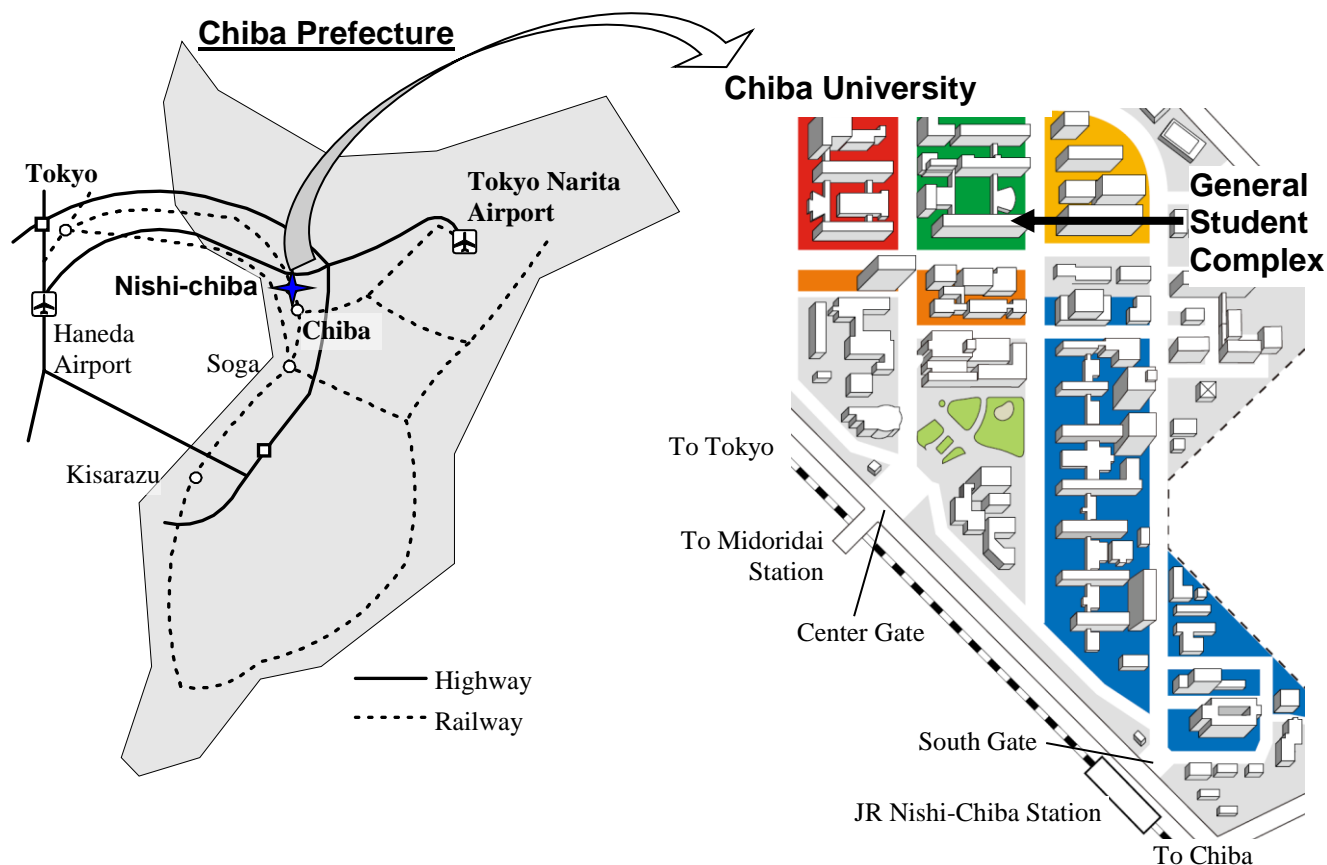


# The 19th Symposium on the Society of Iodine Science

September 16, 2016

General Student Complex (“Sougou-kosha”) in Chiba University,  
Chiba, Japan



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

Chiba University

COSPONSOR : The Chemical Society of Japan

Japan Iodine Industry Association

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## *General Information*

The 19th Symposium is organized under the Society of Iodine Science (**SIS**) and is co-sponsored by a number of Chemical Societies and Industries in Japan. Within the framework of the Symposium,

- (a) Keynote lecture / Award lectures / Invited Lectures
- (b) Lectures / Poster Presentations, on original research and applications
- (c) Banquet

will be involved.

## A Message as the SIS President

My name is Takashi Fujino, Chairman of the Society of Iodine Science (SIS). I would like to extend my warmest greetings to you at the convening of this international symposium.

Iodine is an element that is essential not only to mankind, but also to all organisms. In recent years, iodine has been used throughout many segments of industry, including disinfectants, X-ray contrast media, industrial catalysts, and polarizers for LCD display. The Society of Iodine Science was established with the consciousness of the challenge of utilizing iodine in research and industry in the most advanced ways.

The activities of SIS include the publishing of the Society's reports and newsletters, aiding research, awarding the Society's commendations, and hosting international symposiums. In particular, international symposiums provide an opportunity for active international and interdisciplinary exchange of information. This year marks the 19th annual SIS international symposium. This continuation of our efforts has developed a strong momentum, and we take pride in playing a part in the advancement of iodine science.

This year, the SIS international symposium will be held on September 16 (preparation day: September 15). The program includes a lecture by the winner of this year's Society Award, lectures by three guest speakers, seven oral presentations, and approximately 30 poster presentations. In addition, there will be many presentations on the findings of research supported by grants from the Society, as well as exhibits of products from various companies.

I would like to thank Dr. Shoji Matsumoto of the Graduate School of Engineering at Chiba University and other members of the international symposium committee for their dedication in preparing for this symposium.

Japan produces approximately 30% of the iodine in the world. Although Japan is a resource-limited country, it is the second largest iodine producer, accounting for a large portion of its world production. The Society of Iodine Science was established within this context, and we hope to achieve further advances in iodine science and technology through collaboration among academia, industry, and government. We look forward to your guidance and support through the discussions and exchanges of information at the symposium, so that this annual opportunity for leaders in iodine science can contribute to such development.

Takashi Fujino, Chairman, The Society of Iodine Science (SIS)  
(President and CEO, Ise Chemicals Corporation)

## Official Language

Official language is Japanese. No official simultaneous translation in English will be offered. Presentations for both the oral and the poster presentation welcome in English.

## Registration Fee

Deadline Aug. 13, 2016

Registration Fee (for **SIS** members, including 1 booklet of abstracts; transactions)

Reduced Registration Fee (before August 13, 2016):

<b>SIS</b> -Members	1,000 yen
Members of Co-Sponsored Society <sup>☆</sup>	1,000 yen
Non-members <sup>☆</sup>	3,000 yen
Students <sup>☆</sup>	Free

<sup>☆</sup>Non-**SIS** members who require the booklet need to pay 2,000yen.

<sup>※</sup>Everybody is welcome to join **SIS**. Membership fee is 2,000 yen/year. (Students are 1,000 yen/year)

**After Aug. 15, extra 1,000 yen is needed in every category. After registration by E-mail or Facsimile, you will pay the reduced registration fee at the symposium reception desk (On-site payment).**

Banquet (at COOP Restaurant Food Court 2, Chiba University):

Every Participants	4,000 yen
(Every Students)	2,000 yen

## Time Table (September 16th)

<b>LECTURES General Student Complex :Building 2</b>	
9:15~9:20	<Opening Address > TAKASHI FUJINO ( Chairman of SIS )
Chair : T. Kaiho	
9:20~10:00	<Invited Lecture> YONGHONG LIU (South China Sea Institute of Oceanology, Chinese Academy of Sciences) <b>“Iodine-containing Briarane Diterpenoids from the South China Sea Gorgonians <i>Dichotella gemmacea</i> and <i>Junceella fragilis</i>”</b>
Chair : T. Arai	
10:00~10:15	<Oral Presentation> <u>K. MATSUZAKI</u> , H. UNO, E. TOKUNAGA, N. SHIBATA (Graduate School of Engineering, Nagoya Institute of Technology) <b>“Design, Synthesis and Catalytic Activity of Bis-sulfonyl Compounds for Halogen-bonding”</b>
10:15~10:30	<Oral Presentation> <u>N. MOMIYAMA</u> (Institute for Molecular Science; SOKENDAI) <b>“Perfluoroiodides as Catalysts for Transformations of Organic Molecules”</b>
10:30~10:45	<Oral Presentation> <u>H. NAMBU</u> , I. SHIMOKAWA, T. FUJIWARA, T. YAKURA (Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama) <b>“Development of Readily Recoverable and Recyclable Magnetic Nanoparticle-Supported Iodoarene Catalysts for Phenol Oxidation”</b>
10:45~11:00	<Oral Presentation> R. SAKAMOTO, <u>K. MARUOKA</u> (Graduate School of Science, Kyoto University) <b>“New Photolytic C-H Bond Activation with Hypervalent Iodine Reagents”</b>
Chair : S. Matsumoto	
11:00~11:40	<Invited Lecture> MAKOTO FUJITA (Department of Applied Chemistry, School of Engineering, The University of Tokyo) <b>“Crystalline Sponge Method: Absolute Structure Determination for Scarce and non-Crystalline Compounds”</b>
11:45~12:30	<Short Speeches on Poster Presentations>
<b>POSTER PRESENTATIONS General Student Complex: Building 1, ROOM G1-201 (2F)</b>	
12:00~14:45	Display 12:00~14:45 , Presentation, question and answer 13:30~14:45
<b>COMMENDATION CEREMONY and LECTURES General Student Complex: Building 2</b>	
14:55~15:00	Commendation ceremony
Chair : T. Watanabe	
15:00~15:30	<Award Lecture> <u>NORITAKA NAGASAKI</u> , <sup>1</sup> YOSHIO MORIKUNI, <sup>1</sup> KOJI KATO, <sup>1</sup> NOBUMASA SUZUKI <sup>2</sup> ( <sup>1</sup> Tosoh F-Tech, Inc.; <sup>2</sup> Tosoh, Inc.) <b>“Development of a Novel Manufacturing Process for CF<sub>3</sub>I”</b>
Chair : S. Takahara	
15:30~15:45	<Oral Presentation> <u>L. XIAO</u> , A. GOTO (Division of Chemistry and Biological Chemistry, School of Physical and Mathematical Sciences, Nanyang Technological University, Singapore) <b>“Organoiodine Compounds as Efficient Initiators for Polymer Architectural Designs via Metal-Free Controlled Radical Polymerization”</b>
15:45~16:00	<Oral Presentation> <u>Y. MATSUI</u> <sup>1,2</sup> , A. SAKAI <sup>1</sup> , E. OHTA <sup>1,2</sup> , H. IKEDA <sup>1,2</sup> ( <sup>1</sup> Graduate School of Engineering, Osaka Prefecture University; <sup>2</sup> RIMED, Osaka Prefecture University) <b>“Development of Room-temperature Phosphorescent Organoboron Complex by Utilizing Internal Heavy Atom Effects of Iodine Atoms”</b>
16:00~16:15	<Oral Presentation> <u>S. YANAGIDA</u> <sup>1</sup> , S. YANAGISAWA <sup>2</sup> , M. YANAGIDA <sup>3</sup> , H. SEGAWA <sup>4</sup> ( <sup>1</sup> Osaka University; <sup>2</sup> University of the Ryukyus; <sup>3</sup> NIMS; <sup>4</sup> The University of Tokyo) <b>“The Rationale of High Efficiency of PbI<sub>6</sub>-based Perovskite Solar Cells(PSC)”</b>
Chair : H. Kanoh	
16:15~16:55	<Invited Lecture> NANCY S. GOROFF (Department of Chemistry, Stony Brook University) <b>“Unsaturated Iodocarbon Molecules and Materials”</b>
17:30~19:00	<b>BANQUET COOP Restaurant Food Court 2</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 14:45.

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” Author, Co-authors (Affiliation)
S01	<b>“Oxidative Cross-Coupling Reaction of Phenols Using Organo-Iodine as a Catalyst”</b> <u>K. MORIMOTO</u> <sup>1</sup> , K. SAKAMOTO <sup>1</sup> , Y. TAKAHASHI <sup>1</sup> , T. DOHI <sup>1</sup> , Y. KITA <sup>2</sup> ( <sup>1</sup> College of Pharmaceutical Sciences, Ritsumeikan University; <sup>2</sup> Research Organization of Science and Technology, Ritsumeikan University)
S02	<b>“Glycol Cleavage Using Sodium Hypochlorite Catalyzed by Iodobenzene and Its Application”</b> R. OSUGI, R. MATSUSHIMA, K. YAMAZAKI, S. YONEYAMA, <u>M. KIRIHARA</u> (Department of Materials and Life Sciences, Shizuoka Institute of Technology)
S03	<b>“Development of an Easily Separable and Highly Reactive 2-Iodobenzamide Catalyst”</b> <u>Y. NISHIMURA</u> , H. NISHI, H. NAMBU, T. FUJIWARA, T. YAKURA (Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama)
S04	<b>“Oxidation of Alkene with Chiral Hypervalent Iodine(III): Enantioselective Arylation using Intramolecular Carbon-nucleophile”</b> <u>M. SHIMOGAKI</u> , M. FUJITA, T. SUGIMURA (Graduate School of Material Science, University of Hyogo)
S05	<b>“Hypoiodite-Catalyzed Peroxidative Dearomatization of Phenols”</b> <u>K. NISHIOKA</u> , M. UYANIK, K. ISHIHARA (Nagoya University)
S06	<b>“Mechanistic Study on Aryl Transfer Reaction of Diaryl-λ<sup>3</sup>-iodane with Aryl Iodide”</b> Y. MASUMOTO <sup>1,2</sup> , T. IUCHI <sup>3</sup> , M. OCHIAI <sup>3</sup> , K. MIYAMOTO <sup>1</sup> , M. UCHIYAMA <sup>1,2</sup> ( <sup>1</sup> Graduate School of Pharmaceutical Sciences, The University of Tokyo; <sup>2</sup> RIKEN; <sup>3</sup> Graduate School of Pharmaceutical Sciences, University of Tokushima)
07	<b>“Transition-Metal-Free One-Pot Preparation of Benzopyrans from Propargyl Alcohols with Diaryl Iodonium Salts”</b> <u>T. SASAKI</u> , K. MORIYAMA, H. TOGO (Graduate School of Science, Chiba University)
08	<b>“One-Pot Preparation of Tetrazole Derivatives from Aldehydes with Trivalent Iodines”</b> <u>T. IMAI</u> , K. MORIYAMA, H. TOGO (Graduate School of Science, Chiba University)
09	<b>“Development of Synthetic Reaction to Prepare Novel Thienopyrazines Using Hypervalent Iodine Reagents and Their Properties”</b> <u>Y. TAKEDA</u> , S. UETA, S. MINAKATA (Graduate School of Engineering, Osaka University)
S10	<b>“Decarboxylative Ritter-Type Amination Using Iodine Reagents”</b> <u>T. WATANABE</u> , K. KIYOKAWA, S. MINAKATA (Graduate School of Engineering, Osaka University)
S11	<b>“Convenient Fluorination of Alkynes Using Hypervalent Iodine Reagents”</b> <u>S. MIZUNO</u> , K. MUTA, J. OYAMADA, T. KITAMURA (Department of Chemistry and Applied Chemistry, Saga University)
S12	<b>“Hypervalent Iodine-Mediated Intramolecular Aminofluorination of Homoallylic Amines”</b> <u>A. MIYAKE</u> , K. MUTA, J. OYAMADA, T. KITAMURA (Department of Chemistry and Applied Chemistry, Saga University)
S13	<b>“Synthesis of Novel Pentafluorosulfanylpyridine Hypervalent Iodine Reagents”</b> <u>M. TAKADA</u> <sup>1</sup> , P. DAS <sup>1</sup> , E. TOKUNAGA <sup>1</sup> , K. MATSUZAKI <sup>1</sup> , N. SAITO <sup>2</sup> , N. SHIBATA <sup>1</sup> ( <sup>1</sup> Department of Frontier Materials, Nagoya Institute of Technology; <sup>2</sup> Ube Industries, Ltd.)
S14	<b>“Biological Evaluation of Fluoro-functionalized Aryliodonium Salts”</b> <u>E. TOKUNAGA</u> <sup>1</sup> , K. MATSUZAKI <sup>1</sup> , P. DAS <sup>1</sup> , M. TAKADA <sup>1</sup> , N. SAITO <sup>2</sup> , N. SHIBATA <sup>1</sup> ( <sup>1</sup> Nagoya Institute of Technology; <sup>2</sup> Ube Industries, Ltd.)
15	<b>“Oxidation of Alcohols to Aldehydes or Ketones Using Iodic Acid”</b> <u>S. IMAI</u> , H. TOGO (Graduate School of Science, Chiba University)
16	<b>“One-Pot Transformation of Aldehydes into One-carbon Homologated Nitriles with Wittig Reaction”</b> <u>M. EZAWA</u> , H. TOGO (Graduate School of Science, Chiba University)

S17	<b>“Metal-Free Cycloisomerization-Iodination of <i>N</i>-Propargylamide Derivatives”</b> S. SUZUKI, A. SAITO (Graduate School of Engineering, Tokyo University of Agriculture and Technology)
S18	<b>“Silyl Group-Directed 6-<i>exo-dig</i> Iodocyclization”</b> T. OKITSU <sup>1</sup> , R. SUGIHARA <sup>1</sup> , F. MATANO <sup>1</sup> , H. NAKAHIGASHI <sup>1</sup> , I. FUKUDA <sup>1</sup> , Y. IN <sup>2</sup> , A. WADA <sup>1</sup> ( <sup>1</sup> Kobe Pharmaceutical University; <sup>2</sup> Osaka University of Pharmaceutical Sciences)
19	<b>“Visible-Light Perfluoroalkylation Using Perfluoroalkylhalides as a Radical Precursors”</b> S. SHIGENAGA, M. IKEGAMI, T. YAJIMA (Ochanomizu University)
20	<b>“Synthesis of Internal Alkyne <i>via</i> CuI Catalyzed Suzuki-Miyaura Type Reaction”</b> E. ISHIKAWA, T. MINO, K. WATANABE, Y. YOSHIDA, M. SAKAMOTO (Graduate School of Engineering, Chiba University)
21	<b>“Development of Novel Optically Active Hypervalent Iodine(V) Reagents and Their Applications”</b> A. MAGARA, Y. YOSHIDA, T. MINO, M. SAKAMOTO (Graduate School of Engineering, Chiba University)
22	<b>“Function of Chiral Bis(aminoimino)binaphthol-zinc Trinuclear Complex in Catalytic Asymmetric Iodocyclization”</b> H. MAKINO <sup>1</sup> , O. WATANABE <sup>1</sup> , N. SUGIYAMA <sup>1</sup> , Y. KAMEI <sup>2</sup> , S. YABE <sup>2</sup> , M. YAMANAKA <sup>2</sup> , T. ARAI <sup>1</sup> (Graduate School of Science, Chiba University <sup>1</sup> ; Graduate School of Science, Rikkyo University <sup>2</sup> )
23	<b>“Chiral Bis(imidazolidine)iodobenzene (I-Bidine) Organocatalyst for Thiochromane Synthesis using Asymmetric Michael/Henry Reaction”</b> T. SUZUKI, T. INOUE, S. KUWANO, T. ARAI (Graduate School of Science, Chiba University)
S24	<b>“Development of Halogen-bond-donor/Thiourea Cocatalyzed Unique Reactions”</b> Y. KOBAYASHI, S. LI, Y. NAKATSUJI, Y. TAKEMOTO (Graduate School of Pharmaceutical Sciences, Kyoto University)
S25	<b>“Crystal Structures of Iodoisoquinolinium Salts with a Halogen Bonding”</b> S. MATSUMOTO, S. KIKUCHI, M. AKAZOME (Graduate School of Engineering, Chiba University)
S26	<b>“Effect of Iodine Addition on Morphological Control of Saccharide-derived Hydrothermal Char”</b> T. SEKIDO <sup>1</sup> , Y. MATSUZAKI <sup>1</sup> , O. TANAIKE <sup>2</sup> , H. SAKANE <sup>1</sup> , N. MIYAJIMA <sup>1</sup> ( <sup>1</sup> University of Yamanashi; <sup>2</sup> AIST)
27	<b>“Development of Model Compounds of Reactive Intermediates of Thyroid Hormone Activating Enzymes by Taking Advantage of Large Molecular Cavities”</b> K. GOTO, T. KARASAKI, R. KIMURA, S. SASE (School of Science, Tokyo Institute of Technology)
S28	<b>“Anti-Cancer Activities and Iodination of Glucosamine-Introduced Platinum and Palladium Complexes”</b> A. NOMOTO, <sup>1</sup> M. HATANO, <sup>1</sup> Y. SAKAI, <sup>1</sup> H. KATAOKA, <sup>2</sup> S. YANO, <sup>3</sup> A. OGAWA <sup>1</sup> ( <sup>1</sup> Graduate School of Engineering, Osaka Prefecture University; <sup>2</sup> Graduate School of Medical Sciences, Nagoya City University; <sup>3</sup> Graduate School of Materials Science, Nara Institute of Science and Technology)
29	<b>“Most Effective Form of Povidone-Iodine-Sugar Combination Pasta Not Only for Bed Sore But Also for Diabetic Gangrene”</b> T. KUBO (A Society for the Study of Bed Sore)
30	<b>“Analysis of the PVA(-SbQ)-iodine Formation Complex by the Electrospinning Method”</b> S. FUJISAWA, D. KASHIWAI, Y. EMA, N. IWAMURA, Y. SATO, M. MIZUKOSHI, T. NAGANO, N. ICHIKUNI, S. TAKAHARA (A Graduate school of Advanced Integration Science, Chiba University)
31	<b>“Application of Anammox Process for Underground Brine Treatment”</b> N. YOKOTA <sup>1</sup> , Y. WATANABE <sup>1</sup> , M. SHIMAZAKI <sup>2</sup> , Y. OTSUKA <sup>3</sup> ( <sup>1</sup> Kanto Natural Gas Development Co., LTD; <sup>2</sup> Nihon Tennen Gas Co., LTD; <sup>3</sup> Godo Shigen Co., LTD)

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