

Room A

Wed. May 25

70th Anniversary Lecture

Madoka Takai, presiding

9:30 1A03IL Smart Polymer Technologies for Global Health
Mitsuhiro Ebara

Michiya Matsusaki, presiding

10:15 1A06IL Development of high-performance bioplastics based on innovative heterocycle designs
Tatsuo Kaneko

Takashi Miyata, presiding

11:00 1A09IL Bioenergetic systems working in nature and polymeric sol-gel design
Kosuke Okeyoshi

Toshiaki Ougizawa, presiding

12:30 1A12IL Innovative Adhesion Technology Based on 4-dimensional Multi-scale Analysis of Interfaces
Keiji Tanaka

Miyuki Harada, presiding

13:15 1A15IL Analysis of higher order structures of mesogenic epoxy resins having high thermal conductivities cured on various adhesive substrates
Yoshitaka Takezawa

Toshiyuki Oyama, presiding

14:00 1A18IL Material design and functionalization of high heat resistant resins
Keiko Ohtsuka

Award Lecture

Shinji Sugihara, presiding

14:45 1A21AL Supramolecular Assemblies and Polymer Recognition Based on Polygonal Prism-Shaped Macrocyclic Pillar[n]arenes
Tomoki Ogoshi

Kazunori Sugiyasu, presiding

15:30 1A24AL Creation of Crystalline, Porous, Organic Materials Using Directional Hydrogen Bonds
Ichiro Hisaki

Masao Doi, presiding

16:15 1A27AL Multiscale Modeling of Polymers - Developments and Perspectives
Kurt Kremer

Thu. May 26

Award Lecture

Hiroshi Jinnai, presiding

- 9:30 2A03AL Functionalization of Block Polymers: From Fundamental Understanding to Advanced Technologies
Richard J. Spontak

Invited Lecture

Kazunari Akiyoshi, presiding

- 10:15 2A06IL A Facile Strategy for Enhanced Interfacial Adhesion and Mechanical Properties of Composite Materials by Rationally Designed Polymer Compatibilizers
Heun Young Seo, Kie Yong Cho, Ho Gyu Yoon

70th Anniversary Lecture

Makoto Ouchi, presiding

- 11:00 2A09IL Precision Macromolecular Design toward Elucidation of Polymer Science
Jeremiah A. Johnson

Award Lecture

Takeshi Shiono, presiding

- 12:30 2A12AL Synthesis of Functional Polymers via Living Anionic Polymerization of Novel Monomers
Takashi Ishizone

Masao Tomikawa, presiding

- 13:15 2A15AL Development of Functional Polymers for Energy Storage through Practical Materials Informatics
Kenichi Oyaizu

70th Anniversary Lecture

Atsushi Maruyama, presiding

- 14:00 2A18IL Biomimetic Polymer-based Coloring Material
Michinari Kohri

Takashi Nishino, presiding

- 16:15 2A27IL Cellulose nanocomposites for sustainable development in the context of polymer science
Lars A Berglund

Fri. May 27

Award Lecture

Motohiro Munakata, presiding

9:30 3A03AL Discovery of Island-nanomatrix Structure of Natural Rubber and Its Application
Seichi Kawahara

Kazuo Sakurai, presiding

10:15 3A06AL Mechanisms of Structure Evolution in Polymer Crystallization and Its Melting
Akihiko Toda

70th Anniversary Lecture

Yukikazu Takeoka, presiding

11:00 3A09IL Multiaxial deformation and crack growth dynamics of soft materials
Kenji Urayama

Hideaki Yokoyama, presiding

12:30 3A12IL Structural analysis of branched and cyclic polymers and correlation with their functions
Ken Terao

Yoshiro Kaneko, presiding

13:15 3A15IL Design of polymeric materials based on element-blocks for a new development of inorganic polymers
Kensuke Naka

Tsutomu Yokozawa, presiding

14:00 3A18IL Design of Polymer Reactions and Mechanofunctional Polymers Based on Dynamic Covalent Chemistry
Hideyuki Otsuka

Room B

Wed. May 25

70th Anniversary Lecture

Akihisa Kakimoto, presiding

9:30 1B03IL Japan's Green Growth Strategy Through Achieving Carbon Neutrality in 2050
Kei Kawahara

Hiroyuki Umetani, presiding

10:15 1B06IL Decarbonisation-Oriented Management x Corporate Value Enhancement The Vision Required for Japanese Firms

Issui Ihara

Masao Tomikawa, presiding

11:00 1B09IL Challenges and efforts for building "Sustainable Carbon Society"
Mina Kanda

Toshio Tada, presiding

12:30 1B12IL Regulatory Science for the Solution focused Microplastics Risk
Governance -Marine Environment, Plastic Waste Management
and Polymer Safety Assessment
Kenkichi Fujii

Shuichiro Ogawa, presiding

13:15 1B15IL Construction of a Circular Economy Through Plastic Recycling
Toshiaki Yoshioka

Masakazu Ito, presiding

14:00 1B18IL Unitika's Bioplastics development and Future Prospects
Shoji Okamoto

Toru Doi, presiding

14:45 1B21IL Sustainability Measurement Framework of Sumitomo Rubber
Industries, Ltd.
Kiyoshige Muraoka

Satoshi Hamura, presiding

15:30 1B24IL Idemitsu Kosan's efforts to realize a sustainable society
Hiroto Matsumoto

Seiji Ota, presiding

16:15 1B27IL BASF Sustainability Management
Takeshi Irie, Yuji Uchiyama, Dai Watanabe, Hiroki Yamano

Thu. May 26

70th Anniversary Lecture

Makoto Nishimoto, presiding

9:30 2B03IL Toray's R & D activity to realize a sustainable society
Yuichiro Iguchi

Akiyoshi Kusaka, presiding

10:15 2B06IL Resource Circulation Utilizing Plastic Modifier
Hironobu Tokunaga, Satoru Teranishi, Mikihiro Takenaka

Hiroaki Kuwahara, presiding

11:00 2B09IL Asahi Kasei's Initiatives for Carbon Recycle
Budianto Nishiyama

Fri. May 27

70th Anniversary Lecture

Shigeru Yao, presiding

- 9:30 3B03IL Surface and Interface Characterization of Polymers-Past, Present and Future
Atsushi Takahara
Kenichi Ueda, presiding
- 10:15 3B06IL Sustainable and circular biopolymer design based on nature and natural material. - An example of spider silk -
Keiji Numata
Masayuki Hanakawa, presiding
- 11:00 3B09IL Research activities of Membrane Center in Kobe University for realization of carbon neutrality
Hideto Matsuyama
Naoko Yoshie, presiding
- 12:30 3B12IL Process Innovation and Application of Process Informatics
Kimito Funatsu
Makoto Nishimoto, presiding
- 13:15 3B15IL The data-driven tire materials development
Hirokazu Sato
Masakazu Kitano, presiding
- 14:00 3B18IL Biodegradable Plastics of Mitsubishi Chemical: A Solution for Realizing Circular Society
Hiroshi Sano
Yoshiki Nakagawa, presiding
- 14:45 3B21IL The future of sports and lifestyles pioneered by polymer innovation
Kenichi Harano

Room C

Wed. May 25

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Daisuke Takeuchi, presiding

- 10:00 1C05 ROMP of Norbornadiene Dimers Containing Cyclopropane Ring and Post-Polymerization Modification
Shin-ichi Matsuoka, Kazuki Hase, Masato Suzuki
- 10:15 1C06 Synthesis and physical properties of cyclic olefin (co)polymers by ring-opening metathesis (co)polymerization of norbornene derivative with spirofluorene moiety.
Saki Ishii, Yoshiya Ota, Shin-ichi Matsuoka, Masato Suzuki
- 10:30 1C07 Synthesis of poly(alkoxycarbonylmethylene)s containing amide-linkage and investigation of their thermophysical properties
Itsuki Katashima, Nagisa Yano, Hiroaki Shimomoto, Tomomichi Itoh, Eiji Ihara
- 10:45 1C08 Polymerization of diazoacetates initiated by Pd complexes with diphosphine and diamine ligand
Yuto Miyano, Hiroaki Shimomoto, Tomomichi Itoh, Eiji Ihara

Shin-ichi Matsuoka, presiding

- 11:00 1C09 Synthesis of cis-1,4-Polybutadiene by Coordination Polymerization of Butadiene derived from Biomass
Yuhi Sasakawa, Tomoyuki Toda, Katsuhiko Takenaka, Kosuke Yamaguchi, Yoshinao Nakagawa, Kei Nishii, Yo Nakamura
- 11:15 1C10 Butadiene Polymerization by Dinuclear Nickel Complex with Dipyridylpyridazine Ligand
Yusei Miura, Daisuke Takeuchi
- 11:30 1C11 Isomerization Polymerization of 2-Alkylbornenes by Palladium Catalysts
Ayano Suda, Kanane Kohama, Daisuke Takeuchi

Hiroaki Shimomoto, presiding

- 12:30 1C12 Chain-Transfer Approach for Terminal Functionalization of Polycarbonate Synthesized by Alternating Copolymerization of CO₂ and Epoxide
Haruki Nagae, Saki Matsushiro, Kazutaka Sakamoto, Takanori Iwasaki, Kyoko Nozaki, Kazushi Mashima
- 12:45 1C13 Synthesis and Analysis of Sequence-Regulated Ethylene-Styrene Copolymers by Olefin Metathesis Polymerization of Sequence-Regulated Oligomers
Kenta SOMA, Mineto UCHIYAMA, Mitsuo HARA, Takahiro SEKI, Yuichi MASUBUCHI, Masami KAMIGAITO
- 13:00 1C14 Synthesis of fluorine-containing poly(diphenylacetylene)s with high gas permeability
Toshikazu Sakaguchi, Misa Kuroiwa, Tamotsu Hashimoto
- 13:15 1C15 Synthesis and Ultra-Remote Helicity Control of Water-Soluble Poly(biphenylacetylene)s Bearing an Optically Active Binaphthyl Pendant at the Side-Chain End
Koshi Nakamura, Tomoyuki Ikai, Eiji Yashima
- 13:30 1C16 Helicity Control of Poly(biphenylacetylene) Derivatives Bearing Amino Acid Residues and Their Use as Chiral Stationary Phases
Shogo Okuda, Tomoyuki Ikai, Eiji Yashima

Toshikazu Sakaguchi, presiding

- 13:45 1C17 Polymerization of diphenylacetylenes using molybdenum(V) chloride and organotin reagents
Tsuyoshi Taniguchi, Mami Miyairi, Tatsuya Nishimura, Katsuhiko Maeda
- 14:15 1C19 Synthesis of telechelic poly(phenylacetylene)s using diazo esters as a terminator
Kensuke Echizen, Mikuri Saito, Tsuyoshi Taniguchi, Tatsuya Nishimura, Katsuhiko Maeda
- 14:30 1C20 Mechanistic Analysis of the Polymerization of Phenylacetylenes with Molybdenum(V) Chloride and Tungsten(VI) Chloride
Shingyo Sueyoshi, Tsuyoshi Taniguchi, Tatsuya Nishimura, Katsuhiko Maeda
- 14:45 1C21 Development of the Improved Method for Polymerization of Diphenylacetylenes with Niobium Catalysis
Daisuke Nakaguchi, Tsuyoshi Taniguchi, Tatsuya Nishimura, Katsuhiko Maeda

Shigeru Yamago, presiding

- 15:00 1C22 Radical Polymerizations of Isopropenyl Boronic Acid Monomers: Positive Effects of the Boron Substituent Design and Salt Additive on Polymerization Behaviors

- Hiroshi Suzuki, Tsuyoshi Nishikawa, Makoto Ouchi
- 15:15 1C23 Reversible-Deactivation Radical Polymerization of Alkenyl Boronate: Precise Polymer Syntheses via Controlled Polymerization and Transformation of Boronyl Side Chains
Tomoaki Kanazawa, Tsuyoshi Nishikawa, Makoto Ouchi
- 15:30 1C24 Backbone Degradation of Methacrylate Polymers by Trigger Design
Taichi Kimura, Makoto Ouchi
- Tsuyoshi Nishikawa, presiding**
- 16:00 1C26 Synthesis and Rheological Properties of Block Polyacrylate Copolymers with Linear-Hyperbranched Structures
Masato Kibune, Hiroshi Watanabe, Yumi Matsumiya, Shigeru Yamago
- 16:15 1C27 Synthesis of hyperbranched polyacrylamide having both controlled branching structure and controlled stereoregularity
Keisuke Shibahara, Yuji Imamura, Masato Kibune, Shigeru Yamago
- 16:30 1C28 Synthesis of hyperbranched polyacrylates containing methyl methacrylate by ab-initio emulsion radical copolymerization
Yuhan JIANG, Masato KIBUNE, Masatoshi TOSAKA, Shigeru YAMAGO

Thu. May 26

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Yasuhiro Kohsaka, presiding

- 9:30 2C03 Effect of Branching Structure on Aggregate Morphology of Amphiphilic Hyperbranched Diblock Copolymers
Kana GOTO, Yangtian LU, Masatoshi TOSAKA, Shigeru YAMAGO
- 9:45 2C04 Understanding and Prediction of Monomer Reactivity Ratios in Radical Copolymerization Using Machine Learning
Nanyi Zhu, Masatoshi Tosaka, Shigeru Yamago, Hiroshi Mamitsuka
- 10:00 2C05 Synthesis of Polymers with Various Architectures from Glycerol-Derived Cyclic Vinyl Ethers
Riko Kashima, Tomohiro Kubo, Kotaro Satoh
- 10:15 2C06 Synthesis of Multi-Arm End-Functionalized Poly(vinyl alcohol) for Novel High Performance Hydrogels
Gaishi Murakami, Tomohiro Kubo, Kotaro Satoh
- 10:30 2C07 Synthesis of Degradable Vinyl Polymers by Using Cyclic Thiocarbonyl Comonomers Derived from Lactides
Ryoya Kamiki, Tomohiro Kubo, Kotaro Satoh

Kotaro Satoh, presiding

- 10:45 2C08 Chemically recyclable polystyrene derivatives capable of depolymerization induced by the hydrolysis of side groups: Monomer design for rapid depolymerization
Yota Chiba, Yasuhiro Kohsaka
- 11:00 2C09 Main chain scission of vinyl polymers driven by retro-aldol reaction of β -keto alcohol skeletons over the backbone and side groups
Akane Kazama, Patrick Theato, Yasuhiro Kohsaka

- 11:15 2C10 Synthesis of degradable vinyl polymers by radical copolymerization of allyl alcohol and cyclic ketene acetal
Kaho Toyama, Yasuhiro Kohsaka
- 11:30 2C11 Synthesis and Characterization of Spherical Poly (acrylic acid) with High Density Crosslinking
Ryohei Ono, Shota Fujii, Kazuo Sakurai
- Hironobu Watanabe, presiding**
- 12:30 2C12 Polymerization using radically active species generated by solution plasma
Yang Zhou, Yuta Nishina
- 12:45 2C13 Radical polymerization using natural deep eutectic solvents
Shingo YUKI, Hideharu MORI
- 13:00 2C14 Radical polymerization of vinyl cinnamate for the control of intramolecular cyclization
Miyuki Oshimura, Shodai Enoki, Tomohiro Hirano, Koichi Ute
- 13:15 2C15 Fabrication of polymer materials using monomers with polymerization group and metal complex toward regulating the metal composition
Shigehito Osawa, Sosuke Kurokawa, Hidenoru Otsuka
- Miyuki Oshimura, presiding**
- 13:30 2C16 Radical Polymerization Using Carbon-Heteroatom Double Bond: Synthesis of Novel Polymers Containing Heteroatoms in the Main Chain
Hironobu Watanabe, Masami Kamigaito
- 13:45 2C17 Radical Polymerization Behavior and Regioselective Exchange Reactions of Acylhydrazone Monomers
Akito Moriya, Kounosuke Ohata, Daisuke Nagai
- 14:15 2C19 Cosolvency of Amphiphilic Alternating Copolymers Prepared by Controlled Radical Polymerization
Kazuki Yano, Shohei Ida, Daichi Ida, Shokyoku Kanaoka
- 14:30 2C20 Precision Syntheses of HEMA-Propylacrylamide Alternating Copolymers: Effects of Sequence and Side-Chain Structures on Thermoresponsive Behaviors in Water
Xiaoyan Xu, Makoto Ouchi
- Daisuke Nagai, presiding**
- 14:45 2C21 Molecular Design of (Meth)Acrylamide Monomers Carrying Saccharin-Like Pendant for Control of Alternating Sequence and Effective Side-Chain Transformation
YUEHANG PAN, Makoto Ouchi
- 15:00 2C22 Sequence-Specific Radical Copolymerizations of Active Ester (Meth)Acrylate with Benzyl Vinyl Ether
Keita Kuroda, Makoto Ouchi
- 15:15 2C23 Study on the termination mechanism of radical polymerization by de-carbonylation reaction
Yasuyuki Nakamura

Fri. May 27

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Tsuyoshi Nishikawa, presiding

- 9:30 3C03 Novel polymerization reactions based on cyclotrimerization of one vinyl monomer and two aldehydes: tandem polymerization and sequence regulated polymer synthesis
Tadashi Naito, Arihiro Kanazawa, Sadahito Aoshima
- 9:45 3C04 Efficient linking of two epoxides using potassium thioacetate in water and its use in polymerization
Takanori Kishida, Kazunori Sugiyasu
- 10:00 3C05 Development of New Initiators with Alkyne Functionality for Click Living Polymerization
Satoshi Sakai, Tomohiro Kubo, Kotaro Satoh
- 10:15 3C06 Solid-state polymerization of 1,3,5-tris(buta-1,3-diyne)benzene.
Taiki Ietsune, Mariko Tsutsumi, Ayako Shinozaki, Kazuki Sada

Kousuke Tsuchiya, presiding

- 10:30 3C07 Direct Arylation Polymerization of Heteroarenes with Dichloroarenes: Development of Highly Efficient Palladium Catalysts
Masayuki Wakioka, Takumi Nakazato, Yooichiroh Maruyama, Masatsugu Ayabe
- 10:45 3C08 Synthesis and Reactions of Homoditopic Nitrile N-Oxides Comprising Imide Skeletons as a Spacer
Yasuhito Koyama, Souma Ooba, Noriyuki Nakajima, Masahiro Hamada, Toshikazu Takata
- 11:00 3C09 Synthesis of commodity polyesters with chemical degradability by conjugate substitution reaction
Kinari Tsurumi, Yasuhiro Kohsaka
- 11:15 3C10 Lipase-catalyzed synthesis of linear aliphatic polyester bearing amino groups in side chains
Yuya Oyama, Naruki Kurokawa, Atsushi Hotta
- 11:30 3C11 Reexamination of reactivity of N-Carboxy amino acid anhydrides 98. Rejection of the side reaction theory in the primary or tertiary amine initiated polymerization
Hitoshi Kanazawa, Aya Inada

Masayuki Wakioka, presiding

- 12:30 3C12 Synthesis of polyserine without protection of the side chain by chemoenzymatic polymerization
Kayo Terada, Takumi Watanabe, Shogo Takemura, Hiroyasu Masunaga, Kousuke Tsuchiya, Keiji Numata
- 12:45 3C13 Synthesis of polycarbonate by means of polycondensation of diol ester and dialkyl carbonate
Takayoshi KATO, Maai SASO, Yoshihiro OHTA, Tsutomu YOKOZAWA
- 13:00 3C14 Additive-controlled topology switching from cyclic polymer to linear polymer in unstoichiometric polycondensation using excess two bromoarenes connected to functional group
So MIYAZAKI, Takeru KAMIGAWARA, Yoshihiro OHTA, Tsutomu YOKOZAWA
- 13:15 3C15 Functionalization of polyphenylene at both ends by means of Suzuki-Miyaura coupling reaction and polymerization after Kumada-Tamao catalyst-transfer condensation polymerization
Reo NITTO, Yu TOKITA, Yoshihiro OHTA, Tsutomu YOKOZAWA

Yoshihiro Ohta, presiding

13:30	3C16	Polyaddition reaction of bisoxetane with tellurium tetrachloride and properties of the obtained polymers <u>Ryusei Hanaki</u> , Hiroto Kudo, Hiriyuki Maekawa
13:45	3C17	Synthesis of polyimines from aliphatic diamines by oxidative polymerization using ionic liquid and oxygen <u>Masaru Yoneyama</u> , Haruka Simoda, Takeshi Yamanobe
14:15	3C19	Polymer Structure Control in Friedel-Crafts Polycondensations with 4-Methoxytrifluoroacetophenone <u>Kazuya Matsumoto</u> , Masakazu Wakana, Mitsutoshi Jikei
14:30	3C20	Porosity control of porous cyclohexyl epoxy resin <u>Shuma Shinoda</u> , Reiko Saito
14:45	3C21	Dispersity control of silica nanocapsules in epoxy resin by surface modification <u>Keisuke Inagaki</u> , Yuichi Iki, Minghao Lu, Reiko Saito

Room D

Wed. May 25

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Shunsuke Ohtani, presiding

10:00	1D05	Comparison of Photophysical Properties between Group 13 Dialdiminate Complexes with Different Central Atoms <u>Yuto Aoyama</u> , Yuki Sakai, Shunichiro Ito, Kazuo Tanaka
10:15	1D06	Synthesis of Functional Luminescent Conjugated Polymers Based on Typical Element Complexes of N ₂ -Type Ligands <u>Shunichiro Ito</u> , Kazuo Tanaka, Yoshiki Chujo
10:30	1D07	Synthesis and luminescent property of chain-end functionalized polymer with tetraphenylethylene unit <u>Kazuki Horibe</u> , Raita Goseki, Takashi Ishizone

Kazuaki Kato, presiding

10:45	1D08	Anionic copolymerization of 1-phenyl-1,3-butadiene and 1,1-diphenylethylene <u>Kotaro Koike</u> , Yoshito Itaya, Hamin Kim, Raita Goseki, Takashi Ishizone
11:00	1D09	Self-alternating polymerization of bifunctional monomers with two different reactive vinyl groups Yoshito Itaya, Hamin Kim, <u>Raita Goseki</u> , Takashi Ishizone
11:15	1D10	Controlled synthesis of cyclic alternating smart polymers via ring-expansion RAFT copolymerization <u>Yuna Okuno</u> , Jin Motoyanagi, Masahiko Minoda
11:30	1D11	Development of functionalized cyclic polymers synthesized by ring-expansion RAFT polymerization <u>Jin Motoyanagi</u> , Hiroki Fujii, Masahiko Minoda

Arihiro Kanazawa, presiding

12:30	1D12ILY	Functional polymers based on cyclic monomers with dynamic nature
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Daisuke Aoki

- 13:00 1D14 Polymer topology effect on cyclized Pluronic surfactant micelles
Tomohisa Watanabe, Daichi Ida, Akiyuki Ryoki, Takuya Yamamoto
- 13:15 1D15 Structural specificity of cyclic polyoxazoline / Pd(II) complex and its derivatives
Ryo Itoga, Ren-Hua Jin

Takashi Ishizone, presiding

- 13:30 1D16 On-surface synthesis of graphene nanoribbon at low temperature
Takahiro Kojima, Karan Patel, Shunpei Nobusue, Hiroshi Sakaguchi
- 13:45 1D17 Precise synthesis of graphene nanoribbons using metal-organic frameworks
Takashi Kitao, Kazuki Nakata, Takashi Uemura
- 14:15 1D19 Synthesis and Host-Guest Capability of Silicon-Bridged Pillar[*n*]arenes
Shunsuke Ohtani, Kenichi Kato, Tomoki Ogoshi
- 14:30 1D20 Molecular Design of Polyrotaxanes toward Advanced Resins
Kazuaki Kato, Kohzo Ito, Ken Kojio, Taiki Hoshino

Takaya Terashima, presiding

- 14:45 1D21 Synthesis and evaluation of multicyclic polystyrene as elastomer additive
Yamato Ebii, Yoshinobu Mato, Takuya Isono, Takuya Yamamoto, Kenji Tajima, Hironori Marubayashi, Hiroshi Jinnai, Toshifumi Satoh
- 15:00 1D22 Synthesis and Luminescent Property of α -Cyanostilbene-Containing Pillar[5]arene
Keigo Nakagawa, Shunsuke Ohtani, Kenichi Kato, Tomoki Ogoshi
- 15:15 1D23 Synthesis of cinchona-squaramide polymers by Sonogashira-Hagihara coupling polymerization and their application to asymmetric synthesis
Naoki Haraguchi, Hiroya Sasaki, Toru Amaya, Shinichi Itsuno
- 15:30 1D24 Synthesis of various poly (ether ketone) block copolymers by Friedel-Crafts reaction in [bmim] / AlCl₃ solvent system and their properties
Mizuki SAITO, Takeshi YAMANOBE, Masaru YONEYAMA

Kenichi Kato, presiding

- 16:00 1D26ILY Development of Near-Infrared Emissive π -Conjugated Polymers Based on Hypervalent Compounds
Masayuki Gon, Kazuo Tanaka, Yoshiki Chujo
- 16:30 1D28 Synthesis of stimuli-responsive polymers based on hypervalent bond
Yusuke Morisaki, Masayuki Gon, Kazuo Tanaka
- 16:45 1D29 Construction and evaluation of π -conjugated scaffolds incorporating hypervalent bismuth compounds
Kazuya Tanimura, Masayuki Gon, Kazuo Tanaka

Thu. May 26

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Tsuneaki Sakurai, presiding

- 9:30 2D03 Synthesis and Optical Properties of Pyrene-Substituted Carborane Anions
Takumi YANAGIHARA, Junki OCHI, Kazuo TANAKA
- 9:45 2D04 Synthesis of Novel Luminescent Materials Based on Boron-Fused Azomethine Complexes
Misato Kanjo, Masayuki Gon, Kazuo Tanaka
- 10:00 2D05 Synthesis of Conjugated Polymers Based on Luminescent Tropolonate Boron Complexes and Their Optical Properties
Hikari Ogoshi, Hiromasa Takahashi, Shunichiro Ito, Kazuo Tanaka
- 10:15 2D06 Syntheses and optical properties of conjugated polymers containing a novel benzoxaborin framework
Shuhei Morimoto, Kazuya Tanimura, Masayuki Gon, Kazuo Tanaka

Shunichiro Ito, presiding

- 10:30 2D07 Luminescence behavior and self-assembled structures of random copolymers consisting of dipeptides and AIE molecules
Ryo YONENUMA, Hideharu MORI
- 10:45 2D08 Photophysical properties of self-encapsulated conjugated molecular wires with controlling tacticity and insulating chain length
Yukino Egawa, Tsuneaki Sakurai, Masaki Shimizu
- 11:00 2D09 Morphology Control via RAFT Emulsion Polymerization-Induced Self-Assembly: Systematic Investigation of Core-Forming Blocks
Atsushi Takashima, Yasushi Maeda, Shinji Sugihara
- 11:15 2D10 Precise synthesis and characteristic properties of poly(vinyl ether)s with pendant ionic liquid structures as thermosensitive segments
Naoki Matsuo, Arihiro Kanazawa, Sadahito Aoshima
- 11:30 2D11 Development of self-healing and high refractive index materials by radical polymerization of an imidazole-containing S-vinyl monomer and metal complexation
Kaori MORIKAWA, Ibuki WATABABE, Sadaki SAMITSU, Hideharu MORI

Jin Motoyanagi, presiding

- 12:30 2D12 Sub-10 nm Lamellar Microphase Separation Materials of Cationic Random Copolymers
Takaya Terashima, Sahori Imai
- 12:45 2D13 Design and Microphase Separation of Amphiphilic Polymers Bearing Quaternary Ammonium Cation Pendants
Ryota Sujita, Sahori Imai, Makoto Ouchi, Takaya Terashima
- 13:00 2D14 Synthesis and Physical Properties of Highly Stable π -Conjugated Polymer Hybrid Films with Luminophore-Integrated POSS
Yusuke Taguchi, Masayuki Gon, Kazuo Tanaka

Award Lecture

Takuma Yasuda, presiding

- 13:30 2D16AL Quantitative Analysis of Stereoscopic Molecular Orientations in Thermally Reactive and Heterogeneous Noncrystalline Thin Films via Variable-temperature Infrared pMAIRS and GI-XRD
Ryohei Ishige

Makoto Ouchi, presiding

- 14:15 2D19AL Polymers of Lignin-sourced Components as a Facile Chemical
Integrand for the Passerini Three-component Reaction
Ryohei Kakuchi

Masato Ikeda, presiding

- 14:45 2D21AL Simple Preparation, Properties, and Functions of Vitri-mer-like
Polyacrylate Elastomers Using Trans-N-Alkylation Bond Exchange
Mikihiro Hayashi

Takeshi Serizawa, presiding

- 15:15 2D23AL Preparation of Agarose Xerogel Nanoparticles by Solvent
Evaporation from Water Nanodroplets
Yuuka Fukui, Ryutaro Inamura, Keiji Fujimoto

Fri. May 27

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Kenta Kokado, presiding

- 9:30 3D03 Photophysical Properties and Substituent Effects of β -
Diketiminato Complexes of the Group 13 Elements
Keisuke Suwa, Shunichiro Ito, Kazuo Tanaka
- 9:45 3D04 Mechanochromic Luminescence of Bis-*ortho*-Carboranyl
Anthracene
Kazuhiro Yuhara, Kazuo Tanaka
- 10:00 3D05 High-Speed Optimization of Adhesive Films by Machine Learning
in Multi-Material Mixed Systems
Yuuki Nagai
- 10:15 3D06 Goal-oriented Bayesian optimization for resin material design
Kyohei Hanaoka, Yuki Nagai, Naotaka Tanaka

Masahiro Teraguchi, presiding

- 10:30 3D07ILY Synthesis and characterization of homogeneous polymer
networks based on star polymers
Shintaro Nakagawa
- 11:00 3D09 Precision Construction of Folded Amphiphilic Polymer Micelles:
Effects of Sequence Control and Polymer Backbones
Hiroyuki Kouno, Masayuki Hibino, Makoto Ouchi, Takaya
Terashima
- 11:15 3D10 Salt-Responsive Association of Amphiphilic Random Copolymers
in Water: From Micellization Control to Hydrogels
Rikuto Kanno, Makoto Ouchi, Takaya Terashima
- 11:30 3D11 Hydrogels with Random Copolymer Micelles as Dynamic
Crosslinking Points: Control of Physical and Adhesive Properties
Hiroaki Asai, Makoto Ouchi, Takaya Terashima

Takaya Terashima, presiding

- 12:30 3D12 Synthesis of multibranched polymer having cinnamoyl groups at
chain ends
Yuki Kokita, Kaoru Adachi
- 12:45 3D13 Synthesis of networked gold cluster polymers based on ligand-
mediated reactions

Yuki Saito, Yukatsu Shichibu, Katsuaki Konishi

13:00 3D14 Unique mechanical properties of star-crosslinked gels: Size effect of star polymer
Souma Suzuki, Shohei Ida, Hiroki Takeshita, Shokyoku Kanaoka

13:15 3D15 Synthesis of unimolecular-thick 2D polyanion networks using MOF templates
Ami Saito, Yuki Hayashi, Nobuhiko Hosono, Takashi Uemura

Shohei Ida, presiding

13:30 3D16 Synthesis and control of the end groups of hyperbranched polymer containing thiophene backbone by mean of unstoichiometric $A_2 + B_3$ Suzuki-Miyaura polycondensation through intramolecular catalyst transfer.
Ryusuke SHIMADA, Yoshihiro OHTA, Tsutomu YOKOZAWA

13:45 3D17 Systematic synthesis and characterization of multicyclic polycaprolactones with varied number of cyclic units
Hanyoung Seo, Yoshinobu Mato, Takuya Isono, Takuya Yamamoto, Kenji Tajima, Toshifumi Satoh

14:15 3D19 Nanoaggregation behavior of ladder-like polymer consisting of hydrophilic and hydrophobic polymer chains
Yoshiro Kaneko, Katsufumi Soda

14:30 3D20 Synthesis of ladder-type vinyl polymers in one-dimensional coordination nanospaces
Masahiro Abe, Yuki Kametani, Takashi Uemura

Nobuhiko Hosono, presiding

14:45 3D21 Catalytic functions and Characteristics of gold nanoparticles immobilized on vesicle covered by polyamine loop-clusters corona
Ayaka Kanno, Wenli Wang, Ren-hua Jin

15:00 3D22 Synthesis and permeation of two-dimensional polymers containing ultramicropores (1) from ultrathin membranes of oligoacetylenes having functional groups
Yuka Kimura, Moena Maeyama, Masahiro Teraguchi, Takashi Kaneko, Toshiki Aoki

15:15 3D23 Synthesis and permeation of two-dimensional polymers containing ultramicropores (2) from graft copolymers of fully-conjugated acetylene-type biphenylene macromonomers having functional groups
Keisuke Ookawa, Kehan Cheng, Masahiro Teraguchi, Takashi Kaneko, Toshiki Aoki

15:30 3D24 Synthesis and permeation of two-dimensional polymers containing ultramicropores (3) from membranes of ordered fully-conjugated phenylene-ethynylene oligomers having functional groups
Jia Shi, Hajime Takashi, Masahiro Teraguti, Takashi Kaneko, Toshiaki Aoki

Room E

Wed. May 25

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Ichiro Hisaki, presiding

- 10:00 1E05ILY Photocatalytic properties induced by self-assembly of organic dyes and the applications
Hajime Shigemitsu
- 10:30 1E07 Adsorption/immobilization of protease on interfacial film of organo-modified carbon nanotube and maintenance of its activity under high temperature
Yuna YAMADA, Kei OBUCHI, Atsuhiko FUJIMORI
- 10:45 1E08 DNA adsorption-derived emission behavior of organized molecular films of comb copolymers containing diamino-s-triazine ring and its phase separation
Momo MAEDA, Yoshiki SHIODA, Atsuhiko FUJIMORI
- 11:00 1E09 Shape memory characteristics of crystalline network polymers with trifunctional hyperbranched units as hard segments
Yuto OTSUKI, Juntao YAMAGUCHI, Yuji SHIBASAKI, Atsuhiko FUJIMORI

Hiromitsu Sogawa, presiding

- 11:15 1E10 Simple Synthesis of Mesoporous Materials with High-Aspect Ratios Using Nanotube-Gel-Sheet Templates
Naohiro Kameta, Wuxiao Ding
- 11:30 1E11 Synthesis of Self-propelled Polymer Microtube Motors by Jetting H₂ Bubbles
Ryo Kato, Kaishu Kamachi, Teruyuki Komatsu
- 12:30 1E12 Functional degradation behavior and its origin by the spherical particulation of thixotropic additive molecules that show linear/helical fiber growth depending on the presence/absence of asymmetric carbon
Yuki MASHIYAMA, Yuka HASUNUMA, Atsuhiko FUJIMORI
- 12:45 1E13 Metal scavenging selectivity of interfacial films of cyclic moiety-containing polyguanamine derivatives
Juntao YAMAGUCHI, Yuto OTSUKI, Yuji SHIBASAKI, Atsuhiko FUJIMORI
- 13:00 1E14 Annealing-Induced Rearrangement Effect of Organo-Modified Inorganic Nanoparticles in A Layered Assembly and Maintenance Characteristics of Its Layered Regularity
Nanata KIKUCHI, Yui YAMAGISHI, Atsuhiko FUJIMORI

Ryo Kato, presiding

- 13:15 1E15 Polymerization-induced emission behavior of poly N,N-dimethylaminoethyl acrylate derivatives
Rikuto Ooie, Fumitaka Ishiwari, Akinori Saeki
- 13:30 1E16 Supramolecular formation of trisubstituted benzimidazoles having amino-acid-derived optically active moieties
Takato Mizukoshi, Hiromitsu Sogawa, Fumio Sanda
- 13:45 1E17 Construction of Alternately π -Stacked Systems Based on Carborane
Junki Ochi, Kazuo Tanaka
- 14:15 1E19 Construction and structural transition behavior of isostructural hydrogen-bonded organic frameworks based on a dibenzo[g,p]chrysene with non-planer π -conjugated system
Yuto Suzuki, Ryusei Oketani, Ichiro Hisaki

Daisuke Aoki, presiding

- 14:30 1E20 Comparison between marine micro & nano plastics and model samples
Hisayuki Nakatani, Yuina Oshima, Taishi Uchiyama, Suguru Motokucho
- 14:45 1E21 Computational analysis for the aminolysis reaction and its application to post-modification reaction processes
Kiho Matsubara, Hideki Amii, Ryohei Kakchi
- 15:00 1E22 Borylative Termination in Anionic Polymerization and Subsequent Transformation of Boron Moiety for Syntheses of End-Functionalized Polymers
Hiroshi Makino, Tsuyoshi Nishikawa, Makoto Ouchi
- 15:15 1E23 Synthesis of branched polyimide network crosslinked with triamine derivatives and its dielectric properties
Toshihiro Hiejima, Kazuki Hironaka, Satoshi Naka
- Ryohei Kakuchi, presiding**
- 15:30 1E24 Synthesis and viscoelastic property of covalently adaptive polymer network: Effect of crosslinking group in polymer chains
Yasuyuki Nakamura, Mizuki Tenjimbayashi, Akinori Moriya, Masanobu Naito
- 16:00 1E26 Molecular Design of Fluorescent Radical Precursors for Detecting Polymeric Mechanoradicals
Takumi Yamamoto, Daisuke Aoki, Hideyuki Otsuka
- 16:15 1E27 Synthesis of Macrocycles and Their Polymerization Behavior Induced by Exchange Reactions of Bis(hindered amino)disulfide Linkages
Rikito Takashima, Daisuke Aoki, Hideyuki Otsuka
- 16:30 1E28 Intermolecular Cross-linking Reactions of Single-chain Nanoparticles with Dynamic Covalent Bonds
Gota Tomono, Hirogi Yokochi, Daisuke Aoki, Hideyuki Otsuka

Thu. May 26

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Naoki Haraguchi, presiding

- 9:30 2E03 Isolation of Polyethylene Glycol with Different Reactive Groups at the Chain Ends and Its Application.
Tatsuki Sato, Rikito Takashima, Daisuke Aoki, Hideyuki Otsuka
- 9:45 2E04 Mechanochromic microspheres: The relationship between particle structure and mechanochromic properties
Kengo Ogasawara, Takuma Watabe, Daisuke Aoki, Hideyuki Otsuka
- 10:00 2E05 Synthesis and Evaluation of Diarylacetic-Acid-Based Molecular Probes for Detecting Polymer Chain Scission
Yuto Uchida, Takumi Yamamoto, Daisuke Aoki, Hideyuki Otsuka
- 10:15 2E06 Degradation and functionalization of cross-linked MOF by alkylation
Motoaki Horii, Masato Yamashita, Hiroki Amaya, Kazuki Sada

Daisuke Aoki, presiding

- 10:30 2E07 Chain Scission of Concentrated Polymer Brushes under Shear
Ryota Koyama, Kohji Ohno, Yoshinobu Tsujii

- 10:45 2E08 Asymmetric Diels-Alder Reaction Catalyzed by Ionically Polymer-immobilized MacMillan Catalyst in continuous flow system
Joh Yamada, Ali Md Azgar, Naoki Haraguchi
- 11:00 2E09 Synthesis of ionically polymer-immobilized N-heterocyclic carbene and its application to intramolecular Stetter reaction
Mao Iida, Noriyuki Tatsumi, Naoki Haraguchi
- 11:15 2E10 Fabrication of periodically crosslinked network using dithiol-functionalized MOF
Ikki Matsuda, Takashi Kitao, Takashi Uemura
- Yasuhito Suzuki, presiding**
- 11:30 2E11 Acid-Catalyzed Hydrolysis of Silylether-Carbosilane Alternating Copolymer
Naoki Yoshida, Huie Zhu, Masaya Mitsuishi
- 12:30 2E12 Anionic UV curing behavior of epoxy resins containing a photobase generator releasing aminopyridine
Nanami Ogawa, Daisuke Aoki, Koji Arimitsu
- 12:45 2E13 Highly sensitive anionic UV curing using a photobase generator that generates a tertiary amine by photocyclization
Riku Takizawa, Taku Ishii, Daisuke Aoki, Koji Arimitsu
- 13:00 2E14 Photopattern formation using polysilane modified with glycidyl methacrylate and a photobase generator
Kenyu Sugita, Daisuke Aoki, Koji Arimitsu
- Takeo Suga, presiding**
- 13:15 2E15 Reaction Control of Side Chain Decomposition of Poly(2-hydroxyethyl methacrylate) Protected with BOC Group by the Addition of Thermal Acid Generators
Kaito Osada, Yasuhito Suzuki, Akikazu Matsumoto
- 13:30 2E16 Material Design of Co-continuous Network Polymers (CNP): Effect of the Network Structure of Second Component Polymers on the Strength of CNP
Ren Tominaga, Yasuhito Suzuki, Akikazu Matsumoto
- 13:45 2E17 Bromination of poly(2-phenyl[3]dendralene)
Yukine Niitsuma, Katsuhiko Takenaka, Tomoyuki Toda
- 14:15 2E19 Unique Stimuli-responsiveness of Chromic Molecules with Bottlebrush Polymers
Riho Shibata, Takuma Watabe, Daisuke Aoki, Hideyuki Otsuka
- Tomoyuki Toda, presiding**
- 14:30 2E20 Toughening elastomers with mechanochromic sacrificial bonds
Takuma Watabe, Daisuke Aoki, Hideyuki Otsuka
- 14:45 2E21 Topological adhesion between polymer networks based on exchange reactions of orthogonal dynamic covalent bonds.
Sae Sakamoto, Daisuke Aoki, Hideyuki Otsuka
- 15:00 2E22 Diels-Alder Polymer Network: Temperature-Responsive Bond-Exchange Behavior
Takeo Suga, Jieyuan Zhang, Ryusuke Kishida, Kenichi Oyaizu

Fri. May 27

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Tomoyasu Hirai, presiding

- 9:30 3E03 Anionic Polymerization of Polar Conjugated Diene Monomers Using Phosphines as Initiator
Hiroki Ito, Akinori Takasu
- 9:45 3E04 Cationic polymerization of conjugated dienes catalyzed by cyclic boron-based Lewis acid
Ryo Tanaka, Nakaichi Shogo, Nakayama Yuushou, Shiono Takeshi
- 10:00 3E05 Anionic polymerization of (Z)-1-Phenyl[3]dendralene with Lithium-based initiator
Haruto Tanaka, Tomoyuki Toda, Katsuhiko Takenaka
- 10:15 3E06 Anionic polymerization behavior of 6-phenyl-1,2-benzofulvene
Takashi Ishizone, Raita Goseki, Ayana Fukui

Tomoyuki Toda, presiding

- 10:30 3E07 Anionic polymerizability of 5-phenyl-2-isopropenylthiophene
Yuki Kurishiba, Raita Goseki, Takashi Ishizone
- 10:45 3E08 Anionic polymerization of aromatic 4-styryl ketones
Yuki Kamiya, Raita Goseki, Takashi Ishizone
- 11:00 3E09 Preparation of novel stereoregular organic-inorganic block copolymer via anionic polymerization
Tomoyasu Hirai, Satoshi Kometani, Naoki Kurono, Syuji Fujii, Nakamura Yoshinobu
- 11:15 3E10 Preparation of ionic polymers using novel anionic polymerization in ionic liquid.
Wataru Higashiguchi, Yoshinobu Nakamura, Shuji Fujii, Tomoyasu Hirai
- 11:30 3E11 Anionic photopolymerization of methylenemalonate using a photobase generator without producing gas
Masahiro Takano, Kento Oomura, Kazuki Oofusa, Daisuke Aoki, Koji Arimitsu

Yasuhiro Kohsaka, presiding

- 12:30 3E12 Anionic polymerization of N,N-dialkylmethacrylamides having nitrogen-containing heterocycles
Yuki Inoue, Raita Goseki, Takashi Ishizone
- 12:45 3E13 One-pot synthesis of sequence-controlled polymers by means of living anionic addition reaction
Kazuki Takahata, Tomohiko Nishijima, Raita Goseki, Takashi Ishizone
- 13:00 3E14 Addition-Isomerization Anionic Homopolymerization of 1,1-Diphenylethylene Derivative
Daisuke Tanioka, Kaoru Adachi
- 13:15 3E15 Anionic polymerization using desilylation of benzylsilanes with metal alkoxide
Masaya Terasaki, Kaoru Adachi

Tomohiro Kubo, presiding

- 13:30 3E16 High-Speed Anionic Polymerization of (Meth)acrylates at Ambient Temperature Initiated by Carboxylate Salt with Aluminum Catalyst
Yuji Namie, Michitaka Kaizu, Masashi Shimakage, Naoki Sugano, Yoshitaka Miyazaki, Yasuhiro Kohsaka
- 13:45 3E17 Precision Synthesis of Special Shaped Polymers by Living Anionic Polymerization Based on Degenerative Chain-Transfer Mechanism to C-H Bonds

Konomi YAMASHITA,Mineto UCHIYAMA,Masami KAMIGAITO

- 14:15 3E19 Ring-Opening Polymerization of Novel Lactones with Silyl-Protected Hydroxy Group Derived from Glycerol and Deprotection-Induced Polymer Degradation
Yuki SAKATA,Mineto UCHIYAMA,Masami KAMIGAITO
- 14:30 3E20 Synthesis of Degradable Vinyl Polymers with Multiple Cleavable Units by Living Cationic Copolymerization with Cyclic Thioacetals
Kaoru MATOBA,Mineto UCHIYAMA,Masami KAMIGAITO

Mineto Uchiyama, presiding

- 14:45 3E21 Cationic Ring-Opening Copolymerization of Cyclic Acetals and γ -Butyrolactone or 1,3-Dioxolan-4-ones: Copolymerization and Sequence Control by Main-Chain Scrambling Reactions
Kana Takebayashi,Arihiro Kanazawa,Sadahito Aoshima
- 15:00 3E22 Cationic Co- and Terpolymerization of 3-Alkoxyphthalides with Oxiranes and/or Vinyl Ethers
Yuka Takahashi,Arihiro Kanazawa,Sadahito Aoshima
- 15:15 3E23 UV irradiation in the metal-free living cationic polymerization using diaryliodonium salts as organic Lewis acid catalysts: Acceleration of the living polymerization and elucidation of the mechanism
Yuji Mishima,Arihiro Kanazawa,Sadahito Aoshima
- 15:30 3E24 Controlled Cationic Polymerization of Vinyl Monomers using Thiourea/Halogen Bonding Donor Co-catalysts
Koji Takagi,Hiroto Murakata

Arihiro Kanazawa, presiding

- 16:00 3E26 Living Cationic Polymerization of Vinyl Monomers using Organotelluronium Compounds as Lewis Acid
Koji Takagi,Nao Sakakibara
- 16:15 3E27 Polymerization of cyclic esters and vinyl ethers catalyzed by neutral silicon Lewis acid
Yuushou Nakayama,Keiya Katagi,Ryo Tanaka,Takeshi Shiono
- 16:30 3E28 Precision Cationic Polymerization Using Photo-Transformable Vinyl Ethers
Hiroyuki Kubota,Makoto Ouchi

Room F

Wed. May 25

D. BIOPOLYMERS AND BIORELATED POLYMERS

Takeshi Serizawa, presiding

- 10:00 1F05 Creation of artificial viral capsid decorated with reconstituted ribonuclease S possessing anticancer activity
Yingbing Liang,Junpei Ota,Hiroto Furukawa,Kentaro Sakamoto,Hiroshi Inaba,Kazunori Matuura
- 10:15 1F06 Construction of stable microtubule superstructures by encapsulating Tau-derived peptide-fused tetrameric proteins
Hiroshi Inaba,Yurina Sueki,Muneyoshi Ichikawa,Takashi

- Iwasaki, Arif Md. Rashedul Kabir, Akira Kakugo, Kazuki Sada, Kazunori Matsuura
- 10:30 1F07 Creation of enveloped viral replica equipped with functional membrane proteins
Hiroto Furukawa, Kenshin Miyata, Keigo Nakamura, Hiroshi Inaba, Shin-ichi Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi, Kazunori Matsuura
- Kazunori Matsuura, presiding**
- 10:45 1F08 In-situ analysis of in-cell protein crystallization
Yuto Nakasuji, Satoshi Abe, Takafumi Ueno
- 11:00 1F09 Reaction mechanism of pH responsive piston protein assembly
Koki Date, Toan Pham Thuc, Tatuya Niwa, Hideki Taguchi, Takafumi Ueno
- 11:15 1F10 Construction of Antifreeze protein like semi-clathrate hydrate in the ferritin cage
Jiaxin Tian, Basudev Maity, Satoshi Abe, Takafumi Ueno
- 11:30 1F11 Studies on the chemical synthesis and the solution structures of proline-containing cyclic peptides
Taichi Kurita, Joan Gimenez-Dejoz, Seiya Fujita, Hirotaka Uji, Keiji Numata
- Keiji Numata, presiding**
- 12:30 1F12 Modification of peptides onto MOF 2D grid surface and antibody recognition
Takanao Hirai, Motoaki Horii, Masato Yamashita, Hiroshi Hinou, Kazuki Sada
- 12:45 1F13 Modification for biomineralization capability of filamentous virus based on machine learning
Toshiki Sawada, Michihiro Tanaka, Takeshi Serizawa
- 13:00 1F14 Interfacial analysis of the hydrolysis reaction mechanism of phospholipase in lipid rafts
Kento Akiyama, Ayumi Muroya, Rina Tanaka, Toshiaki Mori
- Toshiaki Mori, presiding**
- 13:15 1F15 Novel Design Strategy of DNA-Artificial Nucleic Acid Chimera Toward Enhancement of Target RNA Cleavage Activities: Application for COVID-19 Therapeutics
Nozomu Ishiwata, Hironori Hayashi, Masahito Inagaki, Masaki Nishijima, Yasuyuki Araki, Eiichi Kodama, Takehiko Wada
- 13:30 1F16 Efficient electronic states calculation and machine learning for designing nucleic acid recognition molecules
Keisuke Hisama, Yuuichi Orimoto, Kazuhiko Nakatani, Yuriko Aoki
- Yu Hoshino, presiding**
- 13:45 1F17 Synthesis of Network Polysaccharides from Water-soluble Chitin/Chitosan
Aina Nakamichi, Kazuya Yamamoto, Jun-ichi Kadokawa
- 14:15 1F19 Synthesis of Polyester-grafted Chitin Derivatives with Thermoplasticity
Aoi Nakashima, Kazuya Yamamoto, Jun-ichi Kadokawa
- 14:30 1F20 Synthesis of Cyclodextrin-Conjugated Chitosan and Its Application to Polysaccharides Composite Films
Takuya Sagawa, Aoi Kashiwabara, Mineo Hashizume
- 14:45 1F21 Preparation of Coumarin-Loaded Polysaccharides Composite Films and Photodimerization of Coumarin in the Films

Daiki Usui, Takuya Sagawa, Mineo Hashizume

Mineo Hashizume, presiding

- 15:00 1F22 Effect of side chain structures of glycopolymers on the interaction with target proteins
Masanori Nagao, Masaya Kichize, Yu Hoshino, Yoshiko Miura
- 15:15 1F23 Synthesis of cyclic glycopolymers and evaluation of the interaction with Target Proteins
WENKANG JIN, MASANORI NAGAO, YU HOSHINO, YOSHIKO MIURA
- 15:30 1F24 Investigation of the anti-inflammatory effects in macrophage-like cells using glycopolymers bearing sialyloligosaccharides.
Takato Ishida, Masanori Nagao, Hirohiko Ise, Yu Hoshino, Yoshiko Miura

Jun-ichi Kadokawa, presiding

- 16:00 1F26 Preparation of chitosan nanohybrid films containing proteoglycans
Hiroki Kajiwara, Saki Kato, Ryosuke Suzuki, Tosiaki Mori
- 16:15 1F27 Direct surface-modification of titania nanotubes by glycopolymers via light-induced polymerization
Tomonari Tanaka, Kaito Nishiyama, Hisataka Nishida, Sung Hun Cho, Tohru Sekino
- 16:30 1F28 Synthesis and characterization of hyperbranched polysaccharide nanoparticles modified the surface with thermoresponsive polymers
Hayata Kimura, Tomoki Nishimura, Yoshihiro Sasaki, Shin-ichi Sawada, Kazunari Akiyoshi

Thu. May 26

D. BIOPOLYMERS AND BIORELATED POLYMERS

Masato Ikeda, presiding

- 9:30 2F03 Reverse polymeric micelle composed of AB₃-type polydepsipeptide
Hiroataka Uji, Naoki Watabe, Tatsuya Komi, Tomoki Sakaguchi, Ryo Akamatsu, Kenta Mihara, Shunsaku Kimura
- 9:45 2F04 Cubic co-assembly by two kinds of amphiphilic polypeptides self-assembling curved and planar sheets
Motoki Ueda, Mohamed Elafify, Yoshihiro Ito
- 10:00 2F05 Preparation of reductively responsive nanocapsules using reactive polymer zwitterion
Akifumi Kawamura, Kazuki Naruse, Todd Emrick, Takashi Miyata

Motoki Ueda, presiding

- 10:15 2F06 Morphological control in response to photo-irradiation by cationic comb-type copolymer with malachite green
Seiya Takemura, Atsushi Maruyama, Naohiko Shimada
- 10:30 2F07 Development of polyion complex vesicles using peptides containing an alternating sequence of lysine/glutamic acid
Kousuke Tsuchiya, Seiya Fujita, Keiji Numata
- 10:45 2F08 Membrane disruption by calixarene derivatives and their bioactivities

Kazuma Yasuhara, Mizuki Kaji, Hideto Kibata, Takuto Nakano, Gwenaël Rapenne

Atsushi Maruyama, presiding

- 11:00 2F09 Fabrication and analysis of novel higher ordered structures of polyion complex based on polymer condensates formation
Hiroshi Kamizawa, Tomoki Maruyama, Yiwei Liu, Teruki Nii, Kanjiro Miyata, Takeshi Mori, Yoshiki Katayama, Akihiro Kishimura
- 11:15 2F10 Characterization of Hydration Water Bound to Cholinephosphate Type Polymer Brush by Differential Scanning Calorimetry
Kaito Inoue, Shouhei Shiomoto, Masaru Tanaka, Motoyasu Kobayashi
- 11:30 2F11 Cellular uptake behavior of degradable and transformable core-corona type particles
Satoshi YAMADA, Syuuhei KOMATSU, Akihiko KIKUCHI

Shin-ichi Sawada, presiding

- 12:30 2F12ILY Construction of functional nanostructured materials via molecular self-assembly of cellulose
Yuuki Hata
- 13:00 2F14 Supramolecular materials based on artificial molecule/biomolecule modular hybrids
Masato Ikeda
- 13:15 2F15 Control of Energy Conversion for Autonomously Oscillating Hydrogel Microsphere Assemblies
Kohei Inui, Ikuma Saito, Ryo Yoshida, Haruka Minato, Daisuke Suzuki

Yoshiki Katayama, presiding

- 13:30 2F16 Single-particle analysis and functional evaluation of extracellular vesicles and magnetic particle hybrids interfaced with self-assembled nanogels
Ryosuke Mizuta, Shinichi Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi
- 13:45 2F17 Design and characterization of single-chain antibody-incorporated liposomes for cancer therapy
Shin-ichi Sawada, Nakamura Keigo, Sasaki Yoshihiro, Kazunari Akiyoshi
- 14:15 2F19 Gene introduction into plant mitochondria by peptide/DNA micelle complex modified with mitochondrial targeting and cell membrane penetrating peptides
Naoya Abe, Seiya Fujita, Takaaki Miyamoto, Kousuke Tsutiya, Keiji Numata

Fri. May 27

D. BIOPOLYMERS AND BIORELATED POLYMERS

Masaya Yamamoto, presiding

- 9:30 3F03 Protein Adsorption on Oriented Mesoporous Silica Films
Yadong Chai, Yuri Maruko, Mari Miyata, Motohiro Tagaya
- 9:45 3F04 Design of Orthogonal Lamination Process of Uniaxially-Oriented Mesoporous Silica Films and Their Adsorptive Ability for Cationic Dye

- Rin Nakajima, Yadong Chai, Mari Miyata, Motohiro Tagaya
- 10:00 3F05 Smart refolding system using UCST-type uredo polymers
Naohiko Shimada, Yamato Tanaka, Niu Chun Hao, Taira Sasaki, Atsushi Maruyama
- Motohiro Tagaya, presiding**
- 10:15 3F06 Fabrication of cicada-wing-inspired nanopillar films and their antibacterial properties
Yohei Kotsuchibashi
- 10:30 3F07 Preparation of thin films from hydrophobic amino acid-derived vinyl polymers and their characterization
Rara Ogawa, Nobuyuki Higashi, Tomoyuki Koga
- 10:45 3F08 Preparation and functional characterization of biomimetic tissue adhesive
Kazuhiro Nagasaka, Shiharu Watanabe, Shima Ito, Hiroaki Ichimaru, Akihiro Nishiguchi, Hidenori Ohtsuka, Tetsushi Taguchi
- Tomoyuki Koga, presiding**
- 11:00 3F09 Spontaneous liquid-liquid phase separation to liquid-solid phase transition of citrulline polypeptide/nucleic acid complex
Shouhei Nomura, Naohiko Shimada, Atsushi Maruyama
- 11:15 3F10 Construction of hybrid particles covered with biological membrane by cell permeation method
Keigo Ukyo, Yoshihiro Sasaki, Shin-ichi Sawada, Kazunari Akiyoshi
- 11:30 3F11 Design of Temperature-Responsive Gels That Regulate Molecular Binding Ability by Conformational Change and Controlled Drug Release
Takashi Miyata, Yuto Toyoshima, Akifumi Kawamura, Yoshinori Takashima
- Akifumi Kawamura, presiding**
- 12:30 3F12 Synthesis of novel star-shaped amino acid-derived vinyl polymers and their thermo responsiveness.
Momoka Kamiya, Nobuyuki Higashi, Tomoyuki Koga
- 12:45 3F13 Application of phenylalanine-bearing carboxy-terminal dendrimers to pH-responsive DDS and colorimetric sensor
Chie Kojima, Misaki Nishio, Hai Xia, Akikazu Matsumoto
- 13:00 3F14 Temperature/pH dual-responsive shape memory hydrogels composed of amino acid-derived vinyl polymers
Yuki Komori, Nobuyuki Higashi, Tomoyuki Koga
- Yoshihiro Sasaki, presiding**
- 13:15 3F15 Design of sulfobetaine hydrogels
Nobuyuki Morimoto, Atsuki Murata, Tomoki Hiraoka, Masaya Yamamoto
- 13:30 3F16 Fabrication of hydrogel-based microfluidics device for biomolecular sensing
Aya Tanaka, Riku Takahashi, Tomomi Murai, Suzuyo Inoue, Masumi Yamaguchi
- 13:45 3F17 Transient volume phase transition and payload secretion of a poly-peptide responsive hydrogel
Masahiko Nakamoto, Michiya Matsusaki
- Chie Kojima, presiding**
- 14:15 3F19ILY Development of polymeric materials through bio-inspired design, bio-synthetic interaction, and bio-synthetic fusion

Room G

Wed. May 25

D. BIOPOLYMERS AND BIORELATED POLYMERS

Chie Kojima, presiding

- 10:00 1G05 Preparation of alginate films by using Beads-array method to control the 3-dimensional distribution of included substances
Masanari Usami, Fakfan Luangapai, Satoshi Iwamoto
- 10:15 1G06 Precise analysis of structural formation of amylopectin gel (Warabi-mochi)
Akane Nagasaki, Yuka Ikemoto, Go Matsuba
- 10:30 1G07 Electrical relaxation behaviors in stacked gelatin films below the glass transition temperature
Souta Hori, Fakfan Luangapai, Satoshi Iwamoto
- 10:45 1G08 Cellular flocculation using concentrated polymer brush-modified cellulose nanofibers: Effect of surface charges and fiber lengths
Chiaki Yoshikawa

Shoichiro Asayama, presiding

- 11:00 1G09 Evaluation of anti-depressive effect of intestinal ROS scavenging nanoparticle
Yutaka Ikeda, Naoki Saigo, Yukio Nagasaki
- 11:15 1G10 Analysis of hydration state of PEG and PEGylated dendrimers
Chie Kojima, Yasuhito Suzuki, Ayako Tsujimoto, Yuka Ikemoto, Masaru Tanaka, Akikazu Matsumoto
- 11:30 1G11 Impact of self-assembled antioxidant specifically accumulating in the gastrointestinal tract on high-intensity running performance
Takuto Toriumi, Hajime Ohmori, Yukio Nagasaki

Yutaka Ikeda, presiding

- 12:30 1G12 Development of glucosylated PEG-conjugated immune checkpoint inhibitors targeting glioblastoma
Yuki Mochida, Tao Yang, Xueying Liu, Hiroaki Kinoh, Horacio Cabral, Kazunori Kataoka
- 12:45 1G13 Design of Diels-Alder Based Magnetic Nanoparticles for Temperature-Triggered Controlled Drug Release
Nanami Fujisawa, Lili Chen, Yoshitaka Matsumoto, Masayuki Takeuchi, Mitsuhiro Ebara
- 13:00 1G14 Lipid nanoparticle based on poly(ϵ -caprolactone) derivatives for in vivo mRNA delivery
Yuta Mizukami, M. Abd Elwakil Mahmoud, Yusuke Sato, Takuya Isono, Takuya Yamamoto, Kenji Tajima, Hideyoshi Harashima, Toshifumi Satoh

Yasuhiko Iwasaki, presiding

- 13:15 1G15 Preparation and selective internalization of L-serine-modified PEG-b-PLGA nanoparticles to renal epithelial cells

Kanoko TAKAHASHI, Syuuhei KOMATSU, Yoshitsugu
AKIYAMA, Akihiko KIKUCHI

- 13:30 1G16 Design of PEG-modified nanoparticles for selective cellular uptake into cancer cells
Tsubasa Hatono, Aoi Uozumi, Akifumi Kawamura, Takashi Miyata
- 13:45 1G17 Design of Cysteine-Based Polymer Assembling Drugs and Therapeutic Effect on Nonalcoholic Steatohepatitis
Yuta Koda, Yukio Nagasaki

Kazuo Sakurai, presiding

- 14:15 1G19 Cell-polymeric biomaterial interaction tailored by a glycan of plasma membrane
Kei Nishida, Masayasu Mie, Eiry Kobatake, Masaru Tanaka
- 14:30 1G20 Efficient phagocytosis of tumor cells by antibody/aptamer co-immobilized macrophages
Xiaodie HU, Yasuhiko IWASAKI
- 14:45 1G21 Hepatocyte-Specific Delivery of Zn²⁺ Ions to Suppress Insulin Receptor Internalization for Diabetes Therapy
Shoichiro Asayama, Akito Endo
- 15:00 1G22 Peptide Modification and Amyloid-beta Aggregation Refolding by Cholesterol End-Modified PEG
SHOTA WATANABE, SHOICHIRO ASAYAMA

Akihiko Kikuchi, presiding

- 15:15 1G23 Photodynamic Activity of Catalase-Albumin Cluster Incorporating Protoporphyrin
Taiga Yamada, Maho Katsumi, Teruyuki Komatsu
- 15:30 1G24 The design of a nanoadjuvant composed of CpG ODNs and a cationic molecular bottlebrushes
Yusuke Miyashima, Shin Takano, Shota Fujii, Kazuo Sakurai
- 16:00 1G26 Construction of a Novel Carrier System for Cancer Cell-specific Delivery Utilizing MMP-9 Activity III: Effects of Polymer Structure upon Enzyme Cleavage and Uptake Ability
Nagisa Kanazawa, Ryota Azuma, Yuka Matsushashi, Hiroka Sugai, Yasuyuki Araki, Masaki Nishijima, Ikuhiko Nakase, Takehiko Wada
- 16:15 1G27 Fine-tuning of cationic block copolymer structures for enhanced blood circulation of single-oligonucleotide-loaded ultrasmall nanocarriers
Mitsuru Naito, Hiroyuki Chaya, Masaru Cho, Kazuko Toh, Kotaro Hayashi, Shigeto Fukushima, Yamasaki Yuichi, Kazunori Kataoka, Kanjiro Miyata

Thu. May 26

D. BIOPOLYMERS AND BIORELATED POLYMERS

Michiya Matsusaki, presiding

- 9:30 2G03 Evaluation of Calcium Phosphate Precipitation Effect on Citric Acid-Modified Poly(vinyl alcohol) Films
Yanni Zhou, Yadong Chai, Mari Miyata, Motohiro Tagaya
- 9:45 2G04 Creation of cellular scaffold materials using temperature-responsive injectable polymer crosslinked by gelatin

- Nobuo Murase, Yuichi Ohya
- 10:00 2G05 Development of pseudo-brain tissue to elucidate the mechanism of neural network reconstruction
Yuna Kato, Tadashi Nakaji-Hirabayashi, Ayumu Ogasawara, Hikari Yasui, Noriyasu Oguma

Nobuyuki Morimoto, presiding

- 10:15 2G06 Thermoresponsive block copolymer brush with cell affinity peptides for cell separation
Kenichi Nagase, Masaki Shimura, Ruka Shimane, Hideko Kanazawa
- 10:30 2G07 Suppression of cellular senescence by mitophagy-induced nanocarriers
Kiyoshi Sato, Yui Okido, Keisuke Ashiba, Hiroyoshi Kawakami
- 10:45 2G08 Synthesis of polyvinyl alcohol derivatives targeting L-type amino acid transporter 1 (LAT1) and their application to cancer cell capturing materials
Michiya MATSUSAKI, Ryo MITSUYASU, Donghee KANG

Kenichi Nagase, presiding

- 11:00 2G09 Fabrication of elastic modulus-tunable scaffolds by controlling the size of collagen fibers and their application to cancer cell culture
Michiya Matsusaki, Tomoyuki Suezawa, Naoko Sasaki, Ryohei Katayama
- 11:15 2G10 Epithelial cell culture on MOF gel-immobilized cell culture substrates
Masaya Tanaka, Masaya Yamamoto
- 11:30 2G11 Application of biodegradable film for cell sheet multilayer technology as a novel cell-friendly material
Mai Hazekawa, Shigeru Yao

F. INDUSTRIAL POLYMERS AND TECHNOLOGY “English Session”

Shin-ichi Kuroda, presiding

- 12:30 2G12 Development of Photo-polymer with Controllable Phase-Separated Structure by Light-Induced Reversible Addition-Fragmentation Chain-Transfer Polymerization
Masaru Mukai, Taiki Maruyama, Taichi Furukawa, Syoji Maruo
- 12:45 2G13 High performance of virgin plastic-Extended the Physical Degradation / Physical Regeneration Theory-
Shigeru Yao, Patchiya Phantong, Haruka Kaneyasu, Tetsuya Kimura, Ryo Hieda, Yuki Kawakami, Shuhei Imamura
- 13:00 2G14 Fabrication of high heat-resistant polyarylate nanofibers by electrospinning
Shigeki Okada, Tomoki Maeda, Atsushi Hotta
- 13:15 2G15 Bamboo Charcoal/ Poly(L-lactide) Fiber Webs Prepared via Laser-Electrospinning
Zongzi Hou, Nahoko Itagaki, Haruki Kobayashi, Tanaka Katsufumi, Wataru Takarada, Takeshi Kikutani, Midori Takasaki

Masayuki Yamaguchi, presiding

- 13:30 2G16ILI The Power of Advanced Characterizations in Industrial Research: Study Cases from Impact-resistant PP Copolymer

Wonchalerm Rungswang

Masaru Mukai, presiding

- 14:15 2G19 Study on cellulose nanocrystal / polypropylene composites
Shin-ichi Kuroda, Wanyu Dong, Tomoki Tanabe, Mitsuo Asahara, Saeki Mitsugi
- 14:30 2G20 Surface modification ability of Side Chain Crystalline Block Copolymer
Shigeru Yao, Shinsuke Aso, Tokumu Aoki, Yuki Fukano, Kazuhiro Matsuo, Ryoko Nakano
- 14:45 2G21 Development of an ultra-precision polishing technique for polymer material using a metal catalyst and pure water
Toh Daisetsu, Koudai Takeda, Kazuto Yamauchi, Yasuhisa Sano
- 15:00 2G22 Effect of plasma gas species in atmospheric pressure plasma CVD for improving adhesion strength of ceramics
Kenichi Yamazaki, Hiroyuki Yasui, Hinako Suematsu, Tsuyoshi Noguchi, Yuma Suenaga, Akitoshi Okino

D. BIOPOLYMERS AND BIORELATED POLYMERS

Atsushi Mahara, presiding

- 9:30 3G03 Improvement of substrate adhesion and functionalization of antibiofouling heteroarm star polymer
Tsuyoshi Ando, Yuji Kinoshita, Fumitoki Nagura, Hiroharu Ajiro
- 9:45 3G04 Evaluation of antibiofouling property on zwitterionic cross-linked polymer coating by a microfluidic perfusion culture system
Yuta Kozuka, Tsukururu Masuda, Shintaro Hara, Norifumi Isu, Madoka Takai
- 10:00 3G05 Development of biogas sensor embedding detecting enzyme in electrospun polymer microfiber
Tsubomi Tomono, Misa Nakaya, Kenta Iitani, Koji Toma, Takahiro Arakawa, Yuji Tsuchido, Kohji Mitsubayashi, Naoya Takeda

Mitsuhiro Ebara, presiding

- 10:15 3G06 Synthesis of PMPC-conjugated lipid and its liposome modification for avoidance of immune system
Yuji Teramura, Kazuhiko Ishihara
- 10:30 3G07 Surface interaction analysis of human umbilical vein endothelial cells (HUVECs) on the poly (2-methoxyethyl acrylate (PMEA) analogous
Md Azizul Haque, Daiki Murakami, Masaru Tanaka
- 10:45 3G08 Synthesis of Novel Blood-Compatible Acrylic Polymers
Shota Taniguchi, Kenichi Nakamura, Masaru Tanaka

Yuji Teramura, presiding

- 11:00 3G09 Polymeric MR contrast agents for in vivo live imaging of angiogenesis
atsushi mahara, Shigeyoshi saito, keigo shima, yoshiaki hirano, tetsuji yamaoka
- 11:15 3G10 Highly sensitive labeling reagents for Raman imaging with latex beads encapsulating an algal pigment
Yusuke Yonamine, Joshua Chidiebere Mba, Yusei Miyata, Yu Hoshino, Hideyuki Mitomo, Kuniharu Ijiri
- 11:30 3G11 Design of Urease Immobilized Nanofiber Meshes and Evaluation

of Urea Decomposition
Makoto Sasaki, Yihua Liu, Mitsuhiro Ebara

Masaru Tanaka, presiding

- 12:30 3G12ILY Design of tissue-adhesive biomaterials to prevent postoperative complications
Akihiro Nishiguchi
- 13:00 3G14 The development of antibody-smart polymer conjugate by "Grafting from" method toward an early diagnosis of infection disease
Erika YOSHIHARA, Nabil Ahmed, Michihiro IJIMA, Mitsuhiro EBARA

Tsuyoshi Kimura, presiding

- 13:15 3G15 Development of anti-adhesion materials spontaneously forming barriers on the soft tissues
Kyoko Fukazawa, Sunao Matsui, Takeshi Nagasaki, Tetsuji Yamaoka
- 13:30 3G16 surface and interface properties of zwitterion based N-oxide polymer brush
Naoto Ogiwara, Tsukuru Masuda, Madoka Takai
- 13:45 3G17 Surface modification of liposome with PMPC-conjugated lipid driven by self-assembling phenomenon
Haruna Suzuki, Naoko Nakamura, Kazuhiko Ishihara, Yuji Teramura

Akihiro Nishiguchi, presiding

- 14:15 3G19 Platelet adhesion behavior of poly(L-lactide-co-glycolide)-poly(1,5-dioxepan-2-one) random multiblock copolymers
Nozomi Tanaka, Xoan Vu Thi, Mitsutoshi Jikei, Kazuya Matsumoto, shigeharu Ueki, Masaki Hikida
- 14:30 3G20 Cilostazol-loaded acellular sheet for suppressing the smooth muscle cell growth
Kaito Shimizu, Atsushi Mahara, Yoshiaki Hirano, Tetsuji Yamaoka
- 14:45 3G21 Immunological evaluation of polymeric biomaterials using designed cells
Tsuyoshi Kimura, Shota Toda, Ruri Ishigaki, Yoshihide Hashimoto, Takahide Matsushima, Hiroshi Asahara, Wataru Nomura, Naoko Nakamura, Masaya Yamamoto, Akio Kishida

Room H

Wed. May 25

E. POLYMERS AND ENVIRONMENT

Syuji Fujii, presiding

- 13:15 1H15ILY Functionalized Capsule Polymer Particles Fabricated by Interfacial Photocrosslinking of Polymer Particles
Yukiya Kitayama

Toshifumi Satoh, presiding

- 13:45 1H17 Whitening of "lignin", a plant aromatic polymer
Kazuhiro Shikinaka, Yuichiro Otsuka
- 14:15 1H19 Synthesis, Thermal Properties and Enzymatic Degradation of Divanillic Acid-derived Polyester with Free Hydroxyl Groups
Kentaro Fujieda, Yukiko Enomoto, Tadahisa Iwata
- 14:30 1H20 Synthesis and Two-step Enzymatic Degradation of Paramylon Ester-graft-poly(lactic acid)
Jin Ho Seok, Yukiko Enomoto, Tadahisa Iwata
- 14:45 1H21 Preparation of cellulose nanocrystal-based particles with fixed core-shell structure
Emiko MOURI, Satsuki AZUMA, Teruyuki NAKATO
- Kazuki Fukushima, presiding**
- 15:00 1H22 Polymerization of glycidate with malic anhydride esters and evaluation of properties of cured products
Kota Okumura, Yoshimasa Matsumura, Bungo Ochiai
- 15:15 1H23 Development of Compatibilizer for Cellulose Acetate/Poly(ϵ -caprolactone) Blend
Yuki Tsuji, Satoshi Katsuhara, Naoki Sunagawa, Kiyohiko Igarashi, Takuya Yamamoto, Takuya Isono, Kenji Tajima, Toshifumi Satoh
- 15:30 1H24 Development of novel bio-based polymers derived from ferulic acid and cellulose for CO₂ capture
Shinji Kanehashi, Kenji Ogino, Junichi kamagata, Hitoshi Aoki
- Yukiya Kitayama, presiding**
- 16:00 1H26 Synthesis and Physical Properties of Polyimides Derived from Plant-based Materials Exhibiting High Transparency, Low Refractive Indices, and Low Dielectric Constants.
Ririka Sawada, Mitsutaka Ozaki, Kazuhisa Yajima, Ryohei Ishige, Shinji Ando
- 16:15 1H27 Development of Aliphatic Polycarbonates Exhibiting Liquid Crystallinity
Kazuki FUKUSHIMA, So NAKAI, Junya UCHIDA, Takashi KATO
- 16:30 1H28 Synthesis and Characterization of Cationic Cellulose (I) - Synthesis of Highly Substituted Derivatives
Yutaro Hayashi, Elisabeth R Seiler, Yuko Takeoka, Masahiro Rikukawa, Masahiro Fujita
- 16:45 1H29 Development of self-healable and elastomeric lignin-based polymer with hydrogen bonding
Shuhei Takamura, Naruki Kurokawa, Atsushi Hotta

Thu. May 26

E. POLYMERS AND ENVIRONMENT

Hiroharu Ajiro, presiding

- 9:30 2H03 Polymer composite of plant oil-based polyesters with cellulose nanofibers and their mechanical properties
Yuichi Matsumoto, Kotohiro Nomura
- 9:45 2H04 Development and evaluation of water conditions degradable enzyme embedded biodegradable polyesters.
QIUYUAN HUANG, Satoshi Kimura, Tadahisa Iwata

- 10:00 2H05 Effect of oligomers derived from biodegradable polycaprolactone on eco- and neuro-toxicity
Naoto Yoshinaga, Ayaka Tateishi, Kotaro Sato, Keiji Numata
- 10:15 2H06 Application of poly(ferulic-acid-co-glycolic acid) as Property Modifier for Poly(lactide)
Daisuke Ishii, Rui Tsukada, Ai Matahira
- Daisuke Aoki, presiding**
- 10:30 2H07 Degradation of poly(trimethylene carbonate) derivatives with ester free structure bearing various substituents
Hiroharu AJIRO, Rikyu Miyake, Lee Tan, Nalinthip Chanthaset
- 10:45 2H08ILY Development of marine biodegradable bioplastics using polysaccharides
Yu-I Hsu
- 11:15 2H10 Aggregation States and Degradation Behaviors of Thin Polyamide 4 Films in Underwater Environments
Shunta Tamura, Haruki Mokudai, Takashi Masaki, Norifumi Yamada, Hisao Matsuno, Keiji Tanaka
- 11:30 2H11 Spray drying of natural rubber latex and its effect on vulcanization
Yoshimasa Yamamoto, Akihiro Sato, Anna Sasaki, Seiichi Kawahara
- Keiji Numata, presiding**
- 12:30 2H12ILY Study on nanomechanical properties of soft materials for environmental load reduction
Xiaobin Liang
- Kousuke Tsuchiya, presiding**
- 13:00 2H14 Preparation and property evaluation of microbead derived from biodegradable polyesters
Hongyi Gan, Takumi Okada, Satoshi Kimura, Tadahisa Iwata
- Kotaro Satoh, presiding**
- 13:15 2H15 Nucleating effect of surface-modified plate-like cellulose II microcrystals on the crystallization behavior of poly(L-lactic acid)
Ikumi Tsuzuki, Kayoko Kobayashi, Masahisa Wada, Ryosuke Kusumi
- 13:30 2H16 Design of thermoplastic materials using cellulose as a base matrix
Ruozhu Wang, Yoshito Andou
- 13:45 2H17 Melt spinning of curdlan propionate fiber and observation of crystal formation mechanism in melt spinning process using synchrotron radiation X-ray
Taizo Kabe, Hongyi Gan, Hiroyasu Masunaga, Tadahisa Iwata

E. POLYMERS AND ENVIRONMENT “English Session”

Yukiko Enomoto, presiding

- 14:15 2H19ILI Utilization of Bio-renewable Resources via Chemical Reaction and Their Applications on Environmental Treatment and Energy Storage
Suwadee Kongparakul
- 14:45 2H21 Degradation Behavior of Melt-spun Polyamide 4 Fibers in Underwater Environment

Jinhyeok Hong, Haruki Mokudai, Takashi Masaki, Hisao Matsuno, Keiji Tanaka

Keiji Tanaka, presiding

- 15:00 2H22 Preparation and properties of binary green blends of poly(butylene succinate) and polysaccharide ester derivatives
Manikandan Ilangovan, Hongyi Gan, Tadahisa Iwata
- 15:15 2H23 Controlled of reaction conditions on mechanochemical esterification of thermoplastic cellulose oleate
Lease Jacqueline, Yoshito Andou
- 15:30 2H24 Rapid Identification of Microplastics of Commodity Polymers using Nile Red Staining
Ramadan Eljamal, Tomoko Kajiwara, Adchara Padermshoke, YingJun An, Atsushi Takahara

E. POLYMERS AND ENVIRONMENT

Hisao Matsuno, presiding

- 9:30 3H03 Phenolic resin using glycol lignin
Hajime Kimura, Morio Yonekawa, Yasunori Ohashi, Thi Thi Nge, Yusuke Matsumoto, Tatsuhiko Yamada
- 9:45 3H04 Development of UV-curable bio-based polymer derived from natural phenol compound
Shinji Kanehashi, Kan Kato, Kenji Ogino
- 10:00 3H05 Polymeric materials to fertilizers by the degradation reaction with ammonia
Takumi Abe, Daisuke Aoki, Hideyuki Otsuka
- 10:15 3H06 Observation of the dispersed state of polyvinyl acetate in polyethylene and polypropylene
Kazutoshi Ikenaga, Yuta Yamashita

Shinji Kanehashi, presiding

- 10:30 3H07 Purification of polyethylene and polypropylene in waste plastics using solvent extraction method
Kazutoshi Ikenaga, Yuki Morikami
- 10:45 3H08 Effect of Anion Interaction on Polarity of Ionic Liquid Mixture
Hiroki Shibata, Suiji Katsura, Takeshi Kakibe, Satsuda Matsuda, Hajime Kishi
- 11:00 3H09 Preparation of polymer composites filled with fibrillated olive pomace and marble powder waste and the optimization of mechanical properties
Tessei Kawano, Yoshito Andou, Esra Yel
- 11:15 3H10 Metal adsorption behavior of metal-absorbing polymers
Koki Kawabata, Masanori Hisano, Yuki Anma, Yoshikiyo Hatakeyama, Hironori Hondoh, Daisuke Nagai

Kazutoshi Ikenaga, presiding

- 12:30 3H12 Evaluation of the fracture behavior of aqueous latex films
Hayato Suzuki, Yuma Sasaki, Kazuya Uenishi, Kazuko Nakazono, Toshikazu Takata, Daisuke Suzuki
- 12:45 3H13 Effect of crosslinking density for hydrolysis reaction of crosslinked polyurethane by carbonic acid water
Suguru Motokucho, Ryota Oshima, Moe Sasai, Hisayuki Nakatani

- 13:00 3H14 Development of the accelerated evaluation method of biodegradability in seawater
Nao OSAKA, Hironori TAGUCHI, Hisao MATSUNO, Keiji TANAKA, Takako KIKUCHI
- 13:15 3H15 Environmental Degradation Behavior of Fishing Line Fibers
Yingjun AN, Tomoko KAJIWARA, Adchara PADERMSHOKE, Hiroyasu MASUNAGA, Sono SASAKI, Atsushi TAKAHARA

Room J

Wed. May 25

Invited Lecture “English Session”

<Japan-Taiwan Joint Session>

Teruaki Hayakawa, presiding

- 12:30 1J12IL Oriented Artificial Water Channels Formed via Water-Induced Self-Assembly
Chien-Lung Wang, Yuan Chen, Hsi-Yen Chang, Wei-Tsung Chuang, Kuan-Yi Wu
- 13:00 1J14IL Chemically Tailored Optical Resonators for Sensing and Energy Harvesting
Hiroshi Yamagishi
- 13:30 1J16IL Materials Design for High-Performance Stretchable and Self-Healing Semiconducting Polymers
Yu-Cheng Chiu
- 14:15 1J19IL Fracture Process of Polymer Materials by Molecular Simulation
Yuji Higuchi

Tomoya Higashihara, presiding

- 14:45 1J21IL Phase and Crystallization Behaviors of Binary Block Copolymer Blends with Hydrogen-Bonding Interaction
Chieh-Tsung Lo, Po-Yun Chuang, Shu-Yu Liao, Kuang-Hsin Wu, Bo-Jhih Yeh
- 15:15 1J23IL Crystal Structure and Dynamics Behavior of Chitosan-ZnCl₂ Complex
Takuya Uto
- 16:00 1J26IL Hollow Gyroid Featuring Minimum Structural Volume from a Dual-Removable Ternary Nanocomposite
I-Ming Lin, E-Ming Wang, Edwin L. Thomas, Yeo-Wan Chiang
- 16:30 1J28IL Thermodynamics and phase transition in model polymer blend
Yutaka Aoki, Julia S. Higgins, Joao T. Cabral

Thu. May 26

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

Akikazu Matsumoto, presiding

- 9:30 2J03ILI Structure regulation and properties of cellulose materials under external fields
Guangjie Song, Jun Zhang
- 10:00 2J05 Effect of Thermal History of Isotactic Polypropylene on Mesostructure and Frequency of Bubble Nucleation in Physical Foaming Phenomena
Kanao Ishikawa, Miori Takizawa, Kentaro Taki
- 10:15 2J06 Effect of radical formation on NMR relaxation in a heat-treated ethylene ionomer
Shohei Mikage, Atsushi Asano
- 10:30 2J07 Melt-Isothermal Crystallization Kinetics of Microbial Poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) in Thin Films
Toan Van Nguyen, Nagata Toshiteru, Noso Kosei, Kaji Kenshiro, Masunaga Hiroyasu, Hoshino Taiki, Sakurai Shinichi, Sasaki Sono

Kentaro Taki, presiding

- 10:45 2J08 beta relaxation of polyfumarates and structural anisotropy
Yasuhito Suzuki, Koji Fukao, Akikazu Matsumoto
- 11:00 2J09 Elastic single crystal fibers consisting of an anthracene derivative for winding
Satoshi Watanabe, Keigo Ono, Shotaro Hayashi, Masashi Kunitake
- 11:15 2J10 Self-assembled prolate micro-spheroids of achiral π -conjugated polymer with chiral dopant
Sota Nakayama, Osamu Oki, Hiroshi Yamagishi, Yohei Yamamoto
- 11:30 2J11 Rheological and tensile properties of poly(methyl methacrylate) containing lithium halides
Asae Ito, Arisa Shin, Koh-hei Nitta

Hiroshi Jinnai, presiding

- 12:30 2J12 Aggregation States and Thermal Molecular Motion of Poly(methyl methacrylate) in Nanofiber Mats with Different Tacticity
Keigo Kawahara, Hisao Matsuno, Keiji Tanaka
- 12:45 2J13 Thermal Diffusivity of Shape-Anisotropic Polyimide Particles by Solid-State Polycondensation of Monomer Salt Single Crystals
Hiroki Fujisawa, Meguya Ryu, Daniel Alonso Cerron-Infantes, Miriam Unterlass, Shinji Ando, Junko Morikawa
- 13:00 2J14 Reactive all-atom molecular dynamics study on fracture process of semi-crystalline polyethylene
Shuichi Uehara, Yusuke Ootani, Chen Qian, Nobuki Ozawa, Momoji Kubo

Isamu Akiba, presiding

- 13:15 2J15 Study of PA6 thermal properties and natural degradation using low-frequency spectroscopy method
Jiacheng Gao
- 13:30 2J16 Kinetic Pathway of Order-Order Transition in Diblock Copolymer by Time-resolved 3D Electron Microscopy
Wang Hsiaofang, Jinnai Hiroshi
- 13:45 2J17 DNP SANS study of water distribution in hair fiber microstructure at swollen state
Yohei Noda, Satoshi Koizumi, Tomoki Maeda, Takumi Inada, Mitsuki Tanaka, Aya Ishihara, Hiroyuki Inoue

Seiichi Kawahara, presiding

- 14:30 2J20 Solution Properties of Monodisperse Cross-linked Poly (acrylic acid) Particles Made by Radical Precipitation Polymerization
Kazuo Sakurai, Ryohei Ono, Shota Fujii
- 14:45 2J21 Microphase separation induced by the segregation of side chains in styrene-acrylic-acid alternating copolymers
Kazuo Sakurai, Takuma Kanamaru, Yuka Kitajima, Shota Fujii, Isamu Akiba
- Yohei Noda, presiding**
- 15:00 2J22 Electro-Rheological Responses and Electrical Current Behavior of Suspensions based on Titanium Dioxide Nano-Particles
Katsufumi Tanaka, Takumi Uchikoshi, Yuki Maenaka, Midori Takasaki, Haruki Kobayashi
- 15:15 2J23 A molecular dynamics study to investigate the structure-property relationship of polyethylene under shear
Mohammed Althaf Hussain, Takashi Yamamoto, Shigeru Yao
- 15:30 2J24 Preparation and characterization of vulcanized natural rubber with high stereoregularity
Masaki Yamano, Yoshimasa Yamamoto, Seiichi Kawahara

Fri. May 27

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

Kazue Kurihara, presiding

- 9:30 3J03 Sum Frequency Generation Imaging for Semi-Crystalline Polymer Films
Tatsuki Abe, Hironao Shimada, Taiki Hoshino, Daisuke Kawaguchi, Keiji Tanaka
- 9:45 3J04 Orientational Reorganization of Poly(methyl methacrylate) Chains at a Solid Interface
Daisuke Kawaguchi, Kazuki Sasahara, Manabu Inutsuka, Satoru Yamamoto, Keiji Tanaka
- 10:00 3J05 Swelling Behaviors of Poly(2-hydroxyethyl methacrylate) Adsorbed Layers in Underwater Environments
Kento Kawabata, Norifumi Yamada, Hisao Matsuno, Keiji Tanaka

Yoshimitsu Itoh, presiding

- 10:15 3J06 An Effect of Humidity on Thermal Molecular Motion of Isolated Poly(tert-butyl methacrylate) Chains on Substrates
Masayuki KAWANO, Yuma MORIMITSU, Yukari ODA, Daisuke KAWAGUCHI, Keiji TANAKA
- 10:30 3J07 Lubricity of Hyperbranched Polymers in Base Oil Studied by Resonance Shear Measurement
Yutaka TAKAHASHI, Masashi MIZUKAMI, Yuzhong HE, Masatoshi TOSAKA, Shigeru YAMAGO, Kazue KURIHARA
- 10:45 3J08 Aggregation of Double Hydrophilic Poly(2-ethyl-2-oxazoline)/Polycarboxybetaine Diblock Copolymers in Aqueous Environments
Yuji Higaki, Takumi Masuda, Mai Nakamura, Naoki Kuraoka, Masaya Takahashi

Daisuke Kawaguchi, presiding

- 11:00 3J09 Non-close-packed arrangement of particles on solid substrates

formed by drying dispersions
Yuma Sasaki, Seina Hiroshige, Masaya Takizawa, Yuichiro Nishizawa, Takayuki Uchihashi, Haruka Minato, Daisuke Suzuki

11:15 3J10 Novel Synthetic Method for Free-Standing Reticular Polymeric Nanomembranes under Unique Electrochemical Conditions
Yoshimitsu ITOH, Tengfei FU, Pier-Luc CHAMPAGNE, Takuzo AIDA

11:30 3J11 Hysteresis on assembly/disassembly of gold nanodiscs coated with thermoresponsive molecules
Joshua Chidiebere MBA, Hideyuki Mitomo, Yusuke Yonamine, Kuniharu Ijiro

Yuichi Masubuchi, presiding

12:30 3J12 Kinetics of Curing Reaction for Compounds with Different Number Densities of Epoxide Groups
Satoru Yamamoto, Keiji Tanaka

12:45 3J13 Cross-Linking Effect on Time-Temperature Scaling of Epoxy Resins
Atsuomi Shundo, Mika Aoki, Satoru Yamamoto, Keiji Tanaka

13:00 3J14 Influence of Monomer Symmetry on Higher-Order Structure and Thermal Conductivity of Cured Epoxy Resins
Rika Marui, Yuta Nabae, Teruaki Hayakawa

13:15 3J15 Mechanochromism and mechanical performance of polyurethanes with mechanoresponsive molecular frameworks
Yuto Kubota, Yuchen Mao, Akira Ishigami, Yutaka Kobayashi, Hiroshi Ito, Takuma Watabe, Daisuke Aoki, Hideyuki Otsuka

Naoko Yoshie, presiding

13:30 3J16 Effect of Bentonite on Gelation of Acrylamide
Yuya Doi, Haruka Kizu, Takumitsu Kida, Takashi Uneyama, Yuichi Masubuchi

13:45 3J17 Marked Sensitivity of Ultimate Elongation to Loading Axiality in Polyrotaxane Gels with Largely Slidable Cross-Links
Takuma Aoyama, Kazuaki Kato, Kenji Urayama

Daisuke Aoki, presiding

14:15 3J19 Structural design of core-shell hydrogel microspheres
Yuichiro Nishizawa, Daisuke Suzuki

14:30 3J20 Synthesis and characterization of tough multiphase elastomer with metal-ligand coordination
Xiangyuan Guo, Shintaro Nakagawa, Naoko Yoshie

Room K

Wed. May 25

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS “English Session”

Shinji Ando, presiding

10:00 1K05 Control of Helical Nanostructures of Chiral-Nematic Liquid Crystals in Super-Monodispersed Polymeric Particles

Tomoki Shigeyama, Kyohei Hisano, Osamu Tsutsumi

- 10:15 1K06 Study for molecular simulation of polymer chain aggregation and spread for photoalignment of fluorine-containing polyimide
Hitoshi Sugiyama, Shuichi Sato, Kazukiyo Nagai
- 10:30 1K07 Fabrication and polarized waveguiding analysis of terpolymer-based optical fiber doped with phthalocyanine derivatives.
Shintaro Haruyama, Takahiro Shigeyama, Rei Furukawa, Hayato Yamazaki
- 10:45 1K08 Analysis of the effect of copolymer in Zero-Birefringence polymer optical fiber on steady-state speed
Kimiteru Yamauchi, Rei Furukawa, Shingo Sode, Hayato Yamazaki

Rei Furukawa, presiding

- 11:00 1K09 Analysis of Prolonged Irradiation-induced Delayed Luminescence of Imide Compounds Dispersed in Polymer Matrices
Marina Doi, Mayuko Nara, Ryohei Ishige, Shinji Ando
- 11:15 1K10 Photophysical Analysis of Phosphorescence Enhancement of Bromine-Containing Phosphorescent Polyimides under High Pressure
Ryuichi Isoda, Koichiro Muto, Marina Doi, Ryohei Ishige, Shinji Ando
- 11:30 1K11 Construction of insulating layer with mechanical stability on the surface of nickel-plated core particles
Tomonao Naruhashi, Tatsuo Taniguchi, Takashi Karatsu

Kenji Miyatake, presiding

- 12:30 1K12 Nanoscale Mapping of Local Photocurrent of Ternary Blend Polymer Solar Cells by Photoconductive Atomic Force Microscopy
Chitlada MANI-LATA, Toshiki KAWANISHI, Yongyoon CHO, Manish PANDEY, Masakazu NAKAMURA, Hiroaki BENTEN
- 12:45 1K13 Correlation between Backbone Linkage Pattern and Photovoltaic Property in Thiazole-Based π -Conjugated Polymers
Yoshikazu Teshima, Masahiko Saito, Tsubasa Mikie, Itaru Osaka
- 13:00 1K14 Introduction of Rigid π -Planar Cations into Polymer Side Chains by Click Chemistry and Their Anion Conductivity
Yuki Motoishi, Naoki Tanaka, Tsuyohiko Fujigaya
- 13:15 1K15 Preparation and Characterization of Solid Electrolytes Using Ion-Gels for Na-ion Batteries (I) -Effect of PVdF-HFP Composition on Various Properties-
Masaya Sato, Rei Takahashi, Yuko Takeoka, Masahiro Rikukawa, Masahiro Yoshizawa-Fujita

Yuko Takeoka, presiding

- 13:30 1K16 Experimental and Theoretical Analysis on the Effect of Ether Sidechain on Electrochemical Properties for Polyether-Based Electrolytes with Cyano Groups
Kyoko Watanabe, Shintaro Saku, Namie Ikeda, Soichiro Yamanaka, Ryansu Sai, Yu Katayama, Kenta Fujii, Hiromori Tsutsumi
- 13:45 1K17 Acid Grafted Polybenzimidazole/ Sulfonated Silica Composite Membranes for Polyelectrolyte Membrane Application
Hiroto Miura, Yuki Motoishi, Tsuyohiko Fujigaya
- 14:15 1K19 Platinum nanoparticle/ carbon nanotube composite film using a thiol-functionalized polymer for hydrogen production by water electrolysis
Osama Ramadan Mohamed Metawea, Miyuki Nara, Takeharu

Murakami, Satoshi Wada, Katsushi Fujii, Yoshihiro Ito, Masuki Kawamoto

- 14:30 1K20 ePTFE reinforced, sulfonated polyphenylene membranes for durable PEMFCs
Zhi Long, Kenji Miyatake
- Yoshiko Miura, presiding**
- 14:45 1K21 Crosslinked Centrifugally Spun Polyimide Fibers for Oil Removal Application
Masaki Negoro, Kenji Kinashi, Wataru Sakai
- 15:00 1K22 Development of Elution-Order Switchable Chiral Stationary Phases Based on Helical Polyacetylene Brushes
Tatsuya Nishimura, Misaki Yoshida, Daisuke Hirose, Tsuyoshi Taniguchi, Katsuhiko Maeda
- 15:15 1K23 Selectable Oil-Water Separation Membrane using a Self-organized Honeycomb Film
Bihai CHEN, Takehiko WADA, Hiroshi YABU
- 15:30 1K24 Metal-Organic Frameworks for Structure Recognition and Separation of Polymers
Nobuhiko Hosono, Takashi Uemura

Takashi Uemura, presiding

- 16:00 1K26 Evaluation of the interaction between carbon dioxide and Poly (ether-block-amide) block copolymer
Sinan FENG, Ryosuke MATSUNO, Nutthon YOKACHUKSUSE, Atsushi TAKAHARA
- 16:15 1K27 A multifunctional diblock oligomer with a completely uniform steric structure that recognizes peptides.
Shota Iseri, Sotaro Akashi, Yusuke Sito, Hinako Iwamoto, Masanori Nagao, Yu Hoshino, Yoshiko Miura
- 16:30 1K28 Continuous flow synthesis process with polymer immobilized organo catalyst of polymer monolith
Yoshiko Miura, Seiya Nonaka, Matsumoto Hikaru, Tomoki Imoto, Masanori Nagao, Yu Hoshino
- 16:45 1K29 Synthesis of polymer microsphere-immobilized MacMillan catalyst and its application to asymmetric Diels-Alder reaction in continuous flow system
Md Azgar Ali, Joh Yamada, Naoki Haraguchi

Thu. May 26

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS “English Session”

Takeshi Serizawa, presiding

- 9:30 2K03 Gas Sorption Property in Low-elastic PDMS Rubber Powder at Low Temperature
Mizuki Inoue, Edhuan Ismail, Sadaki Samitsu, Hirofumi Kanoh, Izumi Ichinose
- 9:45 2K04 Evaluation of mechanical property of functional films based on sulfobetaine-modified poly(buthylene succinate)
Nalinthip CHANTHASET, Utana NARUKAWA, Hiroharu AJIRO
- 10:00 2K05 Fabrication of polythiophene elastomer with cyclic siloxane as cross-linking points

Takuya Matsumoto, Masaki Kashimoto, Atsunori Mori, Takashi Nishino

- 10:15 2K06 A Simple and Versatile Method for Designing Tough Hydrogels Using Entanglement of Polymer Chains
Takashi Miyata, Chika Hajime, Yuino Inamoto, Chisa Norioka, Akifumi Kawamura

Takashi Miyata, presiding

- 10:30 2K07 Influence of Polyglycerol Addition on Physical Properties of Poly(vinyl alcohol) Hydrogels
Ayano Yamamoto, Tooru Ooya
- 10:45 2K08 Making polymer gels viscostic: Reactivity of crosslinker in radical copolymerization affects viscoelasticity and adhesiveness
Tsukuru Masuda, Yui Saegusa, Toshikazu Tsuji, Madoka Takai
- 11:00 2K09 Development of highly viscose zwitterionic hydrogels toward biocompatible adhesive materials
Yui Saegusa, Tsukuru Masuda, Toshikazu Tsuji, Madoka Takai
- 11:15 2K10 Emergent Synchronous Oscillation Behavior in Hierarchically Structured Self-oscillating Gel Cluster
WON SEOK LEE, Takafumi Enomoto, Mizutani Aya Akimoto, Ryo Yoshida
- 11:30 2K11 Preparation of Cellulose Oligomer-Based Robust Composite Hydrogels via In Vitro Enzymatic Synthesis
Yuta Sakurai, Toshiki Sawada, Takeshi Serizawa

Shusaku Nagano, presiding

- 12:30 2K12 Dissipative Self-assembly of Stimuli-responsive Polymers Driven by Redox Catalysis
Takafumi Enomoto, Aya M. Akimoto, Ryo Yoshida
- 12:45 2K13 Propagating wave by billions of nanosheets for mass transport
Koki Sano, Yasuhiro Ishida
- 13:00 2K14 Synthesis of asymmetrically substituted graphene nanoribbons as a functional material
Patel Karan, Shunpei Nobusue, Takahiro Kojima, Hiroshi Sakaguchi
- 13:15 2K15 Synthesis of thermoplastic poly(2-methoxyethyl acrylate)-based polyurethane
Tomoki Maeda, Shunsuke Tazawa, Atsushi Hotta

Junko Morikawa, presiding

- 13:30 2K16ILI Hypersonic phonon propagation in architected soft matter
Yu Cang, George Fytas

Yasuhiro Ishida, presiding

- 14:15 2K19 Effects of photo-isomerisable side groups on phase and mechanical properties of main-chain nematic elastomers
Takuya Ohzono, Emiko Koyama
- 14:30 2K20 Reversible Thermal- and Photo- Mechanical Effects of Main Chain Liquid Crystalline Polymers Containing an Azobenzene Moieties
Ryoma Amanuma, Ayumi Kobayashi, Kohei Iritani, Takashi Yamashita
- 14:45 2K21 Photoalignment of polymer thin film forming smectic liquid crystalline lamella structure and proton conductive anisotropy
Kazuya Hirata, Fangfang Wang, Yuki Nagao, Kota Suetsugu, Shusaku Nagano

- 15:00 2K22 Removal of Viruses from Their Cocktail Solutions by Ionic Liquid-Crystalline Water-Treatment Membranes
Takeshi Sakamoto, Daniel Kuo, Shotaro Torii, Miaomiao Liu, Hiroyuki Katayama, Takashi Kato
- 15:15 2K23 Development of ionic liquid-crystalline polymer membrane actuators
Che-Hao Wu, Masafumi Yoshio

Fri. May 27

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS “English Session”

Shin-ichi Yusa, presiding

- 9:30 3K03 Effect of End Groups on Axle polymer Folding in Pseudo-polyrotaxane Nanosheet
Haruki Kazumi, Shuntaro Uenuma, Hideaki Yokoyama, Kohzo Ito
- 9:45 3K04 Synthesis and function of catechol modified pseudo-polyrotaxane nanosheets
Junshin Takeda, Shuntaro Uenuma, Hideaki Yokoyama, Kohzo Ito
- 10:00 3K05 Luminescence Properties of Cyclosiloxane-AIE Molecular Assemblies
Manmian Chen, Huie Zhu, Masaya Mitsuishi
- 10:15 3K06 Construction and Biosensing Application of Cellulose Assemblies with Surface Oligo(ethylene glycol) Chains
Kai Sugiura, Toshiki Sawada, Hiroshi Tanaka, Takeshi Serizawa
- 10:30 3K07 Fabrication of poly(ether ketone) nanofibers by solution electrospinning
Tomoyuki Nomura, Tomoki Maeda, Atsushi Hotta

Masaya Mitsuishi, presiding

- 10:45 3K08 Preparation and Characterization of Biocompatible Polyion Complex (PIC) Micelles with Random Copolymers containing Pendant Sulfonate and Quaternary Amino Groups
Shukanta Bhowmik, Shin-ichi Yusa
- 11:00 3K09 Synthesis of Strongly Segregating PS-b-PMMA Derivatives by Precision Polymerization and Post-functionalization and the Structural Control in the Thin Films
Shinsuke Maekawa, Lei Dong, Takehiro Seshimo, Takahiro Dazai, Kazufumi Sato, Yuta Nabae, Teruaki Hayakawa
- 11:15 3K10ILI Functional Fibers for Environmental Solutions
Varol Intasanta

Hiroshi Eguchi, presiding

- 12:30 3K12 Dispersion Characteristics of Polypropylene/Organo-Modified Single-Walled Carbon Nanotube Composites with a Long-Chain Phosphonic Acid Added as the Third Dispersant Component and Their Drawn Orientation
Almarasy Ahmed, Harada Ko, Kai Xu, Astuhiro Fujimori
- 12:45 3K13 Visualization and Quantification of Accumulated Tensile Stresses by Composites of Layered Polydiacetylene and Polyurethane
Yuki Mochizuki, Hiroaki Imai, Yuya Oaki
- 13:00 3K14 Visualization and quantification of three-dimensional compression-stress distribution by integration of layered

polydiacetylene and dry liquid
Nahoko Ono, Hiroaki Imai, Syuji Fujii, Yuya Oaki

Yuya Oaki, presiding

- 13:15 3K15 Synthesis and Characterization of Cyclosiloxane Polymer Networks
HUIE ZHU, YUHI WATANABE, MASAYA MITSUISHI
- 13:30 3K16 Preparation of Plasma Modified Carbon Nanotubes Reinforced Polyimide Nanocomposites
Seira Morimune-Moriya, Yuki Iwamura, Daisuke Ogawa, Keiji Nakamura
- 13:45 3K17 Thermal, Electrical, and Tribological Properties of Cellulose Nanofiber/Graphite/Epoxy Composite Materials
Hiroshi Eguchi, Yukiya Koyama, Kenji Nagata

Keiji Tanaka, presiding

- 14:15 3K19 Preparation of Linear and Cyclic Poly(2-methoxyethyl acrylate)-grafted Substrates with Slightly Difference of Hydration States and Evaluation of Cell Adhesion Behavior onto These Surfaces
Shinnosuke Nishimura, Shohei Shiimoto, Tomoya Ueda, Daiki Murakami, Masaru Tanaka
- 14:30 3K20 Analysis of Hydration Behavior for Linear and Cyclic Poly(2-methoxyethyl acrylate) Monolayers by Frequency Modulation Atomic Force Microscopy
Shohei Shiimoto, Shin-nosuke Nishimura, Tomoya Ueda, Daiki Murakami, Masaru Tanaka
- 14:45 3K21 Formation of Insulating Coating by an Electrodeposition Technique Using Soluble Polyimide Having Methacrylate Groups
Yasuhiro Funayama, Ayumi Kobayashi, Rumana Nozawa, Nagisa Ito, Kohei Iritani, Daisuke Misho, Hideyuki Kikuchi, Thi Thi Nge, Tatsuhiko Yamada, Takashi Yamashita

Masaru Tanaka, presiding

- 15:00 3K22 Design of amphiphilic bottlebrush copolymers as a surface modifier for anti-biofouling
Masayasu Totani, Junko Katayama, Masaaki Ozawa, Nobutomo Tsuruzoe, Hisao Matsuno, Keiji Tanaka
- 15:15 3K23 Regulation of Cellular Behaviors on Thin Polymer Films Based on Subsurface Mechanical Response
Hisao Matsuno, Kento Kawabata, Masayasu Totani, Keiji Tanaka
- 15:30 3K24 Characterization of surface potential and fixed aqueous layer of well-defined cationic polymer brush
Tsukuru Masuda, Yoichi Watanabe, Madoka Takai

Room L

Wed. May 25

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

Takashi Kitao, presiding

- 12:30 1L12ILI Construction and Self-recovery of Supramolecular Chirality in an Absolute Achiral Polymer System

Wei Zhang, Tengfei Miao

- 13:00 1L14 Control of Higher-Order Structures of Diblock Copolymers by Modification of Side Chain Functional Groups
Kodai Nagashima, Yuta Nabaе, Teruaku Hayakawa

Yuta Nabaе, presiding

- 13:15 1L15 Fabrication of ultrathin polyacrylonitrile nanosheet using metal-organic framework
Xiyuan Zhang, Saito Ami, Takashi Kitao, Takashi Uemura
- 13:30 1L16 Synthesis of a Polycyclic Polymer Possessing Dense 1,2,3-Triazole Backbone and Its Interaction with Palladium Dichloride
Linlin XU, Yuri KAMON, Masaki NAKAHATA, Akihito HASHIDZUME
- 13:45 1L17 Synergistic dual transition metal catalysis for the synthesis of semiconducting polymers
Christine Keiko Luscombe, Liwen Xing
- 14:15 1L19 Improved Degradability of Poly(Lactic Acid) by Introducing Thionoester Linkage
Tomohiro Kubo, Kotaro Satoh

Tomohiro Kubo, presiding

- 14:30 1L20 Substituents effect on self-alternating polymerization behavior of 1-(4-vinylphenyl)-1-phenylethylene derivatives
Hamin Kim, Raita Goseki, Takashi Ishizone
- 14:45 1L21 Ring-opening copolymerization of a cyclic carbonate monomer having ortho-nitrobenzyl moiety and photo-degradability of the copolymers
Jiade WU, Masatoshi TOSAKA, Shigeru YAMAGO
- 15:00 1L22 Accessing Divergent Main-Chain-Functionalized Polyethylenes via Copolymerization of Ethylene with a CO₂/Butadiene-derived Lactone
Shang Tang, Yajun Zhao, Kyoko Nozaki
- 15:15 1L23 Synthesis of ABA-type Block Copolymers by Combination of Acyclic Diene Metathesis (ADMET) polymerization with Ring-Opening Polymerization (ROP)
Kotohiro NOMURA, Mohamed Mehawed Abdellatif

Kotohiro Nomura, presiding

- 15:30 1L24 Pore engineering of magnesium ethoxide-based Ziegler-Natta catalyst through modulator approach
Patchanee Chammingkwan, Le Thi Tuyet Mai, Minoru Terano, Toshiaki Taniike
- 16:00 1L26 Synthesis of Novel Functional Bio-Based Polystyrenes by Precision Polymerization of Ester-Protected Vinyl Catechols
Shiho Tanizaki, Tomohiro Kubo, Kotaro Satoh
- 16:15 1L27 Novel main-chain degradable vinyl polymers using trigger-responsive comonomers
Sota Yamamoto, Tomohiro Kubo, Kotaro Satoh

Thu. May 26

D. BIOPOLYMERS AND BIORELATED POLYMERS “English Session”

Takeshi Mori, presiding

- 9:30 2L03 Study of solvent effects on peptide assembly to understand the behavior of biological water
Avanashiappan Nandakumar, Yoshihiro Ito, Motoki Ueda
- 9:45 2L04 The hierarchic structure of catch-thread spider silk enables the pinning of water droplets
Taro Echizen, Olaf Karthaus
- 10:00 2L05 Rational design of PS-mimetic polymers and their anti-inflammatory effect.
Shunsuke Matsumoto, Akari Tasaki, Yihua Liu, Mitsuhiro Ebara
- 10:15 2L06ILI Efficacy of Antioxidant Nanoparticles against Acute Radiation Syndromes (ARS) in Mice Model
Chitho P. Feliciano, Yukio Nagasaki
- Eiji Yuba, presiding**
- 10:45 2L08 Development of smart nanofiber mesh combined with hyperthermia and chemotherapy for the treatment of glioblastoma
Emiho Oe, Mitsuhiro Ebara, Yoshitaka Matsumoto
- 11:00 2L09 Preparation of Nylon-4-based nanoparticles and applications in the treatment of depression disease
Duc Tri Bui, Yukio Nagasaki
- 11:15 2L10ILI Nanocomplex-mediated in vivo CAR-M1 macrophage therapy for solid tumors
Hee Ho Park
- Sachiro Kakinoki, presiding**
- 12:30 2L12 Design of nanofiber meshes for the removal of excess electrolyte from kidney failure patient
Kaho Takahashi, Motohiro Ebara
- 12:45 2L13 Temperature Responsive Smart Polymer for Enabling Affinity Enrichment of Current Coronavirus (SARS-CoV-2) to Improve its Diagnostic Sensitivity
Ahmed Nabil, Mitsuhiro Ebara
- 13:00 2L14 Reactive Oxygen Species Mediates the Mechanically-Induce Senescence of Breast Cancer Multicellular Aggregates on the Polymer Melt
Mazaya Najmina, Koichiro Uto, Mitsuhiro Ebara
- Mitsuhiro Ebara, presiding**
- 13:15 2L15 Preparation of folic acid-functionalized composite scaffolds of gelatin and gold nanoparticles
Huajian Chen, Xiuhui Wang, Naoki Kawazoe, Guoping Chen
- 13:30 2L16 Investigation of the effect of viscosity on osteogenic differentiation of mesenchymal stem cells on micropatterned surfaces
Jing Zheng, Yongtao Wang, Naoki Kawazoe, Guoping Chen
- 13:45 2L17 Evaluation of physical and functional properties of chitosan-based films incorporating curcumin nanoemulsion
Fakfan Luangapai, Methavee Peanparkdee, Satoshi Iwamoto