

Program

Friday, December 11

- 9:00 – 9:30 **Registration**
- 9:30 – 9:40 **Y. Ono (Director of High Tech RC, Vice President of Toho University)**
Welcome
- 9:40 – 10:00 **Y. Habata (Toho University)**
Silver-vororous Molecules: a Footprint in the Last 5 Years
- 10:00 – 10:25 **S. S. Lee (Gyeongsang National University)**
Thiacrowns and Calix-thiacrowns as Building Blocks for Sensing Materials and Coordination Polymers Exhibiting Crystal Transformation and Photophysical Nano-switching
- 10:25 – 10:50 **J. S. Kim (Korea University)**
Chemosensors and Chemodosimeters for Ionic Recognition
- 10:50 – 11:10 **Coffee Break**
- 11:10 – 12:00 **K. Kim (POSTECH)**
Self-assembled Organic Nanomaterials and Their Applications
- 12:00 – 13:20 **Lunch**
- 13:20 – 14:40 **Poster session**
- 15:00 – 15:50 **M. Komiyama (University of Tokyo)**
Molecular Design of Artificial Enzymes for Manipulation of Huge DNA
- 15:50 – 16:05 **Coffee Break**

- 16:05 – 16:30** **T. M. Dore (University of Georgia)**
Developing the Chemistry to Explore Cell Physiology with Light
- 16:30 – 16:55** **I. J. Dmochowski (University of Pennsylvania)**
Making Light of Anesthetics and Other Probing Tales
- 16:55 – 17:10** **Coffee Break**
- 17:10 – 17:35** **A. Heckel (Goethe University Frankfurt)**
Nucleobase-caged Nucleic Acids
- 17:35 – 17:55** **T. Furuta (Toho University)**
Modular caged Compounds -- Design, Synthesis and Their Use –
- 17:55 – 18:10** **Coffee Break**
- 18:10 – 18:35** **J. Stumpe (Fraunhofer IAPR)**
*Photopolymers Containing Inorganic Nanoparticles
for Holographic Diffraction Elements*
- 18:35 – 18:55** **K. Ichimura (Toho University)**
Core-shell Nanohybrids of Molecular Crystals
- 19:00 – 21:00** **Banquet**

Saturday, December 12

- 9:30 – 9:40 *Announcements*
- 9:40 – 10:05 **J. A. Real (Universitat de Valencia)**
Hofmann-like Metal-Organic Frameworks Exhibiting Spin Crossover Behaviour
- 10:05 – 10:30 **A. Bousseksou (CNRS Toulouse)**
Spin Crossover Molecular Materials: From Molecules Thin Films to Nanostructuration to Devices
- 10:30 – 10:50 **M. Nakamura (Toho University)**
Switchable Spin States in Deformed Iron(III) Porphyrin Complexes
- 10:50 – 11:10 **Coffee Break**
- 11:10 – 11:30 **Q. Wang (Toho University)**
Ultrathin Film SAM Fabrication on ITO Surface Step-by-Step Modified by Fullerene and Nanotube Hybrid System
- 11:30 – 11:55 **T. Naito (Hokkaido University)**
Carrier Dynamics in Organic Superconductors and Related Materials
- 11:55 – 13:10 **Lunch**
- 13:10 – 13:35 **T. Mochida (Kobe University)**
Ferrocene-Based Charge-Transfer Salts. from Molecular Crystals to Ionic Liquids
- 13:35 – 14:00 **M. Tamura (Tokyo University of Science)**
Valence-Bond and Two-Carrier Physics in the Frustrated Triangular System, [Pd(dmit)₂] Salts

- 14:00 – 14:25** **H. Mori (ISSP, University of Tokyo)**
Nonlinear Conduction and Superconductivity of Molecular Charge-ordered Conductor, β -(meso-DMBEDT-TTF) $_2$ PF $_6$
- 14:25 – 14:50** **Coffee Break**
- 14:50 – 15:10** **K. Kajita (Toho University)**
A Zero-gap Organic Conductor α -(BEDT-TTF) $_2$ I $_3$
- 15:10 – 15:35** **N. Tajima (RIKEN)**
Effects of Zero-energy Landau Level on Inter-layer Transport in Multilayer Massless Dirac Fermions System
- 15:35 – 15:50** **Coffee Break**
- 15:50 – 16:15** **T. Osada (ISSP, University of Tokyo)**
Dirac Fermion and Magnetotransport in Multilayer Graphite
- 16:15 – 16:40** **R. Kondo (University of Tokyo)**
Crystal Structure Analysis of α -type Organic Conductors under Compression
- 16:40 – 16:50** **Closing**

Posters

- 1. Intensively Blue-fluorescent 2,5-Bis(benzimidazol-2-yl)pyrazine Dyes with Improved Solubility. Synthesis, Fluorescent Property, and Application as a Microenvironment Polarity Probe**

R. Saito, and K. Hitotsumatsu

Department of Chemistry, Toho University, 2-2-1 Miyama, Funabashi, Chiba, 274-8510 Japan

- 2. Synthesis of Boradiazaindacene-Imidazopyrazinone Conjugate as Lipophilic and Yellow-Chemiluminescent Chemosensor for Superoxide Radical Anion**

R. Saito

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- 3. Aldose Reductase Inhibitory Activity of (Z)-4-Arylmethylidene-1H-imidazol-5(4H)-ones Related to the GFP Chromophore**

R. Saito,¹ M. Hoshi,¹ M. Tokita,¹ C. Ishikawa,² and M. Satoh

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- 4. Synthesis of Zinc (II) Complexes with Ethyl 2, 5-dihydro-4-hydroxy-5-oxo-1H-pyrrole-3-carboxylates and Evaluation of Their Insulin-Mimetic Activities**

R. Saito and H. Kawarada

Department of Chemistry, Toho University, 2-2-1 Miyama, Funabashi, Chiba, 274-8510 Japan

- 5. Biomimetic Approach to the Development of Switching Materials with Iron(III) Porphyrinoids**

Yoshiki Ohgo^{1,2}, Saburo Neya³, Daisuke Hashizume⁴ and Mikio Nakamura^{1,2}

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6. Nanostructuring of 2D and 3D Spin Crossover Coordination Polymers Exhibiting Magnetic, Optical and Structural Bistability

Ana B. Gaspar*, Víctor Martínez*, Ishtvan Boldog*, Francisco J. Muñoz-Lara*, Norma Ortega-Villar*, M. Carmen Muñoz**, José A. Real*

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*** Departament de Física Aplicada, Universitat Politècnica de València, Camí de Vera s/n, 46022 València, Spain*

7. Synthesis and Characterisation of a New Series of Bistable Iron(II) Spin Crossover 2D Metal-Organic Frameworks

J. A. Real*, M. C. Muñoz **, V. Martínez*, F. J Muñoz-Lara*, A. B. Gaspar*, G. V. Bukin*** and G. Levchenko***

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**** Donetsk Physico-Technical Institute, NAS of Ukraine, R. Luxemburg 72, 83114 Donetsk, Ukraine*

8. Crystal Structure and Magnetic Property of Spin Crossover Complex

$\text{Fe}^{\text{II}}(\text{3-Phenylpyridine})_2[\text{Au}^{\text{I}}(\text{CN})_2]_2$

K.Yoshida^{a)}, T.Kosone^{a)}, C.Kanadani^{b,c)}, T.Saito^{b,c)}, T.Kitazawa^{a,c)}

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9. Coelenteramide and Its Analogues as a New Class of Aldose Reductase Inhibitors

R. Saito,¹ K. Uda,¹ M. Tokita,¹ C. Ishikawa,² and M. Satoh²

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²Faculty of Pharmaceutical Sciences, Toho University, 2-2-1 Miyama, Funabashi 274-8510, Japan.

10. Synthesis of Botryllazine B Analogues and Evaluation of Their Aldose Reductase Inhibitory Activities

R. Saito,¹ M. Tokita,¹ C. Ishikawa,² and M. Satoh²

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11. Synthesis of Fluorescent Labelling Reagents for Amines Possessing a Boron Dipyrrromethene (BODIPY)

R. Saito and E. Ito

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12. Transport Properties of α -(BEDT-STF)₂I₃ in Magnetic Fields

K.Miura^A, M.Sato^{A,B}, S.Endo^A, K.Takayama^A, S.Sugawara^C, N.Tajima^D,

T.Naito^E, K.Murata^F, Y.Nishio^{A,B}, and K.Kajita^{A,B}

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13. Charge Separation in Et₂Me₂Sb[Pd(dmit)₂]₂ System under Hydrostatic Pressure

Kazuhiko Sasaki*, Yusuke Matsuzaki*, Tomoki Tanaka*,

Yutaka Nishio*, Koji Kajita*, Reizo Kato**

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14. Thermal Study of VB Ordering on EtMe₃X[Pd(dmit)₂]₂ System

K. Takahashi^A, T. Hirota^A, H. Suzuki^A,

Y. Nishio^{A,B}, K. Kajita^{A,B}, R. Kato^{C,D}

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15. Thermal Properties of λ-(BETS)₂Fe_xGa_{1-x}Cl₄ System

~ Fe-doping Effect on π-d Interaction ~

H. Akiba^{1,2}, Y. Nishio^{1,2}, K. Kajita^{1,2}, B. Zhou³, A. Kobayashi³, and H. Kobayashi³

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16. Synthesis, Structure and Magnetic Properties of Dinuclear Lanthanide Complexes

(Ln = Tb(III), Dy(III)) with TCNQ radicals

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17. Synthesis, Structure, Luminescence and Magnetic Properties of Lanthanide(III) Tripodal Imidazole Complexes [Ln = Sm, Eu, Gd, Tb, Dy]

Katsuya Yanagi,^{**} Chihiro Kachi-Terajima,^{***} Toru Kaziki,^{**} Toshiaki Saito,^{****}

Chikahide Kanadani,^{****} Takafumi Kitazawa,^{***} Miki Hasegawa^{***}

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18. Fractionally Charged Solitons in the Various Density-Wave States in the Quarter-Filled Extended Peierls-Hubbard Model

K. Hirokawa¹ and Y. Ono^{1,2}

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19. Critical Level Statistics in Two Dimensional Disordered Electrons in a Strong Magnetic Field

H. Yonei*, T. Kawarabayashi*,**, and Y. Ono*,**

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20. Spin-crossover Behavior of Fe(II)-Au(I) Hofmann-like Coordination Polymer System Containing 4-alkylpyridine Ligand

I. Tomori¹, T. Kosone^{1,2}, C. Kanadani³, T. Soito^{2,3} and T. Kitazawa^{1,2}

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21. Novel Electronic and Magnetic Structures in Mono(imidazole)-ligated Iron(III) Porphyrin Complexes

Akira Ikezaki*, Masashi Takahashi**, ***, **** and Mikio Nakamura*, **, ****

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22. Effect of Counter Anions on CD Spectra of the Hg²⁺ Complexes with Chiral Podand having Two Pyridin-4-yl Groups as Coordination Sites

IKEDA MARI¹, KUWAHARA SHUNSUKE¹, and HABATA YOICHI^{1,2*}

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23. Silver-vorous Molecule having Urea Units: Simultaneous Binding of Ag⁺ and X⁻ ions

UTSUNOMIYA MAI¹, KUWAHARA SHUNSUKE¹, and HABATA YOICHI^{1,2}

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24. Fluorescence Spectral Property of Metal Complexes with a Silver-vorous molecule having Two 4-(anthracene-9-yl) benzyl and Two benzyl groups as Side-arms

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25. Hg(CF₃SO₃)₂-Induced Spectral Changes of a Chiral Bidentate Ligand having an α -Phenylethyl Group

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26. Pseudo-rotaxanes using DB24C8 with Aminium Ions bearing

Bis[4-(biphenyl-3-yl)pyridine] Units as Axis Molecules

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27. A Chiral Helical 1-D Chain Based on an Achiral Cu(II)

Complex; Synthesis, Characterization, and Magnetic Properties

Chihiro Kachi-Terajima,^{1,2} Megumi Ishii,² Ayano Sasaki,² Toshiaki Saito,^{1,3}

Chikahide Kanadani,^{1,3} Takafumi Kitazawa,^{1,2} Takunori Harada,⁴ Reiko Kuroda^{4,5}

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28. Interlayer Hall Effect of Organic Zero Gap Conductor

M.Sato*, **, K.Miura*, S.Sugawara***, N.Tajima****, K.Murata*****, Y.Nishio*, **, and K.Kajita*, **

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29. Structures of Cu(hfac)₂ Complexes with Podands having Pyridyl Groups

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30. Synthesis and Properties of New Model of Molecular Motors Binding to DNA Secondary Structure

Shunsuke Kuwahara¹, Naoto Nagaya², Maiko Kobayashi², Nobuyuki Harada³, Yoich Habata^{1,4}, and Fumi Nagatsugi²

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31. Specific Heat of Selectively Deuterated (DMe-DCNQI)₂Cu Systems

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32. Magnetoresistance in Quasi-two-dimensional Organic Conductor

K. Suzuki^{*}, Y. Toida^{*}, M. Sato^{***}, S. Sugawara^{***}, H. Kobayashi^{****}, Y. Nishio^{***},
and K. Kajita^{***}

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33. Crystal Structures, Emission Spectra and Mössbauer Spectra of Lanthanide(III)

Complexes of Phosphine Oxides with Chelating Perchlorate

M. Takahashi^{*} and Y. Hirai

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Japan*

34. Synthesis and Photochemistry of Caged Peptide Nucleic Acids

Mariko Kishi, Junichi Matsuura, Toshiaki Furuta

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35. Photoactivated Gene Manipulation using Bhc-caged Plasmid DNAs in Mammalian Cells

Junko Ohmuro, Kyoko Fukamauchi, Toshiaki Furuta

Department of Biomolecular Science, Toho University

36. A New Spin Crossover Heterometallic Fe^{II}Au^I Coordination Polymer: Crystallographic and Magnetic Study

Takashi Kosone^{a,c)}, Itaru Tomori^{a)}, Chikahide Kanadani^{b,c)}, Toshiaki Saito,^{b,c)} and Takafumi Kitazawa^{a,c)}

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37. Preparation and Reactions of Uracil-substituted Azamacrocycles

Soichiro Watanabe*, **, Ayako Komori*, Masayuki Saito*, and Akira Uchida*

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38. Synthesis of a New Cross-linker to Detect DNA-protein Interaction

Takuya Toyoshima*, Keiko Yanai*, Takashi Hasegawa*, Kazuyuki Yanai*, and Soichiro Watanabe*, **

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39. Preparation and Magnetic Properties of Thin Films of the Heavy Fermion Compound CeRu₂Si₂

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**40. Effect of the Random Magnetic Anisotropy on the Dynamics in Amorphous
(Zr_{1-x}Nd_x)₃₃Fe₆₇ System**

Yuya Morimoto^A, Chikahide Kanadani^B, and Toshiaki Saito^{A,B}

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**41. Ageing Phenomena in Epitaxial Fe(100)/Cr(100) and Fe(110)/Cr(110) Multilayers with
Interfacial Magnetic Frustration**

Masahiro Nomura^{*}, Chikahide Kanadani^{**}, Tatsuya Komori^{*}, and Toshiaki Saito^{***}

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42. 2D Spin Ice-like State of Layered Single Molecular Magnet Networks

Toshiaki Saito^{1,3}, Chihiro Kachi-Terajima^{2,3}, Chikahide Kanadani³, Yutaka Nishio^{1,3},
Takafumi Kitazawa^{2,3}, and Hitoshi Miyasaka⁴

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43. NS₂-Macrocyclic-based Metallosupramolecules and Chemosensor

Sunhong Park, Mari Ikeda, Yoichi Habata,^{*} and Shim Sung Lee^{*}

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Department of Chemistry, Toho University, Chiba 274-8510, Japan

**44. A Self-consistent Analysis of the Peierls States and the Berry Phase in the
Two-dimensional Honeycomb Lattice**

Yuito Teppo¹, Tohru Kawarabayashi^{1,2}, Yoshiyuki Ono^{1,2}, and Yasuhiro Hatsugai³

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45. Multi-step and Gate-opening Type Adsorption on a Porous Coordination Polymer Possessing Gated Channels

Joobeom Seo^{*}, Ryotaro Matsuda^{***}, Charlotte Bonneau^{*}, and Susumu Kitagawa^{***}

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46. Spin-spin Interactions in Iron(III) Porphyrin Cation Radical with Deformed Porphyrin ring

Souhei Kouno^{**} and Mikio Nakamura^{*****}

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47. Magnetic and Transport Properties of C₆₀ Fulleride Molecular Nanowire Crystals

Hiroshi Moriyama^{*1,2}, Takahito Sugiura^{†2}, Yuto Ono², Hatsumi Mori³

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48. Reversible complexation by a silver-vorous molecule : Nano-trefoil

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