

Room A

Wed. May 23

INVITED LECTURES

M. Higuchi, presiding

10:15 1A06IL Biomatter-based design and development of functional polymers
Takeshi Serizawa

A. Usuki, presiding

11:00 1A09IL Recent trend in applications of cellulose nanofibers to polymer materials
Akira Isogai

M. Suzuki, presiding

12:30 1A12IL Stimuli-responsive supramolecular systems guided by chemical reactions
Masato Ikeda

S. Kutsumizu, presiding

13:15 1A15IL New Polymer Morphologies Created by Complex Multi-component Polymer Systems
Yushu Matsushita

AWARD LECTURES

E. Ihara, presiding

14:00 1A18AL Polymers with Intrinsic Porosities: Synthesis, Structure, Properties and Applications
Swaminathan Sivaram, Chilukuri.V. Avadhani, Vikas Kumar, Shyambo Chatterjee

T. Kitayama, presiding

15:00 1A22AL Precision Design of Complex Macromolecular and Hybrid Nanostructures
Axel H. E. Müller

A. Takahara, presiding

15:45 1A25AL Molecular Structures and Assemblies Maximizing Properties of Advanced Functional Polymers
Moonhor Ree

Y. Tezuka, presiding

16:30 1A28AL 2D Polymers: Synthesis, Characterization, Application
A. Dieter Schlüter

Thu. May 24

AWARD LECTURES

M. Maeda, presiding

9:30 2A03AL Development of Spray Type Adhesion Barrier
Naotaka Chino, Hiroyuki Ishihara, Taishi Niimi, Miho Kai, Tetsuro Kawanishi

INVITED LECTURES

Y. Chujo, presiding

10:15 2A06IL Multifunctional Supramolecular Platforms with Stimuli-Responsive Surface
Chulhee Kim

N. Yoshie, presiding

11:00 2A09IL Nanocrystal-Based Polymer Nanocomposites: Future of Optoelectronics
Kookheon Char

AWARD LECTURES

S. Aoshima, presiding

12:30 2A12AL Design of artificial chaperones to engineer biomolecular functions
Atsushi Maruyama

M. Shibayama, presiding

13:15 2A15AL Shape Persistence Micelles with the Same Aggregation Numbers with the
Platonic Solids
Kazuo Sakurai

INVITED LECTURES

T. Doi, presiding

14:00 2A18IL Highly sensitive photopolymers based on cascade-type chemistry
Koji Arimitsu

M. Kamigaito, presiding

15:00 2A22IL Precision Polymer Synthesis Using Visible Light
Cyrille A. Boyer

S. Izawa, presiding

15:45 2A25IL Recent Trends and Outlook in Acrylonitrile-Butadiene-Styrene Compounding
Industry in China
Jian Zhang, Ting Zhou, Guifang Shan, Wenqiang Li, Lei Gao, Minghua Luo, Min
Qi Xin

Fri. May 25

INVITED LECTURES

K. Inomata, presiding

9:30 3A03IL Synthesis of Cyclic Vinyl Polymers by Ring-Closing Strategy without Entropic
Penalty (Highly Diluted Condition)
Akinori Takasu

AWARD LECTURES

T. Suzuki, presiding

- 10:15 3A06AL Fundamental Research of Radical Polymerizations using Electron Spin Resonance (ESR) Spectroscopy
Atsushi Kajiwara

I. Tomita, presiding

- 11:00 3A09AL Development of New Polymeric Materials Based on Electronic States of Group 14 Heavy Elements
Joji Ohshita

H. Yokoyama, presiding

- 12:30 3A12AL Development of macroscopically oriented polymer gels using magnetic fields
Yasuhiro Ishida

K. Tanaka, presiding

- 13:15 3A15AL Rational Molecular Design for Control of Monomer Sequence and Ring-Expansion Polymerization
Makoto Ouchi

H. Asanuma, presiding

- 14:00 3A18AL Fabrication of bio-nano hybrid materials based on molecular self-assembly
Yoshihiro Sasaki

Room B

Wed. May 23

POLYMERS TODAY AND BEYOND

H. Asanuma, presiding

- 10:15 1B06IL Next Generation Batteries for EVs Contributing to CO2 Reduction
Kiyoshi Kanamura
- 11:00 1B09IL Functionalization of Lithium-ion Battery Separators by Coating Technology
Satoshi Nishikawa

H. Nakamura, presiding

- 12:30 1B12IL Expectation for Automotive polymer under the current circumstances
Takayuki Nagai
- 13:15 1B15IL Development of Carbon Fiber Composite Material for Automotive Applications.
Yukitane Kimoto

S. Kobayashi, presiding

- 14:00 1B18IL Cutting edge technologies and equipment for CFRP parts (Thermoplastic and thermoset)
Takahiro Oniwa, Hisashi Toyama
- 15:00 1B22IL Hybrid technologies based on reactions at the interfaces and the future
Mitsuteru Mutsuda
- 15:45 1B25IL Next-Generation Tire Materials to Realize a Sustainable Society
Shojiro Kaita

Thu. May 24

POLYMERS TODAY AND BEYOND

K. Nagase, presiding

9:30 2B03IL SDGs; Opportunities for Science, Technology and Innovation in an Era of Transformation
Takao Kuramochi

H. Fujimura, presiding

10:15 2B06IL Dow 2025 Sustainability Goals - Redefine the role of business in society
Yuichi Urano

S. Ogawa, presiding

11:00 2B09IL Sumitomo Chemical Group's initiatives for SDGs
Kanako Fukuda

S. Matsumura, presiding

12:30 2B12IL Konica Minolta's R & D, -"SHINKA" to become a digital company with insight into implicit challenges -
Hiroshi Kita

A. Nanasawa, presiding

13:15 2B15IL R&D management of the DIC group that provides Color & Comfort
Kazunari Sakai

M. Yokota, presiding

14:00 2B18IL R&D Strategy of Sumitomo Bakelite Group To create and provide smiles
Koji Choki

Fri. May 25

POLYMERS TODAY AND BEYOND

H. Nakamura, presiding

9:30 3B03IL Development of Polymer Thin Film (Nanosheet)-type Devices for Health and Medical Care
Shinji Takeoka

H. Yokoi, presiding

10:15 3B06IL Novel medical adhesive LYDEX which is excellent in the safety and functionality using a natural polymer
Shokyu Gen (Suong-Hyu Hyon)

11:00 3B09IL Polymer Materials for Medical Devices
Tetsuro Kawanishi

H. Nakamura, presiding

12:30 3B12IL Design of biocompatible soft-biomaterials for medical devices
Masaru Tanaka

H. Yokoi, presiding

13:15 3B15IL Polymer Materials for Blood Purification Therapies
Takao Nishimura

14:00 3B18IL From Apparel to medical materials (Entry into different business field)
Masakazu Suzuki

Room C

Wed. May 23

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

T. Uemura, presiding

- 10:00 1C05 Development of sulfur-free RAFT agent for novel living radical polymerization
Maki Amano, Hisaaki Takeshima, Mineto Uchiyama, Kotaro Satoh, Masami Kamigaito
- 10:15 1C06 Controlled Polymerization of Bio-Based Styrene Derivatives via Various Growing Active Species
Hisaaki Takeshima, Kotaro Satoh, Masami Kamigaito
- 10:30 1C07 Sequence-Regulated Polymers via Atom Transfer Radical Addition and Thiol-Ene Polyaddition: Effect of the Sequence of Vinyl Monomers
Yoshiko TANAKA, Mineto UCHIYAMA, Koutaro SATOH, Masami KAMIGAITO

S. Yamago, presiding

- 10:45 1C08 Synthesis of sequence-regulated vinyl polymers using a metal-organic framework
Shuto Mochizuki, Susumu Kitagawa, Takashi Uemura
- 11:00 1C09 Fabrication of ultrathin polymer films at the molecular level using pillared-layer metal-organic frameworks
Shuto Mochizuki, Takashi Uemura
- 11:15 1C10 Making theoretical significance of Q-e value by computational chemistry
Ryo Nishikubo, Yoshihiro Hayashi, Susumu Kawauchi
- 11:30 1C11 Photoinitiator-free photopolymerization of common acrylate monomers with 254-nm light
Masahiro Furutani, Takashi Ide, Shinobu Kinoshita, Raita Horiguchi, Ichiro Mori, Kazuhiro Sakai, Koji Arimitsu

K. Satoh, presiding

- 12:30 1C12 Living radical polymerization of N-vinyl monomers using organotellurium compounds
Weijia Fan, Shigeru Yamago
- 12:45 1C13 Synthesis of structurally controlled hyperbranched polystyrene through a designed monomer with hierarchical reactivity.
Yangtian LU, Shigeru YAMAGO
- 13:00 1C14 Synthesis of structurally controlled core-shell block copolymers with thermal responsive solution properties
Yiming LIN, Yangtian LU, Shigeru YAMAGO
- 13:15 1C15 Effect of viscosity on tellanyl radical-mediated chain transfer reaction
Xiaopei LI, Yasuyuki NAKAMURA, Shigeru YAMAGO

H. Mori, presiding

- 13:30 1C16 Radical-radical coupling reaction based on the regioselective radical addition to [4]dendralene
Yuji Imamura, Takehiro Fujita, Madison J. Sowden, Michael S. Sherburn, Shigeru Yamago
- 13:45 1C17 Precision Alternating Copolymerization of Styrene and Maleimide: Molecular Design toward Sequence Analysis and Alternating-Oriented Functions
Kana Nishimori, Takaya Terashima, Makoto Ouchi
- 14:00 1C18 Alternating copolymer of methacrylic acid and acrylamides: Diverse side chain structure for sequence oriented functions
Yuki Kametani, Takaya Terasima, Makoto Ouchi

- 14:15 1C19 Cleavable and Transformable Monomer for Sequence Control via Radical Addition and Polymerization
Dongyoung Oh, Takaya Terashima, Makoto Ouchi
- 14:30 1C20 Additive Effect of Protic Solvent on Controlled Radical Polymerization of Styrene Bearing Electron Donating Group
Hayato Yoshioka, Kazuo Yamaguchi, Motoyasu Kobayashi
- M. Ouchi, presiding**
- 14:45 1C21 Living Radical Polymerization of Ethyl Acrylate using the Initiator with π -Conjugated Structure
Tomoyuki Ono, Shotaro Hayashi, Ryouyusuke Hirai, Toshio Koizumi, Shin-ichi Yamamoto
- 15:00 1C22 Synthesis of Triblock Copolymers Containing Rigid Polyfumarate Segment by RAFT polymerization
Nagisa Tsuji, Kohei Takada, Akikazu Matsumoto
- 15:15 1C23 Synthesis of iso-polyacrylonitrile and its dielectric properties
YU WANG, RYOTA NAKAMURA, TAKEO SUGA, KENICHI OYAZU, HIROYUKI NISHIDE
- 15:30 1C24 Relationship between Reactivity of Radical Copolymerization and Thermoresponsive Property of Hydrophilic/Hydrophobic Copolymer Gels
Daiki Nishisako, Shohei Ida, Shokyoku Kanaoka
- 15:45 1C25 Homopolymerization of Vinyl Ethers
Shinji Sugihara, Ayano Yoshida, Tsuyoshi Takayama, Takaaki Kouno, Masahiro Sudo, Yasushi Maeda
- S. Kanaoka, presiding**
- 16:00 1C26 Controlled synthesis of zwitterionic polymers containing tertiary sulfonium group
Ryutaro Imamura, Mori Hideharu
- 16:15 1C27 Synthesis of ion-conducting polymers by radical polymerization of deep eutectic monomers
Keiko Ajino, Kazuhiro Nakabayashi, Hideharu Mori
- 16:30 1C28 Solvent Effect on Radical Polymerization of Menthyl Acetamidoacrylate near Ceiling Temperature
Tsutomu Sawada, Miki Niwa, Hitoshi Tanaka
- 16:45 1C29 Radical Polymerization of Chiral Oxazolidinone Bearing Benzoyl Group
Miki Niwa, Hajime Norisada, Hitoshi Tanaka

Thu. May 24

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

A. Matsumoto, presiding

- 9:30 2C03 Synthesis of polymethacrylate bearing tetrathiaspiro-ring
Naoto Aoyagi, Takeshi Endo
- 9:45 2C04 Synthesis and polymerization behavior of the monomer bearing DBU structure
Shintaro Nagayama, Takeshi Endo
- 10:00 2C05 Synthesis and degradation of polymer bearing cyclic hemiacetal ester pendants via radical polymerization of dehydroaspirin
Akane Kazama, Yosuke Matsuhashi, Yasuhiro Kohsaka
- 10:15 2C06 Parallel control for polymer main-chain construction reaction and side-chain exchange reaction using acylhydrazone monomer
Kazutoshi Kobayashi, Kento Nakamura, Daisuke Nagai, Takeshi Yamanobe

T. Terashima, presiding

- 10:30 2C07 One-pot synthesis of sequence-controlled amino acid-derived vinyl polymers via RAFT polymerization.
Tsukasa Yamano, Nobuyuki Higashi, Tomoyuki Koga
- 10:45 2C08 One-Step Synthesis of Peptide-Vinyl Polymers Alternating Block Copolymers by Nitroxide-mediated Polymerization
Shinnosuke Nishimura, Nobuyuki Higashi, Tomoyuki Koga
- 11:00 2C09 Synthesis and Evaluation of Thioglycerol Derivative RAFT Agents for Controlled Aqueous Oligomerization of Acrylamide Monomers.
Hinata Takimoto, Shohei Taniguchi, Masanori Nagao, Yusuke Yonamine, Yu Hoshino, Yoshiko Miura
- 11:15 2C10 Synthesis of Micron-sized Hydrogel Microspheres for Visualizing Deformation at Air/Water Interface
Haruka Minato, Masaya Takizawa, Takumi Watanabe, Daisuke Suzuki
- 11:30 2C11 Preparation of fluorescent core-shell microgels
Kenshiro Honda, Takumi Watanabe, Yuka Saduka, Masaya Takizawa, Daisuke Suzuki

K. Kokado, presiding

- 12:30 2C12 Properties of cured bismaleimide resin using oligo(imidethioether)s having terminal maleimide groups
Morio Yonekawa, Keiko Ohtsuka, Hajime Kimura, Atsushi Miyata, Shinji Ikeshita
- 12:45 2C13 Synthesis and photochemical properties of near-infrared emitting graphene quantum dots possessing perimidine moieties
Kairi Yamato, Kaho Suzuki, Ryo Sekiya, Takeharu Haino
- 13:00 2C14 Synthesis and Photoluminescence Properties of Diiminate Complexes Containing Group 13 Element
Shunichiro Ito, Kazuo Tanaka, Yoshiki Chujo
- 13:15 2C15 Synthesis and Photoluminescence Properties of Boron Diiminate Complexes Having Multiple Aromatic Groups on the Ligand Moiety
Misao Yaegashi, Shunichiro Ito, Kazuo Tanaka, Yoshiki Chujo

K. Takagi, presiding

- 13:30 2C16ILY Design of functional soft materials utilizing various type cross-linking methods
Mikihiro Hayashi
- 14:00 2C18 Synthesis of Flexible and Symmetrical Ladder Polymers via Ring-Opening Reaction of Troeger's Base
Fumitaka Ishiwari, Nobuhiko Takeuchi, Takahiro Sato, Takanori Fukushima
- 14:15 2C19 Synthesis of polycarbonate and polyester containing Noria skeleton
Kuta Kitagawa, Hiroto Kudou

M. Minoda, presiding

- 14:30 2C20 Synthesis of cyclic-polysulfide by living ring-expansion polymerization
Syuto Onishi, Hiroto Kudou
- 14:45 2C21 Development of high sensitivity and resolution extreme ultraviolet laser resist material based on tannic acid
Shizuya Ohori, Hiroto Kudo
- 15:00 2C22 Synthesis of High-Molecular-Weight Cyclopolymers of Divinyl Ethers via Controlled Cationic Cyclopolymerization and Star Polymer Formation
Takafumi Yamamoto, Michio Urushisaki, Toshikazu Sakaguchi, Tamotsu Hashimoto
- 15:15 2C23 Synthesis and Properties of Star Polymers Having Two Segments with Different Solubility
Hiroki Ooishi, Shohei Ida, Satoshi Tanimoto, Shokyoku Kanaoka

K. Nakabayashi, presiding

- 15:30 2C24 Unique Thermoresponsive Behavior of Core-Crosslinked Star Poly(*N*-isopropylacrylamide)
Yuri Toyama, Shohei Ida, Shokyoku Kanaoka
- 15:45 2C25 Assembling Behavior and Rheological Properties of Star Polymers with a Tripodal Triptycene Junction
Hibiki Ogiwara, Yukihiro Yamashita, Tadahiro Kimura, Fumitaka Ishiwari, Masatoshi Tokita, Takanori Fukushima
- 16:00 2C26 Synthesis and physical properties of multicyclic poly(ϵ -caprolactone)
Yoshinobu Mato, Kohei Honda, Takuya Yamamoto, Takuya Isono, Kenji Tajima, Toshifumi Satoh
- 16:15 2C27 Facile synthesis of supramolecular A8B2 star-shaped copolymer via guest complexation of self-assembled coordination capsule
Natsumi Nitta, Mei Takatsuka, Ryo Sekiya, Takeharu Haino

Fri. May 25**A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS****K. Sakakibara, presiding**

- 9:30 3C03 Synthesis of Five- or Six-membered Cyclic Carbonates-grafted Hyperbranched Polyacetals
Hiroyuki Matsukizono, Takeshi Endo
- 9:45 3C04 Synthesis of multibranched polymer by living anionic polymerization via exclusive metalation of tolyl units
Kenta Mori, Ryosuke Tajima, Junki Fukuda, Kaoru Adachi, Yasuhisa Tsukahara
- 10:00 3C05 Synthesis and Application of Curable Hyperbranched Polymers Containing Dense Acetal Groups
Eriko Sato, Yoji Yamashita, Takashi Nishiyama, Hideo Horibe
- 10:15 3C06 Synthesis and phase separation of three kinds of diblock copolymers consisting of hyperbranched, *p*-, and *m*-aromatic polyamides and polystyrene
Kenta HOKA, Yoshihiro OHTA, Takahiro KOMAMURA, Takeshi HIGUCHI, Yoshihito ISHIDA, Teruaki HAYAKAWA, Hiroshi JINNAI, Tsutomu YOKOZAWA

K. Adachi, presiding

- 10:30 3C07 Multi-compartmentalization and Sequence Control of Amphiphilic Polymer Nanoparticles via Ionic Interaction
Yasuyuki Ommura, Shota Imai, Makoto Ouchi, Takaya Terashima
- 10:45 3C08 Precision Synthesis of Amphiphilic Graft Copolymers: Nanostructure Design via Sequence Control and Self-Assembly
Takehiro Itami, Goki Hattori, Makoto Ouchi, Takaya Terashima
- 11:00 3C09 Synthesis of Bottlebrush Polymer Containing Polyallene Structure as Main Chain
Hiroshi Eguchi, Keita Sakakibara, Ikuyoshi Tomita, Yoshinobu Tsujii
- 11:15 3C10 Tooth-brush like copolymers possessing polyethyleneimine brush and polymethacrylic acid handle: Synthesis and characterization
Yoshito Inoue, Wen-Li Wang, Katsuya Kaikake, Ren-Hua Jin
- 11:30 3C11 Stabilization of amphiphilic tooth-brush like polymers micelles by cross-linking of core or shell
Moemi Takita, Wenli Wang, Katsuya Kaikake, Ren-Hua Jin

E. Sato, presiding

- 12:30 3C12 Synthesis and reaction of well-defined poly(vinyl ether)s bearing different types of alkynyl groups at the terminus and pendants, respectively.
Tomoki Oka, Tomonari Tanaka, Jin Motoyanagi, Masahiko Minoda
- 12:45 3C13 Synthesis and Higher-Order Structures of Hybrid Polymers Consisting of Peptide-Conjugated Molecules
Soki Sato, Shinya Takaoka, Yu Miyagi, Fumio Sanda
- 13:00 3C14 Synthesis of conductive core-shell polymeric nanoparticles for stretchable device.
Jun Kosai, Chen-Tsyrr Lo, Kazuhiro Nakabayashi, Hideharu Mori
- K. Maeyama, presiding**
- 13:15 3C15 Synthesis and optical properties of well-defined hyperbranched poly(thienylene-phenylene) by Kumada-Tamao catalyst-transfer condensation polymerization of AB₂ monomer
Toshiki Hirota, Yoshihiro Ohta, Tsutomu Yokozawa
- 13:30 3C16 Transition metal-catalyzed direct arylation of a cage silsesquioxane
Satoshi Wada, Hiroaki Imoto, Kensuke Naka
- 13:45 3C17 Synthesis of Luminophores-Integrated POSS Possessing Flexible Side-Chains
Hayato Narikiyo, Masayuki Gon, Kazuo Tanaka, Yoshiki Chujo
- 14:00 3C18 Preparation of lipophilic ions having bulky substituents and evaluation of their dissociability in non-polar solvents
Soukurou Sunaga, Kenta Kokado, Kazuki Sada

Room D

Wed. May 23

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

M. Uchiyama, presiding

- 10:00 1D05 Controlled Cationic Polymerization and Copolymerization of Trimethylsilyl Vinyl Ether: Precise Synthesis of Poly(Vinyl Alcohol) Precursors
Ryusei Kato, Arihiro Kanazawa, Sadahito Aoshima
- 10:15 1D06 Cationic Polymerization of Phenyl Vinyl Ether
Tomohito Asakawa, Arihiro Kanazawa, Sadahito Aoshima
- 10:30 1D07 Controlled cationic copolymerization of *o*-phthalaldehyde and various vinyl monomers
Keisuke Hayashi, Arihiro kanazawa, Sadahito Aoshima

A. Kanazawa, presiding

- 10:45 1D08 Block Copolymerization of Alicyclic Conjugated Dienes Derived from Naturally-Occurring Terpenes
Takenori NISHIDA, Kotaro SATOH, Masami KAMIGAITO
- 11:00 1D09 Synthesis and Analysis of Precisely Designed Network-Polymer by Photo-Switchable Cationic/Radical Polymerization
Nagisa ITO, Mineto UCHIYAMA, Kotaro SATOH, Masami KAMIGAITO
- 11:15 1D10 Photoredox Cationic Polymerization of Vinyl Ether Initiated from Alkoxyamine
Masato KONYA, Mineto UCHIYAMA, Kotaro SATOH, Masami KAMIGAITO
- 11:30 1D11 Living cationic polymerization of vinyl ethers with a sulfide or sulfonyl group
yuhei watanabe, atsushi arisawa, takeshi namikoshi, shinji watanabe

T. Ishizone, presiding

- 12:30 1D12 Stereospecific living cationic polymerization of *N*-vinylcarbazole: Investigation of reaction mechanisms and properties of the isotactic polymer
Hironobu Watanabe, Ryo Yamanaka, Arihiro Kanazawa, Satoshi Okumoto, Shinichi Sakurai, Sadahito Aoshima
- 12:45 1D13 Living cationic polymerization using diphenyliodonium salts as Organic Lewis acid catalysts
Rui Haraguchi, Tuyoshi Nishikawa, Arihiro Kanazawa, Sadahito Aoshima
- 13:00 1D14 Block Sequence-Controlled Copolymers via Living Cationic Polymerization: Controlled Propagation under Iterative Monomer Feed
Sho Yoshida, Takaya Terashima, Makoto Ouchi
- 13:15 1D15 Ring-opening polymerization of cyclic esters catalyzed by aromatic carboxylate salts
Kaoru Takojima, Tatsuya Saito, Takuya Isono, Takuya Yamamoto, Kenji Tajima, Toshifumi Satoh
- 13:30 1D16 Concurrent Cationic Vinyl-Addition, Ring-Opening, and Carbonyl-Addition Terpolymerization toward ABC-type Alternating Sequence Control
Maki Mimura, Arihiro Kanazawa, Sadahito Aoshima
- T. Yamamoto, presiding**
- 13:45 1D17 Ring-Opening Cationic Copolymerization of Dioxolanones with Oxiranes and Terpolymerization with Vinyl Ethers
Kano Hyoi, Arihiro Kanazawa, Sadahito Aoshima
- 14:00 1D18 Synthesis of Unnatural Oligo(amino saccharide)s via Cationic Ring-Opening Polymerization of Oxazoline-Based Sugar Monomers
Yuta Koda, Takaya Terashima, Makoto Ouchi
- 14:15 1D19 Concurrent cationic vinyl-addition and coordination ring-opening copolymerization of vinyl ethers and cyclic esters: Design of graft copolymers with various structures
Motoki Higuchi, Arihiro Kanazawa, Sadahito Aoshima
- 14:30 1D20 Controlled Cationic Copolymerization of Vinyl Monomers and Cyclic Acetals via Concurrent Vinyl-Addition and Ring-Opening Mechanisms: The Effects of the Structures of Cyclic Acetals on the Polymerization Behavior
Kazuya Maruyama, Arihiro Kanazawa, Sadahito Aoshima
- 14:45 1D21 Anionic polymerization of 2-alkyl and 3-alkylbenzofulvenes
Tatsuhiko Matsubara, Yuki Kosaka, Satoshi Uchida, Raita Goseki, Takashi Ishizone
- Y. Kohsaka, presiding**
- 15:00 1D22 Anionic polymerization of *N*-methacryloyl-7-azabicyclo[2.2.1]heptane
Yuki Nemoto, Raita Goseki, Takashi Ishizone
- 15:15 1D23 Photoinitiated anionic polymerization using a photobase generator of tertiary amines
Yasuhiro Nakamoto, Kento Oomura, Nobuaki Koike, Masahiro Furutani, Koji Arimitsu
- 15:30 1D24 Anionic polymerization of *p*-divinylbenzene derivatives possessing β -alkyl groups
Yota Nakagawa, Raita Goseki, Satoshi Uchida, Takashi Ishizone
- 15:45 1D25 Anionic polymerization of *o*-halostyrenes and *m*-halostyrenes
Asahi Kondo, Taro Koizumi, Raita Goseki, Takashi Ishizone
- 16:00 1D26 Anionic polymerization of *N*-(4-vinylphenyl)-2-adamantylideneamine
Takamasa Iso, Satoshi Uchida, Raita Goseki, Takashi Ishizone

Thu. May 24

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

K. Matsumoto, presiding

- 9:30 2D03 Synthesis of diblock copolymer based on radical transfer reaction
Yusuke Kaneko,Yui Hamuro,Reiko Saito
- 9:45 2D04 Template photo-initiated RAFT polymerization of multi-vinyl monomer without radical initiator for ladder-like polymer
Yui Hamuro,Reiko Saito
- 10:00 2D05 Thermal curing reaction of poly(ϵ -caprolactam) and epoxy resins
Yuki Watanabe,Hiroto Kudoh
- 10:15 2D06 Synthesis of monodisperse polymer microspheres having benzyl bromides by precipitation polymerization using a styrene dimer with silyloxy group and transformation reaction
Takuya Sugimoto,Md. Wali Ullah,Naoki Haraguchi
- 10:30 2D07 Synthesis of ionically poly(phenylacetylene)-supported chiral imidazolidinone salts and their application to polymeric chiral organocatalyst
Minoru Oi,Naoki Haraguchi,Shinichi Itsuno

H. Kudo, presiding

- 10:45 2D08 Functional polymeric microsphere that selectively adsorb halogen compounds
Yuichiro Nishizawa,Takuma Kureha,Daisuke Suzuki
- 11:00 2D09 Effect of the Presence of Hydrogel microspheres on the Belousov-Zhabotinsky Reaction
Keito Ishikawa,Kouhei Inui,Takumi Watanabe,Shusuke Matsui,Daisuke Suzuki
- 11:15 2D10 Diamine-crosslinking of poly(γ -glutamic acid) modified with 5-Membered-cyclic-dithiocarbonate and its application to functional adhesives
Yusuke Saito,Yumi Oishi,Kozo Matsumoto,Takeshi Endo
- 11:30 2D11 Glycidyl triazolyl polymer: Facile synthesis of polyethylene glycol with functionalized side chains
Taichi Ikeda

S. Kanaoka, presiding

- 12:30 2D12 Controlled synthesis of ladder polymer in coordination nanospaces toward functional carbon materials
Takashi Kitao,Ryoto Hongu,Susumu Kitagawa,Takashi Uemura
- 12:45 2D13 Freezing-Induced Mechanoluminescence and Dynamic Behaviors of Hybrid Cross-Linked Polymers Having Static and Dynamic Cross-Linking Points
Sota Kato,Daisuke Aoki,Hideyuki Otsuka
- 13:00 2D14 The Study on Temperature Dependency of Photodegradation Mechanisms for Urethane Clear Paintings and Change of Physical Properties
Takato Ishida,Ryoma Kitagaki
- 13:15 2D15 Development of Reactive Cross-linked Polymers Possessing Photoreglatable Thermal Degradability and Reshapability
Jumpei Kida,Daisuke Aoki,Hideyuki Otsuka

T. Uemura, presiding

- 13:30 2D16 Control of Higher Order Structures of Platinum-containing Conjugated Polymers by Ligand Exchange Reaction
Takahiro Ishida,Yu Miyagi,Natsuhiko Sano,Fumio Sanda
- 13:45 2D17 Chemical Recycling of Styrene Dimer or Styrene Trimer-Based Copolymers by Pyrolysis:Two-Cycle Chemical Recycling of Polystyrene
Ryoma Ikeda,Michio Urushisaki,Toshikazu Sakaguchi,Tamotsu Hashimoto

- 14:00 2D18 Chemical Modification of Epoxy Resins Based on Phenylboronic Acid / Diethanolamine Reactivity
Yumiko Ito, Jumpei Kida, Daisuke Aoki, Hideyuki Otsuka
- 14:15 2D19 Synthesis and properties of thermostable mechanochromic polymers having a thermostable mechanophore
Hio Sakai, Tosikazu Sumi, Raita Goseki, Daisuke Aoki, Hideyuki Otsuka
- T. Sakaguchi, presiding**
- 14:30 2D20 Synthesis and Mechanoresponsive Properties of Mechanochromic Dendrimers Containing Diarylbibenzofuranone Moieties at the Core
Takuma Watabe, Kuniaki Ishizuki, Daisuke Aoki, Hideyuki Otsuka
- 14:45 2D21 Macrocyclic Pt-complex-catalyzed hydrosilylation reaction of polydiphenylacetylenes
Kazuki Higuchi, Koji Yamamoto, Hiromitsu Sogawa, Toshikazu Takata
- 15:00 2D22 Catalyst-free Modification and Cross-linking of Polysiloxane Using Kinetically Stabilized Nitrile N-Oxides
Toyokazu Tsutsuba, Toshikazu Takata
- T. Terashima, presiding**
- 15:15 2D23 Multi-color Mechanochromic Polymer-inorganic Composite Based on Two Mechanophores
Takahiro Kosuge, Maxwell J. Robb, Abigail J. Halmes, Vivian M. Lau, Daisuke Aoki, Jeffrey S. Moore, Hideyuki Otsuka
- 15:30 2D24 Photoinduced Conversion of Functional Groups on Poly(ether ether ketone) (I)
Kazuhiko Ishihara, Kyoko Fukazawa, Sheng-Han Chen
- 15:45 2D25 Photoinduced Conversion of Functional Groups on Poly(ether ether ketone)(II)
Kyoko Fukazawa, Sheng-Han CHEN, Kazuhiko Ishihara
- 16:00 2D26 A rational entry to cyclic polymers via selective cyclization based on dynamic covalent bond chemistry
Daisuke Aoki, Hideyuki Otsuka
- 16:15 2D27 Design and Construction of Novel Amphiphilic Gels with Thermoresponsive Crosslinked Domain Structure
Miki Morimura, Hironobu Kitanaka, Shohei Ida, Shokyoku Kanaoka

Fri. May 25

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

T. Higashihara, presiding

- 9:30 3D03 Thermoresponsive Property Induced by Introducing Urethane Units to Hydrophilic Polyacrylamide Derivatives Prepared by RAFT Polymerization
Yusuke Murai, Shohei Ida, Shokyoku Kanaoka
- 9:45 3D04 Catalyst-free cross-linking reaction of bifunctional aliphatic nitrile N-oxides
Tatsuhito Ikeda, Toyokazu Tsutsuba, Hiromitsu Sogawa, Toshikazu Takata
- 10:00 3D05 Fusion of cross-linked polymers having different structure based on thermoresponsive dynamic covalent bonds.
Ayuko Tsuruoka, Koki Ikyta, Akira Takahashi, Daisuke Aoki, Hideyuki Otsuka
- 10:15 3D06 Synthesis of Site-Selectively Functionalized Polymers and Polymer Nanoparticles via Transesterification
Daiki Ito, Makoto Ouchi, Takaya Terashima

H. Otsuka, presiding

- 10:30 3D07 Development of cross-linked polythiophene with oligoisobutylene side chains
Satoshi Miyane, Tomoya Higashihara

- 10:45 3D08 Bromoallylation of polydiphenylacetylenes using macrocyclic palladium catalyst
Riku Nameki, Koji Yamamoto, Hiromitsu Sogawa, Toshikazu Takata
- 11:00 3D09 Accelerated Degradation of Cross-Linked Polyperoxides by Thermal Latent Reductants and Their Application to Dismantlable Adhesives
Chisato Omori, Michihiro Yuri, Eriko Sato, Takashi Nishiyama, Hideo Horibe
- 11:15 3D10 Preparation and Magnetically Responsive Behavior of Holmium-Bearing Polymer
Michinari Kohri, Kenshi Yanagimoto, Tatsuo Taniguchi, Keiki Kishikawa
- 11:30 3D11 Synthesis of transparent hybrid materials by the reaction of N-allylmaleimide copolymers and SH-modified silsesquioxane
Akikazu Matsumoto, Ryohei Oban, Kimihiro Matsukawa

W. Sakai, presiding

- 12:30 3D12 Electrochemical Epoxidation of Natural Rubber in Water Process in the Presence of Carbon Dioxide
Yoshimasa Yamamoto, Takaya Kudo, Seiichi Kawahara
- 12:45 3D13 Structural Reorganization of Polymers with α -Methyl Styrene Dimer Linkages Based on Chain Transfer Reactions
Nao Tsurumi, Takahiro Kosuge, Daisuke Aoki, Hideyuki Otsuka
- 13:00 3D14 Functionalization of polycarbonate by direct arylation
Tadashi Tsukamoto, Toshikazu Takata

A. Matsumoto, presiding

- 13:15 3D15 Improvement of Chirality-Switchable Helical Polymer Ligand Based on Tuning of Achiral Tertiary Phosphine Pendants
Takaya Fujie, Takeshi Yamamoto, Michinori Suginome
- 13:30 3D16 Helical Poly(quinoxaline-2,3-diyl)s Bearing 1,2,3-triazole Pendants: Synthesis and Use as Reusable α NHC Ligands
Takeshi Yamamoto, Pinglu Zhang, Michinori Suginome
- 13:45 3D17 Characteristic Change and Radical Formation on Degradation of Thermoplastic Polyether-Ester Elastomer
Wataru Sakai, Masayo Sono, Kenji Kinashi, Naoto Tsutsumi

Room E

Wed. May 23

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Y. Nagata, presiding

- 10:00 1E05 Synthesis and Evaluation of *o*-Carborane Derivatives with Intense Solid-State Emission
Kyoya Uemura, Kazuo Tanaka, Yoshiki Chujo
- 10:15 1E06 Development of Solid-State Luminescent Materials Using *o*-Carborane
Keisuke Wada, Kazuo Tanaka, Yoshiki Chujo
- 10:30 1E07 Synthesis of Conjugated Polymers Composed of Boron Formazanate Complexes and Their Physical Properties
Yuki KAWANO, Kazuo TANAKA, Yoshiki CHUJO
- 10:45 1E08 Synthesis of chiral magnetic conjugated polymer by electrochemical polymerization in cholesteric liquid crystal

Masashi Otaki, Hiromasa Goto

H. Goto, presiding

- 11:00 1E09 Circularly polarized selective reflection properties of thin films of polyquinoxalines forming cholesteric structure: Effect of the solvent vapors and the substituents on their side chains
Yuuya Nagata, Shunsuke Ashikaga, Hiroki Kondo, Michinori Sugimoto
- 11:15 1E10 Molecular Characterization of Interaction between Stereoregular Poly(Methyl Methacrylate) interacting and Chiral Compound
Masanao Sato, Eric chen, Kai-chieh Yang, Ming-chia Li, Rong-Ming Ho, Tomoyasu Hirai, Atsushi Takahara
- 11:30 1E11 Synthesis of Non-natural Polypeptide Bearing 2,6-Naphthylene Unit in the Main Chain and Formation of Secondary Structure
Yuki Ishido, Naoya Kanbayashi, Taka-aki Okamura, Kiyotaka Onitsuka

T. Hirai, presiding

- 12:30 1E12 Synthesis and properties of diblock copolymers consisted of chiral poly(methylethyleneimine) and achiral poly(ethyleneimine)
Makoto Isaki, Yuuma Umehara, Ren-hua Jin
- 12:45 1E13 Intramolecular cross-linking of block copolymers for downsizing microphase-separated structures
Satoshi Katsuhara, Kodai Watanabe, Takuya Isono, Takuya Yamamoto, Kenji Tajima, Toshifumi Satoh
- 13:00 1E14 Synthesis and microphase separation behavior of block copolymers consisting of poly(propylene oxide) and oligosaccharide
Yasuko Takagi, Takuya Isono, Kenji Tajima, Redouane Borsali, Toshifumi Satoh
- 13:15 1E15 Synthesis and Microphase-separated Structure of Poly(styrene-*block*-methyl methacrylate) Bearing Oligosaccharide at Chain End
Kohei Yoshida, Shunma Tanaka, Ken Miyagi, Takuya Isono, Takuya Yamamoto, Kenji Tajima, Borsali Redouane, Toshifumi Satoh
- 13:30 1E16 Bicontinuous Hard-Soft Nanodomain Formation via Controlled Photo-curing
Takeo Suga, Kaname Takata, Hiroyo Sumida, Hiroyuki Nishide

K. Sugiyama, presiding

- 13:45 1E17 Diversification of Morphology for Silicon-containing Block Copolymers by Introduction Rate of Side Chains
Seina Yamazaki, Takehiro Seshimo, Yuta Nabae, Daisuke Kawana, Akiyoshi Yamazaki, Teruaki Hayakawa
- 14:00 1E18 Controlling the Interfacial Region of Poly(styrene-*b*-2-vinylpyridine) Block Copolymers by Introducing Fluorinated Alkyl Chains
Yoshihiro Agata, Yuta Nabae, Teruaki Hayakawa
- 14:15 1E19 Fluorine-Containing Block Copolymers Synthesized via RAFT Polymerization for Self-organized Porous Membranes
Sho Kurimoto, Alvin Chandra, Ryuichi Nakatani, Yuta Nabae, Teruaki Hayakawa
- 14:30 1E20 Synthesis of Worm-like Nano-objects via Polymerization Induced Self-Assembly
Miku Sakai, Shinji Sugihara, Satoshi Irie, Yasushi Maeda

K. Tanaka, presiding

- 14:45 1E21 An effective Intramolecular ESA-CF Polymer Cyclization by zwitterionic telechelic polystyrenes
Tsuneaki Konomoto, Takuya Yamamoto, Yasuyuki Tezuka
- 15:00 1E22 A programme polymer folding by the ESA-CF protocol using periodically-positioned tetrafunctional telechelic poly(THF)s
Kohei Kyoda, Ran Itsukushima, Takuya Yamamoto, Yasuyuki Tezuka

- 15:15 1E23 Construction of a K3,3 graph polymer topology by the ESA-CF process with a hexafunctional dendritic telechelic precursor
Yu Yanagisawa, Toshiyuki Aoyanagi, Takuya Yamamoto, Yasuyuki Tezuka
- 15:30 1E24 Synthesis and Chromism Properties of Network Polymer by Thiol-ene Reaction using Allylated Rhodamine Derivatives as a Cross-linker
Shintaro Goto, Kazuhiro Yamabuki, Kenjiro Onimura
- 15:45 1E25 Synthesis of Organic-inorganic Hybrid Network Polymer with Crown Ether Modified 8-Arms Silsesquioxane
Ginta Yamane, Kazuhiro Yamabuki, Kenjiro Onimura
- K. Onimura, presiding**
- 16:00 1E26 Synthesis and Evaluation of Polyurethane-Conjugated Polymer Hybrid Films Based on POSS
Keigo Kato, Masayuki Gon, Kazuo Tanaka, Yoshiki Chujo
- 16:15 1E27 Synthesis and characterization of poly(bis(thienylene)cyclobutenedione)
Takuma Sone, Tomoyuki Ohishi, Akihiro Yokoyama
- 16:30 1E28 Synthesis of pentaazaphenylene derivatives toward narrow HOMO-LUMO gap materials
Junki Ochi, Hiroyuki Watanabe, Kazuo Tanaka, Yoshiki Chujo
- 16:45 1E29 Synthesis and Properties of Pentaazaphenylene-Based π -Conjugated Polymer
Hiroyuki WATANABE, Kazuo TANAKA, Yoshiki CHUJO

Thu. May 24

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

M. Gon, presiding

- 9:30 2E03 Synthesis of well-defined functionalized alternating copolymer via living anionic copolymerization
Fan Zhang, Satoshi Uchida, Raita Goseki, Takashi Ishizone
- 9:45 2E04 End functionalization by anionic addition reaction of 1,1-di(2-pyridyl)ethylene
Marika Suzuki, Kazuki Takahata, Raita Goseki, Takashi Ishizone
- 10:00 2E05 Synthesis of Chain End Sequence Controlled Polymers by Living Anionic Addition Reaction using Umpolung Strategy
Kazuki Takahata, Satoshi Uchida, Raita Goseki, Takashi Ishizone
- 10:15 2E06 Synthesis of Novel Block Copolymer with Stereoregular Poly(methyl methacrylate) Block and Characterization of Its Physical Property
Hitoshi Shimamoto, Tomoki Kato, Masanao Sato, Tomoyasu Hirai, Atsushi Takahara
- 10:30 2E07 Synthesis of block copolymer containing alicyclic epoxy group by living radical polymerization with iodide
Sho Nishida, Reiko Saito

H. GUO, presiding

- 10:45 2E08 Synthesis of organic semiconductor nanoparticles using amino acid-based block copolymers.
Keita KATAOKA, Chen-Tsyr LO, Kazuhiro NAKABAYASHI, Hideharu MORI
- 11:00 2E09 Development of Highly-Efficient Emissive Polymer Films Based on Fused Boron Ketoiminates
Kazumasa Suenaga, Kyoya Uemura, Kazuo Tanaka, Yoshiki Chujo
- 11:15 2E10 Synthesis and Characteristics of Emissive Aza-Substituted Fused-Boron Ketoiminates
Aoi Watanabe, Kazumasa Suenaga, Kazuo Tanaka, Yoshiki Chujo

11:30 2E11 Synthesis and Properties of Conjugated Polymers Containing Fused Azomethine-Boron Complexes
Shunsuke Ohtani, Masayuki Gon, Kazuo Tanaka, Yoshiki Chujo

K. Albrecht, presiding

12:30 2E12 Synthesis and Evaluation of Conjugated Polymers Based on meta-Substituted Fused Azobenzene-Boron Complexes
Junko Wakabayashi, Masayuki Gon, Kazuo Tanaka, Yoshiki Chujo

12:45 2E13 Synthesis and Evaluation of Conjugated Polymers Containing Fused Azobenzene-Tin Complexes in the Main Chain
Masayuki Gon, Kazuo Tanaka, Yoshiki Chujo

13:00 2E14 Synthesis of structure-controlled A,B-block type amphiphilic macromolecular wire and photochemical behavior
Haoxuan Guo, Keisuke Yoshida, Hiroyuki Aota

13:15 2E15 Structure Control of Biocompatible Micelles with Pendant Siloxane
Shohei Kozuka, Keita Kuroda, Kazuhiko Ishihara, Shin-ichi Yusa

S. Uchida, presiding

13:30 2E16 Heat-induced networking of mixed solution consisting of diblock copolymer micelles with a crystalline core and ABA triblock copolymer
Kaishi Yamaguchi, Shokyoku Kanaoka, Satoshi Tanimoto

13:45 2E17 Nanostructure Materials Based on Amphiphilic Random Copolymers: Side-Chain Crystallinity for Precision Self-Assembly and Micro-Phase Separation
Takaya Terashima, Goki Hattori

14:00 2E18 Synthesis and Self-Assembly of Amphiphilic Polyacrylamides with Branching Side Chains
Yoshihiko Kimura, Makoto Ouchi, Takaya Terashima

14:15 2E19 Self-Sorting of Amphiphilic Random Copolymers in Water: From Discrete Nano Compartmentalization to Macroscopic Recognition of Hydrogels
Takaya Terashima, Shota Imai

S. Sugihara, presiding

14:30 2E20 Synthesis of Vinyl Ether Copolymers with Pendant Imidazolium Ionic Liquids and Their UCST-type Phase Separation Behavior and Thermosensitive Physical Gelation in Water
Daichi Yokota, Arihiro Kanazawa, Sadahito Aoshima

14:45 2E21 Synthesis of Poly(Vinyl Ether)s by Living Cationic Polymerization and Formation of Nano-Dispersed Pigment Particles
Hiroshi Oda, Arihiro Kanazawa, Sadahito Aoshima

15:00 2E22 Color-change of N-substituted maleimide copolymers depending on polarity of vinyl monomer based on acid-base switching
Yoshiaki Yoshida, Takeshi Endo

15:15 2E23 Control of the threading ratio of cyclic molecules in polyrotaxane consisting of poly(ethylene glycol) and α -cyclodextrins.
Yuichiro Kobayashi, Yukie Nakamitsu, Yoshinori Takashima, Hiroyasu Yamaguchi, Akira Harada

Y. Takashima, presiding

15:30 2E24 Synthesis and property of cyclic block copolymer synthesized with pseudo[2]rotaxane dimer
Gouta Aibara, Tadashi Tsukamoto, Toshikazu Takata

15:45 2E25 Endowing toughness and function with vinyl polymer-based rotaxane-cross-linked polymers
Jun Sawada, Daisuke Aoki, Hiromitsu Sogawa, Toshikazu Takata

16:00 2E26 Synthesis and post-modification of Unsaturated polyester-based

- macromoleculuar [2]rotaxane
Hiromitsu Sogawa, Miya Hiroi, Toshikazu Takata
- 16:15 2E27 Helicity control of polyacetylene using dynamic mechanical chirality
Kazuko Nakazono, Masahiro Konakazawa, Toshikazu Takata

Fri. May 25

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

N. Haraguchi, presiding

- 9:30 3E03 Click Living Polymerization of Azide-Alkyne AB Type Monomers
Takuya NAKAMURA, Mineto UCHIYAMA, Kotaro SATOH, Masami KAMIGAITO
- 9:45 3E04 Synthesis of Reactive Moiety-Containing Poly(L-lysine) in the Side Chain by Polycondensation of Activated Urethane Derivative of L-Lysine Bearing *N*N α -, *N*N ϵ -Phenoxycarbonyl Moiety
ShuheYamada, Ayaka Takashima, Huseyin Akbulut, Takeshi Endo
- 10:00 3E05 Synthesis of Polymers having Zwitterion Structure Obtained by the Reaction of the Cyclic Amidine Derivatives and Isothiocyanate in Side Chains
Akira Yamauchi, Takeshi Endo
- 10:15 3E06 Synthesis of poly(urea-urethane) and poly(urea-ester) copolymer using amino acid
Saori Nagai, ShuheYamada, Takeshi Endo

T. Shiono, presiding

- 10:30 3E07ILY Palladium-Catalyzed Direct Arylation Polymerization: A Simple and Easy Synthetic Method of π -Conjugated Polymers
Masayuki Wakioka
- 11:00 3E09 Suzuki-Miyaura catalyst-transfer condensation polymerization with a variety of bulky phosphine-ligated Pd catalysts
Tatsuya UCHIDA, Yoshihiro OHTA, Tsutomu YOKOZAWA
- 11:15 3E10 Asymmetric Polymerization to Synthesize Optically Active Polymer Bearing Planar Phthalimide Backbone
Marina Saegusa, Naoya Kanbayashi, Yuki Ishido, Taka-aki Okamura, Kiyotaka Onitsuka
- 11:30 3E11 Novel Cyclopolymerization Based on Intramolecular Alternative Insertion of Isocyanide and Allene into Palladium-Carbon Bond
Naoya Kanbayashi, Jun Ikegami, Yuki Kataoka, Yoshio Matsukiyo, Taka-aki Okamura, Kiyotaka Onitsuka

H. Nagae, presiding

- 12:30 3E12 Synthesis of Water-Soluble Poly(biphenylacetylene) Derivatives and Their Helicity Control
Ryoma Ishidate, Chiaki Yokota, Katsuhiko Maeda, Eiji Yashima
- 12:45 3E13 Synthesis of Conjugated Polymers Consisting of *N*-Substituted 2,3-Dithienylmaleimide and Fluorene Derivatives by Direct Arylation Reaction
Ryoya Fujiwara, Kazuhiro Yamabuki, Kenjiro Onimura
- 13:00 3E14 Synthesis of poly(1,5-triazole)s from aliphatic diazides and aliphatic dialkynes using Ru catalysts
 Masaru Yoneyama, Takeshi Yamanobe, Ayami Miyata

M. Wakioka, presiding

- 13:15 3E15 Reversible star polymer assembly of boronic acid end-functionalized polyolefins
Ryo Tanaka, Naoki Tonoko, Yuushou Nakayama, Takeshi Shiono

- 13:30 3E16 Heterogeneity of silica-supported MMAO cocatalyst on copolymerization of norbornene/1-octene
Hiroataka Nagai, Ryo Tanaka, Yuushou Nakayama, Takeshi Shiono
- 13:45 3E17 Ring-opening polymerization of propylene oxide catalyzed by iminophosphazanium aluminate complex
Shogo Hosomi, Ryo Tanaka, Yuushou Nakayama, Takeshi Shiono, Yoshiaki Inoue, Toshihide Yamamoto, Katsuaki Mori
- 14:00 3E18 Telomerization on Alternating Copolymerization of Cyclohexene Oxide with Carbon Dioxide Catalyzed by Macrocycle LnZn₃ Cluster Complexes
Shin-nosuke Akutagawa, Ryota Aoki, Haruki Nagae, Thomas P. Spaniol, Hayato Tsurugi, Jun Okuda, Kazushi Mashima

Room F

Wed. May 23

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

R. Saito, presiding

- 10:00 1F05ILY Polymerization of α -functionalized acrylate designed for functional group synergy
Yasuhiro Kohsaka
- 10:30 1F07 Reexamination of Reactivity of N-Carboxy Amino Acid Anhydrides 85. The true reactivity of N-Carboxy Amino Acid Anhydrides.
Hitoshi Kanazawa, Aya Inada
- 10:45 1F08 Aminophenolic Resin Obtained in the Chiral Silica Matrix
Takumi ITO, Seiji TSUNEGA, Ren-hua JIN

K. Miyatake, presiding

- 11:00 1F09 Synthesis and properties of poly(silarylenesiloxane) derivatives with multiple thiophene moieties.
Ibuki Nishizawa, Hiroki Ajito, Ryouto Mishima, Shingo Morihira, Nobukatsu Nemoto
- 11:15 1F10 Reaction mechanism of amine compound on thiol-epoxy reaction of alicyclic epoxy monomer
Tetsuo Sakaguchi, Akio Takasugi, Susumu Kawauchi, Reiko Saito
- 11:30 1F11 Kinetic analysis of ring-opening reaction of asymmetric epoxy monomer by thiol and amine
Akio Takasugi, Tetsuo Sakaguchi, Reiko Saito

N. Nemoto, presiding

- 12:30 1F12 Synthesis and formation mechanism of polyhydroxyurethane-silica nanocomposites
JooYeon Lee, Reiko Saito
- 12:45 1F13 Polycondensation of α -bromo- α -(bromomethyl)acrylate utilizing sequential conjugate substitution induced by monomer-skeleton reformation
Keito Hagiwara, Yasuhiro Kohsaka
- 13:00 1F14 Synthesis of Sulfonated Polyphenylenes
Keisuke Shiino, Miyake Junpei, Miyatake Kenji
- 13:15 1F15 Synthesis and Properties of Partially Fluorinated Anion Conductive Copolymers Containing Fluorenyl Groups
Mizuki Ozawa, Junpei Miyake, Kenji Miyatake

M. Yoneyama, presiding

- 13:30 1F16 Synthesis of Regioregular P3HTs having Asymmetric Thienoisindigo via Direct Arylation Polycondensation and Their Optoelectronic Properties
Kaoru Uegaki, Shin-ichi Yamamoto, Toshio Koizumi, Shotaro Hayashi
- 13:45 1F17 Synthesis of fluorine-containing aromatic polybenzimidazoles using triazine-based active diesters
Mayu Hanada, Yuji Shibasaki, Yoshiyuki Oishi, Tadashi Kanbara, Tsuyoshi Noguchi
- 14:00 1F18 Unstoichiometric Suzuki-Miyaura cyclic polycondensation of acceptor aromatic monomers
Hajime SUGITA, Takeru KAMIGAWARA, Yoshihiro OHTA, Tsutomu YOKOZAWA
- 14:15 1F19 Suppression of self-condensation of amino acid monomers, immobilized on polynorbornene, by using solid base in chain-growth condensation polymerization
Takeru KAMEYAMA, Ami MORIMITSU, Yoshihiro OHTA, Tsutomu YOKOZAWA

T. Yokozawa, presiding

- 14:30 1F20 Synthesis of triazine oligomer by cyclotrimerization of nitrile derivatives and Application of hybridization with PBI to electrolyte membrane of fuel cell
Masahiro Komeda, Tatsuya Yuki, Naoto Aoyagi, Atsunori Matsuda, Takeshi Endo
- 14:45 1F21 Synthesis of polyureas from diamines and CO₂ using cesium salt catalysts and their properties
Yuto Nishida, Masaru Yoneyama
- 15:00 1F22 Synthesis of polyimines from xylylendiamine using ionic liquid and oxygen
Masaru Yoneyama, Takeshi Yamanobe, Arai Yasuhiro
- 15:15 1F23 Synthesis of polyfluorene via catalyst-transfer polycondensation of triolborate salt monomer
Saburo Kobayashi, Takuya Isono, Takuya Yamamoto, Kenji Tajima, Toshifumi Satoh

T. Satoh, presiding

- 15:30 1F24 Polyester synthesis under halogen- and metal-free conditions by using acyl triazoles
Kazumasa Homma, Ichiro Mori, Yasuhiro Kohsaka, Susumu Sugiyama, Daisuke Matsuura, Yoshikazu Kimura
- 15:45 1F25 Controlling over oxidative coupling polymerization of 3-hexylthiophene using polymethyl methacrylate as a template
Tomoyasu Hirai, Tomoki Kato, Masaru Mukai, Kazutaka Kamitani, Maiko Nishibori, Atsushi Takahara
- 16:00 1F26 Nonstoichiometric Friedel-Crafts Polycondensation Based on Reactivity Change by Protonation-Deprotonation
Kazuya Matsumoto, Takayuki Ogawa, Mitsutoshi Jikei
- 16:15 1F27 Nonstoichiometric polycondensation by Friedel-Crafts acylation reaction with AlCl₃
Chisa Fukui, Kazuya Matsumoto, Mitsutoshi Jikei

Thu. May 24

AWARD LECTURES

K. Tanaka, presiding

- 9:30 2F03AL End-Crosslinking of Controlled Telechelic Poly(*N*-isopropylacrylamide) toward a Homogeneous Gel Network with Photo-Induced Self-Healing
Shohei Ida

T. Yasuda, presiding

- 10:00 2F05AL Direct Arylation Polycondensation for Synthesis of Bithiazole-based Conjugated Polymers and Their Physical Properties
Junpei Kuwabara

T. Serizawa, presiding

- 10:30 2F07AL Analysis of the sol-to-gel transition behavior of temperature-responsive injectable polymer systems by fluorescence resonance energy transfer
Kazuyuki Takata, Keisuke Kawahara, Yasuyuki Yoshida, Akinori Kuzuya, Yuichi Ohya

E. POLYMERS AND ENVIRONMENT

K. Aoi, presiding

- 11:00 2F09 Synthesis of polypeptides containing aromatic rings in main chain by chemoenzymatic polymerization
Kousuke Tsuchiya, Naruki Kurokawa, Keiji Numata
- 11:15 2F10 Synthesis of biopolyester using inedible compounds and its thermal-induced crosslinking
Masuhiko Okada, Katsunori Suzuki, Yasuteru Mawatari, Masayoshi Tabata
- 11:30 2F11 Development of green natural lacquer "Urushi" derived from cashew nut shells
Shinji Kanehashi, Yuta Harada, Kenji Ogino, Tetsuo Miyakoshi

H. Uyama, presiding

- 12:30 2F12 Chemical modification of plant oil based polyolefin and application for functional material
Kazuhisa Ohtake, Yusuke Onose, Junpei Kuwabara, Takaki Kanbara
- 12:45 2F13 Biodegradation of polyamide 4 in seawater
Atsuyoshi Nakayama, Norioki Kawasaki, Naoko Yamano
- 13:00 2F14 Preparation of polymer membranes containing surface-modified pearl-necklace shaped nanoparticles to achieve high CO₂ permeability.
Takuya Muramoto, Manabu Tanaka, Masafumi Yamato, Hiroyoshi Kawakami
- 13:15 2F15 Metal adsorption of porous chitosan nanofiber hydrogel
Sachiko Nitta, Miki Akagi, Hiroyuki Iwamoto

A. Nakayama, presiding

- 13:30 2F16 Fabrication of composite hydrogels by nanoparticle formation inside matrix
Tatsuya Yamamoto, Taka-Aki Asoh, Hiroshi Uyama
- 13:45 2F17 Fabrication of hydrogel electrodes with high mechanical strength consisting of conductive polymer coated bacterial cellulose nanofibers
Tatsuya Higashigaki, Taka-Aki Asoh, Hiroshi Uyama
- 14:00 2F18 Fabrication of Conducting Nanofibers utilizing Cellulose Polymer Electrolytes
Eiichi Shoji, Yoshiki Ohno, Takumi Ikeuchi, Masanori Hatashita

T. Iwata, presiding

- 14:15 2F19ILY Birefringence control of bio-based plastics utilizing orientation correlation and porous structure
Shogo Nobukawa
- 14:45 2F21 Crystal Structure Analysis of Poly(L-2-hydroxy-3-methylbutanoic acid) β -form
Hironori MARUBAYASHI, Ryo MIZUKAMI, Yuji HAMADA, Shuichi NOJIMA
- 15:00 2F22 Ternary- and hetero-stereocomplex crystallization of unsubstituted and substituted poly(lactic acid)s
Hideto Tsuji, Soma Noda, Noriaki Masaki, Takayuki Kimura, Yuki

- Arakawa, Tadashi Sobue, Kazumasa Iguchi
- 15:15 2F23 Spinning of predominantly amorphous silk fibroin solution aimed at toughness enhancement
Kenjiro Yazawa, Keiji Numata
- Y. Nakayama, presiding**
- 15:30 2F24 Mutual Separation Behavior of Platinum Groups utilizing Sulfur-Containing PVA Derivatives
Yui Nonaka, Takumi Akiyama, Rina Takahashi, Daisuke Nagai, Takeshi Yamanobe
- 15:45 2F25 Recycling of polyurethane with a novel photo and thermal catalyst system
Hisayuki Nakatani, Tomohiro Nakamura, Suguru Motokucho
- 16:00 2F26 Development of high performance nanofiltration membrane
Masakazu Koiwa, Hiroki Minehara, Takafumi Ogawa, Masahiro Kimura
- 16:15 2F27 Hydrolysis of polyurethane and polymer glycol under high pressure carbon dioxide
Suguru Motokucho, Kouki Hashimoto, Hisayuki Nakatani

Fri. May 25

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

K. Sada, presiding

- 9:30 3F03ILY Controlled supramolecular polymerization
Kazunori Sugiyasu
- 10:00 3F05 Synthesis and structure control of platinum-conjugated polymers bearing bipyridine ligands
Taichi Sotani, Yui Nishikawa, Tatsuya Ogawa, Yu Miyagi, Fumio Sanda
- 10:15 3F06 Synthesis of a Double-Stranded Titanium Helicate Composed of Oligophenol Units and Its Dynamic Structural Conversion
Manabu ITAKURA, Akira NAGASAKA, Daisuke TAURA, Naoki OUSAKA, Eiji YASHIMA

N. Ousaka, presiding

- 10:30 3F07 Enhancement of Photocatalytic Activity of Re(I) Complexes by Encapsulation in Light-Harvesting Soft Nanotubes
Naohiro Kameta, Masaru Aoyagi, Masumi Asakawa
- 10:45 3F08 Helical organization of supramolecular porphyrin polymers induced by coordination of chiral bispyridine
Kei Maruyama, Kouhei Nadamoto, Toshiaki Ikeda, Takeharu Haino

T. Haino, presiding

- 11:00 3F09 Elastic π -Conjugated Molecular Crystal: Narrow Band-gap Densely Packed Assembles based on Cyano-substituted Oligo(phenylene-vinylene)
Shotaro Hayashi, Ryosuke Hirai, Toshio Koizumi
- 11:15 3F10 Synthesis of Helical Foldamers Possessing a Metal Binding Ability and Their Self-assembly Behavior
Satoshi KAWABATA, Shogo OKUDA, Naoki OUSAKA, Eiji YASHIMA
- 11:30 3F11 Development of Solid-State Molecular-based Materials Showing Photon Upconversion
Nobuhiro Yanai, Taku Ogawa, Nobuo Kimizuka

F. Sanda, presiding

- 12:30 3F12 Design of temperature responsive copolymers using hydrogen bonding and

- charge transfer interaction
Naoki Fukaya, Yoshiki kuroshima, Kenta Kokado, Kazuki Sada
- 12:45 3F13 Synthesis and self-assembled structure of polyrotaxanes having ligand end groups
Riki Masuda, Shuntaro Uenuma, Rina Maeda, Koichi Mayumi, Hideaki Yokoyama, Kohzo Ito
- 13:00 3F14 Self-assembling structure and mechanical property of polyrotaxan Layer-by-Layer film
Rina Maeda, Yuta Ikeda, Koichi Mayumi, Hideaki Yokoyama, Kohzo Ito
- 13:15 3F15 Creation of microsheet structures through controlling polymer interactions in microflow
Munenori Numata, Akira Kaneyoshi, Yoshihiro Kikkawa

Room G

Wed. May 23

D. BIOPOLYMERS AND BIORELATED POLYMERS

T. Mori, presiding

- 10:15 1G06 Development of novel PG-surfactants having antibacterial activity and discussion on the working mechanism.
Ryosuke Kimura, Atsushi Miyagawa, Hatsuo Yamamura, Toshihisa Mizuno
- 10:30 1G07 Ring-opening polymerization of loop-PEGylated hemoglobin
Takashi Matsuhira, Keizo Yamamoto, Hiromi Sakai
- 10:45 1G08 Synthesis of Cell Penetrating Peptide containing α -aminoisobutylic acid using chemoenzymatic polymerization
Yu MIYAGI, Kousuke TSUCHIYA, Keiji NUMATA

K. Numata, presiding

- 11:00 1G09 Development of hemagglutinin accumulated hybrid nanoparticles by cell-free membrane protein expression system
Yuki Ujihira, Mitsuru Ando, Yoshihiro Sasaki, Kazunai Akiyoshi
- 11:15 1G10 Analyses of mechanism to the decomposition of lipid bilayers by lipid membrane degrading enzymes using HS-AFM
Keisuke Kurihara, Rina Tanaka, Toshiaki Mori
- 11:30 1G11 Observation of glycosylation to glycolipids by the glycosyltransferase with AFM Force Mapping
Toshiaki Mori, Shuhei Teguri, Shin-ya Kobayashi

N. Ousaka, presiding

- 12:30 1G12 Design of multi-functional peptides for selective collection of leukemia cells
Akifumi Yoshihara, Yamasaki Yuichi, Yoshiyuki Yamada, Madoka Takai
- 12:45 1G13 Synthesis and Properties of Protein Cage Fused with Amyloid β
Shiori Kameyama, Basudev Maity, Satoshi Abe, Takafumi Ueno
- 13:00 1G14 Encapsulation of exogenous proteins into in vivo protein crystals
Satoshi Abe, Makoto Kasamatsu, Takafumi Ueno
- 13:15 1G15 Design of amphiphilic polymer with oligoaspartic acids and evaluation of their self-assembled structure and pH responsive behavior
Shin Hirose, Tomoki Nishimura, Shinichi Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi

S. Abe, presiding

- 13:30 1G16 Remote Control of Axial Chirality of a 2,2'-Bipyridine Derivative Bearing a Dynamic Helical Peptide and Its Solvent-Induced Helix Inversion
Akio Urushima, Naoki Ousaka, Eiji Yashima
- 13:45 1G17 Construction and evaluation of the gel fibers encapsulating membrane protein at the inside, by using the reactive solubilization surfactants and the later gelation
Taro Shimamoto, Aki Taniguchi, Tomoyasu Noji, Keisuke Kawakami, Takehisa Dewa, Nobuo Kamiya, Shigeru Ito, Toshihisa Mizuno
- 14:00 1G18 Determination of atomic-level structure of the silk fibroin from a wild silkworm, *Samia cynthia ricini* using ¹³C solid-state NMR
Tetsuo Asakura, Shunsuke Kametani, Akio Nishimura, Akira Naito
- 14:15 1G19 Dynamics of Alanine Residues in Polyalanine Regions in *Samia Cynthia Ricini* Silk Fiber as Revealed by Relaxation Measurements Obtained from ¹³C Solid-State NMR
Akira Naito, Yugo Tasei, Akio Nishimura, Tetsuo Asakura

H. Yoshimizu, presiding

- 14:30 1G20 Determination of Packing Structure of Polyalanine Region in Spider Dragline Silk Using ¹³C solid-state NMR and ¹³C labeling of Spider Silk
Tetsuo Asakura, Yugo Tasei, Akio Nishimura
- 14:45 1G21 Determination of Heterogeneous Structure of Glycine-rich Region in Spider Dragline Silk Using ¹³C labeled Sequential Model Peptides (47mer), ¹³C solid-state NMR and Molecular Dynamics Calculation
Tetsuo Asakura, Erika Yamaguchi, Akio Nishimura, Yugo Tasei
- 15:00 1G22 The collaboration of MD simulations and solid-state NMR experiments for elucidation of the correlation between the structure and mechanical properties of silks
Akio Nishimura, Tetsuo Asakura

K. Yasuhara, presiding

- 15:15 1G23 Preparation and dielectric properties of peptide nanotubes composed of cyclic tri- β -peptides having aromatic groups
Yusuke Kamano, Hirotaka Uji, Shunsaku Kimura
- 15:30 1G24 Fabrication and electronic properties of peptide nanotubes consisting of cyclic tri- β -peptides having chloranil groups
Hiroshi Omura, Hirotaka Uji, Shunsaku Kimura
- 15:45 1G25 Evaluation of charge separation using biohybrid antenna complexes driven by ultrafast energy transfer
Akari Goto, Yusuke Yoneda, Masaharu Kondo, Hiroshi Miyasaka, Yutaka Nagasawa, Takehisa Dewa
- 16:00 1G26 Functionalization onto Lipid Membranes with Amphiphilic Block Copolymers: Controlled Membrane Affinity by Precision Designing Artificial Membrane Proteins
Yuta Koda, Daiki Takahashi, Yoshihiro Sasaki, Kazunari Akiyoshi

Y. Sasaki, presiding

- 16:15 1G27 Fission of dumbbell-shaped vesicle from amphiphilic polypeptide
Kon Son, Motoki Ueda, Shinji Takeoka, Yoshihiro Ito
- 16:30 1G28 Autonomous control of lipid bilayer morphological change by cationic comb-type copolymer/peptide complex
Takuro Ochiai, Naohiko Shimada, Atsushi Maruyama
- 16:45 1G29 Design of thermo-responsive cationic comb-type copolymer that enhances membrane permeabilizing activity of an amphiphilic peptide
Tsukuru Masuda, Naohiko Shimada, Atsushi Maruyama

Thu. May 24

D. BIOPOLYMERS AND BIORELATED POLYMERS

T. Dewa, presiding

- 9:30 2G03 Spontaneous formation of lipid nanodisc by amphiphilic polymethacrylate copolymers
Kazuma Yasuhara, Jin Arakida, Masaya Inoue, Ramamoorthy Ayyalusamy, Jun-ichi Kikuchi
- 9:45 2G04 Fabrication of self-degradable capsule wall over the surface of liposomes by the layer-by-layer deposition of polypeptides and enzymes
Yuuka Fukui, Hikari Otsuka, Keiji Fujimoto
- 10:00 2G05 Potentiation of immunity-inducing function of pH-sensitive polysaccharide-modified liposomes by cationic lipid-inclusion
Eiji Yuba, Yuna Kado, Naoki Sakaguchi, Atsushi Harada, Kenji Kono
- 10:15 2G06 Inclusion of water-soluble polymer by nanofiber consisting of Cyclic Peptide Amphiphile
Kosuke Morimoto, Satoshi Kanazawa, Isamu Akiba

A. Maruyama, presiding

- 10:30 2G07 Self-organization and Polymersome of comb-like polymers possessing amphiphilic diblock polymeric side chain
Wenli Wang, Ren-Hua Jin
- 10:45 2G08 Temperature responsive nanoparticles transformed from micelles self-organized from hydrophilic tooth-brush like block copolymers possessing PNIPAM
Haruka Takebuchi, Wenli Wang, Katsuya Kaikake, Ren-Hua Jin
- 11:00 2G09 Aggregation behavior of thermoresponsive polymeric micelles having charged polymer into outer shell segment
Jun Akimoto, Hsiu-Pen Lin, Yaw-Kuen Li, Yoshihiro Ito
- 11:15 2G10 Design of new biocompatible micelles using hydrosilylation reaction
Jun Matsuno, Shota Fujii, Rintaro Takahashi, Kazuo Sakurai
- 11:30 2G11 Stabilization of the micelle structure by cross-link introduction between hydrophobic chains and application to DDS
Rena Tanaka, Shota Fujii, Rintaro Takahashi, Kazuo Sakurai

A. Harada, presiding

- 12:30 2G12 Hierarchical assembly formation of filamentous viruses and their thermophysical properties
Toshiki Sawada, Naoki Ueda, Yuta Murata, Hironori Marubayashi, Shuichi Nojima, Junko Morikawa, Takeshi Serizawa
- 12:45 2G13 Size effect of block copolymer-plasmid DNA micelles on gene delivery efficiency in plants
Takaaki Miyamoto, Kousuke Tsuchiya, Keiji Numata
- 13:00 2G14 Preparation of temperature responsive nanogel for protein delivery application
Maho Ohshio, Shin-ichi Yusa, Kazuhiko Ishihara, Atsushi Maruyama, Naohiko Shimada
- 13:15 2G15 Preparation of transformable core-corona type thermoresponsive nanoparticles with controlled core glass transition temperatures and their uptake behavior to cells
Yoga Kosukegawa, Masatoshi Kawase, Taka-Aki Asoh, Ryo Ishihara, Akihiko Kikuchi

T. Serizawa, presiding

- 13:30 2G16 Preparation of extracellular vesicle by electric field induced methods and evaluation of their biotechnological function
Ai Amano, Yuko Sato, Yoshihiro Sasaki, Kazunari Akiyoshi
- 13:45 2G17 Design and function of the polymer vesicles composed of amphiphilic graft-type saccharides
Tomoki Nishimura, Sishi Shen, Shinichi Sawada, Sadaatsu Mukai, Yoshihiro Sasaki, Kazunari Akiyoshi
- 14:00 2G18 Development of Protein-Encapsulated Yolk-shell Structure by Polyion Complex Formation
Yiwei Liu, Yujiro Hamada, Takeshi Mori, Yoshiki Katayama, Akihiro Kishimura
- 14:15 2G19 Preparation of Stimuli-Responsive Gel Capsules via Miniemulsion Periphery RAFT Polymerization for Protein Delivery Carrier
Akifumi Kawamura, Hiroshi Nakaura, Takashi Miyata

N. Shimada, presiding

- 14:30 2G20 Preparation of Nano-assembly from Block Copolymers Having Thymine Groups and Their ATP-responsive Behavior
Taira Tsuchiya, Akihumi Kawamura, Takashi Miyata
- 14:45 2G21 Proliferation, extension, and aggregation of fibroblast cells in the presence of anisotropic polymer assemblies
Kazuki Fukushima, Masashi Oji, Nozomi Fujimura, Haruka Tsuchiya, Masaru Tanaka
- 15:00 2G22 Preparation and mechanical properties of highly oriented collagen films on scaffolds with parallel grooves
Yuki Matsubara, Takuya Matsumoto, Chizuru Hongo, Takashi Nishino

A. Kawamura, presiding

- 15:15 2G23 Complex formation of electrolyte polysaccharides and collagen model peptide in aqueous solution
Ken Terao, Saki Ishida, Tasuku Yoshida
- 15:30 2G24 Dispersion state of the soybean oil-lecithin mixture in aqueous solution
Kenzo Yamada, Takahiro Sato
- 15:45 2G25 Real-time visualization of hydrogel microspheres by high-speed AFM
Shusuke Matsui, Kensuke Hoshio, Takayuki Uchihashi, Daisuke Suzuki
- 16:00 2G26 Electrodynamic phenomena of model soft hydrogel microspheres
Takuma Kureha, Takahisa Shibamoto, Takamasa Sakai, Daisuke Suzuki
- 16:15 2G27 Triplet-DNP in nanoporous materials towards highly sensitive MRI
Saiya Fujiwara, Masanori Hosoyamada, Nobuhiro Yanai, Ken-ichiro Tateishi, Tomohiro Uesaka, Nobuo Kimizuka

Fri. May 25

D. BIOPOLYMERS AND BIORELATED POLYMERS

H. Kashida, presiding

- 9:30 3G03 Controlled synthesis of alternating glycopolymers by a combination of RAFT copolymerization and stepwise click reactions
Tomomi Otsubo, Jin Motoyanagi, Tomonari Tanaka, Masahiko Minoda
- 9:45 3G04 Precision synthesis and function of saccharides-bearing block copolymers responsive to temperature and lectin
Tomonari Tanaka, Masaru Okamoto
- 10:00 3G05 Synthesis of amylose supramolecules by vine-twining polymerization using poly(THF-block-2-oxazoline)

Keisuke Yano, Kazuya Yamamoto, Jun-ichi Kadokawa

Y. Miura, presiding

- 10:15 3G06 Enzymatic synthesis of amylosic supramolecular network materials
Saya Orio, Kazuya Yamamoto, Jun-ichi Kadokawa
- 10:30 3G07 Construction and characterization of surface-functionalized cellulose nanoribbons
Takatoshi Nohara, Toshiki Sawada, Hiroshi Tanaka, Takeshi Serizawa

K. Akiyoshi, presiding

- 10:45 3G08 Screening molecular recognition of glycopolymer for recognition of cholera toxin
Yuhei Terada, Yu Hoshino, Yoshiko Miura
- 11:00 3G09 Screening of interaction between protein and glycopolymer containing hydrophobic group using surface plasmon resonance imaging (SPRI)
Yuri Kimoto, Yuhei Terada, Yu Hoshino, Yoshiko Miura
- 11:15 3G10 Design of well-defined Glycopolymers for Controlling the Interaction with the Influenza Virus
Masanori Nagao, Akane Kubo, Yurina Fujiwara, Teruhiko Matsubara, Yu Hoshino, Toshinori Sato, Yoshiko Miura
- 11:30 3G11 Affinity purification of labeled proteins by cyclodextrin modified cellulose monolith
Yuya Higuchi, Taka-Aki Asoh, Yoshinori Takashima, Akira Harada, Tsuyoshi Inoue, Hiroshi Uyama

T. Sawada, presiding

- 12:30 3G12 Control of microscopic structure in nanogel crosslinked gels by acoustic wave and their physical properties
Chisato Kadota, Sada-atsu Mukai, Shinichi Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi
- 12:45 3G13 Construction and bio-function of polysaccharide nanogel cross-linked by oligonucleotides
Hirokazu Iwamoto, Shinichi Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi
- 13:00 3G14 Complex Formation from Cationic and Anionic Amylose Analog Polysaccharides
Takuya Uto, Toshifumi Yui, Kazuya Yamamoto, Jun-ichi Kadokawa
- 13:15 3G15 Dissolution Simulation of Chitin in Ionic Liquids
Takuya Uto, Kazuya Yamamoto, Jun-ichi Kadokawa

J. Kadokawa, presiding

- 13:30 3G16 Preparation of polymer monoliths using reactive cyclodextrin derivative and its application as an adsorbent
Shunsuke Mizuno, Taka-Aki Asoh, Yoshinori Takashima, Akira Harada, Hiroshi Uyama
- 13:45 3G17 Formation of Supra-Polysaccharide Membranes by Splitting of Evaporative Air-LC Interface
Kosuke OKEYOSHI, Kittiphong TONGSUK, Miki YAMASHITA, Kulisara BUDPUD, Takeshi SHINHAMA, Gargi JOSHI, Maiko OKAJIMA, Tatsuo KANEKO
- 14:00 3G18 Fabrication of micro-structured surfaces on chitosan film by using anionic polysaccharides
Hironori Izawa, Yuka Miyazaki, Shinsuke Ifuku, Minoru Morimoto, Hiroyuki Saimoto
- 14:15 3G19 Preparation of self-standing hydrogel using oxidized cellulose nanofiber by hydrothermal treatment
Shin Suenaga, Mitsumasa Osada

14:30 3G20 Emulsification mechanism of highly-branched natural heteropolysaccharides
Noriyuki Isobe, Satoshi Okada, Shuji Fujisawa, Shigeru Deguchi

Room H

Wed. May 23

D. BIOPOLYMERS AND BIORELATED POLYMERS

T. Yamaoka, presiding

- 10:00 1H05 Fabrication of Layer-by-Layer (LbL) 3D Skin model and the application for alternatives to animal testing
Masato Murakami, Takami Akagi, Mitsuru Akashi
- 10:15 1H06 High-Density Modification of Poly(propylene) Surface with Cholesterol End-Modified Poly(ethylene glycol)
Yuya Sone, Hiroyoshi Kawakami, Shoichiro Asayama
- 10:30 1H07 Analysis of cell adhesion mechanisms on charged polymer substrates
Takashi Hoshiba, Chiaki Yoshikawa, Keita Sakakibara
- 10:45 1H08 Facile method for the preparation of antioxidative material for stem cell culture and blood contact device
Yutaka Ikeda, Yukio Nagasaki

Y. Nagasaki, presiding

- 11:00 1H09 Peptide-conjugated silane-coupling agent for improving cell affinity and suppressing platelet adhesion of decellularized vascular graft.
Kentaro Kojima, Atsushi Mahara, Yoshiaki Hirano, Tetsuji Yamaoka
- 11:15 1H10 Evaluation of cell capturing process on REDV-modified surface in microchip channel that mimics vascular graft surface
Atsushi Mahara, Kazuki Kitagawa, Takahiko Nakaoki, Tetsuji Yamaoka
- 11:30 1H11 The control of the interaction with blood components by a polymer-concentrated layer
Takashi AOKI, Kanta NOGAMI

A. Kikuchi, presiding

- 12:30 1H12 Development of sprayable wound dressing of hydrophobically-modified gelatin particles
Akihiro Nishiguchi, Tetsushi Taguchi
- 12:45 1H13 Inhibition of cell adhesion on hydrophilic star polymer surface
Masayasu Totani, Tsuyoshi Ando, Hisao Matsuno, Masao Tanihara, Keiji Tanaka
- 13:00 1H14 Effect of Hydrophobic Groups on Cell Adhesion Property to Various Substrates Coated with MPC Copolymers
Risa Katayama, Musashi Ikeda, Chie Kojima, Kohei Shiraishi, Akikazu Matsumoto
- 13:15 1H15 Synthesis and characterization of thermoresponsive graft-copolymer-trypsin conjugates
Yasushi Sasai, Masao Morita, Naoki Doi, Yukinori Yamauchi, Masayuki Kuzuya, Shin-ichi Kondo

T. Takeuchi, presiding

- 13:30 1H16 Role of intermolecular interaction forces in protein adsorption behavior at electrolyte polymer brush surfaces
Yuuki Inoue, Kazuhiko Ishihara

- 13:45 1H17 Development of a rapid tissue clearing process by using acrylamide-acrylic acid copolymer gels
Yuuta Ohno,Chie Kojima,Akikazu Matsumoto
- 14:00 1H18 Raman imaging of intracellular granule metabolism with stable isotope-labeling
Yusuke Yonamine,Yuta Suzuki,Nobutoshi Ota,Yo Tanaka,Takuro Ito,Yoshiko Miura,Keisuke Goda,Yasuyuki Ozeki,Yu Hoshino
- 14:15 1H19 Design of a Surface-Functionalized Power-Free Microchip for Sensitive Extracellular Vesicle Detection
Ryo ISHIHARA,Asuka KATAGIRI,Tadaaki NAKAJIMA,Kazuo HOSOKAWA,Mizuo MAEDA,Yasuhiro TOMOOKA,Akihiko KIKUCHI
- 14:30 1H20 Preparation of Colored Particles with Biomolecular Ligands and Their Application for Diagnosis Systems
Atsuhiko Sugahara,Akifumi Kawamura,Takashi Miyata
- M. Higuchi, presiding**
- 14:45 1H21 Characterization of sugar-responsive dispersibility changes in serum for diagnostic nanoparticles with phenylboronic acid at the terminal of corona layers
Kenta Yonezu,Taka-Aki Asoh,Ryo Ishihara,Akihiko Kikuchi
- 15:00 1H22 Molecularly imprinted nanocavity possessing size/shape and ligand binding domain recognition ability for selective recognition of target proteins
Yuri Kamon,Toshifumi Takeuchi
- 15:15 1H23 Molecularly imprinted cavities bearing multiple recognition modes for highly sensitive detection of prostate specific antigen prepared by post-imprinting modifications
Tetsuro Saeki,Hirobumi Sunayama,Eri Takano,Yuri Kamon,Yukiya Kitayama,Toshifumi Takeuchi
- 15:30 1H24 Antibody-conjugated molecularly imprinted polymers for highly sensitive fluorescent detection of exosomes
Kisho Mori,Mitsuhiro Hirase,Takahiro Morishige,Eri Takano,Yukiya Kitayama,Toshifumi Takeuchi

Thu. May 24

D. BIOPOLYMERS AND BIORELATED POLYMERS

N. Takeda, presiding

- 9:30 2H03 Dually cross-linked supramolecular hydrogel as shape-memory materials for cell culture
Masaki Nakahata,Junki Maeda,Shinji Sakai,Akira Harada,Masahito Taya
- 9:45 2H04 Preparation of Photo-Sensitive Cell Culture Gel Microarrays and their Application to Cardiomyocyte Separation
Chie Kojima,Yusuke Nakajima,Kaeda Yokoyama,Takeshi Kawano,Kenji Takatsuka,Yusuke Taki,Yuji Haraguchi,Katsuhisa Matsuura,Tatsuya Shimizu
- 10:00 2H05 Preparation of a replica of basement membrane of decellularized aorta
Tsuyoshi Kimura,Kondo Mayuka,Yoshihide Hashimoto,Toshia Fujisato,Naoko Nakamura,Akio Kishida
- 10:15 2H06 Preparation of porous gelatin hydrogels and their application for 3D culture of chondrocytes
Guoping Chen,Xiaomeng Li,Naoki Kawazoe

M. Matsusaki, presiding

- 10:30 2H07 Spiropyran-introduced polymer thin film showing perfect photo-switching of

microphase separation and its application to cell culture substrate
Masato Sakano, Keiichi Imato, Naoya Takeda

10:45 2H08 Fabrication of long and large engineered tissues in three-dimensional gel scaffolds of oriented cellulose nanofibers
Keiichi Imato, Kenji Yoneda, Tomo Tanaka, Dong Hyun Yoon, Tetsushi Sekiguchi, Shuichi Shoji, Naoya Takeda

11:00 2H09 Design of Banacle-derived Peptide for Tissue Engineering Scaffold
Daisuke Fujii, Kei Kamino, Sachiro Kakinoki, Yoshiaki Hirano

Y. Hirano, presiding

11:15 2H10 Construction of iPS-derived cardiac fibrosis models using collagen microfibers and control of fibrosis.
Nishi Kouki, Misaki Komeda, Michiya Matsusaki

11:30 2H11 Improved physical stability of collagen fibers by cross-linking and application to three-dimensional tissue construction
Yasuhiro Naka, Koki Nishi, Michiya Matsusaki

T. Yamaoka, presiding

12:30 2H12ILY Evaluating, Designing, and Applying Hydrogel Surfaces for Biomaterials Applications
Aya Mizutani Akimoto

13:00 2H14 Development of Tyr-crosslinked Silk Materials for Soft Tissue Regeneration
Yuya Ichida, Chikako Nakazawa, Atsushi Asano, Ryo Shimada, Shintaro Nemoto, Yasumoto Nakazawa

13:15 2H15 Photo-controllable patterning and selective collection of cultured cells using nitrobenzaldehyde-functionalized polymers
Kimio Sumaru, Toshiyuki Takagi, Kana Morishita, Toshiyuki Kanamori

T. Ooya, presiding

13:30 2H16 Synthesis of Dual Stimuli-Responsive Polymers that Undergo Sol-Gel Phase Transition in Response to Light and Biomolecule and Their Application as Cell Scaffolds
Yosuke Natsume, Kohei Okuma, Akifumi Kawamura, Takashi Miyata

13:45 2H17 Design of Photo/Temperature-Responsive Gels with Controllable Elastic Modulus and Hydrophilicity and Their Applications to Cell Cultures
Takashi Miyata, Akana Matsuda, Akifumi Kawamura

14:00 2H18 Fabrication of 3D tissues by LbL and cell accumulation technique in biopolymer culture vessel.
Yoshinari Tsukamoto, Takami Akagi, Mitsuru Akashi

14:15 2H19 Fabrication of thermosensitive collagen gels
Yuichi Yukawa, Hirotaka Nakatsuji, Shinji Irie, Michiya Matsusaki

T. Miyata, presiding

14:30 2H20 Development of novel tissue engineering technology using extracellular matrix paper
Hirotaka Nakatsuji, Michiya Matsusaki

14:45 2H21 Fabrication of 3D-Cancer-Stromal Tissues Using Collagen Microfibers and Evaluation of Cancer Blood Vessel Structure
Natsuko Kato, Misaki Komeda, Michiya Matsusaki

15:00 2H22 Mechanical and biodegradable properties of poly(ethylene glycol)-modified hyaluronic acid hydrogels
Kazune Oda, Yuta Horibe, Tooru Ooya

K. Sumaru, presiding

15:15 2H23 Poly(ethylene glycol)-modified hyaluronic acid hydrogels for improved stability of a cell growth factor

Yuta Horibe, Kazune Oda, Miyabi Kozuma, Tadaaki Nakajima, Yasuhiro Tomooka, Tooru Ooya

- 15:30 2H24 Trachea regeneration using high pressure engineering-based acellular tissue
Tetsuji Yamaoka, Michinobu Ohno, Shin Enosawa, Yasushi Fuchimoto
- 15:45 2H25 Heparin-modified alpha-tricalcium phosphate granules with early osteogenic capability
Tetsuji Yamaoka, Yoshihiro Takeda, Yoshitomo Honda, Yihua Liu, Baba Shunsuke, Yoshiya Hashimoto

Fri. May 25

D. BIOPOLYMERS AND BIORELATED POLYMERS

Y. Kamiya, presiding

- 9:30 3H03 Minimal unit complex formed with siRNA and block-ionomer
Kotaro Hayashi, Shigeto Fukushima, Kensuke Osada, Nobuhiro Nishiyama, Kanjiro Miyata, Kazunori Kataoka
- 9:45 3H04 Effect of shear stress on structure of polyplex micelles from poly(ethylene glycol)-poly(L-lysine) block copolymers
Kensuke Osada, Kaori Takeda, Yuichi Yamasaki, Kazunori Kataoka
- 10:00 3H05 Stabilization of polyplex micelles loaded with messenger RNA by hybridization of cholesterol modified complementary short RNA oligonucleotide
Naoto Yoshinaga, Satoshi Uchida, Kensuke Osada, Horacio Cabral, Kazunori Kataoka
- 10:15 3H06 Development of designer extracellular vesicles expressing immune checkpoint protein
Raga Ishikawa, Shosuke Yoshida, Shin-ichi Sawada, Sada-atsu Mukai, Yoshihiro Sasaki, Kazunari Akiyoshi
- 10:30 3H07 Design and function of self-assembled nanogel carrier targeting antigen presenting cells
Risako Miura, Yoshiro Tahara, Shin-ichi Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi

S. Mochizuki, presiding

- 10:45 3H08 Target recognition ability of ligand molecules on the surface of DDS carrier penetrating blood-brain barrier
Noriko Nakamura, Yasutaka Anraku, Shigeto Fukushima, Kazuko Toh, Horacio Cabral, Kazunori Kataoka
- 11:00 3H09 Significance of helix formation for the structure and function of polymeric micelles incorporating platinum anticancer drugs
Yuki Mochida, Horacio Cabral, Yutaka Miura, Kensuke Osada, Nobuhiro Nishiyama, Kazunori Kataoka
- 11:15 3H10 Development of polyzwitterion that responds to tumorous environment and its application for effective accumulation of the coated nanomaterials in tumor tissue
Hiroyasu Takemoto, Abdul-Hackam Ranneh, Takahiro Nomoto, Makoto Matsui, Keishiro Tomoda, Yuki Mochida, Mitsuru Naito, Nobuhiro Nishiyama
- 11:30 3H11 Preparation of pH-/Reducing Environment-responsive Gel Particles and Their Function as Intracellular Delivery Carrier
Akifumi Kawamura, Ayaka Harada, Takashi Miyata

T. Wada, presiding

- 12:30 3H12 Effect of cationic graft copolymer/ membrane active peptide complexes on plasma membranes

- Sakamoto Wakako, Takuro Ochiai, Naohiko Shimada, Atsushi Maruyama
- 12:45 3H13 Intracellular-siRNA delivery by ATP-responsive polyion complex micelles
Mitsuru Naito, Naoto Yoshinaga, Takehiko Ishii, Akira Matsumoto, Yuji Miyahara, Kanjiro Miyata, Kazunori Kataoka
- 13:00 3H14 Intercellular distribution of antisense-DNA/SPG complex
Nobuaki Fujiwara, Shinichi Mochizuki, Hiroto Izumi, Yasuo Morimoto, Kazuo Sakurai
- 13:15 3H15 Evaluation of macrophage endocytosis of polyphosphoesters
Akihisa Otaka, Yasuhiko Iwasaki
- Y. Iwasaki, presiding**
- 13:30 3H16 Peptide-lipid-hybrid multi-lamellar vesicular carrier for drug delivery system
Md Mofizur Rahman, Motoki Ueda, Takuji Hirose, Yoshihiro Ito
- 13:45 3H17 Development of cancer specific intracellular delivery system using PEG-conjugated peptide responding to MMP-9 activity and its application for cellular function control
Hiroka Sugai, Moeka Matsushima, Asako Sanbe, JIANG Nan, Masahito Inagaki, Seiji Sakamoto, Satoru Ishibashi, Ikuhiko Nakase, Asako Yamayoshi, Hiromu Kashida, Yasuyuki Araki, Hiroyuki Asanuma, Takanori Yokota, Takehiko Wada
- 14:00 3H18 Relationship between the hydrophilic group of DDS nanomicell and blood retention
Koichi Arai, Syota Fujii, Shinichi Motizuki, Kazuo Sakurai
- 14:15 3H19 Molecular targeting radiotherapy by using radio-enhancement of gold nanoparticles
Keiichiro Hatoyama, Narufumi Kitamura, Mayumi Takano-Kasuya, Yoh Hamada, Takashi Kamei, Kohsuke Gonda
- 14:30 3H20 Gold-nanoparticles Incorporated Molecularly Imprinted Nanogels bearing Human Serum Albumin Recognition Cavities for DDS
Yukiya Kitayama, Takuya Yamada, Hiroaki Akasaka, Yu Matsumoto, Rhohei Sasaki, Toshifumi Takeuchi

Room J

Thu. May 24

D. BIOPOLYMERS AND BIORELATED POLYMERS

K. Murayama, presiding

- 9:30 2J03 Development of tumor-specific double-stranded RNA delivery system using hyaluronic acid to induce antigen presentation
Masashi Umeda, Atsushi Moritaka, Kazuo Sakurai, Shinichi Mochizuki
- 9:45 2J04 Surface Design of DNA-Functionalized Gold Nanoparticles for Colorimetric Screening against Small Molecules with Drug-Nucleic Acid Interactions
Yoshitsugu Akiyama, Yuichi Saikawa, Yuko Kokubo, Jaeyeon Nam, Kotoe Ichihashi, Kazunori Kimura, Akihiko Kikuchi, Tohru Takarada, Mizuo Maeda
- 10:00 2J05 Colorimetric Screening of DNA Damaging Agents Based on Double-Stranded DNA-Modified Gold Nanoparticles
Kazunori Kimura, Yoshitsugu Akiyama, Tohru Takarada, Mizuno Maeda, Akihiko Kikuchi

Y. Akiyama, presiding

- 10:15 2J06 Effect of Poly(ethylene glycol) Molecular Weight for Evading Liver Sinusoidal Endothelial Barrier to Achieve Improved Systemic Blood Circulation Activity of Polyplex Micelles
Anjaneyulu Dirisala, Kensuke Osada, Theofilus A. Tockary, Shigehito Osawa, Kazunori Kataoka
- 10:30 2J07 Direct DNA coupling to graphene oxide by phosphoramidite chemistry
Naoto YAMAGUCHI, Yuta NISHINA, Akinori KUZUYA, Yuichi OHYA
- 10:45 2J08 Carbohydrate-modified triangle DNA as binding inhibitor of influenza viruses
Miyuki Yamabe, Kunihiro Kaihatsu, Yasuhito Ebara

K. Osada, presiding

- 11:00 2J09ILY Designing chemically modified functional oligonucleotides for control of gene silencing system, RNA interference
Yukiko Kamiya

T. Wada, presiding

- 12:30 2J12ILY Bioinspired-mineralization utilizing multifunctional peptide as two- and three-dimensional reaction fields
Kazuki Murai
- 13:00 2J14 Mineralization of calcium phosphate at interface of peptide hydrogels
Hiroto Isobe, Kazuki Murai, Kanjiro Torigoe, Keishi Nishio, Mutsuyoshi Matsumoto
- 13:15 2J15 Synthesis and Adsorption Assessment of Peptides for Hybridization with Hydroxyapatite
Shun Tanaka, Teruhiko Iijima, Teruhiko Matsubara, Toshinori Sato, mineo Hashizume
- 13:30 2J16 Preparation and Characterization of Cationic Polymeric Particles with Anilinophenyl Group
Hidenobu Shimizu, Michio Watanabe, Risei Wada, Masaru Okabe

M. Kondo, presiding

- 13:45 2J17 Anti-inflammatory Strategies for Immune Disease Treatment Using Apoptotic Cell Membrane Inspired Polymers.
Yasuhiro Nakagawa, Yuto Yano, Atsuhiko Saitou, Mitsuhiro Ebara
- 14:00 2J18 Control of Biomolecular Functions with Molecular Glues
Kou Okuro, Takuzo Aida
- 14:15 2J19 Photoresponsive Molecular Glues for Manipulation of Biological Events
Rina Mogaki, Akio Arisaka, Kou Okuro, Takuzo Aida
- 14:30 2J20 Inhibition Effect of Liposomes on Assembly of Gold Nanoparticles Adsorbed on Lipid Membrane
Kouta Sugikawa, Kotaro Matsuo, Atsushi Ikeda
- 14:45 2J21 Development of tetraspanin-integrated proteoliposomes toward construction of artificial exosome
Shuheng Yan, Mitsuru Ando, Yoshihiro Sasaki, Kazunari Akiyoshi

K. Sada, presiding

- 15:00 2J22 High ordered structure of UCST-type thermo-responsive citrulline copolypeptide
Sotaro Kuroyanagi, Naohiko Shimada, Shota Fujii, Kazuo Sakurai, Atsushi Maruyama
- 15:15 2J23 Molecular design of photo-responsive ureido polymers containing azobenzene moieties
Nao Ikeuchi, Naohiko Shimada, Keiji Murayama, Hiroyuki Asanuma, Atsushi Maruyama
- 15:30 2J24 A nanoparticle-preparation kit using ethylene glycol-based block copolymers

with a common temperature-responsive block

Yohei Kotsuchibashi

- 15:45 2J25 Effects of PEG Addition upon Supramolecular Asymmetric Photochirogenesis (SMAP) of 2-Anthracenecarboxylate mediated by Serum Albumin
Mitsuru Okugi, Yuya Fujishiro, Sota Toyooka, Masaki Nishijima, Yasuyuki Araki, Yutaka Ikeda, Seiji Sakamoto, Yukio Nagasaki, Yoshihisa Inoue, Takehiko Wada

Fri. May 25

D. BIOPOLYMERS AND BIORELATED POLYMERS

Y. Hoshino, presiding

- 9:30 3J03 Design of sulfobetaine polymers and the interaction with cell
Nobuyuki Morimoto, Yoshifumi Oishi, Masaya Yamamoto
- 9:45 3J04 Fabrication of Molecular blocks with Cancer Cell Death Property by Self-Assembly in Response to Cancer Microenvironment
Michiya Matsusaki, Yudai Shioji
- 10:00 3J05 Synthesis of intercellular anchoring molecules and their application to 3D-cell patterning
Michiya Matsusaki, Kosuke Yanagisawa
- 10:15 3J06 Wettability control of microstructured superhydrophobic vulcanized rubber surface by elongation
Yuji Hirai, Riku Tamura, Yasutaka Matsuo, Takahiro Okamoto, Toshihiko Arita, Masatsugu Shimomura

S. Nagano, presiding

- 10:30 3J07ILY Water transport regulation by biomimetic approaches
Daisuke Ishii

M. Matsusaki, presiding

- 11:00 3J09 Photo-bidirectional mobility of polypeptide liquid crystalline Gels containing the different chemical properties of cross-linker.
Toshihiro Hiejima, Hiromasa Imai
- 11:15 3J10 Amoeba like self-oscillating polymeric fluids with sol-gel oscillation and its analysis from microscopic/macroscopic viewpoint
Michika Onoda, Takeshi Ueki, Ryota Tamate, Mitsuhiro Shibayama, Ryo Yoshida
- 11:30 3J11 Control of channel formation in a tissue-like gel upon a continuous liquid injection
Daichi Fukuchi, Masaki Ozawa

D. Ishii, presiding

- 12:30 3J12 Preparation and Evaluation of Hydrogel Particles for the Immobilization of Carbonic Anhydrase
Ryutaro Honda, Tomohiro Gyobu, Hideto Shimahara, Yoshiko Miura, Yu Hoshino
- 12:45 3J13 Recognition of Conformational Changes of Proteins by Stimuli-responsive Polymers with Molecular Recognition Sites
Takashi Miyata, Ryota Ozaki, Akifumi Kawamura
- 13:00 3J14 Chiral Recognition Based on LCST-Type Thermo-Responsive Polymers Tethering Urea Groups in the Side Chains
Masami Naya, Kenta Kokado, Kazuki Sada

Room K

Wed. May 23

B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES “English Session”

K. Mayumi, presiding

- 10:00 1K05 Evaluation of gel homogeneity made from linear and four-arm PEG Prepolymers
Yui Tsuji, Xiang Li, Takamasa Sakai, Mistuhiro Shibayama
- 10:15 1K06 Development of physical gel crosslinked with double-stranded DNA
Yusuke Yoshikawa, Xiang Li, Takamasa Sakai, Ung-il Chung, Mitsuhiro Shibayama
- 10:30 1K07 Dynamics of probe particles during sol-gel transition
Nobuyuki Watanabe, Xiang Li, Takamasa Sakai, Mitsuhiro Shibayama
- 10:45 1K08 Three Cooperative Diffusion Coefficients describing Dynamics of Polymer Gels
Takeshi Fujiyabu, Xiang Li, Takamasa Sakai

T. Sakai, presiding

- 11:00 1K09 Dynamics of Guest Polymer in Telechelic Polymer Networks
Takuya Katashima, Takamitsu Chiba, Yu Kashiwagi, Tadashi Inoue
- 11:15 1K10ILI Chemical Approaches Towards Photodynamic Hydrogels
Vinh Truong, Fanyi Li, John Forsythe

T. Katashima, presiding

- 12:30 1K12 Structure and property of poly(methyl methacrylate) containing metal salt
Asae Ito, Masayuki Yamaguchi
- 12:45 1K13 Gel formation of konjac and mechanism
Koumei Harajiri
- 13:00 1K14 Phase Structure and Thermal Conductivity of Liquid Crystalline Epoxy / BN Composites Cured with the Mixture of Curing Agents
Saki Ota, Miyuki Harada
- 13:15 1K15 Controlling hierarchical fibrous structure of cellulose hydrogel
YunZhou Guo, Md. Tariful Islam Mredha, Tasuku Nakajima, Takayuki Kurokawa, Jian Ping Gong

T. Hayakawa, presiding

- 13:30 1K16ILI Nano-Reactors and Artificial Water Channels Made by an Amphiphilic POSS Molecular Nanoparticle
Chien-Lung Wang, Jing-Ting Weng, Jyun-Hao Sie, Wei-Jyun Chen

D. Kawaguchi, presiding

- 14:00 1K18 Fabrication of Polyimide Composite Films Using Soft-Template Method and Creation of Nanostructure by Ozonolysis
Takahiro Komamura, Yuta Nabae, Teruaki Hayakawa
- 14:15 1K19 Tailored Control of Microdomain Orientations in Block Copolymer Thin Films on Non-neutral Polymer Nanolayers
Yuma Morimitsu, Maya K. Endoh, Shotaro Nishitsuji, Keiji Tanaka, Tadanori Koga
- 14:30 1K20 Development of dynamic nuclear polarization instrument for contrast variation neutron scattering experiment at iMATERIA
Yohei Noda, Yukihiko Yoshida, Satoshi Koizumi

14:45 1K21 Grazing Incident Scattering on Model Catalyst for Polymer Electrolyte Fuel Cell
Satoru Ueda, Satoshi Koizumi, Seiichi Kuroda, Andrew Nelson, Robert Robinson

M. Takenaka, presiding

15:00 1K22 Polymer Science by Pulsed Neutron Source - Incoherent Scattering from Hydrogen -
Satoshi Koizumi, Yohei Noda, Takumi Inada

15:15 1K23 Polymer Science by Pulsed Neutron Source - SANS at Compact Neutron Source -
Satoshi Koizumi, Yohei Noda, Takumi Inada, Satoru Ueda, Tomohiro Kobayashi, Toshie Otake

15:30 1K24 Dynamical study of Polyamide/polyrotaxane alloys using X-ray photon correlation spectroscopy
Taiki Hoshino, Takumi Wakabayashi, Keiichiro Nomura, Kohei Yamashita, Tatsuya Takamoto, Kohei Koyanagi, Sadayuki Kobayashi, So Fujinami, Tomotaka Nakatani, Masaki Takata

T. Hoshino, presiding

15:45 1K25 Evaluation of the prevention ability of crystal growth on tetrahydrofuran and water with poly(N-vinylamide) derivatives bearing ethylene glycol units
Ryo KAWATANI, Hiroharu AJIRO

16:00 1K26 Probe diffusion in Nafion solutions
Caidric Indaya Gupit, Xiang Li, Ryosuke Maekawa, Naoki Hasegawa, Mitsuhiro Shibayama

16:15 1K27 Temperature- and Time-dependent Heterogeneity in a Poly(N-isopropylacrylamide) Solution
Takuro Kogo, Atsuomi Shundo, Chi Wang, Keiji Tanaka

Thu. May 24

B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES “English Session”

Y. Oda, presiding

9:30 2K03 Structural characterization of deep eutectic solvents based microemulsions for transdermal delivery
Mina Sakuragi, Shinsuke Tsutsumi, Katsuki Kusakabe

9:45 2K04 Counter Anion-Specific Hydration State of Poly(quarternary ammonium cation) Brushes
Yuji Higaki, Yoshihiro Inutsuka, Tatsunori Sakamaki, Kosuke Igata, Yuka Ikemoto, Norifumi L. Yamada, Atsushi Takahara

10:00 2K05 Characterization of liquid crystalline polymer brush in a nematic solvent by surface forces measurement
Takuya Yanagimachi, Xiao Li, Helou Xie, Paul Nealey, Kazue Kurihara

Y. Higaki, presiding

10:15 2K06 Conformational Relaxation of Polystyrene at Surface Probed by Sum-frequency Generation Spectroscopy
Kim Hung Nguyen, Manabu Inutsuka, Daisuke Kawaguchi, Keiji Tanaka

10:30 2K07 Conformational Relaxation of Poly(styrene-co-butadiene) at Substrate Interface in Spin-coated and Solvent-cast Films
Keiji Tanaka, Biao Zuo, Manabu Inutsuka, Daisuke Kawaguchi, Xinping Wang

10:45 2K08 Control of Polymer Adhesion Based on Chain Architecture
Manabu Inutsuka, Masayuki Haraguchi, Masaaki Ozawa, Norifumi L. Yamada, Keiji Tanaka

11:00 2K09 Sum Frequency Generation Spectroscopy of Silica/Styrene-Butadiene Rubber Interfaces
Takako Imamura, Tomomi Masui, Hiroyuki Kishimoto, Masashi Mizukami, Kazue Kurihara

Y. Fujii, presiding

11:15 2K10 Thermal and Solvent Annealing Effects on Exciton Dynamics in Poly(3-hexylthiophene) Films
Daisuke Kawaguchi, Shuhei Yamaguchi, Keiji Tanaka

11:30 2K11 Aggregation States of Thin Hyperbranched-Polymer Films in Water
Yukari Oda, Ryo Awane, Hisao Matsuno, Masayuki Haraguchi, Masaaki Ozawa, Keiji Tanaka

12:30 2K12 Temperature-responsivities and self-assembling behavior of double zwitterionic block copolymers
Jongmin Lim, Hideki Matsuoka, Yoshiyuki Saruwatari

12:45 2K13 Micro-analysis of a single particle of acrylamide-based polymers formed by irradiation of a focused laser beam in water
Mitsuhiro Matsumoto, Kayo Fujiwara, Taka-Aki Asoh, Tatsuya Shoji, Takashi Nishiyama, Hideo Horibe, Yukiteru Katsumoto, Yasuyuki Tsuboi

K. Yamamoto, presiding

13:00 2K14 Coarsening behavior of lamellar-forming high-x block copolymer domains in thin film
Ryuichi Nakatani, Yuta Nabae, Teruaki Hayakawa

13:15 2K15 Synthesis of POSS containing block copolymers and structure analysis of micro-phase separation
Takumi Uchiyama, Ryuichi Nakatani, Yuta Nabae, Teruaki Hayakawa

13:30 2K16 Depth-Dependent Structural Analyses in Pac12PDI Thin Films as Revealed by Grazing Incidence Wide Angle Scattering in Tender Energy Region
Kazutaka Kamitani, Ayumi Hamada, Yuko Konishi, Masaru Mukai, Tomoyasu Hirai, Maiko Nishibori, Ken Kojio, Atushi Takahara

S. Nagano, presiding

13:45 2K17 Variable temperature pMAIRS analysis of molecular chain orientation in polyimide thin films during thermal curing
Ryohei Ishige, Kazuyuki Tanaka, Shinji Ando

14:00 2K18 Synthesis of Novel Fluorescent Polyimides Having High Orientation Ability using Liquid Crystalline Precursor and Molecular Orientation Analysis Based on Polarized Fluorescence.
Keita Yanase, Kazuyuki Tanaka, Ryohei Ishige, Shinji Ando

14:15 2K19 Roles of end-capping substituents in the solid-state packing and OFET performance of a multi-fused heteroacene
Guan-Ting Ciou, Bo-Han Lai, Chain-Shu Hsu, Chun-Kai Wang, Chin-Lung Chung, Ken-Tsung Wong, Chien-Lung Wang

Y. Matsuda, presiding

14:30 2K20 Effect of an Organic Filler on the Crystallization Behavior of Poly (L-Lactic Acid)
Amit Kumar Pandey, Rahul Patwa, Vimal Katiyar, Sono Sasaki, Shinichi Sakurai

14:45 2K21 Effects of A Liquid-Type Nucleation Agent on Crystallization of Poly (L-Lactic Acid) As Revealed by Small- and Wide-Angle X-ray Scattering
Diep Thi Ngoc Pham, Masatsugu Mochizuki, Mikio Doi, Hideaki Takagi, Nobutaka Shimizu, Noriyuki Igarashi, Sono Sasaki, Shinichi Sakurai

15:00 2K22 DSC Study on the Concentration Dependence of A Liquid-Type Nucleation Agent on Crystallization of Poly (L-Lactic Acid)
Diep Thi Ngoc Pham, Masatsugu Mochizuki, Mikio Doi, Sono Sasaki, Shinichi

Sakurai

- 15:15 2K23 Nucleation theory for polymer crystallization with conformation entropy
Hiroshi Yokota, Toshihiro Kawakatsu

O. Urakawa, presiding

- 15:30 2K24 Relation between Beta transition and the molecular motion in bisphenol based polycarbonates
Kohei Tanabe, Ikuro Fujino, Kei Shimotani, Kazuki Inami
- 15:45 2K25 Self-assembling behavior of chemically modified cyclodextrin of polyrotaxane in the solid state
Shuntaro Uenuma, Rina Maeda, Koichi Mayumi, Kazuaki Kato, Hideaki Yokoyama, Kohzo Ito
- 16:00 2K26 Higher-Order Structure of Polyethylene Glycol and Its Blends Studied by Terahertz Spectroscopy
Dian Marlina, Harumi Sato
- 16:15 2K27 Accelerated Discovery of High Thermal Conductivity Polymers with a Bayesian Molecular Design Method
Stephen Wu, Yukiko Kondow, Masa-aki Kakimoto, Isao Kuwajima, Guillaume Lambard, Kenta Hongo, Yibin Xu, Junko Morikawa, Ryo Yoshida

Fri. May 25

B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES “English Session”

S. Nobukawa, presiding

- 9:30 3K03 Multi-chain Slip-spring Simulations for Branch Polymers
Yuichi Masubuchi
- 9:45 3K04 Micro-Channel Flow Evaluation of Electro-Rheological Nano-Suspensions
Katsufumi Tanaka, Arata Ichikawa, Midori Takasaki, Haruki Kobayashi, Masami Nakano, Atsushi Totsuka
- 10:00 3K05 Direct force measurements of polymer-polymer interactions in a flow by a scanning probe microscopy
Ruri Hidema, Seika Hayashi, Yoshiyuki Komoda, Hiroshi Suzuki
- 10:15 3K06 Effect of Intermolecular Hydrogen Bonding on the Rheological Behavior of Polycarbonate-Polyurethane
Osamu Urakawa, Naoya Miyawaki, Tadashi Inoue

H. Matsuoka, presiding

- 10:30 3K07 Synthesis and Dilution solution properties of Biocompatible HPMA Copolymers toward DDS
Kiyomasa Doi, Rintaro Takahashi, Shota Fujii, Kazuo Sakurai
- 10:45 3K08 Platonic micelles part 1: The effects of alkyl chain length on the aggregation behavior of monodisperse micelles
Shota Fujii, Rintaro Takahashi, Kazuo Sakurai, Ji Ha Lee, Shimpei Yamada
- 11:00 3K09 Platonic micelles part 2: Thermodynamic and kinetic consideration of the micelles with monodispersity and the discrete aggregation numbers
Kazuo Sakurai, Shota Fujii, Rintaro Takahashi, Ji Ha Lee
- 11:15 3K10 Cell Adhesion on Polymer Surfaces with Underlying Amorphous/Crystalline Phases
Hisao Matsuno, Shunya Irie, Toyoaki Hirata, Ruriko Matsuyama, Yukari Oda, Hiroyasu Masunaga, Yukiko Seki, Sadahito Aoshima, Keiji Tanaka

T. Matsumoto, presiding

- 11:30 3K11 Synthesis and Functionalization of Catechol-Containing Triblock Copolymers

- Hiroshi Yabu, Hideaki Komiyama, Shusaku Nagano, Yuki Nagao
- 12:30 3K12 Morphology control of carbon materials at dynamic interface by vortex LB technique
Taizo Mori, Hiroyuki Tanala, Nobuhiko Mitoma, Hirotohi Sakamoto, Shresta Lok Kumar, Kenichiro Itami, Katsuhiko Ariga
- 12:45 3K13 Preparation and structural control of self-assembled helical rods composed of cyclodextrins
Hajime Shigemitsu, Sayaka Sonoda, Ayumi Teragaki, Toshiyuki Kida
- 13:00 3K14 Two-step thermoresponsive self-assembly of gold nanorods coated with a single kind of surface ligand
Hideyuki Mitomo, Ryo Iida, Kenichi Niikura, Kuniharu Ijro

N. Torikai, presiding

- 13:15 3K15 Preparation of Cylindrical Polystyrene Particles and the Surface Absorption Behavior
Wei Li, Toyoko Suzuki, Hideto Minami
- 13:30 3K16 Fabrication of vertically aligned rod-shaped nanoparticle arrays utilizing polyelectrolyte polymer brushes
Satoshi Nakamura, Hideyuki Mitomo, Yasutaka Matsuo, Kenichi Niikura, Miho Aizawa, Atsushi Shishido, Kuniharu Ijro
- 13:45 3K17 Ordering of Sphere-Forming Triblock Copolymer in a Confined Space
Rasha Bayomi, Sono Sasaki, Shinichi Sakurai
- 14:00 3K18 Investigation of the Structure Near the Free Surface of Sphere- and Cylinder-Forming Triblock Copolymer Thin Films
Rasha Bayomi, Takashi Aoki, Sono Sasaki, Shinichi Sakurai

Room L

Wed. May 23

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS “English Session”

N. Kimizuka, presiding

- 10:15 1L06 Photoinduced crater pattern formation by surface heterostructure fabricated by inkjet printing on polymer films
Issei Kitamura, Mitsuo Hara, Shusaku Nagano, Takahiro Seki
- 10:30 1L07 Preparation and evaluation of photomobile property of crosslinked N-benzylideneaniline liquid crystalline polymer
Mizuho Kondo, Kotaro Makino, Kotera Koichi, Yamaguchi Wataru, Fukae Ryohei, Kawatsuki Nobuhiro
- 10:45 1L08 Photo-Switchable Optical Resonators and Arrays from Fluorescent Diarylethene
Daichi Okada, Yusuke Kitayama, Zhang-Hong Lin, Masakazu Morimoto, Jer-shing Huang, Fumio Sasaki, Takeo Minari, Satoshi Ishii, Tadaaki Nagao, Masahiro Irie, Yamamoto Yohei
- 11:00 1L09 Analysis of Fluorescence Properties of Polyimide Films Displaying Excited-state Intramolecular Excited-state Intramolecular Proton Transfer under Very High Pressure
Eisuke Fujiwara, Ryoji Orita, Kenta Kanosue, Ryohei Ishige, Franckevicius Marius, Vysniauskas Aurimas, Gulbinas Vidmantas, Shinji Ando

S. Nagano, presiding

- 11:15 1L10 Synthesis and photophysical properties of polyamides containing 1,4-

- bis(piperazinyl)-2,3-dimethylnaphthalene chromophore in the main chain
Sharidan Amir, Gen-ichi Konishi
- 11:30 1L11 Controlling of nanostructures in ionic liquids for photon upconversion based on triplet exciton diffusion
Shota Hisamitsu, Nobuhiro Yanai, Nobuo Kimizuka
- 12:30 1L12 Synthesis of Main-chain scission type hyperbranched polyacetals and their application for resist materials.
Kouhei Shiotsuki, Hiroto Kudou
- 12:45 1L13 Ultrafast and High-Contrast Electrochromic Devices Based on Metallosupramolecular Polymers
Utpal RANA, Masayoshi HIGUCHI

E. POLYMERS AND ENVIRONMENT “English Session”

K. Sugimura, presiding

- 13:15 1L15 Preparation and Characterizations of Chitosan Film Containing Ionic Liquid for Used as Gel Electrolyte in Electric Double-Layer Capacitor
Ditpon Kotatha, Keito Shinomiya, Mayuko Ogino, Satoshi Uchida, Masashi Ishikawa, Tetsuya Furuike, Hiroshi Tamura
- 13:30 1L16 Deproteinization of Skim Natural Rubber Latex
Bhumin Thanardna, Hiroshi Tamura, Tetsuya Furuike
- 13:45 1L17 Synthesis and Optimization of Lipase-catalyzed Dextrin Esters for Regioselective Substitution
Hakyong Lee, Satoshi Kimura, Tadahisa Iwata
- 14:00 1L18 Synthetic spider silk protein in marine photosynthetic bacterium
Choon Pin Foong, Keiji Numata

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS “English Session”

A. Hashidzume, presiding

- 14:30 1L20 Surface-grafting of Poly(dimethylsiloxane) by Surface-initiated Anionic Polymerization
Motoyasu Kobayashi, Tatsuya Kawabata, Taketo Numazawa, Kazuo Yamaguchi
- 14:45 1L21 Synthesis of hybrid polymers based on trifluoropropyl-substituted incompletely condensed caged-type silsesquioxane
LINA LI, Hiroaki Imoto, Kensuke Naka
- 15:00 1L22 Reversible topochemical polymerization inside confined spaces
Kei Saito

F. Sanda, presiding

- 15:15 1L23 Preparation of Triblock copolymer with polyurethane in the middle block and its physical properties
Lei Chen, Mikihiro Hayashi, Akinori Takasu
- 15:30 1L24 Synthesis of Dense 1,2,3-Triazole-Based Block Copolymers: Their Self-Assembly and Thermoresponsive Behavior in Aqueous Solution
Yanqiong YANG, Akihito HASHIDZUME
- 15:45 1L25 Synthesis and Self-Assembly of In-Chain Functionalized Poly(Styrene)-b-Poly(Methyl Methacrylate) using 1,1-Diphenylethylene Derivatives
Kevin Wylie, Yuta Nabae, Teruaki Hayakawa
- 16:00 1L26 Formation of Graphene Nanoribbon Mediated by Metal-Organic Frameworks

Michael MacLean, Takashi Kitao, Ryoto Hongu, Susumu Kitagawa, Takashi Uemura

T. Hayakawa, presiding

- 16:15 1L27 Self-Assembly Behavior of the Host-Guest Complex formed by POSS derivatives and Hydrophilic NDI
Wei-Cheng Peng, Meng-Hsuan Jao, Shih-Ting Lan, Chien-Lung Wang
- 16:30 1L28 Supramolecular Chemistry and Nanotechnology of Low Generation Amphiphilic Dendrimers (AD)
Jyun-Hao Sie, Chi-Hao Shiang, Chien-Lung Wang
- 16:45 1L29 Synthesis and Crosslinking Reaction of Polyacetylenes Substituted with Benzoxazine Rings
Masahide Goto, Yu Miyagi, Masaki Minami, Fumio Sanda

Thu. May 24

D. BIOPOLYMERS AND BIORELATED POLYMERS “English Session”

N. Shimada, presiding

- 9:30 2L03 A cell-penetrating peptides (CPPs) library screening for Escherichia coli (E. coli)
MD MONIRUL ISLAM, Kazusato Oikawa, Yoko Horii, Takeshi Yoshizumi, Keiji Numata
- 9:45 2L04 Engineering of Protein Crystal Lattice for Assembly into Biosupramolecules
Tien Khanh Nguyen, Hashiru Negishi, Satoshi Abe, Takafumi Ueno
- 10:00 2L05 Toward the Synthesis of Biomimetic Spider Dragline Silk
Ali Andres Malay, Keiji Numata

S. Abe, presiding

- 10:15 2L06 G-quadruplex-Functionalized Gold Nanoparticles, A New Door for Cisplatin Detection
Surachada Chuaychob, Panote Thavarungkul, Proespichaya Kanatharana, Chittanon Buranachai, Chongdee Thammakhet-Buranachai, Masahiro Fujita, Mizuo Maeda
- 10:30 2L07 Cationic polymer chaperons the allosteric nucleic acid enzyme
Orakan Hanpanich, Naohiko Shimada, Atsushi Maruyama
- 10:45 2L08 AFM Visualization of Cellulose Fibrils in Live Plant Cell Wall
Neval Yilmaz, Yutaka Kodama, Keiji Numata

K. Numata, presiding

- 11:00 2L09 Preparation of Elastic Cellulose Film Using Ionic Liquid
Muhammad Abdul Haq, Yasuhiro Habu, Kazuya Yamamoto, Akihiko Takada, Kadokawa Jun-ichi
- 11:15 2L10 Tinder Fungus (Fomes Fomentarius) as a Source for Nanocellulose
Olaf Karthaus, Tatsuhiko Niwa
- 11:30 2L11 Cyclodextrin-based glyco-clusters: NMR spectroscopic characterization, inclusion mode, and relevant lectin recognition analysis
Bin Han, Nobuo Sakairi

K. Miyata, presiding

- 12:30 2L12 Amyloid beta-assembly induced by multiple kinds of gangliosides in lipid membrane
Teruhiko Matsubara, Mako Nakai, Toshinori Sato
- 12:45 2L13 Suppression of heat-induced denaturation of proteins via complexation with amphiphilic poly(ethylene sodium phosphate)

Susita Noree, Yasuhiko Iwasaki

13:00 2L14 Preparation of chiral phenolic resins promoted by chiral silica matrices possessing amine residues
Seiji Tsunega, Ren-Hua Jin

13:15 2L15 Synthesis of Elastin Mimicking Polypeptides by Chemoenzymatic polymerization of Periodic Di- and Tri-peptide Motifs
Prashant Gopal Gudeangadi, Kousuke Tsuchiya, Keiji Numata

Y. Ishida, presiding

13:30 2L16ILI Engineering Conducting Polymer Surfaces for Biosensing Applications
Jih-Guang Wu, Yue Chen, Po-Chun Huang, Jie-Hao Chen, Shyh-Chyang Luo

Y. Ohya, presiding

14:00 2L18 Surface grafting to medical ePTFE for small-diameter vascular grafts
Yihua Liu, Maria Chiara Munisso, Atsushi Mahara, Yusuke Kambe, Kyoko Fukazawa, Kazuhiko Ishihara, Tetsuji Yamaoka

14:15 2L19 Regulation of pluripotency through decoupling surface chemistry and polymer physics using double network hydrogels
Martin Frauenlob, Daniel R. King, Masumi Tsuda, Takayuki Kurokawa, Shinya Tanaka, Jian P. Gong

14:30 2L20 Development of thiol-crosslinked micelle for systemic delivery of antisense oligonucleotide to treat brain diseases
HyunJin Kim, HyunSu Min, Keisuke Katsushima, Yutaka Kondo, Kanjiro Miyata, Kazunori Kataoka

14:45 2L21 Development of a novel tissue plasminogen activator installed redox-active nanoparticles for ischemic stroke therapy
Ting Mei, Binh Long Vong, Kim Ahram, Aiki Marushima, Sandra Puentes, Akira Matsumura, Yuji Matsumaru, Yukio Nagasaki

K. Osada, presiding

15:00 2L22 Sustained drug releasing systems using temperature-responsive injectable polymers containing liposomes
Yuta Yoshizaki, Akinori Kuzuya, Yuichi Ohya

15:15 2L23 Tuning the Drug Release kinetics of pH-responsive Polymeric Micelle to achieve better therapy outcome in a Glioblastoma model.
Sabina Quader, Xueying Liu, Hiroaki Kinoh, Kazunori Kataoka

15:30 2L24 Development of flexible and biodegradable block copolymers for effective delivery of mRNA
Takuya Miyazaki, Satoshi Uchida, Horacio Cabral

15:45 2L25 Anticancer polymer prodrugs: targeted delivery and cascade amplification release
Mingzhou Ye, Ding Hu, Hongxia Xu, Jianbin Tang, Youqing Shen

Room M

Wed. May 23

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS “English Session”

T. Suga, presiding

10:00 1M05 Synthesis of nitrogen- and defect-induced mesoporous carbon by block copolymer templated carbonization of nitrogen containing polymer

Yuta Nabae, Ling Gao, Shinsuke Nagata, Koshi Ohnishi, Yuanyuan Liu, Li Sheng, Teruaki Hayakawa

- 10:15 1M06 Carbon Nanotube-based non-precious metal fuel cell catalyst design
Naotoshi Nakashima, Jun Yang, Junfang Cheng, Jie Tao
- 10:30 1M07 Analysis of Drying Process of Coated Catalyst Ink for Polymer Electrolyte Fuel Cells by Grazing-Incidence X-ray Scattering
Maito Koga, Hidetoshi Matsumoto, Masatoshi Tokita, Hiroyasu Masunaga, Takaaki Hikima, Hidekazu Sugimori, Takashi Sasabe, Toshihiko Yoshida, Kazuhiko Shinohara, Shuichiro Hirai
- 10:45 1M08 Thermo-Electrochemical Cell Development by Using Temperature Responsive Nanogel
Benshuai Guo, Yu Hoshino, Teppei Yamada, Yoshiko Miura

Y. Terada, presiding

- 11:00 1M09 Poly(vinylfluorenone) nanoparticles as a hydrogen carrier
Kouki Oka, Shuhei Furukawa, Ryo Kato, Kenichi Oyaizu, Hiroyuki Nishide
- 11:15 1M10 Amorphous covalent organic nanoflakes with quinone moiety and their electrochemical properties
Jumpei Suzuki, Kosuke Sato, Hiroaki Imai, Yuya Oaki
- 11:30 1M11 TEMPO- and Anthraquinone-containing Polymer Particles as Cathode- and Anode- active Materials for Mass-transfer Controlled Redox Flow Battery System
Ying-Lin Huang, Kenichi Oyaizu, Hiroyuki Nishide

A. Saeki, presiding

- 12:30 1M12 Perovskite Crystals Formed with TEMPO-Substituted Polymers as an Effective Scaffold and their Photovoltaic Characteristics
Koki Suwa, Kenichi Oyaizu, Hiroshi Segawa, Hiroyuki Nishide
- 12:45 1M13 Facile and scalable fabrication of perovskite solar cell in ambient air via ultrasonic spray coating
Li-Hui Chou, Cheng-liang Liu
- 13:00 1M14 Fabrication of Mixed-Organic-Cation Perovskite Solar Cells by Ultrasonic Spray Technique
Yi-Shan Chou, Cheng-Liang Liu
- 13:15 1M15 Synthesis and Properties of Naphthobispyrazine-Based Semiconducting Polymers
Tsubasa Mikie, Itaru Osaka

K. Terao, presiding

- 13:30 1M16 Analysis of evaporative cooling from a hybrid heat-mass exchanger made of polyvinyl alcohol hydrogel
Massimiliano Zamengo, Junko Morikawa
- 13:45 1M17ILY Resin-supported flavopeptides that catalyze aerobic oxygenations
Yukihiro Arakawa
- 14:15 1M19 Synthesis of chiral polyesters of cinchona alkaloids for the enantioselective catalysis in the Michael addition of anthrone to nitroalkenes
Kumpuga Bahati Thom, Naoki Haraguchi, Shinichi Itsuno

Y. Arakawa, presiding

- 14:30 1M20ILI Polysaccharide Derivatives Bearing Various Functional Substituents for Efficient Enantioseparation
Jun Shen, Fan Wang, Wanying Bi, Yoshio Okamoto
- 15:00 1M22 Chiral separation and chain dimensions of cyclic amylose carbamates
Akiyuki RYOKI, Yuto KIMURA, Shinichi KITAMURA, Ken TERAO
- 15:15 1M23 Colorimetric Chiral Cation Sensing on Helical Poly(diphenylacetylene)

Derivatives Bearing Chiral Crown Ether Pendants
Azusa Mizukami,Daisuke Hirose,Tatsuya Nishimura,Shigeyoshi
Kanoh,Katsuhiko Maeda

K. Maeda, presiding

- 15:30 1M24 Elucidation of preferential CO₂ transport mechanism of alkanolamine-containing polymeric membranes
Ikuo Taniguchi,Koki Minezaki,Kae Kinugasa
- 15:45 1M25 Effect of industrial impurities on gas separation performance of polymer hybrids
Shinji Kanehashi,Kenji Ogino,Sandra Kentish
- 16:00 1M26 Separation of Poly(ethylene glycol) with different terminal groups using MOFs
Benjamin Le Ouay,Chikara Watanabe,Takashi Kitao,Takashi Uemura

T. Miyata, presiding

- 16:15 1M27 Tetra-PEG Ion Gel Comprising Solvate Ionic Liquid: Effect of Homogeneous Network on Polymer Electrolyte
Kei Hashimoto,Masayoshi Watanabe
- 16:30 1M28 Dependence of mechanical properties of slide-ring gels on coverage ratio
Lan Jiang,Chang Liu,Koichi Mayumi,Kazuaki Kato,Hideaki Yokoyama,Kohzo Ito
- 16:45 1M29 Relationship between Mechanical Properties and Higher-order Structure of Thermoplastic Polyester Elastomer Moldings
Ryosuke Tamamura,Chisato Nonomura,Katsuhisa Yamashita,Muanchan Paritrat,Yunfeng Zhao,Takashi Kurose,Hiroshi Ito

Thu. May 24

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS “English Session”

A. Aoki, presiding

- 9:30 2M03 Electrochromism of osmium-based metallo-supramolecular polymers
Manas Kumar BERA,Masayoshi HIGUCHI
- 9:45 2M04 Thermally Stable Electrochromic Devices with Metallo-Supramolecular Polymer
SANJOY MONDAL,MASAYOSHI HIGUCHI
- 10:00 2M05 Gradient tint smart window using metallo-supramolecular polymer
Masayoshi Higuchi,Yuki Seino,Keishi Ohashi

M. Higuchi, presiding

- 10:15 2M06 Rapid and Reversible Modulation of Reflection Colors of Cholesteric Liquid Crystals by Electrochemical Reactions
Yoshimitsu Itoh,Shoichi Tokunaga,Takuzo Aida
- 10:30 2M07 Control of molecular orientation of liquid crystalline perylene bisimide derivatives bearing oligosiloxane moieties and reduction reaction in the thin film state
Masahiro Funahashi,Shunsuke Takaoka,Shinobu Uemura
- 10:45 2M08 Liquid Crystalline Phthalocyanine Derivatives Bearing Branched Trisiloxane Chains: Influence of Aggregation Structures on Carrier Transport Properties
Ryutaro Yamaoka,Masahiro Funahashi

M. Funahashi, presiding

- 11:00 2M09 Rod-disc shape compatible liquid crystals of a triphenylene with six alkoxyazobenzenes: phase transition behaviour in polymer matrices
Yo SHIMIZU,Hiroki MATSUMOTO,Naoki KAWAHARA,Kengo HYODO,Tsuyoshi

KAWAI, Kingo UCHIDA

- 11:15 2M10 Self-healing micellar ion gels via multiple hydrogen bonding
Ryota Tamate, Kei Hashimoto, Tatsuhiro Horii, Masayoshi Watanabe
- 11:30 2M11 Microfluidic Environmental Sensors Using Liquid Metal and Ionic liquids
Hiroki Ota

T. Watanabe, presiding

- 12:30 2M12 Dissipating energy at large length scales in polymeric systems
Daniel King, Tsuyoshi Okumura, Riku Takahashi, Jian Ping Gong
- 12:45 2M13 Design of Hydrogels That Look Tough Using Ordinary Polymer
Takashi Miyata, Chisa Norioka, Akifumi Kawamura
- 13:00 2M14 Design and Synthesis of Rotaxane Crosslinked Microspheres and their Application
Seina Hiroshige, Takuma Kureha, Jun Sawada, Daisuke Aoki, Toshikazu Takata, Daisuke Suzuki
- 13:15 2M15 Infrared wavelength selective responsive soft actuators consisting of thermosensitive hydrogels of rare earth metal complex/NIPAAm copolymers
Satoshi Watanabe, Kenji Kojio, Masashi Kunitake

M. Kunitake, presiding

- 13:30 2M16 Photoresponsive properties in end-crosslinked polyimide gel synthesized with tetrafunctional crosslinker having azobenzene moiety
Toshiyuki Watanabe, Masaya Matsumoto
- 13:45 2M17 Strain-induced Fluorescence Response of Mechanophore-doped Polyurethane Dependent on Chemical Structures
Ryota Kotani, Atsuhiro Osuka, Shohei Saito
- 14:00 2M18 Layered composites of polydiacetylene and polymer with stimuli-responsive color-change properties at low temperature
Kei Watanabe, Hiroaki Imai, Yuya Oaki
- 14:15 2M19 3D-Heterometallo Supramolecular Polymers for Proton Conduction Application
Narayana YAMINENI, Masayoshi HIGUCHI

N. Haraguchi, presiding

- 14:30 2M20 Development of Organic/Inorganic Hybrid Materials with Nanofibrous Molecular Templates
Satoshi KAJIYAMA, Haruka SUKEGAWA, Takashi KATO
- 14:45 2M21 Preparation of composite nanomembranes of aluminosilicate nanotubes for molecular separation
Anteneh Mersha, Shigenori Fujikawa
- 15:00 2M22 Development of Liquid-Crystalline Water Treatment Membrane for Virus Removal
Daniel KUO, K. R. Sunil Kumar, Miao Miao LIU, Takeshi SAKAMOTO, Masahiro HENMI, Hiroyuki KATAYAMA, Takashi KATO
- 15:15 2M23 Amorphous covalent organic nanosheets combined with quinone moiety and graphene-like structure
Shoichiro Yano, Kosuke Sato, Hiroaki Imai, Yuya Okai

S. Fujikawa, presiding

- 15:30 2M24 Structural control of thiophene nanosheets and application to supercapacitor
Taichi Ikeda
- 15:45 2M25 Synthesis of hairy polymer microsphere by precipitation polymerization and surface-initiated ATRP and its application to asymmetric catalysis
Md. Wali Ullah, Takuya Sugimoto, Naoki Haraguchi
- 16:00 2M26 Cyclosiloxane Derived Supramolecules for Advanced Coatings and Adhesives

Huie Zhu, Tillman Jan Buchtal, Shunsuke Yamamoto, Ali Demirci, Masaya Mitsuishi

- 16:15 2M27 Superhydrophobic Cellulose Nanofiber Surface Assembly for Oil-Water Separation
Md. Mahbubul Bashar, Huie Zhu, Shunsuke Yamamoto, Masaya Mitsuishi

Fri. May 25

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS “English Session”

N. Asakawa, presiding

- 9:30 3M03 Device applications of laser direct-written reduced graphene oxide microelectrode
Akira Watanabe, Jinguang Cai
- 9:45 3M04 Synthesis of Aromatic Polythioureas and their Segment Block Copolymers for a Dielectric Material
Yang Feng, Yui Hasegawa, Takeo Suga, Guanghui Chen, Shengtao Li, Hiroyuki Nishide
- 10:00 3M05 3,5-bis (decylthio) dithieno [3,2-b:2',3'-d] thiophene (DSDTT)-Based Small Molecules for High-Performance Organic Field-Effect Transistors (OFET) by Solution-Shearing Method.
Xian-Lun Luo, Cheng-Liang Liu, Ming-Chou Chen
- 10:15 3M06 Single crystallization of organic semiconductor molecules in gel capillaries
Satoshi Watanabe, Ryota Urata, Masashi Kunitake

A. Watanabe, presiding

- 10:30 3M07 Control of Threshold Voltage in Polymer Transistors by Electrolytes
Tsukuru Minamiki, Michio Aiko, Tsuyoshi Minami
- 10:45 3M08 Electrically detected magnetic resonance of regioregular poly(3-hexylthiophene) and potential application to neuromorphic devices
Naoki Asakawa, Kunito Fukuda
- 11:00 3M09ILI Impact of dendrimers and conducting polymers with carbon materials for electrochemical energy storage/conversion applications.
Balamurugan Devadas, Toyoko Imae
- 11:30 3M11 Colloidal suspensions based on protic ionic liquids and metal oxide nanoparticles: effect of anionic structures
Mayeasha Marium, Muhammed Shah Miran, Kazuhide Ueno, Masayoshi Watanabe

M. Mitsuishi, presiding

- 12:30 3M12 Kinetics and temperature evolution during the bulk polymerization of methyl methacrylate
Yasuhito Suzuki
- 12:45 3M13 Theoretical study of the surface between graphene and epoxy resin
Kazuki Mori, Nobuhiko Matsumoto, Yuji Kohno
- 13:00 3M14 Preparation and characterization of polyimide nanocomposites reinforced with various surface modified nanodiamonds
Keiya Obara, Seira Morimune-Moriya

N. Yoshie, presiding

- 13:15 3M15 Characterization of Chemically modified Nanodiamond / Natural Rubber Nanocomposite
Takatsugu Kato, Seira Morimune-Moriya
- 13:30 3M16 Soft and Compressible Self-healing Polycyclosiloxanes Based on Siloxane

Equilibrations

Ali Demirci, Huie Zhu, Shunsuke Yamamoto, Tokuji Miyashita, Masaya Mitsuishi

13:45 3M17 Phosphorylated Cellulose Nanocrystal / Imogolite Hybrid Films Prepared by Layer by Layer Assembly
Linlin Li, Wei Ma, Yuji Higaki, Atsushi Takahara

Y. Higaki, presiding

14:00 3M18 Self-assembly of crystalline cellulose oligomers into hydrogels for spatial immobilization of functional colloidal particles
Yuuki Hata, Toshiki Sawada, Takamasa Sakai, Takeshi Serizawa

14:15 3M19 Fabrication of nacre-like polymer/clay nanocomposites with solvent resistant property
Kyungmo Sung, Shintaro Nakagawa, Naoko Yoshie

14:30 3M20 Effect of Fabric Structure on the Toughness of Soft Composites
Yiwan Huang, Daniel R. King, Tao Lin Sun, Tasuku Nakajima, Takayuki Kurokawa, Jian Ping Gong