“Structure and Properties of Hydrophilic Epoxy Networks”  
20 October, 2004

Prof KUROKAWA, Shin-ichi  
High Energy Accelerator Research Organization, Tsukuba, Japan  
“Achievement of KEK-B Factory”  
29 September 2004

Prof KUROKAWA, Shin-ichi  
High Energy Accelerator Research Organization, Tsukuba, Japan  
“Present Situation of Accelerators in Asia”  
29 September 2004

Research Planning Director KYOTO, Michihisa  
Sumitomo Electric Industries, Ltd., Osaka, Japan  
“Strategy in Research & Development at Sumitomo Electric Industries, Ltd.”  
13 December 2004

Dr LEE, Kitae  
Korea Atomic Energy Research Institute, Daejeon, Korea  
“Generation of Intense Attosecond X-ray Pulse using Relativistic Nonlinear Thomson Scattering”  
5 January 2004

Prof LIN, Yuzheng  
Tsinghua University, Beijing, China P. R.  
“The Recent R&D of Electron Linacs and Their Applications at Tsinghua University”  
18 March 2004

Prof LIU, Yunqi  
Institute of Chemistry, Chinese Academy of Sciences, Beijing,

China P. R.  
“Organic/polymeric Light-emitting Diodes”  
22 January 2004

Prof LIU, Yunqi  
Institute of Chemistry, Chinese Academy of Sciences, Beijing, China P. R.  
“Phthalocyanines: Synthesis, Characterization and Their Application in Electronic Devices”  
22 January 2004

Senior Researcher MACHIDA, Masayuki  
Research Center for Glycoscience, National Institute of Advanced Industrial Science and Technology, Ibaraki, Japan  
“From Basic Genetic Engineering to Functional Genomics”  
16 January 2004

Senior Researcher MACHIDA, Masayuki  
Research Center for Glycoscience, National Institute of Advanced Industrial Science and Technology, Ibaraki, Japan  
“What is Functional Genomics?”  
20 February 2004

Senior Researcher MACHIDA, Masayuki  
Research Center for Glycoscience, National Institute of Advanced Industrial Science and Technology, Ibaraki, Japan  
“The Relation between the Progress of Technology and the Evolution of Functional Genomics”  
18 March 2004

Dr MAGONOV, Sergei  
Digital Instruments / Veeco Metrology, USA  
“Visualization of Polymer Structures with Atomic Force Microscopy: From Individual Macromolecules to Bulk and Multicomponent Materials”  
14 June 2004

Dr MARGETIC, Davor  
Rudjer Boskovic Institute, Croatia  
“Novel Thermal Isomerizations of Cyclobutane Di-(carbomethoxy)triazolines Involving Intramolecular 1,3-Dipolar Cycloreversion”  
20 January 2004

Prof MARTIN, Nazario  
Complutense University, Spain  
“Mimicking Photosynthesis: The Quest for Highly Stabilized Radical-Ion Pairs in Functionalized Fullerenes”  
25 June 2004

Prof MESHKOV, Igor N.  
Joint Institute for Nuclear Research (JINR), Dubna, Russia  
“Some Peculiarities of Electron Cooling at Low Ion Energy”  
19 April 2004

Dr MICHEL, Sarah, L. J.  
Maryland University, USA  
“Selective RNA Binding Properties of a Non-Classical Zinc Finger Protein Involved in Inflammatory Response (NUP-475): A Peptide Mimetic Approach”  
16 November 2004

Prof MÜLLER, Axel H. E.  
Bayreuth University, Germany  
“New Amphiphilic and Hybrid Nanoparticles: Janus Micelles, Core-Shell Cylinders, Nanomagnets, Nanowires”  
10 December 2004

CEO and Chairman NAGASAWA, Koichi  
Renesas Technology Corporation, Tokyo, Japan

“Current status and Future of the Semiconductor Industry”  
13 December 2004

Prof NELLIS, William J.  
Harvard University, USA  
“The Semiconductor-Metal Transition in Fluid H, O, N, Rb, and Cs at High Pressures”  
13 September 2004

Prof NG, Michael Kwok-Po  
Department of Mathematics, the University of Hong Kong, Hong Kong, China P.R.  
“On Discovery of Extremely Low-dimensional Clusters Using Semi-supervised Projected Clustering”  
21 October 2004

Prof NICLES, Peter  
Max-Born-Institute, Berlin, Germany  
“Interaction of Short Intense Laser Pulses with Matter, - Activities at the Max-Born-Institute Berlin -”  
17 June 2004

Dr PARK, Seong Hee  
Korea Atomic Energy Research Institute, Daejeon, Korea  
“Preliminary Study of Compton X-ray Source Generation at KAERI”  
5 January 2004

Prof ROSSKY, Peter J.  
Institute for Theoretical Chemistry  
Department of Chemistry & Biochemistry, University of Texas, USA  
“Chemistry in Supercritical Solvents”  
9 September 2004

Chief Engineer SATO, Kenichi  
Energy and Environmental Technology R&D Laboratories, Sumitomo Electric Industries, Ltd., Osaka, Japan  
“Application of Bi-based High- $T_c$  Superconducting Wire”  
12 March 2004

Prof SCHAPER, Andreas  
Material Sciences Center, Philipps University in Marburg, Marburg, Germany  
“Synthesis, Structure, and Properties of Carbon Nanotubes without and with Metal Filling”  
23 February 2004

Prof SCHAPER, Andreas  
Material Sciences Center, Philipps University in Marburg, Marburg, Germany  
“Self-organized Modulation and Ordering in Mineral Single Crystals and in Heteroepitaxial Semiconductor Layers”  
27 February 2004

Prof SCHAPER, Andreas  
Material Sciences Center, Philipps University in Marburg, Marburg, Germany  
“About Spherical and Fibrous Nanomaterials of Different Nature, and for Different Potential Purposes”  
12 March 2004

Prof SCHAPER, Andreas,  
Material Sciences Center, Philipps University in Marburg, Marburg, Germany  
“Electron Microscopic Study of Quasicrystals”  
16 March 2004

Prof SCHMUTZLER, Reinhard  
Institut für Anorganische und Analytische Chemie, Technische

Universität Braunschweig, Germany  
“Oxidative Addition and Insertion Reactions of Hexafluoroacetone and Perfluorinated 1,2-Diketones to Compounds of Low-valent Phosphorus - New Modes of Addition and Unusual Products”  
25 March 2004

Prof SHEVELKO, Viatcheslav P.  
Lebedev Physical Institute Russian Academy of Science Leading Scientist, Moscow, Russia  
“Target Density Effects in Collisions of Fast Ions with Solid Targets”  
30 November 2004

Dr SHIMIZU, Hirohiko  
RIKEN, Saitama, Japan  
“Small-angle Neutron Scattering using Magnetic Focusing Lens”  
19 May 2004

Dr SIDORIN, Anatoly  
Joint Institute for Nuclear Research (JINR), Dubna, Russia  
“Simulation of Particle Dynamics in Presence of Electron Cooling using BETACOOl Code”  
6 February 2004

Dr SMIRNOV, Alexandre Valentinovich  
Joint Institute for Nuclear Research (JINR), Dubna, Russia  
“Simulation of Crystalline Beams in Storage Ring using BETACOOl Code”  
6 February 2004

Prof STANGER, Amnon  
Technion (Israel Institute of Technology)  
“Another Story of Aromaticity that is Told by Strained Aromatic Compounds”  
12 February 2004

Prof STREUBEL, Rainer  
Institut für Anorganische Chemie, Universität Bonn, Germany  
“Electrophilic Terminal Phosphinidene Complex–Coordination Chemistry of a Group 15 Element”  
6 December 2004

Dr STROSZNAJDER, Robert  
Department of Neurophysiology, Medical Research Center, Polish Academy of Sciences, Warszawa, Poland  
“Poly(ADP-ribose) in Neurodegeneration”  
1 November 2004

Dr SUBRAMANIAN, Mas  
Experimental Station, DuPont CR&D, Wilmington, USA  
“Magnetic Perovskites: Magneto Capacitance, Colossal Dielectrics and Valence Degenerate Metals”  
26 October 2004

Prof SUGAWARA, Tadashi  
Graduate School of Arts and Sciences, The University of Tokyo, Tokyo, Japan  
“Towards Self-Replicating Systems”  
2 July 2004

Prof SYRESIN, Evgeny  
Joint Institute for Nuclear Research (JINR), Dubna, Russia  
“Formation of Cooled Ion Beams in Compact Synchrotrons and Storage Rings”  
24 February 2004

Prof TAKAHASHI, Hideaki  
Graduate School of Engineering Science, Osaka University, Osaka, Japan



“Fundamentals and Applications of Hybrid First-Principles Molecular Dynamics Simulations”  
28-29 January 2004

Assoc Prof TAKEDA, Shigenobu  
Department of Aquatic Bioscience, University of Tokyo, Tokyo, Japan  
“A Variety of Iron-utilization Processes by Marine Phytoplankton”  
20 December 2004

Dr TANAKA, Katsunori  
Chemistry Department, Columbia University, USA  
“Configurational Studies of Olefin-Containing Natural Products by Cross Metathesis/CD Analysis”  
9 October 2004

Prof TEIXIDOR, Francesc  
Consejo Superior de Investigaciones Científicas (C.S.I.C.), Spain  
“Relevance of the Electronegativity of Boron in h<sup>5</sup>-Coordinating Ligands. Regioselective Monoalkylation and Monoarylation in Cobaltabisdicarbollide [3,3<sup>1</sup>-Co(1,2-C<sub>2</sub>B<sub>9</sub>H<sub>11</sub>)<sub>2</sub>]- Clusters”  
6 December 2004

Dr TONGE, Matthew P.  
UNESCO Center of Macromolecules and Materials, Stellenbosh University, South Africa  
“Mechanistic Studies on RAFT Polymerisation”  
3 February 2004

Dr TRACZ, Adam  
Center of Molecular and Macromolecular Studies, Polish Academy of Sciences, Poland  
“Crystallization of Polyethylene at Melt/atomically Flat Solid Interface; AFM studies”  
12 March 2004

Senior Research Scientist TSUKAGOSHI, Kazuhito  
RIKEN, Japan  
“Nano-Science and Nano-Technology”  
27-28 September 2004

Dr UTSUMI, Wataru  
Synchrotron Radiation Research Center, Japan Atomic Energy Research Institute, Mikazuki, Hyogo, Japan  
“Congruent Melting of Gallium Nitride at 6 GPa and Its Application to Single-crystal Growth”  
8 April 2004

Prof VIVES, Eric  
University of Montpellier II, France  
“Cell Penetrating Peptides: From Mystery to Reality”  
16 November 2004

Prof WEST, Robert  
University of Wisconsin, Madison, USA  
“Some Aromatic Silicon and Germanium Compounds”  
16 October 2004

Prof WUNDERLICH, J.  
Hitachi Cambridge Laboratory, UK  
“Optical Spin Detection of Quasi-Two-Dimensional Charge Carriers: Experimental Evidence of the Spin Hall Effect”  
18 November 2004

Prof YAN, Chun-hua  
College of Chemistry, Peking University, Beijing, China P. R.  
“Rare Earth Separation and Functional Materials Chemistry”  
12 October 2004

Prof YOUNG, Petey  
Southern Oregon University, USA  
“Writing for Publication in English”  
16 October 2004

# MEETINGS AND SYMPOSIUMS

## **The 3rd International Symposium of the Kyoto University COE Project “Elements Science”: “Elements Selection Rule and Materials Science” in Commemoration of the Opening of International Research Center for Elements Science**

Organized by TAMAO, Kohei and KOMATSU, Koichi  
9-10 January 2004 (ICR, Kyoto)

### **Scientific Sessions**

Prof KAYA, Koji

Institute for Molecular Science

“Photo-Electron Spectroscopy of Solvated Electrons in Nano-scaled Molecular Clusters: From Dipolar Molecules to Aromatic Molecules”

Prof BERTRAND, Guy

University of California, Riverside, USA

“Stable Singlet Diradicals and Tetraradicals Based on Group 13 and 15 Elements”

Prof ETOURNEAU, Jean

University of Bordeaux, France

“Electron Localization and Unusual Hysteresis in the Magnetic Susceptibility of Cubic Hexaboride  $\text{KB}_6$ ”

Prof LEO, Karl

Technical University of Dresden, Germany

“Electrically Doped Organic Semiconductors: Basics and Device Applications”

Prof SAITO, Gunzi

Graduate School of Science, Kyoto University

“Organic Superconductor with Anisotropic Spin-Lattice: Interplay between Spin-Frustration and Superconductivity in  $\kappa\text{-(ET)}_2\text{Cu}_2(\text{CN})_3$ ”

Prof GULDI, Dirk M.

University of Notre Dame, USA

“Novel Multifunctional Nanoarchitectures in Energy Conversion”

Prof PENG, Shie-Ming

National Taiwan University, Taiwan

“From Metal String Complexes to Metal Wires”

Prof LIU, Yunqi

Chinese Academy of Sciences, China P. R.

“Electronic Devices Based on Multiwalled Carbon Nanotubes”

Prof NAKAMURA, Eiichi

The University of Tokyo

“Organic Synthesis: The Gateway to Nanoscience”

Prof GLEITER, Rolf

University of Heidelberg, Germany

“Weak Forces – Strong Effects. Nanotube Formation Favored by Chalcogen-Chalcogen Interactions”

Prof TOKITOH, Norihiro

Institute for Chemical Research, Kyoto University

“The Latest Frontiers of Organoelement Chemistry”

Prof MANNERS, Ian

The University of Toronto, Canada

“Functional and Supramolecular Metallopolymers”

Prof OSUKA, Atsuhiko

Graduate School of Science, Kyoto University

“Exploration of Novel Porphyrinoids; *Meso-meso* Coupled Porphyrin Arrays and Expanded Porphyrins”

Prof SCHLOSSER, Manfred

Swiss Federal Institute of Technology, Switzerland

“The 2 x 3 Toolbox of Organometallic Methods for The Regiochemically Exhaustive Functionalization of Aromatic and Heterocyclic Substrates”

Prof SUGIURA, Yukio

Institute for Chemical Research, Kyoto University

“Potential of Arginine-Rich Peptides as Carriers for Intracellular Protein Delivery”

Prof TATSUMI, Kazuyuki

Nagoya University

“Transition Metal Sulfides -Synthetic Models of the Nitrogenase Active Sites”

### **Poster Sessions**

Kousaku Miyake and Ko Mibu

“Magnetism and Magnetoresistance Effect of NiFe Wires or Dots with Nanocontacts”

Takuya Okuno and Ko Mibu

“Temperature Dependence of Switching Field of Turned-up Magnetization in  $\text{CoNbZr}$  Circular Dots”

Takuo Ohkochi, Ko Mibu, Nobuyoshi Hosoi, and Hiroo Hashizume

“Induced Spin Polarization in Non-magnetic Layers of Magnetic/Non-magnetic Metallic Multilayers”

Norihiro Jiko and Ko Mibu

“Magnetism of Cr-based Multilayers”

Shinpei Yamamoto and Mikio Takano

“Nanocomposite Magnet Prepared by Core-Shell Nanoparticle”

Shintaro Ishiwata, Masaki Azuma, and Mikio Takano

“Pressure-induced Insulator to Metal Transition in  $\text{BiNiO}_3$ ”

Seiji Niitaka, Masaki Azuma, Mikio Takano, Eiji Nishibori, Masaki Takata, and Makoto Sakata

“High-pressure Synthesis and Physical Properties of Bi-contained Transition Metal Oxides  $\text{BiCrO}_3$  and  $\text{BiCoO}_3$ ”

Dan Wang, Ranbo Yu, Masaki Azuma, Takahito Terashima, and Mikio Takano

“Solvo-Thermal Synthesis of Novel Low-Dimensional Zirconium Phosphates”

Daisuke Kan, Takahito Terashima, Mikio Takano, and Akio Yamanaka

“Preparation and Optical Properties of Single-Crystalline  $\text{CaCuO}_2$  Thin Film with Infinite Layer Structure”

- Atsushi Ishizumi, Hiroki Matsubara, and Yoshihiko Kanemitsu  
“Optical Properties of Semiconductor Nanocrystals Doped with Luminescence Centers”
- Hideyuki Inouye, Yoshihiko Kanemitsu, Takami Shimizu, and Mikio Miyake  
“Femtosecond Optical Responses in a Self-organized Metal Nanoparticle System”
- Takehiko Nagai, Hideyuki Inoue, and Yoshihiko Kanemitsu  
“Luminescence Properties of Highly Excited GaN Films”
- Megumi Mizuno, Masahide Takahashi, Yomei Tokuda, and Toshinobu Yoko  
“Formation of Organic-inorganic Hybrid Low-melting Glasses Via Acid-base Reaction of Phosphoric Acid and Chlorosilane”
- Masanori Saito, Hiroshi Kakiuchida, Yomei Tokuda, Masahide Takahashi, and Toshinobu Yoko  
“Laser Fabrication of Organic-inorganic Hybrid Low-melting Glass Prepared through Non-aqueous Acid-base Reaction”
- Yomei Tokuda, Masahide Takahashi, and Toshinobu Yoko  
“Inhomogeneous Distribution of Local Structures around Na Ion in Silicate Glasses by  $^{23}\text{Na}$  MQMAS NMR Spectroscopy”
- Masahide Takahashi, Yomei Tokuda, and Toshinobu Yoko  
“Photochemical Reactions Responsible for Photorefractive Index Change in Germanosilicate Glasses”
- Hirokazu Masai, Masahide Takahashi, Yomei Tokuda, and Toshinobu Yoko  
“Effect of the Organic Groups on the Formation of Siloxane Network”
- Dorjpalam Enkhtuvshin, Masahide Takahashi, and Toshinobu Yoko  
“Effects of the Accumulated  $\text{VO}_2$ -rich Regions on the Photoelectrochemical Performance of the Sol-gel Derived  $\text{Ti}_{0.95}\text{V}_{0.05}\text{O}_2$  Thin Film Electrodes”
- Youichiro Harada, Naoki Sato, Takahito Terashima, Ryoko Kanda, and Mikio Takano  
“A study of Oxide Thin Films towards Transparent Electrode Materials”
- Hiroyuki Yoshida and Naoki Sato  
“Characterization of a Thin Film Prepared by the Deposition of Cluster Ions of Acrylonitrile on a Substrate”
- Jun-ya Tsutsumi, Hiroyuki Yoshida, Naoki Sato, Inta Muzikante, and Ojars Neilands  
“Changes in Crystal Structure and Solid State Properties of a Zwitterionic Compound by Its Aza Substitution”
- Kazukuni Nishimura, Gunzi Saito, Chin Hong Chong, Masaru Makihara, Salavat Khasanov, Hideki Yamochi, Akihiro Otsuka, Kenji Kamada, Koji Ohta, and Jun Kawamata  
“The Estimation of Intramolecular Ionicity, Dipole Moments and (Hyper)polarizabilities in the  $\text{D}^{\delta+}$ - $\pi$ - $\text{A}^{\delta-}$  Zwitterions Prepared from Indoline and TCNQ Derivatives”
- Hideki Yamochi, Akira Ota, and Gunzi Saito  
“Status of  $(\text{EDO-TTF})_2\text{PF}_6$  at Present”
- Masafumi Sakata, Mitsuhiko Maesato, Akira Ota, Hideki Yamochi, and Gunzi Saito  
“The Uniaxial Strain Effect on Transport Property of  $(\text{EDO-TTF})_2\text{PF}_6$ ”
- Yukihiro Yoshida, Mitsuhiko Maesato, Hideki Yamochi, and Gunzi Saito  
“Triangular Spin Lattice Based on Low-Symmetrical EOET-TTF”
- Mitsuhiko Maesato, Yasuhiro Shimizu, Gunzi Saito, Kazuya Miyagawa, and Kazushi Kanoda  
“Role of Anisotropy in the  $\kappa$ -type Structure of the BEDT-TTF Salts”
- Masaya Soeda, Jun Hagiwara, Hideki Yamochi, and Gunzi Saito  
“Synthesis of New Donor Molecule, TP-EDOT and Preparation of its  $\text{PF}_6$  Complex”
- Tsuyoshi Haneda, Hideki Yamochi, Gunzi Saito, Adam Tracz, Jacek Ulanski, Olga Drozdova, and Kyuya Yakushi  
“Humidity Sensitive Conductivity of  $(\text{BEDO-TTF})_2\text{Br}(\text{H}_2\text{O})_3$  as a Bulk Property”
- Junichi Fujii, Yukihiro Yoshida, Koji Muroi, Akihiro Otsuka, and Gunzi Saito  
“1-Ethyl-3-methylimidazolium Based Ionic Liquids Containing Cyano Groups: Synthesis, Physical Property and Crystal Structure”
- Yoshikazu Umemoto, Yasushi Morita, Eigo Miyazaki, Suguru Maki, and Kazuhiro Nakasuji  
“Syntheses and Physical Properties of an Ethylenedithio-TTF Derivative with Butyluracil and Its CT Complexes”
- Takeshi Ishiyama, Shogo Yamamoto, and Fumiyuki Ozawa  
“Synthesis and Reactions of Hydridoplatinum(II) Complexes Bearing Diphosphinidencyclobutene (DPCB) Ligands”
- Takashi Sagawa and Fumiyuki Ozawa  
“Alkyne-Insertion into Group 14 Element Platinum Bonds”
- Hiroyuki Katayama, Yosuke Fukuse, Masato Nagao, and Fumiyuki Ozawa  
“Highly Selective Ring-Opening Cross-Metathesis Reactions Using Fischer-type Carbene Ruthenium Catalysts”
- Masaki Shimizu, Xinyu Liu, and Tamejiro Hiyama  
“A Facile Stereocontrolled Approach to  $\text{CF}_3$ -Substituted Triaryl-ethenes”
- Masaki Shimizu, Masanori Nata, Kotaro Watanabe, and Tamejiro Hiyama  
“Novel Liquid Crystalline Compounds Based on 1-Aryl-2,3,5,6,7,8-hexasilabicyclo[2.2.2]octanes”
- Yoshiaki Nakao, Jun Satoh, Eiji Shirakawa, and Tamejiro Hiyama  
“Palladium-Catalyzed Decarbonylative Carbostannylation of Propargyl Esters”
- Yoshiaki Nakao, Shinjiro Ishihara, Yasuhiro Hirata, Shinichi Oda, Yuki Honda, Eiji Shirakawa, and Tamejiro Hiyama  
“Palladium Iminophosphine-Catalyzed Stannylation Cyclization of Conjugated Enynes and Diyne”
- Masaki Shimizu, Takuya Kurahashi, Hirotaka Kitagawa, Katsuhiro Shimono, and Tamejiro Hiyama  
“*gem*-Silylborylation Approach to Tri- and Tetrametalmethanes: the First Synthesis of Boryl(germyl)(silyl)(stannyl)methanes”
- Hideki Amii, Takeshi Kobayashi, Yutaka Ichihara, Takashi Nakagawa, and Kenji Uneyama  
“Mg-Promoted Double Silylation of Trifluoroacetimidoyl Chlorides: A New Entry to the Fluorinated Dianion Equivalents”

Shiroh Futaki, Ikuhiko Nakase, Miki Niwa, Tomoki Suzuki, Daisuke Nameki, Ei-ichi Kodama, Masao Matsuoka, and Yukio Sugiura  
“Intracellular Delivery of RNase S Complex Bearing Arginine-rich Peptides”

Wataru Nomura and Yukio Sugiura  
“Effects of Length and Position of Extended-Linker on Sequence-Selective DNA Recognition of Zinc Finger Peptides”

Michihisa Murata, Yasujiro Murata, and Koichi Komatsu  
“Synthesis of Open-Cage Fullerene Derivatives and 100% Encapsulation of a Hydrogen Molecule”

Tetsuya Yamazaki, Aihong Han, Jing-Rong Lin, Yasujiro Murata, and Koichi Komatsu  
“Synthesis and Polymerization of the Propylenedioxy-Substituted Terthiophene- Fullerene Dyads”

Yangsoo Lee, Toshikazu Kitagawa, and Koichi Komatsu  
“Charge-Transfer-Promoted Substitution of Alkyl C<sub>60</sub> Chloride by Proton ponge”

Takayuki Uto, Tohru Nishinaga, and Koichi Komatsu  
“Reactions of Benzene and COT Fully Annulated with Bicyclo[2.1.1]hexane”

Rika Nogita, Tohru Nishinaga, Daisuke Yamazaki, and Koichi Komatsu  
“Synthesis and Properties of Bis(bicyclo[2.2.2]octeno)TTF”

Kohei Ogawa, Toshikazu Kitagawa, and Koichi Komatsu  
“Isolation and Structure of Stable Cyclopentadienyl Radical Annulated with Homoadamantene”

Shuichi Suzuki, Yasushi Morita, Kozo Fukui, Hiroshi Kitagawa, Hideo Kishida, Hiroshi Okamoto, Akira Naito, Shigeaki Nakazawa, Kazunobu Sato, Daisuke Shiomi, Takeji Takui, and Kazuhiro Nakasuji  
“Studies on the Thermochromism of the 1,3-Diazaphenalenyl Radical in Solution and Solid States”

Noriyoshi Nagahora, Takahiro Sasamori, Nobuhiro Takeda, and Norihiro Tokitoh  
“Synthesis, Structure, and Properties of a Novel Ferrocenyl-substituted Diphosphene Having a Bulky Substituent”

Takahiro Sasamori, Eiko Mieda, Nobuhiro Takeda, and Norihiro Tokitoh  
“Studies on Reactivities of Doubly Bonded Systems between Heavier Group 15 Elements toward Elemental Chalcogens”

Nobuhiro Takeda, Hirofumi Hamaki, and Norihiro Tokitoh  
“Synthesis and Properties of the First Monomeric, Donor-free Lithium  $\beta$ - Diketiminates Stabilized by Bulky Substituents”

Yutaka Ishida and Akira Sekiguchi  
“Synthesis, Structure, and Reaction of First Germanium Bishomoaromatic Cation”

Atsushi Wakamiya, Toshihisa Ide, and Shigehiro Yamaguchi  
“Synthesis and Properties of Trianthrylborazines”

Caihong Xu, Atsushi Wakamiya, and Shigehiro Yamaguchi  
“Benzo[*b*]silole as a New Building Unit for Fluorescent  $\pi$ -Conjugated Systems”

Shigehiro Yamaguchi, Masataka Miyasato, and Kohei Tamao  
“Reductive Bergman-Type Cyclization of Cyclic 1,2-Bis(silylethynyl)benzenes”

Tomoyuki Saeki, Eun-Cheol Son, Tadafumi Matsunaga, and Kohei Tamao  
“Palladium Catalyzed, Lewis Acid Induced Cross-Coupling Reaction of 1- Aryltriazenes with Areneboronic Acids and Aryltrifluorosilanes”

Hayato Tsuji, Deborah L. Casher, Martins Katkevics, Mari Kubota, Tsunetoshi Kobayashi, Akio Toshimitsu, Josef Michl, and Kohei Tamao  
“Relationship between Structure and Photophysical Properties of Peralkylated Disilanes”

Hayato Tsuji, Motoki Toganoh, Takeshi Kataoka, Yuki Shibano, and Kohei Tamao  
“Synthesis and Properties of Porphyrin-Oligosilane-Fullerene Hybrid Molecules”

## 21st Century COE on Kyoto University Alliance for Chemistry “Organoelement Chemistry Seminar”

Organized by TOKITOH, Norihiro; TAKEDA, Nobuhiro; TAMAO, Kohei; TSUJI, Hayato  
19 January 2004 (Kyoto, Japan)

## UK-JPN Polymer Workshop 2004

Organized by GABRYS, Barbara; KANAYA, Toshiji  
1-2 April 2004 (Kyoto, Japan)

### Oral Presentations

Prof Em KAJI, Keisuke  
Kyoto University  
“A Memory of UK-Japan Collaboration”

Prof BUCKNALL, David  
University of Oxford, UK  
“The Early Stages of Small Molecule Diffusion into Polymer Thin Films”

Prof MATSUSHITA, Yushu  
Nagoya University  
“Microdomain Structures of Block Copolymers with Wide Composition Distribution”

Prof TSUJII, Yoshinobu  
Kyoto University  
“Structure and Properties of High-Density Polymer Brushes”

Dr DALGLIESH, Robert M  
Rutherford Appleton Laboratory, UK  
“Time Resolved Neutron Reflection from Electrochemical Systems”

Prof KANAYA, Toshiji  
Kyoto University  
“Glassy Dynamics of Polymer Thin Films”

Prof MUTHUKUMAR, Murugappan  
University of Massachusetts, USA  
“Polyelectrolyte Physics”

Prof NISHIDA, Koji  
Kyoto University  
“Structure Formation Due to Repulsive and Attractive Interactions”

Prof GABRYS, Barbara  
University of Oxford, UK  
"Ionomers and Polyelectrolytes: Differences and Similarities"

Prof SHIBAYAMA, Mitsuhiro  
University of Tokyo  
"Small-angle Neutron Scattering Study of Pressure and Temperature-sensitive Polyelectrolyte Gels"

Prof GRIFFITHS, Peter  
Cardiff University, UK  
"SANS Studies of the Interactions between Ionisable Polymers and Ionic-nonionic Surfactants"

Prof URAKAWA, Hiroshi  
Kyoto Institute of Technology  
"Gel Structure and Gelation of Sulfated Polysaccharide"

Dr McGREEVY, Robert  
Rutherford Appleton Laboratory, UK  
"Combining Experiment and Modelling for Polymer Systems"

#### Poster Presentations

Nambu T, Yamauchi Y, Kushiro T, Sakurai S  
Kyoto Institute of Technology, JPN  
"Micro-convection, Dissipative Structure and Pattern Formation in Polymer Blend Solutions under Temperature Gradients"

Hayashi K, Kizaki S, Sakurai S, Ejima Y<sup>\*1</sup>, Shimizu T<sup>\*1</sup>, Hara S<sup>\*2</sup>, Yamamoto K<sup>\*2</sup>, Okamoto S<sup>\*2</sup>  
Kyoto Institute of Technology, JPN, KANEKA Corporation, JPN<sup>\*1</sup>, Nagoya Institute of Technology, JPN<sup>\*2</sup>  
"Simultaneous SAXS/WAXS/Hv-SALS Measurements on Crystallization and Spherulite Formation in Phase-Separated Polymer Blends using Synchrotron Radiations"

Takahashi N, Kanaya T, Nishida K, Kaji K  
Kyoto University, JPN  
"Neutron Spin-Echo Studies on Three Types of Poly(vinyl alcohol) Gels"

Miyazaki T<sup>\*1</sup>, Nishida K<sup>\*2</sup>, Kanaya T<sup>\*2</sup>  
Nitto Denko Corporation, JPN<sup>\*1</sup>, Kyoto University, JPN<sup>\*2</sup>  
"Thermal Expansion Behavior of Thin Polymer Films"

Takeshita H, Takenaka K, Shiomi T  
Nagaoka University of Technology, JPN  
"Structure Formation in Crystallization of Block Copolymers"

Kimura K, Tsuchida A, Okubo T  
Gifu University  
"Drying Dissipative Structure of Polymer Solution and Colloidal Dispersion"

Inoue R, Yamano K, Nishida K, Kanaya T, Tsukushi I<sup>\*1</sup>, Shibata K<sup>\*2</sup>, Taylor J. W.<sup>\*3</sup>, Levett S. J.<sup>\*3</sup>  
Kyoto University, JPN, Chiba Institute of Technology, JPN<sup>\*1</sup>, JAERI, JPN<sup>\*2</sup>, Rutherford Appleton Laboratory, UK<sup>\*3</sup>  
"Inelastic Neutron Scattering from Polystyrene Thin Films"

Matsuba G, Ogino Y, Sakamoto S, Kanaya T, Nishida K  
Kyoto University, JPN  
"Shish-kebab Structure in the Drawing Polyethylene Blends with Ultra-high Molecular Weight Component"

Yamauchi Y, Kizaki S, Yokotani K, Sakurai S  
Kyoto Institute of Technology, JPN  
"Effect of the Sample Thickness on Oscillating Microscopic Convection in a Thin Layer of a Polymer Solution under a Temperature Gradient"

Konishi T, Nishida K, Matsuba G, Kanaya T  
Kyoto University, JPN  
"Crystallization and Mesomorphic Phase Formation of Isotactic Polypropylene"

Ogino Y, Matsuba G, Sharma L, Nishida K, Kanaya T  
Kyoto University, JPN  
"Crystallization of Isotactic Polypropylene under Shear Flow"

Akemura M, Munakata S, Sakurai S  
Kyoto Institute of Technology, JPN  
"Effects of the Pressure on Regularity of Cylindrical Microdomains in Block Copolymers"

Senoo K, Atsumi K, Kohjiya S, Ikeda Y<sup>\*</sup>  
Kyoto University, JPN, Kyoto Institute of Technology, JPN<sup>\*</sup>  
"Increase of the Ion Conductivity with the Uniaxial Stretching of High Molecular Weight Poly(ethylene oxide)"

Sharma L, Ogino Y, Nishida K, Kanaya T, Sakamoto S, Konishi K, Matsuba G  
Kyoto University, JPN  
"Bacterial PHB under Shear; Manipulating the Course of Nature ?"

Sharma L, Ogino Y, Nishida K, Kanaya T, Doi Y<sup>\*</sup>, Iwata T<sup>\*</sup>  
Kyoto University, JPN, RIKEN, JPN<sup>\*</sup>  
"Ultra High Molecular Weight PHB and Medium Molecular Weight PHB Blends under Shear; A method for Fibre Formation?"

Kizaki S, Yamauchi Y, Yokotani K, Sakurai S  
Kyoto Institute of Technology, JPN  
"Evaluation of the Extent of the Soret Effect in a PS/DOP Solution under a Temperature Gradient by Laser Beam Deflection Method"

Kitamura M, Kakinoki S<sup>\*1</sup>, Hirano Y<sup>\*2</sup>, Oka M<sup>\*1</sup>  
Nara National College of Technology, JPN, Osaka Prefecture University, JPN<sup>\*1</sup>, Osaka Institute of Technology, JPN<sup>\*2</sup>  
"Molecular Design of Thermoresponsive Polypeptides"

Hirano Y, Okada M, Iuchi T, Kakinoki S<sup>\*1</sup>, Oka M<sup>\*1</sup>  
Osaka Institute of Technology, JPN, Osaka Prefecture University, JPN<sup>\*1</sup>  
"Synthesis and Conformational Analysis of Poly(dipeptide)s"

Kakinoki S, Teraoka M, Onoda Y, Oka M, Hirano Y<sup>\*1</sup>  
Osaka Prefecture University, JPN, Osaka Institute of Technology, JPN<sup>\*1</sup>  
"Synthesis and Conformational Analysis of Poly(tripeptide)s"

Kakinoki S, Yuge M, Arimoto M, Teraoka M, Oka M, Hirano Y<sup>\*1</sup>  
Osaka Prefecture University, JPN, Osaka Institute of Technology, JPN<sup>\*1</sup>  
"Synthesis and Conformational Analysis of Poly(tetrapeptide)s"

Kawaguchi T, Nozaki Y, Kaneko F  
Osaka University, JPN  
"Structure Research of Dialkyl-1,18-octadecanedioate"

Shirouchi K, Munakata S, Sakurai S, Kurimura H<sup>\*</sup>, Suzuki S<sup>\*</sup>  
Kyoto Institute of Technology, JPN, Denki Kagaku Kogyo, K.K.<sup>\*</sup>  
"Features of Microphase-separated Structures in S<sub>1</sub>BS<sub>2</sub> Triblock Copolymers with Different Lengths of End-block Chains"

Funai E, Sakurai S, Okamoto S<sup>\*1</sup>, Yamato M<sup>\*2</sup>, Kimura T<sup>\*2</sup>  
Kyoto Institute of Technology, JPN, Nagoya Institute of Technology, JPN<sup>\*1</sup>, Tokyo Metropolitan University<sup>\*2</sup>  
"Effects of the Magnetic Field on Cylindrical Microdomain Structures in Polystyrene-block-poly(ethylene-co-but-1-ene)-block-polystyrene Triblock Copolymers"

Sugimoto T, Ji W, Kasazaki T  
Nitta Co. Ltd., JPN  
“Structure Control of Thermoplastic Polyurethane by Thermal Treatment”

Yamamoto S, Tsujii Y, Fukuda T, Torikai N<sup>\*1</sup>, Takeda M,<sup>\*2</sup>  
Kyoto University, JPN, High Energy Accelerator Research Organization, JPN<sup>\*1</sup>, JAERI, JPN<sup>\*2</sup>  
“The Structure of High-Density Polymer Brushes in a Chemically Identical Polymer Matrix Studied by Neutron Reflectometry”

Torikai N  
High Energy Accelerator Research Organization, JPN  
“Structural Analysis of Block Copolymer Thin Films by Neutron Reflectivity Measurement”

Koh K, Sugiyama S, Ohno K, Tsujii Y, Fukuda T, Yamahiro M<sup>\*</sup>, Ootake N<sup>\*</sup>, Watanabe K<sup>\*</sup>  
Kyoto University, JPN, Chisso Petrochemical Co., JPN<sup>\*</sup>  
“Synthesis of Tadpole-Shaped Polymers with Polyhedral Oligomeric Silsesquioxane”

Yoshikawa C, Goto A, Tsujii Y, Fukuda T, Yamamoto K<sup>\*</sup>, Kishida A<sup>\*</sup>  
Kyoto University, JPN, National Cardiovascular Center Research Institute, JPN<sup>\*</sup>  
“Precise Surface Design with High-Density Polymer Brushes: Application to a Polymeric Film”

Ogawa H<sup>\*1,2</sup>, Norisuye T<sup>\*2</sup>, Tran-Cong-Miyata Q<sup>\*2</sup>  
Kyoto University, JPN<sup>\*1</sup>, Kyoto Institute of Technology, JPN<sup>\*2</sup>  
“Anisotropic Spinodal Decomposition of Polymer Blends Induced by Spatial Confinement”

### **38th Meeting on Basic Science Division of the Ceramic Society of Japan**

Organized by YOKO, Toshinobu  
9 July 2004 (Kyoto, Japan)