

Program Summary

☆September 2nd, Wednesday☆

18:00 – Registration & Welcome reception at Sapporo Aspen Hotel

☆September 3rd, Thursday☆

*at MC030, Materials Engineering and Chemistry Building,
Faculty of Engineering, Hokkaido University*

9:00 – 9:10 **Opening Remarks** Toshifumi Satoh (*Hokkaido University*)
Wen-Chang Chen (*National Taiwan University*)

Chairman: Prof. Takashi Ishizone

9:10 – 9:50 **Plenary Lecture**

PL01 **Recent Progress in Low Band Gap Polymer Solar Cells**

Show-An Chen (*National Tsing Hua University*)

Chairman: Prof. Guey-Sheng Liou

9:50 – 10:20 **Keynote Lecture**

KL01 **Role of Mechanical Linkage in Polymer Systems: Tough Polymer and Topology-Transformable Polymer**

Toshikazu Takata (*Tokyo Institute of Technology*)

10:20 – 10:40 **Invited Lecture**

IL01 **Band-gap and Solubility Tunable Two-dimensional Conjugated Polymers for Photovoltaic Applications**

Kung Hua Wei (*National Chiao-Tung University*)

10:40 – 11:00 **Coffee break**

Chairman: Prof. Ru-Jong Jeng

11:00 – 11:20 **Invited Lecture**

IL02 **Synthesis of Polycyanurates and Their Application to Optical Materials and Dismantlable Adhesives**

Mitsuru Ueda (*Tokyo Institute of Technology and Kanagawa University*)

11:20 – 11:40 **Invited Lecture**

IL03 **Stereoregularity Effects in Self-assembly**

Jing Cherng Tsai (*National Chung Cheng University*)

Chairman: Prof. Toshikazu Takada

11:40– 12:00

Invited Lecture

IL04

Biosynthesis and Properties of Eco-friendly Polymers

Seiichi Taguchi (*Hokkaido University*)

12:00 – 12:20

Invited Lecture

IL05

Functional High-Performance Polymers for Advanced Applications

Guey-Sheng Liou (*National Taiwan University*)

12:20 – 13:50

Lunch

Chairman: Prof. Jing-Cherng Tsai

13:50 – 14:20

Keynote Lecture

KL02

Topological Polymer Chemistry Designing Macromolecular Graph Constructions

Yasuyuki Tezuka (*Tokyo Institute of Technology*)

14:20 – 14:50

Keynote Lecture

KL03

Temperature-Dependent Composition Profile of Diblock Copolymer Exhibiting Lower Critical Ordering Transition: A Chain Flipping Model

Hsin-Lung Chen (*National Tsing Hua University*)

Chairman: Prof. Yasuyuki Tezuka

14:50 – 15:10

Invited Lecture

IL06

Synthesis of Amphiphilic Cyclic, Figure-Eight-Shaped, and Tadpole-Shaped Block Copolyethers Using Click Cyclization

Toshifumi Satoh (*Hokkaido University*)

15:10 – 15:30

Coffee break

15:30 – 15:50

Invited Lecture

IL07

Chiral Recognition of Enantiomers Via Supramolecular Constructions Derived From Cholesterol

Jui-Hsiang Liu (*National Cheng Kung University*)

Chairman: Prof. Hsin-Lung Chen

15:50 – 16:10

Invited Lecture

IL08

Anionic polymerization of 4-acylstyrenes

Takashi Ishizone (*Tokyo Institute of Technology*)

16:10 – 16:30

Invited Lecture

IL09

Synthesis and Properties of Dual-Cleavable ABCDE Miktoarm Stars

Youliang Zhao (*Soochow University*)

16:30 – 18:00

Poster Session

at Seminar Room 1 (1st Floor), Frontier Research in Applied Sciences Building

18:30 –

Dinner at Sapporo Beer Garden

☆September 4th, Friday☆

at MC030, Materials Engineering and Chemistry Building,

Faculty of Engineering, Hokkaido University

Chairman: Prof. Fumio Sanda

9:00 – 9:30

Keynote Lecture

KL04

Tough Soft Materials with Sacrificial Bonds

Jian Ping Gong (*Hokkaido University*)

9:30 – 10:00

Keynote Lecture

KL05

Development of Conjugated Polymers and Fullerene Derivatives for Organic Solar Cell Applications

Chain-Shu Hsu (*National Chiao Tung University*)

Chairman: Prof. Chi-How Peng

10:00 – 10:20

Invited Lecture

IL10

Crystal Cross-Linking as a New Type of Solid-State Polymerization

Kazuki Sada (*Hokkaido University*)

10:20 – 10:40

Coffee break

10:40 – 11:00

Invited Lecture

IL11

Polysarcosine: from Syntheses to Properties

Jun Ling (*Zhejiang University*)

Chairman: Prof. Ken Kojio

11:00 – 11:20

Invited Lecture

IL12

Synthesis of Optically Active Conjugated Polymers and Control of the Higher Order Structures

Fumio Sanda (*Kansai University*)

11:20 – 11:40

Invited Lecture

IL13

Spray-Coating Techniques for Organic Electronics

Cheng-Liang Liu (*National Central University*)

11:40 – 13:20

Lunch

Chairman: Prof. Teruaki Hayakawa

13:20 – 13:40

Invited Lecture

IL14

Living Anionic Polymerization of 1,4-Diisopropenylbenzene and Its Derivatives

Akira Hirao (*Tokyo Institute of Technology, National Taiwan University, and Soochow University*)

13:40 – 14:00

Invited Lecture

IL15

Polymer Network Based Tunable Plasmonic Device Using Nanoparticles

Kuniharu Ijiro (*Hokkaido University*)

Chairman: Prof. Jui-Hsiang Liu

14:00 – 14:20

Invited Lecture

IL16

Honeycomb-Like Polymeric Films from Dendritic Polymers

Ru-Jong Jeng (*National Taiwan University*)

14:20 – 14:40

Invited Lecture

IL17

Rheo-Optical Analysis of Polymer Materials Using a Synchrotron Radiation X-ray Scattering Technique

Ken Kojio (*Kyushu University*)

14:40 – 15:10

Coffee break

Chairman: Prof. Keiji Tanaka

15:10 – 15:30

Invited Lecture

IL18

Synthesis, Morphology, and Applications of Conjugated Moiety Containing Block Copolymers

Wen-Chang Chen (*National Taiwan University*)

15:30 – 15:50

Invited Lecture

IL19

Perpendicularly Oriented Lamellar Structure Formation Induced by Surface Segregation of Block Copolymer

Teruaki Hayakawa (*Tokyo Institute of Technology*)

Chairman: Prof. Youliang Zhao

15:50 – 16:10

Invited Lecture

IL20

Phase Separation Structures of Polymer/Fullerene Blends in Bulk Heterojunction Solar Cells

Shih-Huang Tung (*National Taiwan University*)

16:10 – 16:30

Invited Lecture

IL21

Water Sorption and Proton Conductivity in Thin Nafion Films

Keiji Tanaka (*Kyushu University*)

16:30 – 17:00

Coffee break

Chairman: Prof. Wen-Chang Chen

17:00 – 17:30

Keynote Lecture

KL06

Origins of Periodical Assembly in Polymer Spherulites: Polycrystalline Branching, Bending, and Scrolling

Eamor Woo (*National Cheng Kung University*)

17:30 – 18:10

Plenary Lecture

PL02

Recent Development for Group Transfer Polymerization of Acrylate Monomers Using Organocatalyst

Toyoji Kakuchi (*Hokkaido University*)

18:40 –

Banquet at Sapporo Aspen Hotel

☆September 5th, Saturday☆

at MC030, Materials Engineering and Chemistry Building,

Faculty of Engineering, Hokkaido University

Chairman: Prof. Yukari Oda

9:00 – 9:20

Young Scientist Invited Lecture

YIL01

A Facile PDMS-Assisted Crystallization for the Crystal-Engineering of C₆₀ Single-Crystal Organic Field-Effect Transistors

Chien Lung Wang (*National Chiao-Tung University*)

9:20 – 9:40

Young Scientist Invited Lecture

YIL02

Synthesis and Properties of Novel Mechanochromic Polymers with Tetraarylsuccinonitrile Unit

Raita Goseki (*Tokyo Institute of Technology*)

Chairman: Prof. Chien Lung Wang

9:40 – 10:00

Young Scientist Invited Lecture

YIL03

Morphology, Photophysical Properties, and Sensor Application of Electrospun Nanofibers from Photoluminescent Copolymers

Chi-Ching Kuo (*National Taipei University of Technology*)

10:00 – 10:20

Young Scientist Invited Lecture

YIL04

Sub-20 nm Scale Nanoorganization in Architecturally Complex Sugar-Based Block Copolymers

Takuya Isono (*Hokkaido University*)

10:20 – 10:40

Coffee break

Chairman: Prof. Raita Goseki

10:40 – 11:00

Young Scientist Invited Lecture

YIL05

From CMRP to ATRP, a direct chain extension from poly(vinyl acetate) to poly(methyl methacrylate) and polystyrene

Chi-How Peng (*National Tsing Hua University*)

11:00 – 11:20

Young Scientist Invited Lecture

YIL06

A Novel Design of Polymer Interfaces Based on Poly(vinyl ether)s

Yukari Oda (*Kyushu University*)

Chairman: Prof. Chi-Ching Kuo

11:20 – 11:40

Young Scientist Invited Lecture

YIL07

Fluorescent and Stimuli-Responsive Mixed Micelles for Drug Delivery System

Wen-Chung Wu (*National Cheng Kung University*)

11:40 – 12:00

Young Scientist Invited Lecture

YIL08

***t*-Bu-P₄-Catalyzed Group Transfer Polymerization of Methyl Methacrylate**

Yougen Chen (*Hokkaido University*)

Chairman: Prof. Wen-Chang Chen and Toshifumi Satoh

12:00 –

Poster award ceremony

12:30—

Lunch

14:00 –

Move to Dai-ichi Takimotokan, Noboribetsu from Sapporo Aspen Hotel

16:00 –

Integration meeting at Dai-ichi Takimotokan, Noboribetsu

☆September 6th, Sunday☆

at Dai-ichi Takimotokan, Noboribetsu

8:00 – 9:50

Meeting for future collaboration at Dai-ichi Takimotokan, Noboribetsu

Chairman: Prof. Wen-Chang Chen and Toshifumi Satoh

9:50 –

Closing remarks and Move to New Chitose Airport

List of Poster Session

☆September 3rd, Thursday☆

16:30 – 18:00

at Seminar Room 1 (1st Floor), Frontier Research in Applied Sciences Building

- P01** **Synthesis and structure of macromolecular [3]rotaxane using α -cyclodextrin-based size-complementary [3]rotaxane**
Yosuke Akae (*Tokyo Institute of Technology*)
- P02** **Novel Highly Selective and Reversible Chemosensor Based on Fluorescent Electrospun Nanofibers with pH and Hg²⁺**
Bo-Yu Chen (*National Taiwan University*)
- P03** **Precise Synthesis of Sequence-controlled Tetrablock Quaterpolymers by Means of Living Anionic Polymerization**
Yuri Matsuo (*Tokyo Institute of Technology*)
- P04** **Low Voltage Organic Field-effect Transistor Memory Devices using High k Water/methanol-soluble Polymer Dielectrics**
Chih-Chien Hung (*National Taiwan University*)
- P05** **Precise Synthesis of Star-Shaped Acrylate Polymer by Core-First Group Transfer Polymerization**
Takahiro Ito (*Hokkaido University*)
- P06** **Application of novel polymer sustained glutaraldehyde resin towards rapid extraction of sphingolipids**
Siddabasave Gowda B (*Hokkaido University*)
- P07** **Lewis acid-catalyzed Group Transfer Polymerization of N-Acryloylmorpholine with Hydrosilane**
Seiya Kikuchi (*Hokkaido University*)
- P08** **Effective Intramolecular Hydroamination of Polyallylurethanes with Pd-tethering Macrocyclic Catalyst**
Hikaru Iwasaki (*Tokyo Institute of Technology*)
- P09** **Functionalization of nano-fibrillated bacterial cellulose (NFBC) via surface modification**
Junya Ohba (*Hokkaido University*)
- P10** **Synthesis of Stereoregular Block Copolyethers by *t*-Bu-P₄-Catalyzed Ring-Opening Polymerization of Epoxides**
Kana Miyachi (*Hokkaido University*)
- P11** **Anisotropic Biomineralization: Anisotropic Mineral Growth in Elongated Hydrogel**
Kazuki Fukao (*Hokkaido University*)
- P12** **Precise synthesis of multiblock acrylate polymers using organocatalyzed group transfer polymerization**
Kenji Takada (*Hokkaido University*)
- P13** **Study on the effect of ROS in dynamic instability of microtubules *in vitro***
Md. Sirajul Islam (*Hokkaido University*)
- P14** **B(C₆F₅)₃-Catalyzed Group Transfer Polymerization of Methacrylic Esters**
Kodai Kitano (*Hokkaido University*)
- P15** **Living Anionic Polymerization of Benzofulvene**
Yuki Kosaka (*Tokyo Institute of Technology*)

- P16** **Cyclopolymerization of Norbornene End-Functionalized Poly(ϵ -caprolactone) Using Metathesis Catalyst**
Kouhei Honda (*Hokkaido University*)
- P17** **Spin-coated well-ordered nanostructures of wholly aromatic condensation polymers**
Ling Gao (*Tokyo Institute of Technology*)
- P18** **Fabrication of Tough Hydrogel Fiber**
Masanori Okada (*Hokkaido University*)
- P19** **Precise Synthesis of Trefoil-Shaped Poly(Butylene Oxide) via Ring-Opening Polymerization and Intramolecular Click Cyclization**
Hirohiko Matsuno (*Hokkaido University*)
- P20** **Novel Solution-Processable Sulfide-Containing Polyimide/ZrO₂ Hybrids with Tunable Digital Memory Behaviors**
Chia-Liang Tsai (*National Taiwan University*)
- P21** **Preparation and conformational analysis of DNA brush**
Satoshi Nakamura (*Hokkaido University*)
- P22** **Bulk Ring-Opening Polymerization of Cyclic Esters Catalyzed by Diphenyl Phosphate**
Tatsuya Saito (*Hokkaido University*)
- P23** **Effect of side-chain bulkiness on the OTFT and OPV performance of two dimensional conjugated polymers based on 5,6-difluoro-benzo-2,1,3-thiadiazole and quarterthiophene units**
Shih-Hao Peng (*National Chiao Tung University*)
- P24** **Synthesis of Comb-Shaped Poly(vinyl ether)s and Their Surface Segregation Behaviors**
Shin Sugimoto (*Kyushu University*)
- P25** **Synthesis of Miktoarm Copolymers using Hydroxyl End-functionalized Poly(methyl methacrylate)s as Macroinitiators**
Eric Ofosu-Twum (*Hokkaido University*)
- P26** **Structural Analyses of Polyester in Solution State by VCD**
Takahiro Hongen (*Hokkaido University*)
- P27** **Synthesis of highly pure ethynyl end-functionalized poly(3-hexylthiophene) via Kumada catalyst transfer polycondensation**
Shoichi Takashima (*Hokkaido University*)
- P28** **Synthesis and Perpendicular Lamellar Orientation Control of Fluorine- and Silicon-containing Block Copolymers**
Hiroki Takano (*Tokyo Institute of Technology*)
- P29** **Enhanced Adjuvant Activity of double-stranded RNA by the Immobilization onto Gold Nanoparticles**
Taiyu Tazaki (*Hokkaido University*)
- P30** **Bulk polymerization of lactide using organophosphoric acids as a catalyst**
Yusuke Aizawa (*Hokkaido University*)
- P31** **Mechanism of poly(lactate-co-hydroxybutyrate) degradation by a soil bacterium depolymerase**
Camila Utsunomia (*Hokkaido University*)
- P32** **Synthesis of Amphiphilic Trefoil-shaped Block Copolyether**
Yusuke Satoh (*Hokkaido University*)
- P33** **Effects of Nuclei on Ring-Banded Spherulitic Morphology of Poly(3-hydroxybutyric acid-co-3-hydroxyvaleric) Co-crystallized with Poly(trimethylene adipate)**
Chun Ning Wu (*National Cheng Kung University*)

- P34** **Effect of Arm Number and Arm Length on Thermoresponsive Property of Star-Shaped Poly(*N*-isopropylacrylamide)**
Kohei Yoshida (*Hokkaido University*)
- P35** **An Effect of Plasma Treatment on Aggregation States of Polystyrene Surface**
Ruriko Matsuyama (*Kyushu University*)
- P36** **Synthesis, Morphology and Properties of Poly(3-hexylthiophene)-*block*-Pendent Poly(isoindigo) Donor-Acceptor Block Polymers for High Performance Nonvolatile Transistor Memory**
Jau-Tzeng Wang (*National Taiwan University*)
- P37** **Precision Synthesis and Orientation Structural Control of Silicon-containing Block Copolymers in Thin Films For Next Generation Lithography Materials**
Rin Odashima (*Tokyo Institute of Technology*)