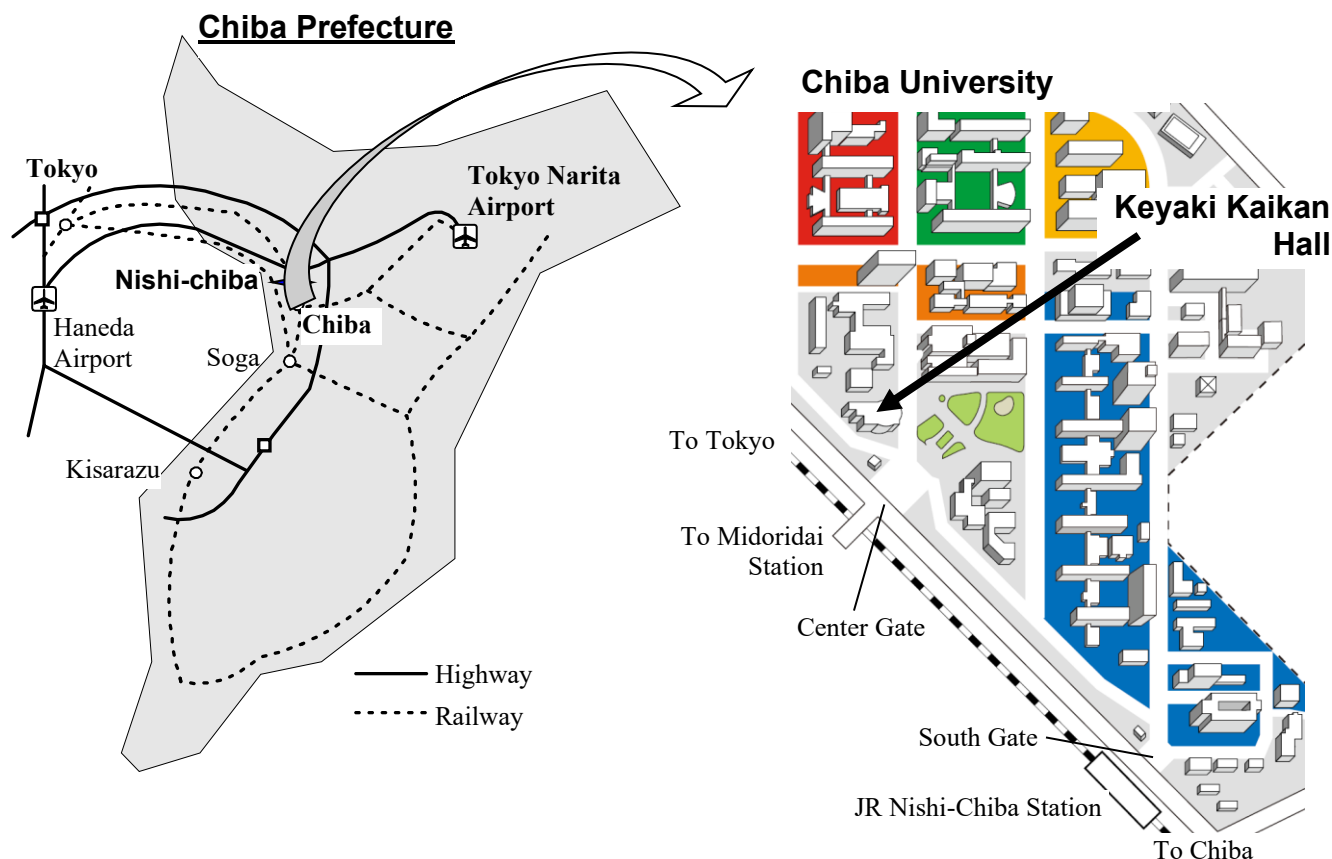


# The 22nd Symposium on the Society of Iodine Science

August 30, 2019

Keyaki Kaikan Hall in Chiba University, Chiba, Japan



SPONSORED by **SIS** The Society of Iodine Science

COSPONSOR : The Chemical Society of Japan

Japan Iodine Industry Association

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# The 22nd Symposium on the Society of Iodine Science

## *Time Table (August 30th)*

9:20~ 9:25	<Opening Address > HIROFUMI KANO ( Chair of SIS )
Chair : T. Kaiho	
9:25~10:05	<Invited Lecture> MARK S. TAYLOR ( Department of Chemistry, University of Toronto) “ <b>Assembly of Nanostructures by Halogen Bonding Interactions of Complementary Macromolecules</b> ”
Chair : S. Takahara	
10:05~10:20	<Oral Presentation> YUDAI MOROTA, KIRA B. LANDENBERGER (Faculty of Engineering, Kyoto University) “ <b>Towards the Formation of Novel Supramolecular Polymer Networks by Halogen-Bonding</b> ”
10:20~10:35	<Oral Presentation> SHIGEKAZU YANO <sup>1</sup> , JUN OGIWARA <sup>1</sup> , KOHEI YUKIZAKI <sup>2</sup> , TAKAHIRO SATO <sup>2</sup> ( <sup>1</sup> Graduate School of Sciences and Engineering, Yamagata Univ.; <sup>2</sup> Ise Chemicals Co.) “ <b>Isolation of Iodine Resistant Bacteria from Soil Samples</b> ”
10:35~10:50	<Oral Presentation> HINAKO EBE, TAKAYUKI CHIBA, AKITO MASUHARA, JUNJI KIDO (Dept. of Organic Materials Science, Yamagata Univ.) “ <b>Iodine-Based Perovskite Quantum Dot Light-Emitting Devices</b> ”
Chair : S. Matsumoto	
10:50~11:30	<Invited Presentation> SHINJI KAWASAKI, YOSUKE ISHII, REMI DATE, MIKAKO TAKAHASHI, TSUYOSHI HASEGAWA (Nagoya Institute of Technology) “ <b>Electrochemical Reactions of Halogen-related Molecules Encapsulated in Single-walled Carbon Nanotubes</b> ”
11:30~12:35	<Short Speeches on Poster Presentations>
<b>POSTER PRESENTATIONS KEYAKI Reception Hall (3F)</b>	
11:00~12:35	Display: From opening the venue ~ 14:45 , Presentation, question and answer: 13:30~14:45
<b>COMMENDATION CEREMONY and LECTURES KEYAKI Hall (1F)</b>	
14:55~15:05	Commendation ceremony
Chair : T. Kitamura	
15:05~15:45	<Award Lecture> NORIO SHIBATA (Department of Nanopharmaceutical Sciences & Department of Life Science and Applied Chemistry, Nagoya Institute of Technology) “ <b>Behind the Success of Synthetic Organofluorine Chemistry: Development of Iodine-based Reagents, Catalysts, and Reactions</b> ”
Chair : K. Moriyama	
15:45~16:00	<Oral Presentation> SHOGO NAKAMURA, KENSUKE KIYOKAWA, SATOSHI MINAKATA (Graduate School of Engineering, Osaka University) “ <b>Intramolecular C–H Amination of Sulfamate Esters Using Iodine Oxidants</b> ”
16:00~16:15	<Oral Presentation> TAKESHI NANJO, NATSUKI KATO, KOSUKE YOSHIKAWA, YOSHIJI TAKEMOTO (Graduate School of Pharmaceutical Sciences, Kyoto University) “ <b>Development of Decarboxylative Acylation Mediated by Hypervalent Iodines</b> ”
16:15~16:30	<Oral Presentation> SHOJI MATSUMOTO, RYUTA SUMIDA, MOTOHIRO AKAZOME (Graduate School of Engineering, Chiba University) “ <b>Electric Conductivity of Thiazolo[2,3-a]isoquinolinium Salts Bearing Halogen Bonding Ability Under Iodine Vapor</b> ”
Chair : K. Ishihara	
16:30~17:10	<Invited Lecture> KÁLMÁN J. SZABÓ (Arrhenius Laboratory, Department of Organic Chemistry , Stockholm University) “ <b>Hypervalent Iodines in Fluorination and Trifluoromethylation Reactions</b> ”
17:30~19:00	<b>BANQUET KEYAKI Reception Hall (3F)</b>

An introduction by the chairman and a five minute question-and-answer period are included for the every lecture.

## Poster Presentation

All posters should be posted between 12:00 and 14:55.

Presenters are requested to be at their papers for discussions:

“S” mark before the poster number shows to give a short speech on poster presentation.

No.	“Title” <u>Author</u> , Co-authors (Affiliation)
01	<p><b>“Prevalence of Gynecological Symptoms Among Women with Goiter – Kaôh Chrêng Island in Cambodian”</b>  <u>YUKI SHIMOTAKE</u><sup>1</sup>, H. KOIDE<sup>2</sup>, S. YOSHIDA<sup>3</sup> {Presentation canceled}            (<sup>1</sup>Kochi University Environment Medicine; <sup>2</sup>Tohoku University CYRIC Elderly Person High Level Brain Medicine Research; <sup>3</sup>Kochi University Medical School)</p>
S02	<p><b>“Preparation for Iodine-Containing Perovskite Nanocrystals by Ultrasonic-Assisted Milling and Application for Light-Emitting Diodes”</b>  <u>JUNYA. ENOMOTO</u><sup>1</sup>, D. SASAKI<sup>2</sup>, K. UMEMOTO<sup>2</sup>, Y. TEZUKA<sup>2</sup>, H. EBE<sup>3</sup>,            Y. TAKAHASHI<sup>3</sup>, T. CHIBA<sup>3,4</sup>, S. ASAKURA<sup>2,5,6</sup>, A. MASUHARA<sup>2,4</sup>            (<sup>1</sup>Fac. of Eng., Yamagata Univ.; <sup>2</sup>Grad. Sch. of Sci. and Eng., Yamagata Univ.;  <sup>3</sup>Grad. Sch. of Org. Mat. Sci., Yamagata Univ.; <sup>4</sup>ROEL, Yamagata Univ.; <sup>5</sup>Ise Chem. Corp., <sup>6</sup>CIRIC)</p>
03	<p><b>“Aqueous Electrolyte Secondary Batteries Using Redox Reactions of Halogen Ions in Single-Walled Carbon Nanotubes”</b>  <u>REMI DATE</u>, M. TAKAHASHI, Y. ISHII, S. KAWASAKI            (Nagoya Institute of technology)</p>
04	<p><b>“Buildup on Monolayer by Halogen Bonding with Iodine Compounds”</b>  <u>RISA KANDA</u>, T. KAIHO, S. TAKAHARA            (Graduate School of Science and Engineering, Chiba Univ., CIRIC)</p>
S05	<p><b>“Removal of Halide Ion from Aqueous Solution Using Monoclinic Layered Double Hydroxides”</b>  <u>SATOKO TEZUKA</u> {Presentation canceled}            (Chiba Institute of Science)</p>
S06	<p><b>“Method for Quantitative Analysis of Iodide and Iodate”</b>            M. KOMATSU, T. SAKUMA, <u>TAKESHI. IZUMI</u>            (Ebara Corporation)</p>
07	<p><b>“Determination of Iodine in Organic Samples by Combustion Ion Chromatography”</b>  <u>HISOMU NAGASHIMA</u>, T. HOTTA            (NAC Techno service Co., Ltd.)</p>
08	<p><b>“Determination of Iodine Species in River Water by Ion Chromatography Using Reversed-Phase C18 Column Coated with Dodecylammonium Cation”</b>  <u>KAZUHIKO TAKEDA</u><sup>1</sup>, A. ISHII<sup>1</sup>, Y. IWAMOTO<sup>1</sup>, K. ITO<sup>2</sup>            (<sup>1</sup>Graduate School of Integrated Sciences for Life, Hiroshima University; <sup>2</sup>Seawater Assessment Technologies Research Institute)</p>
S09	<p><b>“Theoretical Verification of Induced Dipole Interaction Between I<sub>2</sub> and Induced Dipole-Ion Interaction in Formation of I<sub>3</sub><sup>-</sup> and I<sub>5</sub><sup>-</sup>”</b>  <u>SHOZO YANAGIDA</u>, O. YOSHIKAWA, T. KIDA            (M3 Inc.; Osaka Univ.)</p>
S10	<p><b>“Cycloisomerization-Coupling Reaction of N-Propargylamide Derivatives Using Hypervalent Iodine Catalyst”</b>  <u>YUKI UMAKOSHI</u>, Y. TAKEMOTO, A. SAITO            (Graduate School of Engineering, Tokyo University of Agriculture and Technology)</p>
11	<p><b>“Benzofuran Synthesis via Chloromethoxylation of Hydroxychalcone Using Hypervalent Iodine Reagent”</b>            N. KAWASHIMA, K. NAKAOKA, K. OKAMURA, A. NAKAMURA, <u>TOMOHIRO MAEGAWA</u>            (School of Pharmaceutical Sciences, Kindai University)</p>
S12	<p><b>“Synthesis of Indole and Benzofuran Derivatives Using Rearrangement Reaction of Chalcones Mediated by Hypervalent Iodine Reagents”</b>  <u>AKIRA NAKAMURA</u>, A. IMAMIYA, F. RAO, Y. IKEGAMI, T. MAEGAWA            (School of Pharmaceutical Sciences, Kindai University)</p>
S13	<p><b>“Facile Synthesis of Optically Active Polyazahelicene Derivatives by Consecutive Reaction Using a Hypervalent Iodine Reagent”</b>  <u>TAKUMA SASAYAMA</u>,<sup>1</sup> C. IWASHIMIZU,<sup>1</sup> T. OTANI,<sup>2</sup> K. S. KANYIVA,<sup>3</sup> T. SHIBATA<sup>1</sup>            (<sup>1</sup>School of Advanced Science and Engineering, Waseda University; <sup>2</sup>National Institute of Technology, Anan College; <sup>3</sup>Global Center for Science and Engineering, Waseda University)</p>

S14	<p><b>“Regio-Selective Dual Functionalization via Amination of Indole Derivatives Using <i>o</i>-Alkoxy(diacetoxyiodo)arenes”</b>  <u>KAZUHIRO WATANABE</u>, K. MORIYAMA  (Graduate School of Science, Chiba University)</p>
S15	<p><b>“Synthesis of Ynamides Using Copper Catalyst and Alkynyl Hypervalent Iodine”</b>  <u>RYOGO TAKAI</u>, N. TADA, E. YAMAGUCHI, A. ITOH  (Gifu Pharmaceutical University)</p>
S16	<p><b>“Study on the Synthesis of <i>cis</i>-<math>\beta</math>-Amide Vinyl-1,2-benziodoxol-3(1<i>H</i>)-one (VBX) Using Ethynyl-1,2-benziodoxol-3(1<i>H</i>)-one (EBX)”</b>  <u>DAISUKE SHIMBO</u>, N. TADA, E. YAMAGUCHI, A. ITOH  (Gifu Pharmaceutical University)</p>
S17	<p><b>“Development of Oxycarbonylation Reaction as Ester Synthesis Method Using Hypervalent Iodine Compound”</b>  <u>TSUKINA KINOMURA</u>, N. TADA, E. YAMAGUCHI, A. ITOH  (Gifu Pharmaceutical University)</p>
S18	<p><b>“Synthesis of 2-Iodo-3-carboxypyrrrole for Heteroaryl Hypervalent Iodine”</b>  <u>TOMOKI YONEDA</u><sup>1,2</sup>, S. NEYA<sup>2</sup>  (Graduate School of Engineering, Hokkaido University<sup>1</sup>;  Graduate School of Pharmaceutical Sciences, Chiba University<sup>2</sup>)</p>
19	<p><b>“Synthesis of Hypervalent Iodine Compounds Activated by Visible Light”</b>  <u>SHO NAGASAWA</u><sup>1</sup>, M. NAKAJIMA<sup>1,2</sup>, T. NEMOTO<sup>1</sup>  (<sup>1</sup>Chiba Univ.; <sup>2</sup>RIKEN)</p>
S20	<p><b>“Chiral Hypoiodite-Catalyzed Umpolung of Indoles for Enantioselective Dearomatization”</b>  <u>HIROKI TANAKA</u>, N. UKEGAWA, M. UYANIK, K. ISHIHARA  (Nagoya Univ.)</p>
21	<p><b>“Asymmetric <math>\alpha</math>-Azidation of Alkenyl Esters Using Chiral Phosphine-Silver Alkoxide Catalysts”</b>  <u>YUME INOUE</u>,<sup>1</sup> T. WATANABE,<sup>2</sup> A. YANAGISAWA<sup>3</sup>  (<sup>1</sup>Faculty of Science, Chiba University; <sup>2</sup>Nippon Chemical Co., Ltd.;  <sup>3</sup>Graduate School of Science, Chiba University)</p>
22	<p><b>“Asymmetric <math>\alpha</math>-Azidation of <math>\beta</math>-Ketoesters Using Chiral Tin Alkoxide Catalysts”</b>  <u>KOTARO TAKAGI</u>,<sup>1</sup> T. EBIHARA,<sup>1</sup> M. G. RUSSELL,<sup>1</sup> M. Horiguchi,<sup>2</sup>  T. WATANABE,<sup>3</sup> A. YANAGISAWA<sup>2</sup>  (<sup>1</sup>Faculty of Science, Chiba University; <sup>2</sup>Graduate School of Science, Chiba University;  <sup>3</sup>Nippon Chemical Co., Ltd.)</p>
23	<p><b>“Asymmetric Mannich-Type Reaction Using Halogen-Bond-Donor Catalyst”</b>  <u>YUKI NISHIDA</u>, S.U KUWANO, T. ARAI  (Grad. Sch. Sci., Chiba Univ.)</p>
24	<p><b>“[4+2] Cycloadditions of 2-Alkenylindoles Using Halogen-Bond-Donor Catalysts”</b>  <u>SATORU KUWANO</u>,<sup>1</sup> T. SUZUKI,<sup>1</sup> M. YAMANAKA,<sup>2</sup> R. TSUTSUMI,<sup>2</sup> T. ARAI<sup>1</sup>  (<sup>1</sup>Graduate School of Science, Chiba University; <sup>2</sup>Department of Chemistry, Rikkyo University)</p>
S25	<p><b>“The Effect of Iodine for Iodolactonization Catalyzed by Lewis Base”</b>  <u>TAKAHIRO HORIBE</u>, Y. TSUJI, K. ISHIHARA  (Nagoya Univ.)</p>
26	<p><b>“Aromatic Iodination by Disulfide as a Lewis Base Catalyst”</b>  <u>SHUNSUKE ISHIDA</u>,<sup>1</sup> K. IIDA,<sup>1</sup> T. WATANABE,<sup>2</sup> T. ARAI<sup>1</sup>  (<sup>1</sup>Graduate School of Science, Chiba University; <sup>2</sup>NIPPOH CHEMICALS CO., LTD.)</p>
S27	<p><b>“Effect of Iodide Sources on Catalytic Rearrangement of Fused Nitrogen Heterocycles”</b>  <u>KAZUHIRO OKAMOTO</u>, G. MATSUSHITA, K. OHE  (Kyoto University)</p>
S28	<p><b>“Metal-Free Synthesis of Blue Dyes via Organocatalytic Oxidation with Iodine Reagents”</b>  <u>YUKI YAMAMOTO</u>, C.-P. DONG, S. KODAMA, A. NOMOTO, M. UESHIMA, A. OGAWA  (Graduate School of Engineering, Osaka Prefecture University)</p>
S29	<p><b>“Flavin-Iodine-Catalyzed Oxidative Sulfenylation of Pyrazolones Using Molecular Oxygen as an Oxidant”</b>  <u>KAZUMASA TANIMOTO</u>, R. OHKADO, H. IIDA  (Graduate School of Natural Science and Technology, Shimane University)</p>
S30	<p><b>“Iodine-Mediated Fluorination of Alkenes with HF Reagents”</b>  <u>RYUICHI KOMOTO</u>,<sup>1</sup> J. OYAMADA,<sup>1</sup> T. KITAMURA,<sup>1</sup> M. HIGASHI,<sup>2</sup> Y. KISHIKAWA<sup>2</sup>  (<sup>1</sup>Faculty of Science and Engineering, Saga University; <sup>2</sup>Daikin Industries, Ltd.)</p>

S31	<p><b>“<math>\alpha</math>-Amino Acids and Amines as Inexpensive Feedstocks for the Asymmetric Synthesis of 4-Imidazolidinones Using Iodine Catalyst”</b>  <u>MARINA TANE</u><sup>1</sup>, K. S. KANYIVA<sup>2</sup>, T. SHIBATA<sup>1</sup>  <sup>(<sup>1</sup>School of Advanced Science and Engineering, Waseda University; <sup>2</sup>Global Center for Science and Engineering, Waseda University)</sup></p>
32	<p><b>“Novel Preparation of 2-Arylquinolines from Arylpropionitriles through Iminyl Radical-Mediated Cyclization”</b>  <u>HIROKI NARUTO</u>, H. TOGO          (Graduate School of Science, Chiba University)</p>
33	<p><b>“Facile One-Pot Preparation of 6-Arylphenanthridines from <i>o</i>-Aroylbiaryls through Cyclization of Imino Radical onto Aromatic Ring ”</b>  <u>EIJI KOBAYASHI</u>, A. KISHI, H. TOGO          (Graduate School of Science, Chiba University)</p>
34	<p><b>“Novel Synthesis of Aromatic Nitriles from Aryl Bromides and Arenes using I<sub>2</sub>.”</b>  <u>KO UCHIDA</u>, H. TOGO          (Graduate School of Science, Chiba University)</p>
S35	<p><b>“Chemoselective Reduction of <math>\alpha,\beta</math>-Unsaturated Carbonyl Compounds by Using Hydrogen Iodide”</b>  <u>HAYATO MARUMOTO</u><sup>1</sup>, M. AKAZOME<sup>1</sup>, Y. OTANI<sup>2</sup>, T. KAIHO<sup>2</sup>, S. MATSUMOTO<sup>1</sup>  <sup>(<sup>1</sup>Graduate School of Engineering, Chiba University; <sup>2</sup>Godō Shigen Co., Ltd.)</sup></p>
S36	<p><b>“Aminoselemination Reaction of Alkenes by Utilizing a Selenenyl Iodide”</b>  <u>YO ISHIKAWA</u>, S. SASE, K. GOTO          (Department of Chemistry, School of Science, Tokyo Institute of Technology)</p>
S37	<p><b>“Development of Cascade Cyclization Reaction of Polyenes by Taking Advantage of Alkene Activation with Selenenyl Iodides”</b>  <u>TAKA AKI NAKADA</u>, S. SASE, K. GOTO          (School of Science, Tokyo Institute of Technology)</p>
38	<p><b>“A Thought on Cyclopropanation Mechanism of <math>\alpha,\beta</math>-Unsaturated Carbonyl Compounds with Iodoform or Diiodomethyl <i>p</i>-Tolyl Sulfone (DMTS) ”</b>  <u>KAHORI TAMURA</u>, S. MATSUMOTO, M. AKAZOME          (Graduate School of Engineering, Chiba University, Mitsui Chemicals, Inc.)</p>
39	<p><b>“Reactivity of Cyclic Thioamidium Salt and Cyclic Imidazoisoquinolinium Salt toward Various Nucleophiles”</b>  <u>SHOTA WATANUKI</u>, D. TAKADA, M. AKAZOME, S. MATSUMOTO          (Graduate School of Engineering, Chiba University)</p>
S40	<p><b>“Evaluation of Organic Iodine Compounds with Perfluoroalkyl Group as Controlled Radical Polymerization Initiators”</b>  <u>MANAMI UENO</u>,<sup>1</sup> T. KANBARA,<sup>2</sup> T. YAJIMA<sup>1</sup>  <sup>(<sup>1</sup>Grad. Sch. Of Humanities &amp; Sci., Ochanomizu Univ.; <sup>2</sup>Daikin)</sup></p>
S41	<p><b>“Methods for the Synthesis of Carbonyl-Functionalized Iodotriazolium Salts”</b>  <u>RYOSUKE HARAGUCHI</u>,<sup>1</sup> S. KEMMOCHI<sup>2</sup>, S. HAYAKAWA<sup>1</sup>, T. AKIMOTO<sup>1</sup>,          H. ABO<sup>2</sup>, K. TORITA<sup>2</sup>, S. FUKUZAWA<sup>2</sup>  <sup>(<sup>1</sup>Graduate School of Engineering, Chiba Institute of Technology; <sup>2</sup>Graduate School of Science and Engineering, Chuo University)</sup></p>
42	<p><b>“Development and Application of Lewis Acidic Novel Halonium Salts”</b>  <u>TOMOKI HASEGAWA</u>, Y. YOSHIDA, S. ISHIKAWA, T. MINO, M. SAKAMOTO          (Graduate School of Engineering, Chiba University)</p>
43	<p><b>“Design of Halogen Bonding Donors Based on Fluoro-functionalized Iodobenzenes”</b>  <u>KENTA SASAKI</u>, Y. SUMII, N. SHIBATA          (Nagoya Institute of Technology)</p>
S44	<p><b>“Synthesis and Application of Novel <math>\pi</math>-Expanded Perfluoroiodoarenes”</b>  <u>NAOYA OHTSUKA</u>, S. SUGIURA, H. OTA, T. SUZUKI, N. MOMIYAMA          (Institute for Molecular Science; SOKENDAI)</p>
45	<p><b>“Development of Polymer-Immobilized Nucleophilic Catalyst via Halogen Bond”</b>  <u>TATSUAKI HORI</u>, N. MOMIYAMA          (Institute for Molecular Science; SOKENDAI)</p>
46	<p><b>“Development of Luminescent Materials Using Iodine Compounds as Halogen Bond Donors”</b>  <u>YUSUKE YOSHIGOE</u>,<sup>1</sup> T. YAMAKAWA,<sup>2</sup> Z. WANG,<sup>1,2</sup> M. KANAI,<sup>2</sup> Y. KUNINOBU<sup>1</sup>  <sup>(<sup>1</sup>Institute for Materials Chemistry and Engineering, Kyushu Univ., <sup>2</sup> Graduate School of Pharmaceutical Sciences, The Univ. of Tokyo)</sup></p>
S47	<p><b>“Luminescent Properties of Crystal of Dibenzoylmethanate–BF<sub>2</sub> Complexes Having Iodine Atoms”</b>  <u>TAKUMU ARI</u>,<sup>1</sup> S. YAMAMOTO,<sup>1</sup> A. SAKAI,<sup>1</sup> H. IIDA,<sup>2</sup> Y. OZAWA,<sup>2</sup> M. ABE,<sup>2</sup>          Y. MATSUI,<sup>1,3</sup> E. OHTA,<sup>1,3</sup> H. IKEDA<sup>1,3</sup>  <sup>(<sup>1</sup>Grad. Sch. Eng., Osaka Pref. Univ.; <sup>2</sup>Grad. Sch. Mat. Sci., Univ. of Hyogo; <sup>3</sup>RIMED, Osaka Pref. Univ.)</sup></p>

S48	<p><b>“Control Molecular Orientation in Asymmetric Thienoacenes via Iodine–Iodine Interactions”</b> <u>AMANE MATSUNAGA</u><sup>1</sup>, Y. OGAWA<sup>1</sup>, D. KUMAKI<sup>2</sup>, S. TOKITO<sup>2</sup>, H. KATAGIRI<sup>1,2</sup> (<sup>1</sup>Graduate School of Science and Engineering Yamagata University. <sup>2</sup>Graduate School of Organic Materials Science Yamagata University)</p>
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### *Correspondence*

For more information please contact to Secretariat of **SIS** .

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