

Room A

Wed. May 27

INVITED LECTURES

T. Miyata, presiding

10:15 1A06IL Development of enzyme-loaded PICsomes and its application
Akihiro Kishimura

Y. Miura, presiding

11:00 1A09IL Novel monomer and polymer structure design for various biodegradable polymer materials
Hiroharu Ajiro

Y. Higaki, presiding

12:30 1A12IL Molecular Assembly of Polymers with Well-Controlled Structure
Shin-ichi Yusa

M. Takenaka, presiding

13:15 1A15IL Structure and Properties of Polyrotaxane Glass
Kazuaki Kato

T. Inoue, presiding

14:00 1A18IL Simulations of Entangled Polymer Dynamics
Yuichi Masubuchi

AWARD LECTURES

H. Jinnai, presiding

14:45 1A21AL Phase and micro-phase separation in vitrimers
Ludwik Leibler, Ralm Ricarte, François Tournilhac, Michel Cloître

T. Satoh, presiding

15:30 1A24AL Self-assembly of Carbohydrate-based Block Copolymer Systems
Redouane Borsali

INVITED LECTURES

T. Sakai, presiding

16:15 1A27IL Friction of Polymer Gel
Takayuki Kurokawa

Thu. May 28

INVITED LECTURES

S. Fujii, presiding

9:30 2A03IL In-situ Formation/Functionalization of Polymer Coatings: Material Design &

Processing
Takeo Suga

T. Kato, presiding

- 10:15 2A06IL An overview of optical film for the flexible display including foldable mobile phone
Yang Kook Kim

K. Sakurai, presiding

- 11:00 2A09IL Metallically Conductive Alginate Fiber by Simply Modified Wet-Spinning Process
Tae Ho Lee,Jun Young Lee

AWARD LECTURES

M. Yoshida, presiding

- 12:30 2A12AL Development of Multiple Controlled Radical Polymerization
Masami Kamigaito

H. Jinnai, presiding

- 13:15 2A15AL Design and Applications of Polymer Membranes and Gels Based on Molecular Interactions
Takashi Miyata

INVITED LECTURES

H. Otsuka, presiding

- 14:00 2A18IL Crystal Crosslinking as the 3D Polymerization of Monomers Arranged on 3D Lattice
Kazuki Sada

A. Takahara, presiding

- 14:45 2A21IL Design of intelligent dendrimer-based nanoplatfoms for gene delivery and cancer theranostics
Xiangyang Shi

K. Tanaka, presiding

- 15:30 2A24IL Polymers for Impact Mitigation: New Measurements Provide Insights into an Old Problem
Christopher L. Soles

Fri. May 29

INVITED LECTURES

T. Yasuda, presiding

- 9:30 3A03IL Progress in semiconducting polymers: controlled, green, and stretchable polymer syntheses
Tomoya Higashihara

AWARD LECTURES

J. Ohshita, presiding

- 10:15 3A06AL Functions of Rigid Dendrimers and Their Applications
Kimihisa Yamamoto

H. Ihara, presiding

- 11:00 3A09AL Creation of functional softmaterials based on self-oscillating polymer gels
Ryo Yoshida

A. Kakugo, presiding

- 12:30 3A12AL Precision Synthesis of Molecular Assemblies through Living Supramolecular Polymerization
Kazunori Sugiyasu

T. Maruyama, presiding

- 13:15 3A15AL Experimental elucidation of structure-property relationship of polymer gels
Takamasa Sakai

INVITED LECTURES

H. Matsuno, presiding

- 14:00 3A18IL Precision Synthesis of Polysaccharides by Enzymatic Polymerization
Jun-ichi Kadokawa

Room B

Wed. May 27

POLYMERS TODAY AND BEYOND

T. Shiraki, presiding

- 10:15 1B06IL Modification of polymers by supramolecular networks and their practical application progress
Mikihiko Tsubouchi

- 11:00 1B09IL "Hyperfluorescence™" Materializes the Future of OLEDs
Junji Adachi

J. Fujimoto, presiding

- 12:30 1B12IL How do fossil-based plastics and bioplastics play in a Circular Economy
Nobuyuki Kawashima

- 13:15 1B15IL Commercialization of wood-plastic composite material (WPRC), the recycling-type wooden building material
Kouji Ishimoto

- 14:00 1B18IL Chemical Recycling, a key solution to realize our vision "Circulate everything"
Takao Masaki

S. Yao, presiding

- 14:45 1B21IL New trends in packaging for a circular-oriented society
Toshio Arita

- 15:30 1B24IL Development of plastic recycling technology and its social implementation to realize a circular economy
Youichiroh Ide, Kenji Ebara, Terumi Sakabe

16:15 1B27IL Kao's Environmental Approach to Plastic Containers and Packaging
Shinichi Inaba

Thu. May 28

POLYMERS TODAY AND BEYOND

H. Fujimura, presiding

9:30 2B03IL Practical Application of Materials Informatics to Polymer Development in
NIPPON SHOKUBAI
Keiya Migita, Yuki Matsuo

N. Watanabe, presiding

10:15 2B06IL Accelerating material development with informatics technologies
Hisaki Ikebata

S. Ogawa, presiding

11:00 2B09IL Descriptor for the higher order structures of polymeric materials
Hiroshi Morita

H. Murooka, presiding

12:30 2B12IL Research and Development of Asahi Kasei for Sustainability
Hiroshi Shirai

M. Yokota, presiding

13:15 2B15IL R&D Strategy of KUREHA CORPORATIN
Hiroyuki Sato

M. Nishimoto, presiding

14:00 2B18IL Open Innovation at TOYOBO
Yasuo Ohta

INVITED LECTURES

T. Kato, presiding

16:15 2B27IL Future society engendered by LIB
Akira Yoshino

Fri. May 29

POLYMERS TODAY AND BEYOND

H. Murakami, presiding

9:30 3B03IL A once-in-a-century revolution in automotive technologies
Yuichi Azuma

10:15 3B06IL Current Status and Future Trends of Carbon Fiber Composite Materials
Technology
Naoki Sugiura

11:00 3B09IL Adhesive for Dissimilar Materials Bonding
Masato Akimoto

H. Yano, presiding

12:30 3B12IL Photonics Polymer towards 8K, 5G Era

Yasuhiro Koike

13:15 3B15IL Development of Novel Aromatic Vinyl-based Curable Low Loss Materials for High Speed PWB
Masanao Kawabe

14:00 3B18IL Low Dielectric Loss Polyimides for 5G Telecommunication and Millimeter-wave Radar Applications
Masao Tomikawa

Room C

Wed. May 27

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

K. Yamabuki, presiding

10:00 1C05 Photo-induced dissociation of alpha-cyclodextrin-threaded polyrotaxane with reversibly cleavable dithioester stoppers
Yoshinori Arisaka, Nobuhiko Yui

10:15 1C06 Preparation and characterization of polyrotaxane with sulfur-styrene copolymer and methylated Acyclodextrins
Yuichiro Kobayashi, Akira Harada, Hiroyasu Yamaguchi

10:30 1C07 Investigation of Latex Film from Acrylate Microspheres Crosslinked with Rotaxane
Yuma Sasaki, Seina Hiroshige, Jun Sawada, Daisuke Aoki, Toshikazu Takata, Daisuke Suzuki

10:45 1C08 Property of rotaxane-crosslinked polymers synthesized using a cyclodextrin-based [3]rotaxane crosslinker
Yosuke Akae, Toshikazu Takata

T. Hirao, presiding

11:00 1C09 Synthesis of PMMA-based polyrotaxane via RAFT polymerization and gel preparation
YuCheng Wang, Rina Maeda, Gergely Kali, Gerhard Wenz, Koichi Mayumi, Hideaki Yokoyama, Kohzo Ito

11:15 1C10 Construction of Cyclotetrasiloxane Network Using Rotaxane-style Crosslink and Its Gelation Behavior
Atsuya YAMAMOTO, Kazuhiro YAMABUKI, Kenjiro ONIMURA

11:30 1C11 Molecular weight effect on the preparation of pseudo-polyrotaxane using PLA-PEG copolymer and stereocomplex formation
Jaeyeong Choi, Hiroharu AJIRO

T. Hirai, presiding

12:30 1C12 Synthesis and characterization of polyphenylene-based block copolymers having super strong acid groups (I) - Establishment of synthetic route and characterization -
Hirotaka Shinohara, Masahiro Rikukawa, Yuko Takeoka, Masahiro Fujita

12:45 1C13 Creation of Chemoselectively and Dually Functionalizable Diblock Copolymer
Kodai Nagashima, Yuta Nabaе, Teruaki Hayakawa

13:00 1C14 Synthesis of block copolymers having diphenylalanine moiety by RAFT polymerization and formation of ordered structures
Ryo YONENUMA, Hideharu MORI

- 13:15 1C15 Synthesis of Block Copolymers Containing One Molecule of Semifluoroalkanes at the Junction Point of Blocks and its Effect on Microphase Separation
Yoshihiro Agata, Yuta Nabae, Teruaki Hayakawa

M. Fujita, presiding

- 13:30 1C16 Synthesis of Oligosaccharide-Containing Monodisperse Block Co-Oligomers for Ultrafine Microphase-Separated Structures
Chaehun Lee, Ryoya Komaki, Takuya Isono, Takuya Yamamoto, Kenji Tajima, Toshifumi Satoh
- 13:45 1C17 Synthesis and Microphase Separation Behavior of Poly(vinylferrocene) Bearing Oligosaccharide Moieties at Chain End
Satoshi Katsuhara, Takuya Isono, Takuya Yamamoto, Kenji Tajima, Toshifumi Satoh
- 14:00 1C18 Synthesis of block copolymer assembly recognizing thermal history via polymerization-induced self-assembly
Yuto Tsutsui, Shinji Sugihra, Yasushi Maeda, Hideyuki Uematsu
- 14:15 1C19 Amphiphilic Random Copolymer Micelles: Design Criteria for Self-Sorting or Co-Self-Assembly
Takaya Terashima, Kei Tanaka

K. Naka, presiding

- 14:30 1C20 Amphiphilic Polymer Micelles: Dynamic Self-Assembly Controlled by Primary Structure
Masayuki Hibino, Kei Tanaka, Makoto Ouchi, Takaya Terashima
- 14:45 1C21 Self-Sorting Micelles of Amphiphilic Homopolymers: Morphology Transition Driven by Dense Crystalline Pendants
Takaya Terashima, Yoshihiko Kimura
- 15:00 1C22 Preparation of polymer particles using a living anionic polymerization-induced self-assembly
Toshiki Terao, Teruaki Hayakawa, Syuji Fujii, Yoshinobu Nakamura, Tomoyasu Hirai
- 15:15 1C23 Controlling of stereoregularity in polyhedral oligomeric silsesquioxane(POSS)-functionalized polymethacrylate using a living anionic polymerization and evaluation of its molecular aggregation state.
Kei Manabe, Syujii Fujii, Yoshinobu Nakamura, Teruaki Hayakawa, Tomoyasu Hirai

Y. Arisaka, presiding

- 15:30 1C24 Synthesis of polymers and cyclic compounds utilizing a side-opening cage silsesquioxane
Yuri Sato, Hiroaki Imoto, Kensuke Naka
- 15:45 1C25 Precise synthesis of polyhedral oligomeric silsesquioxane(POSS)-containing polymer with well-controlled stereoregularity and evaluation of its molecular aggregation state
satosi kuretani, Tsai Sung-yu, Wang Chien-Lung, Teruaki Hayakawa, Syuji Hujii, Yoshinobu Nakamura, Tomoyasu Hirai
- 16:00 1C26 Separation and functionalization of nanographenes produced by oxidative cleavage
Ikuya Matsumoto, Kairi Yamato, Ryo Sekiya, Takeharu Haino
- 16:15 1C27 Controlled Synthesis of mix-edge Graphene Nanoribbons in nanochannels of Metal Organic Frameworks
Kazuki Nakata, Takashi Kitao, Takashi Uemura

Thu. May 28

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

H. Guo, presiding

- 9:30 2C03 Synthesis of Boron-fused Azomethine Polymers with Solid-state Emission and Evaluation of Alkyl Chain Length Dependence
Natsumi Yamada, Shunsuke Ohtani, Masayuki Gon, Kazuo Tanaka
- 9:45 2C04 Molecular Sensing Using Thiourea-modified Polythiophenes
Tomoaki Tsuchiya, Gaku Fukuhara
- 10:00 2C05 Synthesis and Properties of Anthrabisthiadiazole-Based Wide-Bandgap Semiconducting Polymers
Yukiya Minagawa, Hiroki Mori, Yasushi Nishihara

G. Fukuhara, presiding

- 10:15 2C06 Synthesis and evaluation of electron transfer of structure-controlled A,B-block type amphiphilic macromolecular wire
Haoxuan Guo, Hiroyuki Aota
- 10:30 2C07 Side-chain liquid crystalline polymer having BTBT mesogens
Naohiro Yamaguchi, Sadayuki Asaoka
- 10:45 2C08 Evaluation of solid-state synthesis using ONO-type ligand and development of functional materials
Taichi Kato, Masayuki Gon, Kazuo Tanaka

S. Ito, presiding

- 11:00 2C09 Design and synthesis of polymers containing selective cleavable points: Synthesis of block, graft, and star-shaped polymers using acetal-containing precursor polymers and the acid hydrolysis behavior
Sae Taniguchi, Arihiro Kanazawa, Sadahito Aoshima
- 11:15 2C10 Synthesis of diazacyclooctane-containing ladder polymers with various functional groups on the nitrogen atoms
Keiki Inoue, Fumitaka Ishiwari, Takanori Fukushima
- 11:30 2C11 Synthesis and properties of polyurethanes having oxazolidone structure
Yoshiaki Yoshida, Takeshi Endo

H. Murakami, presiding

- 12:30 2C12ILY Development of Near-Infrared Emissive Conjugated Polymers Based on Hypervalent Tin Complexes
Masayuki Gon, Kazuo Tanaka, Yoshiki Chujo
- 13:00 2C14 Functionalization for Conjugated Polymers by Hybridization with POSS
Satoru Saotome, Masayuki Gon, Kazuo Tanaka
- 13:15 2C15 Synthesis and Evaluation of Regioregular Boron-fused Azomethine Polymers
Shunsuke Ohtani, Masayuki Gon, Kazuo Tanaka

T. Kitao, presiding

- 13:30 2C16 Conjugated Polymeric Ligands Synthesized through Polycondensation of Malondialdehyde Derivatives and Aromatic Diamines Based on Boron Diiminate Complexes
Yuki SAKAI, Shunichiro ITO, Kazuo TANAKA
- 13:45 2C17 Highly Efficient Anodic Chlorination of π -conjugated Polymer Films with the Use of $AlCl_3$ as both a Lewis Acid and a Chlorine Source
Tomoyuki Kurioka, Naoki Shida, Hiroki Nishiyama, Ikuyoshi Tomita, Shinsuke Inagi
- 14:00 2C18 Quantitative arylthiolation of a perfluoroarene-containing π -conjugated polymer based on nucleophilic aromatic substitution reaction
Naoki Shida, Kazuyuki Ninomiya, Takanobu Nishikawa, Hiroki Nishiyama, Ikuyoshi Tomita, Shinsuke Inagi

14:15 2C19 Chiral Sensing Based on Aggregate Formation of Poly(biphenylacetylene) Derivatives
Mayu FUKUDA, Daisuke HIROSE, Tsuyoshi TANIGUCHI, Tatsuya NISHIMURA, Eiji YASHIMA, Kastuhiro MAEDA

T. Ikai, presiding

14:30 2C20 Synthesis and Optical Properties of Boron Complexes Based on Pyrazine toward Highly Efficient Near-Infrared Fluorescence
Hiromasa TAKAHASHI, Hiroyuki WATANABE, Kazuo TANAKA

14:45 2C21 Synthesis and Photoluminescence Properties of Near-infrared Light-emitting Polymers Using Tin-fused Azobenzene Complexes
Kazuuya Tanimura, Misao Yaegashi, Masayuki Gon, Kazuo Tanaka

15:00 2C22 Synthesis and Optical Property of Conjugated Compound Based on Formazan
Yoshinori ITO, Shunichiro ITO, Kazuo TANAKA

15:15 2C23 Synthesis and Optical Properties of Fused Bisboron Complexes Having Expanded Conjugated Systems through Azo Groups
Masashi Nakamura, Masayuki Gon, Kazuo Tanaka

T. Taniguchi, presiding

15:30 2C24 Chiral Separation Using Poly(biphenylacetylene) derivatives with helicity memory capability
Nozomu Suzuki, Tomoyuki Kurake, Tomoyuki Ikai, Katsuhiro Maeda, Eiji Yashima

15:45 2C25 Helicity Control of Poly(biphenylacetylene) Derivatives Bearing Optically Active Polyethylene Glycol Pendants
Tomoyuki Ikai, Kosuke Mizumoto, Riho Ikeda, Ryoma Ishidate, Katsuhiro Maeda, Eiji Yashima

16:00 2C26 Transcription of Chirality from Metal-Organic Framework to Conjugated Materials
Takashi Kitao, Yusuke Nada, Yujiro Nagasaka, Takashi Uemura

Fri. May 29

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

M. Jikei, presiding

9:30 3C03 Synthesis of a spiro-biscarbonate and its ring-opening polyaddition with diamines
Naoki Ousaka, Takeshi Endo

9:45 3C04 Synthesis of Polyurea Type Microcapsules Containing Leuco Dyes by Interfacial Polymerization
Takemi Yokoyama, Kazuhiro Yamabuki, Kenjiro Onimura

10:00 3C05 Chemoenzymatic synthesis, thermal and biological properties of nylon-containing polypeptides
Kayo Terada, Prashant G Gudeangadi, Ayaka Tateishi, Kousuke Tsuchiya, Keiji Numata

N. Ousaka, presiding

10:15 3C06 Synthesis and characterization of polypeptides containing zwitterion structures similar to cellulose-dissolving ionic liquids
Kousuke Tsuchiya, Keiji Numata

10:30 3C07 Preparation of polyimines by oxidative polymerization using ionic liquid and oxygen
Masaru Yoneyama, Takeshi Yamanobe, Yasuhiro Arai

10:45 3C08 Synthesis and characterization of copolythioamides from m-xylylenediamine,

1,6-hexamethylenediamine, and sulfur
Masaru Yoneyama, Takeshi Yamanobe, Haruka Shimoda

M. Yoneyama, presiding

- 11:00 3C09 Importance of irreversible reaction for end functionalization by unstoichiometric polycondensation
Takayoshi KATOH, Tomoya SUZUKI, Yoshihiro OHTA, Tsutomu YOKOZAWA
- 11:15 3C10 Orientation Control of Block Copolymer Microphase-separated Nanostructures on Polyimide Films
Hayato Maeda, Yuta Nabae, Teruaki Hayakawa
- 11:30 3C11 Synthesis of Aromatic Polyketones by Ideal Nonstoichiometric Polycondensation Using Superacid as an Activating Agent
Kazuya Matsumoto, Shuko Hasegawa, Mitsutoshi Jikei

T. Hayakawa, presiding

- 12:30 3C12 Synthesis and Polymerization of divinyl monomers with fluorene skeletons
Yasuhiro Kohsaka, Akira Hiramatsu, Masatoshi Ohyama, Rie Yasuda, Shinsuke Miyauchi
- 12:45 3C13 Reexamination of Reactivity of N-Carboxy Amino Acid Anhydrides 93. Why is not increased the molecular weight of polymer obtained in the primary amine initiated polymerization of amino acid NCA ?
Hitoshi Kanazawa, Aya Inada
- 13:00 3C14 Development of novel oil-soluble polyurethane gel and its application to cosmetics
Takashi Takeshita, Ryo Hagino, Yuji Masubuchi, Yusuke Taniguchi, Hisanori Ishita

Y. Kohsaka, presiding

- 13:15 3C15 Synthesis and Properties of Polyimides from Perfluoroalkylene-Containing Diamines
Yoshiki Endo, Tadashi Tsukamoto, Yuji Shibasaki, Yoshiyuki Oishi
- 13:30 3C16 Synthesis and properties of bio-based polymers with L-ascorbic acid skeletons in the main and side chain
Shintaro Takahashi, Hiroto Kudo
- 13:45 3C17 Development of new resist materials for EUV resist materials containing extreme ultraviolet super absorbing elements (iodine and tellurium)
Yutaro Iwashige, Hiroto Kudo
- 14:00 3C18 Synthesis of hyperbranched polyphenylene derivatives and chirality induction to the polymers using chiral additives and circularly polarized light
Yuting Wang, Zhiyi Song, Tamaki Nakano
- 14:15 3C19 Synthesis of polymers composed of 1,10-phenantroline-5,6-diyl and phenanthrene-5,6-diyl units and their application for catalysis
Jiyue Luo, Masayoshi Bando, Zhiyi Song, Tamaki Nakano

Room D

Wed. May 27

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

S. Ida, presiding

- 10:00 1D05 A method for removal of organotellurium group from the polymers prepared by

ab-initio emulsion organotellurium-mediated radical polymerization
Yuhan JIANG, Masatoshi TOSAKA, Makoto TSUJISAKA, Yoshiki SOHRIN, Shigeru YAMAGO

- 10:15 1D06 Dual control over molecular weight and stereoregularity in the polymerization of acrylamides by TERP in the presence of Lewis acid
Yuji Imamura, Shigeru Yamago
- 10:30 1D07 Effect of viscosity and polarity of the reaction media on the termination mechanism of radical polymerization of acrylonitrile
Xiaopei LI, Yasuyuki NAKAMURA, Shigeru YAMAGO
- 10:45 1D08 Controlled Radical Polymerization of Various Activated (Meth)acrylamide Derivatives and Synthesis of Poly((meth)allyl Alcohol)
Yuto SUGIURA, Daichi WATANABE, Takenori NISHIDA, Mineto UCHIYAMA, Kazuaki ISHIHARA, Masami KAMIGAITO

S. Yamago, presiding

- 11:00 1D09 Controlled Radical Copolymerization of Terpenoid-Based exo-Methylene Conjugated Dienes and Various Vinyl Monomers
Takenori NISHIDA, Kotaro SATOH, Masami KAMIGAITO
- 11:15 1D10 Thermoresponsive Mechanical Properties of Designed Hydrogels with Crosslinked Domain Structure Prepared by RAFT polymerization
Miki Morimura, Shohei Ida, Masatoshi Oyama, Hiroki Takeshita, Shokyoku Kanaoka
- 11:30 1D11 Preparation of glycopolymer library using aqueous PET-RAFT polymerization
Takeshi Uemura, Yoshiko Miura, Yu Hoshino, Yuri Kimoto

M. Ouchi, presiding

- 12:30 1D12 RAFT Polymerization of 2-Hydroxyethyl Methacrylate Protected with tert-Butoxycarbonyl Group and Functionalization of the Resulting Polymers by Post-Reactions
Jing Chu, Yasuhito Suzuki, Akikazu Matsumoto
- 12:45 1D13 Polymerization induced phase separation cause Trommsdorff effect
Yasuhito Suzuki, Yuya Shinagawa, Eri Kato, Koji Fukao, Akikazu Matsumoto

A. Matsumoto, presiding

- 13:00 1D14 Syntheses of Alternating Copolymers and Sequence Functions: Transformable Comonomer Design with Bulkiness and Electron Density
Yosuke Furuya, Tsuyoshi Nishikawa, Makoto Ouchi
- 13:15 1D15 Synthesis of various sequence-controlled copolymers via cyclopolymerization of transformable divinyl monomers
Yuki Kametani, Makoto Ouchi
- 13:30 1D16 Synthesis and properties of block copolymer surfactants having hyperbranched structure
Yuzhong HE, Yangtian LU, Shigeru YAMAGO
- 13:45 1D17 The design of vinyl telluride for the synthesis of structurally controlled hyperbranched polymers
Yangtian LU, Shigeru YAMAGO

H. Mori, presiding

- 14:00 1D18 Simulation of Formation Process of Dendrimer-like Hyper-branched Polymer by Radical Polymerization
Masatoshi Tosaka, Hinako Takeuchi, Yangtian Lu, Shigeru Yamago
- 14:15 1D19 Controls of Monomer Sequence and Molecular Weight in Radical Copolymerization of α -Trifluoromethyl Acrylate and Vinyl Ether
Dasom YOO, Masato MIYAJIMA, Mineto UCHIYAMA, Kotaro SATOH, Masami KAMIGAITO, Bruno Ameduri

14:30 1D20 Synthesis of Sequence-Regulated Polymers with Catechol and Amino Groups by Single Monomer Addition and Thiol-Ene Polymerization
Yusuke YAMADA, Masato MIYAJIMA, Mineto UCHIYAMA, Masami KAMIGAITO

14:45 1D21 Radical Copolymerization using an Alkenyl Boronate as a Monomer: Synthesis of Novel Copolymers through Side Chain Replacement and their Properties
Hiroshi Makino, Tsuyoshi Nishikawa, Makoto Ouchi

B. Ochiai, presiding

15:00 1D22 Radical Polymerization of Vinyl Boronate Derivatives: The Relationship between Molecular Structure and their Chain-Growth Behavior
Tsuyoshi Nishikawa, Makoto Ouchi

15:15 1D23 Synthesis and characterization of novel polymers containing selenium unit in the side chain by radical polymerization
Yoshihisa TOKUSHITA, Shogo FURUYA, Hideharu MORI

15:30 1D24 Radical polymerization of novel deep eutectic acrylamide derivatives
Ayaka Torii, Keiko Ajino, Hideharu Mori

K. Arimitsu, presiding

15:45 1D25 Development of acrylates by utilizing incompletely condensed cage silsesquioxane precursors
AMATO IGARASHI

16:00 1D26 Effects of synthetic routes of acrylic polymers having five-membered cyclic carbonate group on their properties
Kenta Kosugi, Yoshimasa Matsumura, Bungo Ochiai

16:15 1D27 Recyclable heterogeneous catalysts for reversible complexation mediated polymerization
Shunsuke Chatani, Shuyao Hsu, Hiroshi Niino

Thu. May 28

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

M. Kamigaito, presiding

9:30 2D03 Control of Microgel Structures by Free Radical Precipitation Polymerization
Yuichiro Nishizawa, Ikuma Saito, Takuma Kureha, Mitsuhiro Sibayama, Takayuki Uchihashi, Daisuke Suzuki

9:45 2D04 UV curing mechanism of a photoinduced redox-initiated polymerization system in the shadow part at room temperature
Kazuki Uetake, Masahiro Furutani, Koji Arimitsu

10:00 2D05 Direct ESR Observation of Radical Polymerizations of (Meth)acrylamides and Related Nitrogen Containing Monomers
Mayu Ichimura, Atsushi Kajiwara

N. Haraguchi, presiding

10:15 2D06 Synthesis of Anion Exchange Resin Possessing Highly Robust Phosphonium Salts Moieties
Keisuke Ikeda, Ryoyu Hifumi, Hiroki Nishiyama, Shinsuke Inagi, Ikuyoshi Tomita

10:30 2D07 Synthesis of group 14 heterole-containing π -conjugated polymers via Te-Li exchange of tellurophene-containing polymer
Feng Zheng, Naoki Shida, Hiroki Nishiyama, Shinsuke Inagi, Ikuyoshi Tomita

10:45 2D08 Synthesis of tellurophene-containing polymers by the transition metal-catalyzed polycondensation and their transformations to heteroatom-containing π -conjugated polymers
Feng Zheng, Naoki Shida, Hiroki Nishiyama, Shinsuke Inagi, Ikuyoshi Tomita

K. Oyaizu, presiding

- 11:00 2D09 Cyclic Polymer Synthesis Using Exchange Reactions of Bis(hindered amino)disulfide Linkages
Rikito Takashima, Daisuke Aoki, Hideyuki Otsuka
- 11:15 2D10 Reversible cross-linking reactions of polymers with pendant hindered disulfide bonds under bulk condition
Shimon Kataoka, Ayuko Tsuruoka, Daisuke Aoki, Hideyuki Otsuka
- 11:30 2D11 Control of Primary Structure of Polymers by Using Dynamic Covalent Macrocyclic Monomers
Hirogi Yokochi, Rikito Takashima, Daisuke Aoki, Hideyuki Otsuka

D. Aoki, presiding

- 12:30 2D12 Synthesis of polymer-supported diphenylprolinols and their application to asymmetric oxidation
Yudai Shinya, Naoki Haraguchi
- 12:45 2D13 Synthesis of Reactive Polyurea Having Vinylcyclopropane Moiety in the Main Chain and Its Radical Cross-linking with Thiols
Shusuke Okamoto, Takeshi Endo
- 13:00 2D14 Synthesis of sulfonated hollow polymer microsphere by precipitation polymerization
Yuri Hashimoto, Miku Nakagawa, Naoki Haraguchi

E. Sato, presiding

- 13:15 2D15 Development of Mechanochromic Polymers with Asymmetric Mechanochromophores that Can Generate Different Radical Species
Kosaku Yanada, Sota Kato, Daisuke Aoki, Hideyuki Otsuka
- 13:30 2D16 Enhancing Mechanochromic Property by Surface Modification of Mechanochromic Dendrimers
Takuma Watabe, Daisuke Aoki, Hideyuki Otsuka
- 13:45 2D17 Effect of Base on Electrochemical Epoxidation of Natural Rubber
Yoshimasa Yamamoto, Ayaka Tsutsui, Seiichi Kawahara

S. Inagi, presiding

- 14:00 2D18 In Situ XAFS Study on the Vulcanization of Isoprene Rubber
Yuko Ikeda, Yuta Sakaki, Kosuke Miyaji, Takumi Ohashi, Hisayoshi Kobayashi
- 14:15 2D19 Synthesis of reversibly cross-linkable acrylic copolymers and their application to pressure-sensitive type dismantlable adhesives with rebondability
Eriko Sato, Naoki Ando, Ken Amano
- 14:30 2D20 Behavior of curing of bifunctional glycidate and anhydrides, and adhesion and decomposition characters of cured products
Miharu Yashima, Yoshimasa Matsumura, Bungo Ochiai

S. Kawahara, presiding

- 14:45 2D21 Combustion behavior analysis of polymer materials with different molecular weights
Yoshifumi Hosokawa, Tomonaga Ueno
- 15:00 2D22 Visualization of Polymer Crystallization with a Fluorescent Mechanochromophore
Sota Kato, Daisuke Aoki, Kazusato Oikawa, Kousuke Tsuchiya, Naohiko Shimada, Atsushi Maruyama, Keiji Numata, Hideyuki Otsuka
- 15:15 2D23ILY Topology Transformation of Polymer Chains and Its Application to Functional Materials
Daisuke Aoki

Fri. May 29

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

K. Kokado, presiding

- 9:30 3D03 Improvement of Solid-state Excimer Emission Based on Dimer Formation of Carborane Derivative
Junki Ochi, Kazuo Tanaka
- 9:45 3D04 Novel Coordination Polymers Based on Carborane Anion
Tatsuya Yoshii, Mutsumi Kimura, Miyamoto Kazunori, Kanazawa Junichiro, Uchiyama Masanobu, Kitazawa Yu
- 10:00 3D05 Synthesis of Chiral Coordination Polymers Composed of Paddle-Wheel-Type Dirhodium Complexes and Chiral Amplification
Shogo Okuda, Riku Ishida, Takuya Iwata, Akio Urushima, Naoki Ousaka, Tomoyuki Ikai, Eiji Yashima
- 10:15 3D06 Syntheses of Porous Molecular Conductors Triggered by Reduction of Naphthalenediimide-Based Ligand
Hiroaki Iguchi, Liyuan Qu, Shohei Koyama, Shinya Takaishi, Masahiro Yamashita
- 10:30 3D07 Polymer Recognition by Programmed Nanospace of MOFs
Nobuhiko Hosono, Biplab Manna, Takashi Uemura

H. Iguchi, presiding

- 10:45 3D08 Synthesis and Structure of Feet-to-Feet Connected Bis- and Trisresorcinarenes
Daisuke Shimoyama, Toshiaki Ikeda, Ryo Sekiya, Hiroto Kudo, Takeharu Haino
- 11:00 3D09 Development of supramolecular network polymer via host-guest interactions and metal-coordination based on bisporphyrin cleft
Naoyuki Hisano, Nang Duy Lai, Takehiro Hirao, Takeharu Haino
- 11:15 3D10 Precise size control of polyhedral polymer gels and their assembly formation
Ayano Michibata, Emi Takagi, Yuki Furukawa, Kenta Kokado, Kazuki Sada
- 11:30 3D11 Surface selective modification of organic catalytic moiety on MOF crystal
Masato Yamashita, Kota Mishima, Kenta Kokado, Kazuki Sada

D. Taura, presiding

- 12:30 3D12 Photo-Stimulus Shrinkable Nanotubes for Bio applications
Naohiro Kameta
- 12:45 3D13 Structure of PMMA controlled by molecular recognition of fullerene and calix[5]arene
Kazushi Fukuta, Takehiro Hirao, Takeharu Haino
- 13:00 3D14 Synthesis of D- π -A molecules bearing Lewis pairs and their assembled structure
Takahiro Yanbe, Ryohei Yamakado, Shuji Okada

N. Hosono, presiding

- 13:15 3D15 Control Over Self-Assembly Pathway of Helicene Possessing Tris(phenylisoxazolyl)benzene Units
Yudai Ono, Kyohei Hirano, Takehiro Hirao, Takeharu Haino
- 13:30 3D16 Selective Formation of Double-Stranded Boron Helicates Composed of Different Molecular Strands
Daisuke Taura, Xiang Wang, Masaki Ito, Eiji Yashima
- 13:45 3D17 Helical supramolecular polymer produced through self-assembly of amino acid-functionalized tetrakisporphyrin
Naoka Fujii, Takeharu Haino, Takehiro Hirao

Room E

Wed. May 27

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

T. Isono, presiding

- 10:00 1E05 Anionic polymerization of divinylthiophene derivatives
Ayaka Oguri, Raita Goseki, Takashi Ishizone
- 10:15 1E06 Anionic polymerization of isopropenylthiophene derivatives
Yuki Kurishiba, Ayaka Oguri, Raita Goseki, Takashi Ishizone
- 10:30 1E07 Design of Cyclic Vinyl Polymer via Ring-closing Reaction without Diluted Condition and Direct Observation
Keiji Naruse, Yuki Muramatsu, Akinori Takasu, Masahiro Higuchi
- 10:45 1E08 Ring-opening polymerization of macrocyclic oligocarbonate with phosphazene superbases
Haobo Yuan, Ryo Tanaka, Yuushou Nakayama, Takeshi Shiono

Y. Nakayama, presiding

- 11:00 1E09 Synthesis of lactic acid/glycolic acid alternating copolymer by organocatalytic ring-opening polymerization of 3-methylglycolide
Takuya Isono, Kaoru Takojima, Hiroshi Makino, Takuya Yamamoto, Kenji Tajima, Toshifumi Satoh
- 11:15 1E10 Control of Random Copolymerization of Alkyl Methacrylates Using Sequential Addition Flow System
Yusuke Takahashi, Ibuki Shite, Aiichiro Nagaki
- 11:30 1E11 Anionic polymerization of *N,N*-dialkylacrylamides having nitrogen-containing ring structures
Yuki Inoue, Yuki Nemoto, Raita Goseki, Takashi Ishizone

Y. Mori, presiding

- 12:30 1E12 Anionic polymerizability of 2,6-disubstituted styrenes
Mio Ishibashi, Raita Goseki, Takashi Ishizone
- 12:45 1E13 Synthesis of sequence-controlled oligomer composed of 1,1-diphenylethylene derivatives by anionic addition reaction
Marika Suzuki, Kazuki Takahata, Raita Goseki, Takashi Ishizone

K. Satoh, presiding

- 13:00 1E14ILY Cationic Copolymerization of Vinyl and Cyclic Monomers
Arihiro Kanazawa
- 13:30 1E16 Concurrent Cationic Vinyl-Addition and Ring-Opening Copolymerization of Vinyl Ethers and Oxiranes with Various Alkyl Substituents: Effects of the Structure of Oxiranes on the Frequency of Crossover Reactions
Yui Kawamura, Arihiro Kanazawa, Sadahito Aoshima
- 13:45 1E17 Cationic Copolymerization of Vinyl Acetate and Cyclic Acetals
Junichi Azuma, Arihiro Kanazawa, Sadahito Aoshima
- 14:00 1E18 Curing Reaction of Epoxy Resin by Boronate Esters
Yasuyuki Mori, Shintaro Nagayama, Takeshi Endo

A. Kanazawa, presiding

- 14:15 1E19 Development of new photosensitizers and approach to the efficient photoinitiators for cationic polymerization
Yusuke Miyauchi, Yasunobu Ohno, Satoshi Watanabe, Toyofumi

Shinozuka, Toshihiko Murai, Takeshi Endo

- 14:30 1E20 Synthesis and Reactions of Poly(tetrahydrofuran) with Initial- and Terminal-Groups for Conjugate Substitution
Naoki Nagatsuka, Kentaro Maehara, Madoka Kitamura, Yasuhiro Kohsaka
- 14:45 1E21 Cationic polymerization of dehydroaspirin: Vinyl polymerization vs. ring-opening polymerization
Akane Kazama, Yasuhiro Kohsaka
- 15:00 1E22 Controlled Cationic Polymerization of Bicyclic Conjugated Diene Derived from Isosorbide
Hayato YOSHIDA, Takenori NISHIDA, Mineto UCHIYAMA, Kotaro SATOH, Masami KAMIGAITO
- 15:15 1E23 Synthesis of Vinyl Polymer Periodically Containing Degradable Unit in Main Chain by Degenerative Chain-Transfer Living Cationic Polymerization Using Cyclic Thioacetal
Yukihiro Murakami, Mineto Uchiyama, Kotaro Satoh, Masami Kamigaito

Y. Kohsaka, presiding

- 15:30 1E24 The Synthesis of Copolymers with Various Monomer Sequences and Degradability via the Design of Cyclic Acetal Structures: The Controlled Cationic Copolymerization with Vinyl Monomers
Kazuya Maruyama, Arihiro Kanazawa, Sadahito Aoshima
- 15:45 1E25 Synthesis of Copolymers Degradable under Versatile and Mild Conditions via Concurrent Vinyl-Addition and Ring-Opening Copolymerization of Trimethylsilyl Vinyl Ether and Cyclic Acetals
Yuya Kinoshita, Ryusei Kato, Arihiro Kanazawa, Sadahito Aoshima
- 16:00 1E26 Design of multi-functional cyclic initiator for ring-expansion cationic polymerization toward solution of the issues
Naoyuki Kusuyama, Makoto Ouchi
- 16:15 1E27 Control of Cationic Cyclopolymerization based on Thorpe-Ingold Effect and Development of Ring-Expansion Cyclopolymerization
Hiroyuki Kubota, Makoto Ouchi
- 16:30 1E28 New Initiating Systems for Cationic Ring-Opening Polymerization of Oxiranes: Investigation toward Living Homo- and Copolymerization through the Stabilization of Propagating Species
Masamichi Inoue, Arihiro Kanazawa, Sadahito Aoshima

Thu. May 28

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

M. Ouchi, presiding

- 9:30 2E03 Cationic homopolymerization of alkene monomers and copolymerization with styrenes
Shunya Hasegawa, Arihiro Kanazawa, Sadahito Aoshima
- 9:45 2E04 Stereoselective Cationic Polymerization of Vinyl Ethers using TADDOL Ligands Derived from Tartaric Acid
Hironobu Watanabe, Arihiro Kanazawa, Sadahito Aoshima

K. Maeda, presiding

- 10:00 2E05 Ring-opening metathesis polymerization of norbornene lactones
Shin-ichi Matsuoka, Narumi Miyasako, Masato Suzuki
- 10:15 2E06 Synthesis and ring-opening metathesis polymerization of norbornadiene dimers
Kazuki Hase, Shin-ichi Matsuoka, Masato Suzuki

D. Hirose, presiding

- 10:30 2E07 Addition Copolymerization of Norbornene Lactone by Pd Catalysts
Kosuke Isaji, Shin-ichi Matsuoka, Masato Suzuki
- 10:45 2E08 Metathesis polymerization of diphenylacetylenes containing trimethylsilylphenylacetylene and gas permeability of the obtained polymers
Toshikazu Sakaguchi, Hikaru Shimada, Tamotsu Hashimoto
- 11:00 2E09 Synthesis of polynorbornene-graft-polybutadiene and evaluation of its physical properties
Yui Kushima, Ryo Tanaka, Yuushou Nakayama, Takeshi Shiono

M. Suzuki, presiding

- 11:15 2E10 Development of Controlled Polymerization of Phenylacetylenes Using Boronic Acid Derivatives as Initiators
Tsuyoshi Taniguchi, Takumi Yoshida, Kensuke Echizen, Kokoro Takayama, Tatsuya Nishimura, Katsuhiko Maeda
- 11:30 2E11 Revisiting and Improvement of Tungsten(VI)-Catalyzed Polymerization of Diphenylacetylenes
Mami Miyairi, Tsuyoshi Taniguchi, Tatsuya Nishimura, Katsuhiko Maeda

T. Sakaguchi, presiding

- 12:30 2E12 Postpolymerization modification of poly(alkoxycarbonylmethylene)s: Alkylation of main chain carbon atoms via ketenesilylacetal-type intermediate
Shogo Tsunematsu, Hiroaki Shimomoto, Tomomichi Itoh, Eiji Ihara
- 12:45 2E13 Quantitative Structural Analysis of Various Ziegler-Natta Catalysts with Synchrotron X-ray Total Scattering
Toru Wada, Gentoku Takasao, Patchanee Chammingkwan, Minoru Terano, Toshiaki Taniike
- 13:00 2E14 Bottom-Up Synthesis of Ziegler-Natta Catalyst with Multi-Grain Structure
Tomohiro Ikeda, Toru Wada, Patchanee Chammingkwan, Toshiaki Taniike

K. Maeda, presiding

- 13:15 2E15 Synthesis and characterization of As-bridged 4,4'-bipyridines
Toshiki Fujii, Susumu Tanaka, Shotaro Hayashi, Hiroaki Imoto, Kensuke Naka
- 13:30 2E16 Synthesis and Photophysical Properties of Polymers Containing Boron Dialdiminate Complexes
Miyako Hashizume, Shunichiro Ito, Kazuo Tanaka
- 13:45 2E17 Synthesis of β -Diketiminato Complexes of the Group 13 Elements and Effects of the Central Element on Solid-State Luminescence Properties
Shunichiro ITO, Kazuo TANAKA, Yoshiki CHUJO
- 14:00 2E18 Development of new thermosetting system for microgel-containing epoxy resin.
Shuji Nishioka, Hiroto Kudo

T. Hirai, presiding

- 14:15 2E19 Synthesis of Helical Bottlebrush Polymers Consisting of Poly(phenylacetylene) Chains
Masato Yamamoto, Tsuyoshi Taniguchi, Tatsuya Nishimura, Kazuki Miyata, Takeshi Fukuma, Katsuhiko Maeda
- 14:30 2E20 Synthesis and direct AFM observation of star-shaped polymers consisting of helical poly(phenylacetylene)s
Ayato INABA, Masato YAMAMOTO, Tsuyoshi TANIGUCHI, Kazuki MIYATA, Takeshi FUKUMA, Tatsuya NISHIMURA, Katsuhiko MAEDA
- 14:45 2E21 Helical conjugated poly(arylisocyanide) grafted from silicon substrate
Emika Oomura, Sadayuki Asaoka
- 15:00 2E22 Characteristic and Controlled Aggregation of Thermoresponsive Multiarmed Star-Shaped Polymers

Sayuri Takeshima, Shohei Ida, Shin-ichi Yusa, Shokyoku Kanaoka

S. Kanaoka, presiding

- 15:15 2E23ILY Preparation of polymer with well-controlled stereoregularity and evaluation of its structure and physical properties
Tomoyasu Hirai, Kei Manabe, Syuji Fujii, Yoshinobu Nakamura
- 15:45 2E25 Downsizing of Microphase-Separated Structure by One-Step Intramolecular Crosslinking of Block Copolymer
Noya Kaizawa, Kodai Watanabe, Takuya Isono, Takuya Yamamoto, Kenji Tajima, Toshifumi Satoh
- 16:00 2E26 Synthesis and physical properties of graft polymers with cage-shaped macrocyclic side chains
Maho Sudo, Yoshinobu Mato, Takuya Isono, Takuya Yamamoto, Kenji Tajima, Toshifumi Satoh

Fri. May 29

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

T. Terashima, presiding

- 9:30 3E03 Synthesis and Evaluation of Polynuclear Metal Complexes Based on Polyhedral Oligomeric Silsesquioxane
Daisuke Iizuka, Hayato Narikiyo, Masayuki Gon, Kazuo Tanaka
- 9:45 3E04 Development of extreme ultraviolet(EUV) resist materials based on special structure oligomers containing Calixarenes in the main chain.
Hiroyuki Maekawa, Hiroto Kudo
- 10:00 3E05 Synthesis and Applications of Stimuli-responsive Magnetic Nanoparticles Based on Living Coordination Polymerization of Allenes
Rina Asami, Takeshi Wakiya, Hiroki Nishiyama, Shinsuke Inagi, Yoshitaka Kitamoto, Ikuyoshi Tomita
- 10:15 3E06 Synthesis of Ladder Polymers by using Polymer Direct Arylation
Koji Takagi, Hidetoshi Tanaka

K. Takagi, presiding

- 10:30 3E07 Self-Assembled Materials Based on Amphiphilic Folded Polymer Micelles: Nanodomain Design and Hydrogels
Takaya Terashima, Yasuyuki Ommura, Takehiro Itami
- 10:45 3E08 Crystallization and microphase separation of multi-component random and block copolymers
Sahori Imai, Yasuyuki Ommura, Makoto Ouchi, Takaya Terashima
- 11:00 3E09 Sub-5 nm Microphase Separation of Random Copolymers with Crystalline Pendants and Hydrogen-Bonding Units
Takaya Ikami, Makoto Ouchi, Takaya Terashima
- 11:15 3E10 Development of Fluorescence Sensors Based on Polyhedral Oligomeric Silsesquioxane Possessing Flexible Side-Chains
Hayato Narikiyo, Masayuki Gon, Kazuo Tanaka
- 11:30 3E11 Synthesis and properties of special structure polymers by the polyaddition of t-butylcalix[n]arene(BCA[n])(n=4,8) and bifunctional epoxides
Naoto Sakaguchi, Hiroto Kudo

E. Sato, presiding

- 12:30 3E12 Effects of number of arms on the mechanical properties of star cyclic olefin copolymer
Ryo Tanaka, Takumitsu Kida, Koh-hei Nitta, Takeshi Shiono

- 12:45 3E13 Synthesis and property of Botryosin type polymers containing cyclodextrin moieties in the main chain.
Shogo Hayashi, Hiroto Kudo
- 13:00 3E14 Synthesis and evaluation of necklace polymers having completely and incompletely condensed cage-silsesquioxanes
Taihei Hayashi, Ayano Ishida, Hiroaki Imoto, Kensuke Naka
- 13:15 3E15 Grafting of Poly(vinyl ether): Organic Catalyzed Ring-Opening Polymerization of Cyclic Esters from Poly[(2-hydroxyethyl vinyl ether)-ran-(vinyl acetate)]
Akane Otori, Shinji Sugihara, Yasushi Maeda

I. Tomita, presiding

- 13:30 3E16 Synthesis and gas permselectivity of 2D-polymer containing polyacetylene composite membranes (1) Excellent oxygen permselectivity of 2D polymer containing composite membranes synthesized by membrane interface polycondensation
Yanqing Qu, Kehan Cheng, Masahiro Teraguchi, Takashi Kaneko, Toshiki Aoki
- 13:45 3E17 Synthesis and gas permselectivity of 2D-polymer containing polyacetylene composite membranes (2) : Enhancement of the oxygen permselectivity by partial polymer reactions in the membrane state using the supramolecular structures of the starting polyacetylene membranes as templates
Shohei Takeda, Masahiro Teraguchi, Takashi Kaneko, Toshiki Aoki
- 14:00 3E18 Synthesis of Dual Curable Hyperbranched Polymers and Their Application to Dismantlable Adhesives
Eriko Sato, Seidai Okada
- 14:15 3E19 Synthesis of graft acrylic polymers by utilizing liquid polyesters bearing ATRP initiating points at the side groups for creation of acrylic resins with enhanced toughness.
Mikihiro Hayashi, Keisuke Shibata, Shogo Nobukawa, Akinori Takasu
- 14:30 3E20 Synthesis and Orientation of T-Shaped Poly(3-hexylthiophene)s
Masayuki Wakioka, Kai Ku, Fumiyuki Ozawa

Room F

Wed. May 27

D. BIOPOLYMERS AND BIORELATED POLYMERS

M. Ikeda, presiding

- 10:30 1F07ILY Development of polymeric materials through bio synthetic interaction and fusion
Masaki Nakahata
- 11:00 1F09 Preparation and UCST like behavior of sulfobetaine-PEG copolymer
Nobuyuki Morimoto, Masaya Yamamoto
- 11:15 1F10 Synthesis of Conjugated Polymer Thin Film Having Choline Phosphate as Side Groups and Their Surface Properties
Masaru Mukai, Chao-Hung Cheng, Wei Ma, Mi Chin, Chia-Hsin Lin, Shyh-Chyang Luo, Atsushi Takahara
- 11:30 1F11 DNA function switching by coacervate-forming UCST-type ureido polymers
Naohiko Shimada, Shunya Kawai, Atsushi Maruyama

N. Morimoto, presiding

- 12:30 1F12 Activity-Controlling of Enzymes by UCST-type Ureido Polymer Forming

Coacervate
Takuya KOMACHI, Naohiko SHIMADA, Atsushi MARUYAMA

- 12:45 1F13 Control of Macrophage Phenotypes using Apoptotic Cell Membrane Mimetic Polymers
Jeonggyu Lee, Mitsuhiro Ebara
- 13:00 1F14 Design of Stimuli-responsive Gels by Entropy Suppression of Polymer Chains and Their Dynamic Molecular Binding Regulation
Takashi Miyata, Masaaki Kanazawa, Akifumi Kawamura
- 13:15 1F15 Convective meniscus splitting of polysaccharide microparticles and the effect of substrate wettability
Kosuke Okeyoshi, Isamu Saito, Yoshiya Tonomura, Miki Yamashita, Kulisara Budpud, Gargi Joshi, Maiko Okajima, Tatsuo Kaneko
- 13:30 1F16 Thermo-responsiveness of random copolymers composed of 2-acrylamide phenyl boronic acid and amino acid-derived vinyl monomer
Takumi Odama, Nobuyuki Higashi, Tomoyuki Koga

N. Shimada, presiding

- 13:45 1F17 Development of supramolecular hydrogels comprising of biomolecular hybrids
Masato Ikeda
- 14:00 1F18 Fabrication of tough hydrogels filled with hydrophobic particles.
Taka-Aki Asoh, Tatsuya Yamamoto, Hiroshi Uyama
- 14:15 1F19 Shape Memory Hydrogels Composed of Amino Acid-derived Vinyl Polymer Network Cross-linked with Disulfide Bond
Tomoyuki KOGA, Yutaro YAMAGUCHI, Nobuyuki HIGASHI
- 14:30 1F20 Shape memory hydrogels from graft-type peptide-polymer hybrids
Tomoyuki KOGA, Hideki MOTODA, Nobuyuki HIGASHI

T. Koga, presiding

- 14:45 1F21 Development of Plastic Antibody incorporating Homogeneous Oligomer as hypervariable loop
Yusuke Saito, Sotaro Akashi, Hinata Takimoto, Yu Hoshino, Yoshiko Miura
- 15:00 1F22 Fabrication of silica-based cellular replicas maintaining the morphology of living cell and analysis of cellular behaviors cultured on the replicas
Tokitaka Katayama, Koji Nagahama
- 15:15 1F23 Biomolecular motors promote dynamics of microtubule lattice
Daisuke Inoue, Sarah Triclin, Jeremie Gaillard, Laurent Blanchoin, Manuel Thery
- 15:30 1F24 The control of catalytic activity and selectivity of polymer-supported organocatalyst by the interaction with a small molecule
Kota Mishima, Naoki Fukaya, Kenta Kokado, Kazuki Sada
- 15:45 1F25 Order-structural control of gelatin hydrogel by self-assembly
Kazuki Murai, Kohei Kawaguchi, Shuhei Komatsu, Akihiko Kikuchi

Thu. May 28

AWARD LECTURES

M. Ikeda, presiding

- 10:15 2F06AL Mechanical properties of doubly crosslinked gels
Takuya Katashima

K. Numata, presiding

- 10:45 2F08AL Phase Separation during Bulk Polymerization of Methyl Methacrylate
Yasuhito Suzuki

T. Yasuda, presiding

- 11:15 2F10AL Polysaccharide-based wrinkled surfaces induced by polyion complex skin layers upon drying
Hironori Izawa

D. BIOPOLYMERS AND BIORELATED POLYMERS

Y. Arima, presiding

- 12:30 2F12 Cell Behavior on Photo-responsive Polymer Films with Controllable Surface Modulus
Takashi Miyata, Misato Higashino, Akifumi Kawamura
- 12:45 2F13 Maintaining undifferentiated state and multipotency of adipose-derived stem cells cultured in biodegradable injectable polymer hydrogel
Nozomi Mayumi, Yuta Yoshizaki, Akinori Kuzuya, Yuichi Ohya
- 13:00 2F14 Structural Analysis of Biocompatible Polycarbonate/Polylactide Block Copolymers and Its Correlation with Biological Functions
Kazuki FUKUSHIMA, Masayoshi JOHMEN, Ikue MITANI, Takashi KATO
- 13:15 2F15 Design of Dual Stimuli-Responsive Polymers That Respond to Both Visible Light and Temperature and Their Applications as Cell Culture Substrates
Masaaki Okihara, Akifumi Kawamura, Takashi Miyata
- 13:30 2F16 Novel cell manipulation based on photo-selective release of micro-patterned polymer thin layers
Kimio Sumaru, Toshiyuki Takagi, Kana Morishita, Toshiyuki Kanamori

K. Fukushima, presiding

- 13:45 2F17 Design and Function of Polymer Materials Capable of Photo-induced LCST Shift under Cell Culture Conditions
Yuji Tsuchido, Rina Watanabe, Keiichi Imato, Naoya Takeda
- 14:00 2F18 Design of azobenzene containing polymer exhibiting photo-induced phase transition and its application as a mechanobiological material
Kenta Homma, Alice Ching-Hsuan Chang, Tamate Ryota, Shota Yamamoto, Takeshi Ueki, Jun Nakanishi
- 14:15 2F19 Construction of Collagen Gels with Reversible Thermosensitivity by Controlling Self-Assembly of Collagen Nanofibers
Michiya Matsusaki, Yuichi Yukawa, Hirotaka Nakatsuji, Shinji Irie
- 14:30 2F20 Preparation and degradation behavior of polysaccharide nanogel-PEG hybrid gel sheets
Mengzhe Li, Kazunari Akiyoshi, Yoshihiro Sasaki, Shin-ichi Sawada

M. Matsusaki, presiding

- 14:45 2F21 Promotion of cell fusion through cell-cell attachment by cell surface modification using functional peptide-conjugated PEG-lipid
Yuji Teramura, Sayumi Watanabe, Kazuhiko Ishihara
- 15:00 2F22 Cell surface modification with cell-penetrating peptide-conjugated PEG-lipid for rapid adhesion to substrate
Makoto Noiri, Yuya Goto, Kazuhiko Ishihara, Yuji Teramura
- 15:15 2F23 Cell culture on floating hydrogel sheet for enhancement of physiological cell functions
Atsushi Tsuyukubo, Kimio Sumaru, Kana Morishita, Toshiyuki Kanamori
- 15:30 2F24 Fabrication of adipose-derived stem cell-based hydrogel as focal administered tissue regenerative materials
Natsumi Ueda, Koji Nagahama

Fri. May 29

D. BIOPOLYMERS AND BIORELATED POLYMERS

Y. Teramura, presiding

- 9:30 3F03 Luminal surface characteristics required for long-term patency of acellular small-diameter vascular grafts
Tetsuji Yamaoka, Y.-I Hsu, Hiroki Yamanaka, Kentaro Kojima, Maria Munisso, Naoki Morimoto, Yoshiaki Hirano, Atsushi Mahara
- 9:45 3F04 Induction of growth factor-free angiogenesis by hydrophobically-modified gelatin hydrogel
Yosuke Mizuno, Tetsushi Taguchi
- 10:00 3F05 Fabrication of 3D blood vessel wall model using elastin microfiber for in vitro reconstruction of arteriosclerotic processes
Hirotaka Nakatsuji, Masatsune Ogura, Mariko Shiba, Michiya Matsusaki
- 10:15 3F06 Formation of multicellular aggregate by cell surface engineering with recombinant proteins
Yusuke Arima, Kosuke Shibanuma, Yusuke Hirai

K. Sumaru, presiding

- 10:30 3F07 Application of DNA Quadruplex Gel as Cell Preservation Medium
Yuhei HACHIRO, Shinsuke YUKAMI, Shizuma TANAKA, Yuichi OHYA, Akinori KUZUYA
- 10:45 3F08 Preparation of carbonated apatite capsules carrying dual-drugs for bone regeneration
Shuhei Abe, Syuuhei Komatsu, Taka-Aki Asoh, Akihiko Kikuchi
- 11:00 3F09 Preparation of Transparent Molecules for Deep Observation of Living Three-dimensional Tissue
Kazuma Ishiguro, Hirotaka Nakatsuji, Michiya Matsusaki
- 11:15 3F10ILY Development of polymeric materials and devices for the treatment of cardiovascular diseases
Yusuke Kambe

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

K. Sada, presiding

- 12:30 3F12ILY Synthetic polymer chemistry and material applications based on multi-component reactions
Ryohei Kakuchi
- 13:00 3F14 Synthesis of telechelic polymers using the living polymerization of phenylacetylenes.
Kensuke Echizen, tsuyoshi Taniguchi, Tatsuya Nishimura, Katsuhiko Maeda

T. Nishimura, presiding

- 13:15 3F15 Design of Stereoselective Cationic Polymerization Systems Based on the Monomer Structure: Effect of the Substituents and Chirality
Hironobu Watanabe, Takuya Yamamoto, Satoshi Okumoto, Arihiro Kanazawa, Sadahito Aoshima
- 13:30 3F16 Cationic copolymerization of *o*-phthalaldehyde and vinyl monomers: Effects of the substituents of vinyl monomers on the copolymerization behavior
Keisuke Hayashi, Arihiro Kanazawa, Sadahito Aoshima

- 13:45 3F17 "Solid state" cationic ring-opening polymerization of 1,3,5-trioxane: Frozen polymerization for suppression of oligomer formation and synthesis of ultra-high molecular weight polymers
Chihiro Suemitsu, Arihiro Kanazawa, Sadahito Aoshima

S. Aoshima, presiding

- 14:00 3F18 Control of chain growth by encounter probability between monomers
Kazuki Sada, Kenta Kokado
- 14:15 3F19 Preparation of pillared-layer MOF cross-linked with bifunctional monomer
Hiroki Amaya, Tokiyo Katou, Shizuka Anan, Takumi Ishiwata, Kenta Kokado, Kazuki Sada
- 14:30 3F20 Synthesis of high-refractive-index polymers by thiol-ene reaction of styrenic bismuth monomers
Yoshimasa Matsumura, Kikuo Furukawa, Miyuki Miyamoto, Yoshio Nishimura, Bungo Ochiai

Room G

Wed. May 27

D. BIOPOLYMERS AND BIORELATED POLYMERS

T. Takeuchi, presiding

- 13:45 1G17 Development of chiral amplification system using artificial nucleic acid
Hiromu Kashida, Keiji Nishikawa, Ichiyo Hayashi, Takahiro Kakuta, Tomoki Ogoshi, Hiroyuki Asanuma
- 14:00 1G18 Augmentation of deoxyribozyme activity by cationic copolymers
Orakan Hanpanich, He Huang, Krittika Rudeejaronrun, Naohiko Shimada, Atsushi Maruyama
- 14:15 1G19 Non-enzymatically degradable cationic polyaspartamide derivatives for mRNA delivery
Yuta Otsu, Mitsuru Naito, Rimpei Kamegawa, Kotaro Hayashi, Satoshi Uchida, Hyun Jin Kim, Kanjiro Miyata
- 14:30 1G20 Single Molecule Analysis of Excluded Volume Effect Using DNA origami Modified with PEG
Yuta Okamoto, Shota Abe, Yoshihiro Iida, Kota Sakamoto, Yuichi Ohya, Akinori Kuzuya

A. Maruyama, presiding

- 14:45 1G21 Detection of genomic DNA sample from E. coli O157 by bioluminescence using the pipette tip-type automatic sensing system
Eri Takano, Nobuaki Shimura, Yukiya Kitayama, Hirobumi Sunayama, Kazunori Ikebukuro, Toshifumi Takeuchi
- 15:00 1G22 Aptamer-fused polymeric nanocavities for highly sensitive detection of extracellular vesicles
Minako Takai, Eri Takano, Hirobumi Sunayama, Yukiya Kitayama, Toshifumi Takeuchi
- 15:15 1G23 Generation of protein characteristic patterns using cross-reactive capability of DNAs
Shunsuke Tomita, Hiroka Sugai, Masahiro Mimura, Ishihara Sayaka, Kentaro Shiraki, Ryoji Kurita

Thu. May 28

D. BIOPOLYMERS AND BIORELATED POLYMERS

T. Tanaka, presiding

- 9:30 2G03 Gel Formation from Poly(2-oxazoline)-grafted Chitin Nanofibers
Seiya Kitasono, Kazuya Yamamoto, Jun-ichi Kadokawa
- 9:45 2G04 Film Formation from Low Molecular Weight Chitin Esters
Eisuke Sasaki, Kazuya Yamamoto, Jun-ichi Kadokawa
- 10:00 2G05 Effect of constituent parameters on Swelling Behavior of Chitosan-Genipin Gel
Yu totsuka, Yasutaka Anraku, Ichiro Sakuma, Yuki Akagi
- 10:15 2G06 Preparation of honeycomb-like porous chitosan films
Hironori Izawa, Haruya Kajimoto, Shinsuke Ifuku, Minoru Morimoto, Hiroyuki Saimoto

S. Sawada, presiding

- 10:30 2G07 Control of Internal Structure of Polysaccharide Composite Films Using Electric Fields
Yayoi Yoda, Yusuke Yataka, Mineo Hashizume
- 10:45 2G08 Development of Polysaccharide Composite Films Capable of Releasing Hydrophobic Drugs
Rie Goto, Yusuke Yataka, Mineo Hashizume
- 11:00 2G09 Aqueous synthesis of glycopolymers bearing oligosaccharide by post-polymerization modification on QCM sensor chip and their binding affinities with proteins
Sotaro Tsuji, Tomonari Tanaka
- 11:15 2G10 Development of drug delivery system for tissue fibrosis by N-acetylglucosamine(GlcNAc) polymer-specific binding activity of vimentin.
Inu Song, Beomju Hwang, Idumi Hamano, Hirohiko Ise
- 11:30 2G11 Preparation of Glycopolymer Library by PET-RAFT Polymerization and Molecular Recognition Ability
Yoshiko Miura, Yuri Kimoto, Takeshi Uemura, Yu Hoshino

M. Hashizume, presiding

- 12:30 2G12 Design and characteristics of nanogel cross-linked porous gel with degradable linker
Shin-ichi Sawada, Ryo Hirose, Yoshihiro Sasaki, Kazunari Akiyoshi
- 12:45 2G13 Design and functional evaluation of amphiphilic block copolymer for sugar structure presentation on lipid membrane surface
Ryuji Fujihara, Tomoki Nishimura, Yoshihiro Sasaki, kazunari Akiyoshi
- 13:00 2G14 Synthesis and Functions of Oxazoline-Hybrid Unnatural Oligoaminosaccharides
Yuta Koda
- 13:15 2G15 Enzymatic Synthesis of 6-Deoxyamylose Oligomer
Le Hooi Lee, Kazuya Yamamoto, Jun-ichi Kadokawa

K. Matsuura, presiding

- 13:30 2G16 Enrichment Of Biomarker For Infectious Diseases By Using "Smart Antibody" Engineered With Temperature-Responsive Polymer
Keita Hironaka, Akihiko Kikuchi, Ebara Mitsuhoro
- 13:45 2G17 Detection of influenza virus using sugar-mimic peptides modified polystyrene particle
Ai Yamaguchi, Teruhiko Matsubara, Akane Kubo, Ryunosuke Kuriyama, Toshinori Sato
- 14:00 2G18 Ultra-sensitive assay of protease activity on gelatin hydrogel using ink-jet micro-

patterning
Mikiko Tsudome, Shigeru Deguchi

14:15 2G19 Regulation of stem cell behavior by chiral nanofibrous peptide hydrogels
Toru Yoshitomi, Hangyu Zheng, Gouping Chen, Keitaro Yoshimoto

T. Sato, presiding

14:30 2G20 Monitoring of the adsorption of serum albumin onto the single-walled carbon nanotube surface with fatty acid.
Kenta Nakamura, Yoshiaki Niidome, Yukiko Nagai, Naoki Tanaka, Tomohiro Shiraki, Takeshi Mori, Yoshikli Katayama, Tsuyohiko Fujigaya

14:45 2G21 Construction of gold nanoparticle-encapsulated microtubules by using a Tau-derived peptide
Hiroshi Inaba, Arif Md. Rashedul Kabir, Akira Kakugo, Kazuki Sada, Kazunori Matsuura

15:00 2G22 Fluorescence correlation spectroscopy analysis of self-assembling behavior of artificial viral capsids under molecular crowding conditions
Risako Kobayashi, Hiroshi Inaba, Kazunori Matsuura

15:15 2G23 Hierarchical assembly formation composed of filamentous viruses and their thermophysical properties
Toshiki Sawada, Naoki Ueda, Taiki Tsuruoka, Hironori Marubayashi, Shuichi Nojima, Junko Morikawa, Takeshi Serizawa

T. Yoshitomi, presiding

15:30 2G24 Determination of the precise structure of Bombyx mori silk fiber (Silk II) using solid-state NMR
Tetsuo Asakura, Tatsuya Ogawa, Akihiro Aoki, Hironori Kaji, Akira Naito

15:45 2G25 Mechanical and structural responses of spider dragline silk fibers depending on environmental humidity and strain rates
Kenjiro Yazawa, Keiji Numata

16:00 2G26 Rapid and micro protein crystallization and structure analysis in living cells
Satoshi Abe, Mariko Kojima, Ryoga Kogure, Takafumi Ueno

Fri. May 29

D. BIOPOLYMERS AND BIORELATED POLYMERS

T. Matsumoto, presiding

9:30 3G03 Highly sensitive Raman probes for multicolor detection using an algal carotenoid
Yusuke Yonamine, Joshua Mba, Yu Hoshino, Hideyuki Mitomo, Kuniharu Ijiri

9:45 3G04 Self-assembled structure of fluorescein and Gd-chelate modified 8-arm PEG for microvascular MR imaging
Atsushi Mahara, Shigeyoshi Saito, Tomohiro Aoki, Tetsuji Yamaoka

10:00 3G05 High-sensitive sensing of extracellular vesicles by synthetic polymer nanocavities capable of molecular recognition
Kisho Mori, Taku Shimizu, Hirobumi Sunayama, Eri Takano, Yukiya Kitayama, Toshifumi Takeuchi

A. Kikuchi, presiding

10:15 3G06 Development of colloidal wound dressing with tissue adhesive and hemostatic properties
Akihiro Nishiguchi, Fumisato Sasaki, Hidehito Maeda, Masayuki Kabayama, Akio Ido, Tetsushi Taguchi

10:30 3G07 Cell Adhesion Behavior on Polyamide with Different Thermal Histories

Kyoko Oku, Takuya Matsumoto, Takashi Nishino

- 10:45 3G08 Interaction between peptide-modified ePTFE and blood cells
Tomoyuki Azuma, Tetsuji Yamaoka

K. Shiraishi, presiding

- 11:00 3G09 Endothelial cell capturing ability on REDV peptide-immobilized acellular surface
Seina Yamada, Atsushi Mahara, Toshiya Fujisato, Tetsuji Yamaoka
- 11:15 3G10 Antiplatelet adhesion behavior of poly(L-lactide-co-glycolide)-poly(1,5-dioxepan-2-one) copolymers
Mitsutoshi Jikei, Keita Kashiwaya, Mao Takeda, Kazuya Matsumoto, Masaki Hikida, Shigeharu Ueki
- 11:30 3G11 Preparation of degradable hydrogel surfaces with re-oriented PEG-grafts for removal of adsorbed protein layer
Tatsuki KAMIYA, Syuuhei KOMATSU, Akihiko KIKUCHI

S. Asayama, presiding

- 12:30 3G12 Study of Polymeric Films Prepared by Amphiphilic Copolymers of Glycerol Dendrons
Tooru Ooya, Satoshi Hirakawa, Midori Goda
- 12:45 3G13 Influence of MPC Polymer Coating on Coagulation and Complement System in Human Whole Blood
Kenta Asawa, Sana Asif, Yuuki Inoue, Kazuhiko Ishihara, Bo Nilsson, Yuji Teramura
- 13:00 3G14 Study of swelling behaviors of MPC polymer-coated surface by using a new wettability assessment AILE method
Chie KOJIMA, Risa KATAYAMA, Nobuyuki TANAKA, Yo TANAKA, Kohei SHIRAIISHI, Akikazu MATSUMOTO
- 13:15 3G15 Synthesis of polyolefin-based nonthrombogenic materials with focusing on polymer-water interaction
SHINGO KOBAYASHI, NAOKI FUJITA, KENTO YOSHIDA, MASARU TANAKA

T. Ooya, presiding

- 13:30 3G16 Design of Bioinert Interface by Coating with Cholesterol End-Modified Poly(ethylene glycol)
Yuya Sone, Shoichiro Asayama
- 13:45 3G17 Effect of star-shaped polymer on intermediate water formation and enzyme activity
Kohei Shiraishi, Yuki Takebe, Yuto Oki
- 14:00 3G18 Preparation of acrylamide having L-lysine and various copolymers and effect of copolymer structure on fibrinolytic activity
Kohei Shiraishi, Yuto Oki, Nami Shugimoto
- 14:15 3G19 Long-term durability improvement by anion-exchange reactions of retinal prosthesis using photoelectric dyes coupled to polyethylene film
Koichiro Yamashita, Tenu Tanaka, Tetsuya Uchida, Toshihiko Matsuo

Room H

Wed. May 27

D. BIOPOLYMERS AND BIORELATED POLYMERS

T. Niidome, presiding

- 10:15 1H06 Synthesis of Brush Polymer Particles and Their Antitumor effects
Shin Takano, Shota Fujii, Kazuo Sakurai
- 10:30 1H07 Bone-targeting zwitterionic polymers to deliver lipophilic drugs to metastatic cells
Akihisa Otaka, Ryoya Saisho, Toru Hiraga, Yasuhiko Iwasaki

T. Mori, presiding

- 10:45 1H08 Design and function of hybrid extracellular vesicles for biopharmaceutical delivery
Raga Ishikawa, Shosuke Yoshida, Shin-ichi Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi
- 11:00 1H09 Characterization of TiO₂ nanoparticles-incorporated polyion complex with both immune cell activation ability and antigen delivery function
Misaki Kitagawa, Eiji Yuba, Atsushi Harada
- 11:15 1H10 Synthesis of Albumin-Hemoglobin Nanoparticle as an Artificial O₂ Carrier
Wataru Okamoto, Mai Hasegawa, Yoshitsugu Morita, Teruyuki Komatsu
- 11:30 1H11 Cellular interaction of molecularly imprinted polymer nanogels capable of protein corona regulation using intrinsic serum albumin
Yukiya Kitayama, Natsuki Hayakawa, Takuya Yamada, Toshifumi Takeuchi

Y. Kitayama, presiding

- 12:30 1H12 Heat-induced stabilization and pharmacokinetic control of platinum-complexed polymeric micelles
Yuki Mochida, Horacio Cabral, Kazunori Kataoka
- 12:45 1H13 New evaluation method of PEG antibody and relationship between PEG and ABC phenomenon
Koichi Arai, Shota Fujii, Kazuo Sakurai
- 13:00 1H14 Clarification of cellular uptake mechanism of PMEA analogs based on polymer-cell interaction
Hiroki Uehara, Kei Nishida, Shingo Kobayashi, Masaru Tanaka
- 13:15 1H15 Exploration of anti-inflammatory polyamine and development of anti-inflammatory polysaccharide
Akihiro Nishiguchi, Tetsushi Taguchi

A. Kishimura, presiding

- 13:30 1H16 Impacts of self-assembled antioxidants on intensive long-time running
Takuto Toriumi, Ahram Kim, Syoichi Komine, Ikuru Miura, Suminori Nagayama, Hajime Ohmori, Yukio Nagasaki
- 13:45 1H17 Development of extracellular and intracellular condition-responsive linker for cancer cell-selective drug delivery system
Yuka Matsuhashi, Kenta Ootake, Yan Cheng, Masaki Nishijima, Yasuyuki Araki, Takehiko Wada
- 14:00 1H18 Development of Shape-memory Balloon for Bone Tumor Treatment
Sosuke Ouchi, Akihiko Kikuchi, Mitsuhiro Ebara
- 14:15 1H19 PLGA nanoparticles that release drugs responding to near infrared light
Ryo Yamashita, Takuro Niidome

K. Osada, presiding

- 14:30 1H20 Preparation of multi stimuli-responsive hydrogel for stimuli-responsive loading and release of proteins
Moeno Tago, Syuuhei Komatsu, Taka-Aki Asoh, Akihiko Kikuchi
- 14:45 1H21 Development of poly(amino acid) bearing gemcitabine pendant via cyclic acetal linkage for enhanced antitumor activity and decreased side effects
Hiroyasu Takemoto, Takahiro Nomoto, Makoto Matsui, Yutaka Miura, Nobuhiro Nishiyama

15:00 1H22 Stimuli-responsive properties and delivery to immune cells of phenylalanine-modified dendrimers with carboxyl termini
Chie KOJIMA, Mamiko TAMAKI, Misaki NISHIO, Yutaka NISHIMOTO, Akikazu MATSUMOTO

H. Takemoto, presiding

15:15 1H23 Creation of DNA micelle using temperature-responsive polymer
Miyo Soejima, Shota Fujii, Kazuo Sakurai

15:30 1H24 Antisense nucleic acid delivery to tumor using polysaccharide
Kazuki Sumiya, Hiroto Izumi, Yasuo Morimoto, Shinichi Mochizuki, Kazuo Sakurai

15:45 1H25 Stabilization of siRNA nanoparticle by fine tuning cationic poly(amino acid)s
Kotaro Hayashi, Kazuko Toh, Shigeto Fukushima, Kanjiro Miyata, Kanjiro Kataoka

16:00 1H26 Stroma penetration of pancreatic tumor by single-strand DNA-loaded polyplex micelles
Kensuke Osada, Theofilus Tockary, Kazunori Kataoka

Thu. May 28

D. BIOPOLYMERS AND BIORELATED POLYMERS

C. Kojima, presiding

9:30 2H03 Functions of cationic polysaccharide nanogels as nanocarrier for cancer vaccine
Kazuki Ikeda, Risako Miura, Shin-ichi Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi

9:45 2H04 Design of adjuvant-loaded nanogels for immune stimulation
Shogo Aso, Shin-ichi Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi

10:00 2H05 Development of sustained-release type vaccine formulations using temperature-responsive biodegradable injectable polymers
Yuta Yoshizaki, Akinori Kuzuya, Yuichi Ohya

S. Mochizuki, presiding

10:15 2H06 Enhancement of ADCC by high affinity antibody recruiting molecules
Yunosuke Oshiro, Hiroshi Tarawa, Koichi Sasaki, Akihiro Kishimura, Takeshi Mori, Yoshiki Katayama

10:30 2H07 Combination cancer therapy of nanogel vaccine and immune checkpoint antibody
Risako Miura, Shin-ichi Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi

10:45 2H08 Development of magnetically induced nanogels for in vivo delivery of biopharmaceuticals
Ryosuke Mizuta, Riku Kawasaki, Shin-ichi Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi

Y. Sasaki, presiding

11:00 2H09 Protection of gut microbiome from antibiotics by using vancomycin-selective adsorbent microparticles
Kurumi Matsuo, Kazuki Yuzuriha, Kyosuke Yakabe, Shunyi Li, Akihiro Kishimura, Koji Hase, Yun-Gi Kim, Takeshi Mori, Yoshiki Katayama

11:15 2H10 Gut Microbiome Protection by Using Antibiotic Capturing Ion-exchange Resin
Shunyi Li, Zai Khadijah, Kyosuke Yakabe, Akihiro Kishimura, Takeshi Mori, Yungi Kim, Kouji Hase, Yoshiki Katayama

11:30 2H11 Modulation of cell adhesion based on water state of polymer substrates and plasma membrane for cell sorting
Kei Nishida, Takahisa Anada, Shingo Kobayashi, Masaru Tanaka

A. Kikuchi, presiding

12:30 2H12ILY Design of Polymers Grafting Metal Complexes Toward Biomaterial Application
Shigehito Osawa,Hidenori Otsuka

N. Shimada, presiding

13:00 2H14 Design and self-assembly of amphiphilic graft poly(vinyl alcohol)
Yusuke Hatatani,Tomoki Nishimura,Yoshihiro Sasaki,Kazunari Akiyoshi

13:15 2H15 Differential Scanning Calorimetry Analysis of Hydrated States of
Cholinephosphate-type Polyzwitterion and its Stable Conformation
Shohei Shiomoto,Kazuo Yamaguchi,Hiroki Uehara,Masaru Tanaka,Hiromitsu
Takaba,Motoyasu Kobayashi

13:30 2H16 Evaluation of permeability of amphiphilic phospholipid polymer through
epithelial barrier
Hiroaki Hatano,Kazuhiro Ishihara,Yuji Miyahara,Tatsuro Goda

M. Kobayashi, presiding

13:45 2H17 Control of lipid membrane morphology by amphiphilic polymer: Induction of
dendrite-like structure
Tatsuhiko Murata,Tomoki Nishimura,Shin-ichi Sawada,Yoshihiro
Sasaki,Kazunari Akiyoshi

14:00 2H18 Interaction of lipid nanodiscs spontaneously formed by amphiphilic polymers
with cells
Kazuma Yasuhara,Yuma Mitsuyoshi,Jinyu Hao,Gwenael Rapenne

14:15 2H19 Polyion complex micelles made from pH-responsive block polymer having
phospholipid membrane destruction
Ken Gotoh,Syuuhei Komatsu,Glen S. Kwon,Akihiko Kikuchi

T. Muraoka, presiding

14:30 2H20 2D-3D reversible conversion of lipid membranes by cationic copolymer/anionic
peptide
Naohiko Shimada,Takuro Ochiai,Tsukuru Masuda,Yamada Takayoshi,Atsushi
Maruyama

14:45 2H21 Elucidation of lipid membrane degradation behavior by sphingomyelinase using
AFM
Ayumi Muroya,Rina Tanaka,Keisuke Kurihara,Toshiaki Mori

15:00 2H22 The formation and disassembling mechanism of pseudopolyrotaxane self-
organizing nanosheets
Kengo Kasai,Rina Maeda,Shuntaro Uenuma,Koichi Mayumi,Hideaki
Yokoyama,Kohzo Ito

T. Mori, presiding

15:15 2H23 Glycine Substitution Effects on Self-assembly of Amphiphilic Peptides
Takahiro Muraoka,Atsuya Ishida,Itsuki Ajioka,Go Watanabe

15:30 2H24 Preparation of functional nanoparticles from sequential peptide-poly(lactic acid)
blockpolymers
Togo Yamazaki,Nobuyuki Higashi,Tomoyuki Koga

15:45 2H25 Fusogenic hybrid vesicle composed of amphiphilic polypeptide and phospholipid
Motoki Ueda,Mohammed Abosheasha,Yoshihiro Ito

16:00 2H26 Recruitment of susceptibility to membrane active peptides by cationic
copolymers
Wakako Sakamoto,Tomoka Takenaka,Naohiko Shimada,Atsushi Maruyama

Fri. May 29

D. BIOPOLYMERS AND BIORELATED POLYMERS

T. Shiraki, presiding

- 9:30 3H03ILY Morphological Changes of Lipid Vesicles by the Interaction of Supramolecular Nanofibers
Kouta Sugikawa

T. Sawada, presiding

- 10:00 3H05 Design of polymer vesicles with selective molecular permeability and the function as artificial channels
Tomoki Nishimura, Shin Hirose, Yoshihiro Sasaki, Kazunari Akiyoshi
- 10:15 3H06 Construction and functional evaluation of vesicular polyion complexes comprising oligonucleotide-intercalated membrane
Kanjiro Miyata, Beob Soo Kim, Mitsuru Naito, Hyun Jin Kim, Kazunori Kataoka, Akihiro Kishimura
- 10:30 3H07 Addition of antibiotic resistance to plants by delivery of PICsome containing enzyme
Seiya Fujita, Kousuke Tsuchiya, Keiji Numata
- 10:45 3H08 Characterization of PIC micelles with different mixing anion/cation ratio in biological condition
Noriko Nakamura, Shigeto Fukushima, Horacio Cabral, Kazunori Kataoka, Yasutaka Anraku

K. Miyata, presiding

- 11:00 3H09 Effect of supramolecular nanofibers on liposome gels
Kouta Sugikawa, Hiromu Yamada, Riku Kawasaki, atsushi Ikeda
- 11:15 3H10 Dynamics of wrinkling on hydrogel surface fabricated by electrophoretic approach
Yuka Kashihara, Masatoshi Kato, Taka-Aki Asoh, Hiroshi Uyama
- 11:30 3H11 Virus-Based Membranes with Separation Capabilities
Toshiki Sawada, Haruhiko Inomata, Takeshi Serizawa

T. Asoh, presiding

- 12:30 3H12 Elucidation of mechanism of gold accumulation at the subunit interface of ferritin cage
Yuki Hishikawa, Basudev Maity, Satoshi Abe, Diannan Lu, Takafumi Ueno
- 12:45 3H13 Disk-like complex formed by cyclic peptide and phospholipid
Ryosuke Nagao, Isamu Akiba
- 13:00 3H14 Solubilization and refolding of aggregated proteins in hydrated ionic liquids
Kyoko Fujita, Roka Nakano, Kimiyoshi Ichida, Nobuhumi Nakamura, Hiroyuki Ohno

Y. Hoshino, presiding

- 13:15 3H15 Energy Transfer and Photocurrent Generation Activity of Biohybrid Light-Harvesting 1-Reaction Center Core Complex (LH1-RC)
Genki Kasagi, Masaharu Kondo, Yusuke Yoneda, Hiroshi Miyasaka, Yutaka Nagasawa, Takehisa Dewa
- 13:30 3H16 Functional Coupling of Photosynthetic Light Harvesting and Reaction Center Complexes: Quantitative Evaluation by Photocurrent Generation Activity on an Electrode
Takehisa Dewa, Hiromi Harada, Genki Kasagi, Masaharu Kondo
- 13:45 3H17 Effect of structure of polymeric microspheres on molecular separation
Yuichiro Nishizawa, Ikuma Saito, Takuma Kureha, Daisuke Suzuki

K. Fujita, presiding

- 14:00 3H18 Synthesis of Quercetin Polysaccharide and its Micellization Behaviors
Yasuhito Koyama, Mahmuda Nargis, Abu Bin Ihsan

- 14:15 3H19 Hydrogel adhesion by using specific interaction of water-soluble cellulose derivatives
Yuki Shioji, Asoh Taka-Aki, Hiroshi Uyama
- 14:30 3H20 Effect of sugar structure on self-assembly of double-hydrophilic block glycopolymer in water.
Takahiro Oh, Yu Hoshino, Yoshiko Miura

Room J

Wed. May 27

E. POLYMERS AND ENVIRONMENT

K. Sakurai, presiding

- 10:15 1J06ILY Advanced utilization of biomass with low toxic cellulose solvents
Kosuke Kuroda
- 10:45 1J08 Effect of oxygen on thermal decomposition of polyolefin
Tomohiro Ohkawa, Mikio Hata, Yoshihiro Takai

T. Hashimoto, presiding

- 11:00 1J09 Polystyrene oligomerization with a dormant bond
Yukito Urakawa, Hisayuki Nakatani
- 11:15 1J10 Oxidation of poly(4-methyl-1-pentene) monolith by chlorine dioxide radical gas
Kohei Kikkawa, Yu-I Hsu, Taka-Aki Asoh, Hiroshi Uyama
- 11:30 1J11 Development of flexible transparent polymers derived from unutilized biomass
Shinji Kanehashi, Kan Kato, Kuis Asato, Syotaro Kariya, Kenji Ogino

K. Kuroda, presiding

- 12:30 1J12 Biosynthesis and mechanical properties of ultra-high molecular weight PHBV
Kotaro Ino, Shun Sato, Kazunori Ushimaru, Azusa Saika, Tokuma Fukuoka, Tomotake Morita, Koichi Ohshiman
- 12:45 1J13 Study on utilization of sulfated polysaccharide derived from green tide forming algae
Ken-ichi Kanno
- 13:00 1J14 Preparation of composite of 4-aminocinnamic acid-based water-soluble polyamide and cellulose nano fiber
Yasuyoshi Funahashi, Amit Kumar, Kenji Takada, Tatsuo Kaneko
- 13:15 1J15 Syntheses and evaluation of polyurea based thermo-responsive networks using bio-derived furandiamine.
Takuya Kumakura, Amit Kumar, Kenji Takada, Tatsuo Kaneko

K. Takada, presiding

- 13:30 1J16 Thermal properties of polyurethane foams prepared from liquefied fruit residue
Mika Iijima, Tatsuko Hatakeyama, Hyoe Hatakeyama
- 13:45 1J17 Synthesis of water-insoluble polymer composed of cyclodextrin and functional evaluation
Jun Katsuki, Shota Fujii, Kazuo Sakurai
- 14:00 1J18 Synthesis of bio-based acrylic resins by the group-transfer polymerization using organic acid catalysts
Yasumasa Takenaka, Motosuke Imada, Hideki Abe
- 14:15 1J19 Synthesis and Properties of Bio-based Biphenyl Polyesters Composed of

Divanillic Acid and Diols with Cyclic Structure
Yunfan Zhang, Yukiko Enomoto, Tadahisa Iwata

K. Ikenaga, presiding

- 14:30 1J20 Preparation and characterization of b-1,3-glucan hydrogels with various cross-linker length.
Yusuke Matsumoto, Yukiko Enomoto, Tadahisa Iwata
- 14:45 1J21 Synthesis and properties of bio-polyesters derived from divanillic acid
Yukiko Enomoto, Tadahisa Iwata
- 15:00 1J22 Synthesis of a-1,3- and b-1,3-glucan esters having C=C bond and its surface modification
Yuki Hori, Yukiko Enomoto, Tadahisa Iwata
- 15:15 1J23 Molecular weight and substituent control of alpha-1,3-Glucan ester derivatives for the high functional bio-based plastic
Yuya Fukata, Satoshi Kimura, Tadahisa Iwata

Y. Enomoto, presiding

- 15:30 1J24 Fully bio-based polymer blend of polyamide 11 and Poly(vinylcatechol) showing thermodynamic miscibility and excellent engineering properties
Takayuki Hirai, Mamiko Narita, Taiji Ikawa, Jumpei Kawada, Kotaro Satoh, Masami Kamigaito
- 15:45 1J25 Re-swelling behavior of alginate/DNA composite hydrogels
Takashi Aoki, Toi HASHIMOTO
- 16:00 1J26 Synthesis and Properties of Biodegradable Thermoplastic Elastomers from 2-Methyl-1,3-propanediol, Succinic Acid and Lactide
Lamya Zahir, Takumitsu Kida, Ryo Tanaka, Yuushou Nakayama, Takeshi Shiono, Norioki Kawasaki, Naoko Yamano, Atsuyoshi Nakayama
- 16:15 1J27 Solid-state Structure and Thermal Properties of Substituted Poly(lactic acid)s with Alkyl Side Chains
Hironori MARUBAYASHI, Yuji HAMADA, Ryo MIZUKAMI, Shuichi NOJIMA
- 16:30 1J28 Depolymerization of PLA with alcohol under microwave heating
Kazutoshi Ikenaga, Kohei Higuch

Thu. May 28

E. POLYMERS AND ENVIRONMENT

H. Nakatani, presiding

- 9:45 2J04 Biodegradation of Polymers with Seawater Blend
Atsuyoshi Nakayama, Norioki Kawasaki, Naoko Yamano, Tsutomu Nakamura
- 10:00 2J05 Preparations of re-dispersible CNF powder and its composite
Tessei KAWANO, Yoshito ANDOU
- 10:15 2J06 Preparation and polishing characteristics of cellulose nanofiber/cerium dioxide nanocomposites
Takuya Matsumoto, Hiroaki Takahashi, Takashi Nishino
- 10:30 2J07 Preparation of carbon fibers coated with epoxy sizing agents containing degradable acetal linkages and synthesis of carbon fiber-reinforced plastics (CFRPs) for chemical recycling
Tamotsu Hashimoto, Ryosuke Aoki, Ayaka Yamaguchi, Michio Urushisaki, Toshikazu Sakaguchi

T. Matsumoto, presiding

- 10:45 2J08 Investigation of interfacial adhesion of telechelic polypropylenes for carbon fiber-reinforced plastics (CFRPs)

Tamotsu Hashimoto, Ayaka Yamaguchi, Hideyuki Uematsu, Michio Urushisaki, Toshikazu Sakaguchi, Atsushi Takamura, Daisuke Sasaki

- 11:00 2J09 Marine microplastic analysis by high-performance pyrolysis-GC-MS
Hajime Ohtani, Kenji Harata, Risa Nakano
- 11:15 2J10 Microplastic production mechanism and its collecting method development
Hisayuki Nakatani, Takuma Kyan, Takuya Muraoka
- 11:30 2J11 Synthesis and characterization of crosslinked resin using hydroxylated
Eucommia ulmoides elastomer
Yu-I Hsu, Ginga Hoshi, Kinkoh Sho, Nobuaki Suzuki, Yoshihisa Nakazawa, Taka-
Aki Asoh, Hiroshi Uyama

Y. Hsu, presiding

- 12:30 2J12 Facile and Quick Synthesis of Hydrophobic/Hydrophilic Polymer Brushes
Tomoya Sato, Richard Archer, Satoshi Nakamura, Chihiro Urata, Atsushi Hozumi
- 12:45 2J13 Construction of catalytic asymmetric photoreaction system of anthracene
derivatives mediated by human serum albumin
Misaki Kawai, Sota Oyooka, Yuya Fujishiro, Masaki Nishijima, Yasuyuki
Aeaki, Takehiko Wada
- 13:00 2J14 Study of low molecular weight polytetrafluoroethylene suppressed formation of
perfluorocarboxylic acid and its salt
Takayuki Tanaka, Hideki Nakaya, Ryosuke Senba, Kazuyuki Satoh, Akihiro
Oshima
- 13:15 2J15 Physical degradation caused by shear deformation of polypropylene
Keitaro Yamashita, Patchiya Phantong, Sho Hirai, Ryoko Nakano, Shigeru Yao

E. POLYMERS AND ENVIRONMENT “English Session”

T. Asoh, presiding

- 13:30 2J16 Adsorption of polycation onto nanosilica prepared from rice husk and
application for antibiotic removal
Thu Thao Pham, Tien Duc Pham, Thu Thuy Bui, Shin-ichi Yusa
- 13:45 2J17ILI Amino Acid-Derived Copolymers for Sustainability and Protein Therapeutics
Hua Lu
- 14:15 2J19 Photooxidation and stabilization of a bio-derived polyimide
Anh Thi Minh Mai, Thanh Nhat Nguyen, Tatsuo Kaneko, Toshiaki Taniike

O. Karthaus, presiding

- 14:30 2J20 Citric acid modified-cellulose reinforced the PP resin as fillers
Xinnan Cui, Toshiki Honda, Taka-Aki Asoh, Hiroshi Uyama
- 14:45 2J21 Photoautotrophic growth and production of spider silk using marine purple
non-sulfur bacterium
Choon Pin Foong, Keiji Numata
- 15:00 2J22 Synthesis of Polyurethane with Cellulose Acetate (L-30)
Safarul Bin Mustapha, Yoshito Andou

Y. Andou, presiding

- 15:15 2J23ILI Degradation of Polyethylene Using a Cross Alkane Metathesis Strategy
Zheng Huang, Xiangqing Jia
- 15:45 2J25 The effect of weathering of plastics on their surface contamination
Tomoki Terashima, Kazuya Ueno, Takumi Yoshida, Kento Kawamura, Olaf
Karthaus
- 16:00 2J26 Inner structure transition of virgin low-density polyethylene under shear

deformation: characterization by rheo-Raman spectroscopy
Patchiya Phanthong, Shigeru Yao

Fri. May 29

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

H. Shimomoto, presiding

- 9:30 3J03 Synthesis, structure control and cross-linking reaction of optically active acetylene copolymers substituted with benzoxazine moieties
Masahide Goto, Masaki Minami, Fumio Sanda
- 9:45 3J04 Air-Tolerant Poly(3-hexylthiophene) Synthesis via Catalyst-Transfer Polymerization
Tomohiro Kubo, Anne McNeil
- 10:00 3J05 Synthesis of Novel Group 16 Element-containing p-Conjugated Polymers by Three-component Coupling Polymerization
Rundong Gong, Hiroki Nishiyama, Shinsuke Inagi, Ikuyoshi Tomita
- 10:15 3J06 Ring-opening Anionic Polymerization of Epoxy Monomer in the Presence of Alkylaluminum
Motoyasu Kobayashi, Chisako Kurosu, Kazuo Yamaguchi

M. Kobayashi, presiding

- 10:30 3J07 Anionic polymerization of 1-(4-vinylphenyl)-1-phenylethylene
Hamin Kim, Raita Goseki, Takashi Ishizone
- 10:45 3J08 Remarkable effect of a tripodal triptycene additive on the self-assembling properties of narrow-distribution PDMS terminated with triptycene groups
YUGEN CHEN, FUMITAKA ISHIWARI, KEITA FUCHISE, TAKASHI KAJITANI, TAKANORI FUKUSHIMA
- 11:00 3J09 Synthesis and structure control of platinum-containing conjugated polymers bearing optically active bipyridine ligands
Taichi Sotani, Yousuke Fujiwara, Ken Motohara, Fumio Sanda
- 11:15 3J10 Synthesis and properties of bifacial polyindenofluorenes with various substituents
Yalun Yin, Fumitaka Ishiwari, Takanori Fukushima
- 11:30 3J11 Nanoporous Nitrogen-doped Carbon Synthesis from Triazine-based Covalent Organic Frameworks
Tomohiro Shiraki, Gayoung Kim, Tsuyohiko Fujigaya

T. Shiraki, presiding

- 12:30 3J12 Mechanistic Studies on the Cobalt-Catalyzed Copolymerization of Ethylene and Methyl Acrylate
Jin Jung, Kyoko Nozaki
- 12:45 3J13 Nano-dispersed Ziegler-Natta catalyst for microfine ultra-high molecular weight polyethylene
Patchanee Chammingkwan, Yusuke Bando, Minoru Terano, Toshiaki Taniike
- 13:00 3J14 Helical fullerene polymers accessed via molecular recognition
Takehiro Hirao, Yoshiki Iwabe, Takeharu Haino
- 13:15 3J15 Stereochemically Alternating Supramolecular Copolymerization of Thiophene-Fused Chiral [4n]Annulenes and Their Photofunctions
Tsubasa Aoki, Michihisa Ueda, Yoshimitsu Itoh, Takuzo Aida

Room K

Wed. May 27

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

S. Koizumi, presiding

- 10:00 1K05 Structure and properties of polyimide nanocomposite reinforced with chemically modified nanodiamond
Seira Morimune-Moriya, Keiya Obara
- 10:15 1K06 Fabrication and Characterization of Polypropylene Composites Reinforced with Chemically modified Nanodiamond
Ryohei Haga, Hiroaki Tanahashi, Taiki Hashimoto, Seira Moriya-Morimune
- 10:30 1K07 Characterization of Polyethylene / Nanodiamond Nanocomposite.
Taiki Hashimoto, Hiroaki Tanahashi, Ryohei Haga, Seira Moriya-Morimune
- 10:45 1K08 Dynamics in Block Copolymer-Grafted Silica Particles under Mechanical Deformation
ChaoHung Cheng, Kiyu Uno, Nattanee Dechnarong, Shiori Masuda, Kazutaka Kamitani, Taiki Hoshino, Ken Kojio, Atsushi Takahara

K. Kojio, presiding

- 11:00 1K09 Elucidation of crosslinks by dynamic nuclear polarization & neutron contrast variation method 1
Satoshi Koizumi, Yohei Noda, Tomoki Maeda, Akemi Masui, Hiromichi Kishimoto
- 11:15 1K10 Elucidation of crosslinks by dynamic nuclear polarization & neutron contrast variation method 2
Yohei Noda, Satoshi Koizumi, Tomomi Masui, Hiromichi Kishimoto, Tomoki Maeda
- 11:30 1K11 Analysis of the spatial distribution of sulfur and zinc in vulcanized rubber by μ -XRF mapping
Yohei Nakanishi, Kazuki Mita, Kentaro Yamamoto, Kotaro Ichino, Mikihiro Takenaka

H. Yamaguchi, presiding

- 12:30 1K12 Characterization of water molecule dynamics in κ -carrageenan hydrogel using terahertz spectroscopy
Koji Furuno, Shu Sato, Yui Tsuji, Xiang Li, Mitsuhiro Shibayama, Toshiaki Hattori
- 12:45 1K13 Swelling behaviors of polyelectrolyte gel based with high charge density
Jian Tang, Xiang Li, Mitsukami Yoshiro, Yuki Yokoyama, Takuya Katashima, Mitsuhiro Shibayama, Takamasa Sakai
- 13:00 1K14 Control of the flow temperature of poly(lactic acid) gel by changing the crystalline structure
Yasuhiro Matsuda, Takahiro Fukui, Hiroki Ashizawa, Kazuaki Miyamoto, Akinobu Fukatsu, Atsushi Takahara, Shigeru Tasaka
- 13:15 1K15 Ion gel formed by phase separation of ABA-type block copolymer induced by ionic liquid
Kei Hashimoto, Manabu Hirasawa, Hisashi Kokubo, Watanabe Masayoshi

Y. Matsuda, presiding

- 13:30 1K16 Structure analysis of gels with deliberately introduced spatial inhomogeneities
Yui Tsuji, Xiang Li, Shintaro Nakagawa, Mitsuhiro Shibayama
- 13:45 1K17 Structural Analysis of Hydrogel Microspheres by Light Scattering and High-Speed AFM
Yuichiro Nishizawa, Shusuke Matsui, Kenji Urayama, Takuma Kureha, Mitsuhiro

Shibayama, Takayuki Uchihashi, Suzuki Daisuke

- 14:00 1K18ILI Development of Functional Hydrogels by Tuning Internal Structures
Younsoo Kim
- 14:30 1K20 Bio-Inspired Memory-Forgetting Hydrogels Based on Thermal-Induced Transient Structure Formation
Chengtao Yu, Kunpeng Cui, Honglei Guo, Xueyu Li, Ya Nan Ye, Jian Ping Gong

T. Hoshino, presiding

- 14:45 1K21 Structural analysis of spatially homogeneous gel synthesized via bond percolation
Xiang Li, Shintaro Nakagawa, Yui Tsuji, Mitsuhiro Shibayama
- 15:00 1K22 Research on hierarchical structure of rubber using anomalous scattering near K absorption edge of zinc
Yuki Watanabe, Mikihiro Takenaka, Shotaro Nishitsuji
- 15:15 1K23 Design and evaluation of mechanical properties of dissimilar polymer mixed materials with mobile crosslinking
Ryohei Ikura, Shunsuke Murayama, Junsu Park, Motofumi Osaki, Hiroyasu Yamaguchi, Akira Harada, Yuka Ikemoto, Go Matsuba, Yoshinori Takashima
- 15:30 1K24 Mirror radius-fracture stress relationship for the brittle fracture of hydrogel
Ryuji Kiyama, Takayuki Nonoyama, Daniel King, JianPing Gong

T. Hattori, presiding

- 15:45 1K25 Near ideal physical gel cross-linked via double-strand DNA
Masashi Ohira, Xiang Li, Mitsuru Naito, Mitsuhiro Shibayama
- 16:00 1K26 Dynamical study of epoxy resin in the thermoset process using X-ray photon correlation spectroscopy
Taiki Hoshino, Yasushi Okamoto, Atsushi Yamamoto, Hiroyasu Masunaga
- 16:15 1K27 Synthesis and property of elastomers with nearly ideal network structure
Xin Huang, Shintaro Nakagawa, Naoko Yoshie
- 16:30 1K28 Structural Effect of Diamine Isomer on Curing Process for Epoxy Resin
Keunwon Song, Satoru Yamamoto, Keiji Tanaka

Thu. May 28

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

S. Okazaki, presiding

- 9:30 2K03 Dynamics of bound water in nylon-6 films studied by terahertz spectroscopy
Hiromichi Hoshina, Takuro Kanemura, Michael Ruggiero
- 9:45 2K04 Terahertz Spectroscopy for Characterization of Hydrogen Bonding and Cross-Linked Structure Dynamics in Polyurethane
Hiromichi Hoshina, Saito Yuichi, Furuhashi Takumi, Tomomi Shimazaki, Manabu Sawada, Yasunori Hioki, Chiko Otani
- 10:00 2K05 Glass Transition Behaviors of Hydrogen Bonding Polymer Blends
Osamu Urakawa, Tadashi Inoue

O. Urakawa, presiding

- 10:15 2K06 Molecular mechanism of toughening of PMMA through compressive rolling studied by molecular dynamics calculation
Hiroaki Ishikawa, Kazushi Fujimoto, Tang Zhiye, Susumu Okazaki
- 10:30 2K07 All-atom Molecular Dynamics Study of Impact Fracture of Glassy Polymers: About the Yielding Phenomenon in a Microscopic View
Zhiye Tang, Kazushi Fujimoto, Susumu Okazaki

10:45 2K08 Physical ageing response of a glassy polymer and the relaxation model including the stretching process
Yutaka Tanaka, Daisuke Tsuda

M. Tanaka, presiding

11:00 2K09ILI Probing nanochemical domains of dry powder inhalers using atomic force microscopy infrared spectroscopy (AFM-IR)
Dipesh Khanal

11:30 2K11 Solid-state DNP-NMR spectroscopy for insoluble polyolefins
Shinji Tanaka, Atsuko Ogawa, Yumiko Nakajima, Kazuhiko Sato

S. Sakurai, presiding

12:30 2K12 Swelling effects of liquid paraffin on dynamic mechanical properties in HDPE
Asae Ito, Kaori Hioki, Koichi Kono, Yusuke Hiejima, Koh-hei Nitta

12:45 2K13 Changes in hierarchical structures of polyethylene under uniaxial stretch
Mizuki Kishimoto, Kazuki Mita, Mikihito Takenaka

13:00 2K14 A Molecular Dynamics Study on Structural Change of Polyethylene by Beta Decay of Substituted-tritium using Reactive Force Field
Haolun Li, Susumu Fujiwara, Tomoko Mizuguchi, Hiroaki Nakamura, Takuo Yasunaga, Ayako Nakata, Tsuyoshi Miyazaki, Takao Otsuka, Takahiro Kenmotsu, Yuji Hatano, Shinji Saito

M. Takenaka, presiding

13:15 2K15 Effect of uncrystallizable 3-hydroxyhexanoate content on early-stage crystallization behavior from the melt of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate)
Toan Nguyen Van, Hiroyasu Masunaga, Taiki Hoshino, Shinichi Sakurai, Sono SASAKI

13:30 2K16 Confined Crystallization of Poly(ethylene glycol) in a Poly(L-lactic acid) Spherulite in the PLLA/PEG (50/50) Blend Specimen
Apisit Banpean, Shinichi Sakurai

13:45 2K17 In Situ Synchrotron Radiation X-ray Scattering Study on Microphase-separated Structure of Thermoplastic Elastomer under Various Deformation Modes
Nattane Dechnarong, Kazutaka Kamitani, Chao-Hung Cheng, Shiori Masuda, Shuhei Nozaki, Chigusa Nagano, Yoshifumi Amamoto, Ken Kojio, Atsushi Takahara

14:00 2K18 Thermal Molecular Motion of Poly(methyl methacrylate) in a Nanofiber Mat
Hisao Matsuno, Ryo Matsumoto, Masayasu Totani, Keiji Tanaka

H. Matsuno, presiding

14:15 2K19 Inclusion process of terminal-alkylated polyethylene glycol and cyclodextrin
Shun Kitawaki, Norifumi Yamada, Kohzo Ito, Hideaki Yokoyama

14:30 2K20 Formation of ordered surface morphology by solvent-mediated crystallization of polymer brushes
Shintaro Nakagawa, Naoko Yoshie

14:45 2K21 Melting and recrystallization of poly(trimethylene terephthalate)
Daisuke Tadokoro, Takashi Konishi, Koji Fukao, Teppei Yoshida, Yoshihisa Miyamoyo

15:00 2K22 Estimation of higher order structure of model polymer using persistent homology and machine learning
Yohei Shimizu, Takanori Kurokawa, Hirokazu Arai, Hitoshi Washizu

T. Konishi, presiding

15:15 2K23 Particle Aggregation and Flow Behavior of Electro-Rheological Nano-Suspensions
Katsufumi Tanaka, Y Yamamura, H Masumoto, Y Maenaka, M Takasaki, H

- Kobayashi
- 15:30 2K24 Rheology of Models of Cytoplasm with Metabolic Activity
Yujiro Sugino, Kohei Fukumoto, Kazuaki Mitani, Kenji Nishizawa, Tatsuro Takahashi, Daisuke Mizuno
- 15:45 2K25 Entropy-Driven Segregation of Specific Molecules in an Epoxy-Amine System at a Solid Interface
Satoru Yamamoto, Keiji Tanaka
- 16:00 2K26 Tracking the aggregation number change in the platonic micelles using ultracentrifugation
Naoto Moriyama, Eri Tabata, Shota Fujii, Isamu Akiba, Kazuo Sakurai

Fri. May 29

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

T. Sasaki, presiding

- 9:30 3K03 Mechanical Properties of Styrenic Triblock Copolymer Ultra-Thin Films
Masayuki Saito, Kohzo Ito, Hideaki Yokoyama
- 9:45 3K04 Gel Network Amplification for Evaluation of Tertiary Solvents Adsorption at Solid Interfaces
Sora Kimura, Shunsei Abe, Masahito Sano
- 10:00 3K05 Local Chain Conformation of Poly(2-ethyl cyanoacrylate) Chains at Alumina Interface
Daisuke Kawaguchi, Daiki Saito, Keiji Tanaka

M. Sano, presiding

- 10:15 3K06 Adsorption of poly(9-anthracenyl methyl methacrylate) onto inorganic surfaces
Mina Ishihara, Yurina Yamaguchi, Yusuke Sumi, Takashi Sasaki
- 10:30 3K07 Structural Evaluation of Concentrated Polymer Brushes of Poly(methyl methacrylate) Using Surface Forces Measurement
Yutaka Takahashi, Masashi Mizukami, Yoshinobu Tsujii, Kazue Kurihara
- 10:45 3K08 Surface structure of polymer electrolyte membrane -Observation by grazing incidence X ray scattering-
Satoshi Koizumi, Kouki Shishido, Tomoki Maeda
- 11:00 3K09 Dynamics of Chains in a Hydrogel Film at Water Interface
Atsuomi Shundo, Nozomi Itagaki, Daisuke Kawaguchi, Keiji Tanaka

T. Nonoyama, presiding

- 11:15 3K10 Self-Assembly of Poly(3-hexylthiophene) on Graphite Surface Studied by In-Situ Scanning Tunneling Microscopy
Daisuke Takajo, Hiroyasu Katsuno, Koichi Sudoh
- 11:30 3K11 The relationship between structure of microemulsions, entrapment amount of resveratrol, and skin permeation
Mina Sakuragi, Hana Yoshimura, Reina Yano, Katsuki Kusakabe

H. Mitomo, presiding

- 12:30 3K12 Solvent Dependence of Platonic Structures of Resorcinarene assemblies and their catalytic activity
Shota Fujii, Kazuo Sakurai
- 12:45 3K13 Selective absorption of alkanes by pores in the crystal of polymer P4MP1 and its causes
Ayano Chiba, Akio Oshima, Ryo Akiyama
- 13:00 3K14 Enhanced Dispersion Stability of Gold Nanoparticles by Cyclic Poly(Ethylene

Glycol)
Yubo Wang, Takuya Yamamoto

- 13:15 3K15 Preparation and Assembly of Ellipsoidal Microgels
Kenshiro Honda, Yuka Sazuka, Kojiro Iizuka, Shusuke Matsui, Takayuki Uchihashi, Takuma Kureha, Mitsuhiko Shibayama, Takumi Watanabe, Daisuke Suzuki

M. Sakuragi, presiding

- 13:30 3K16 Fabrication of highly oriented ultra-thin film of polymeric semiconductor by utilizing ultra high temperature LB method
Masato Ito, Yu Ymashita, Taizo Mori, Shun Watanabe, Jun Takeya, Katsuhiko Ariga
- 13:45 3K17 A new type polymer cracking mechanism for full color printing
Masateru Ito, Easan Sivaniah, Gibbons Andrew, Detao Qin
- 14:00 3K18 Thermo-responsive assembly of gold nanoparticles depending on oligo(ethylene glycol) density at their surface
Hideyuki Mitomo, Yier Shi, Yusuke Yonamine, Kuniharu Ijiri
- 14:15 3K19 Formation Mechanism of Pseudo-polyrotaxane Nanosheet
Shuntaro Uenuma, Rina Maeda, Hideaki Yokoyama, Kohzo Ito

Room L

Wed. May 27

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS “English Session”

K. Ueno, presiding

- 10:00 1L05 Synthesis and applications of nanocomposite hydrogel microspheres
Takumi Watanabe, Tetsuya Noguchi, Daisuke Suzuki
- 10:15 1L06 Evaluation of Lowering of Shortening Temperature of Gold Nanorods by RAFT Polymer Modification.
Tatsuya Fujiwara, Yukiko Nagai, Tsuyohiko Fujigaya
- 10:30 1L07 Silk Protein Fabricated with Metallic Nanoparticles for a Multifunctional Drug Delivery System
Anh T.N. DAO, Motofumi NAKAMURA, Farsai TAEMAITREE, Hitoshi KASAI
- 10:45 1L08 Submarine Emission under Control by Molecular Manipulation of Double-Paddled Binuclear Pt(II) Complexes at Air-Water Interface
Taizo Mori, Junya Adachi, Ryo Inoue, Souichiro Kawamorita, Takeshi Naota, Katsuhiko Ariga

T. Mori, presiding

- 11:00 1L09 Preparation of a Polythiophene Luminescent Film Based on the Polymer Composite System
Tsukuru Minamiki, Ryosuke Esaka, Ryoji Kurita
- 11:15 1L10 Crystallization behavior of polypropylene induced by amphiphilic Janus nanocellulose as a scaffold
Masato Kamogawa, Shingo Yokota, Tetsuo Kondo
- 11:30 1L11 Synthesis of single walled carbon nanotubes modified with functional peptides for gene delivery into plant cells
Simon Sau Yin Law, Yukiko Nagai, Naoki Tanaka, Kousuke Tsuchiya, Tsuyohiko Fujigaya, Keiji Numata

D. King, presiding

- 12:30 1L12 Preparation of mixed electronic/ionic conducting gels using a liquid metal and an ionic liquid
Juri ASADA, Aya SARUWATARI, Ryota TAMATE, Hiroki OTA, Kazuhide UENO, Masayoshi WATANABE
- 12:45 1L13 Effect of self-assembly of block copolymers in ionic liquid on properties of ion gel
Haruna Mizuno, Kei Hashimoto, Hisashi Kokubo, Kazuhide Ueno, Masayoshi Watanabe
- 13:00 1L14 Synthesis of a thermoresponsive gel by using a strong cationic radical initiator
Tsukuru Masuda, Toshikazu Tsuji, Hideki Koizumi, Madoka Takai

T. Fujigaya, presiding

- 13:15 1L15 Double Network Hydrogels based on Semi-Rigid Polyelectrolyte Physical Networks
Daniel Rudolf King, Takuma Ikai, Riku Takahashi, Kazuki Fukao, Takayuki Kurokawa, Jian Ping Gong
- 13:30 1L16 Control of spatiotemporal behavior of self-oscillating gel by introducing comb-type and gradient structures
Won Seok Lee, Takafumi Enomoto, Aya Mizutani Akimoto, Ryo Yoshida
- 13:45 1L17 Adjacent cationic-aromatic sequences yield strong electrostatic adhesion of hydrogels in seawater
Hailong Fan, Jian Ping Gong
- 14:00 1L18 Heterobimetallic metallo-supramolecular polymer for multicolor electrochromism
Manas Kumar BERA, Masayoshi HIGUCHI

S. Watanabe, presiding

- 14:15 1L19 Vivid colored electrochromism of metallo-supramolecular polymers
Dines SANTRA, Utpal RANA, Masayoshi HIGUCHI
- 14:30 1L20 Synthesis of 4-armed porphyrin-containing polymer exhibiting sol-gel phase transition by metal ions and their applications as cell culturing scaffolds
Akifumi Kawamura, Ayaka Ide, Takashi Miyata
- 14:45 1L21 Stimuli-responsive Polymer Micelles with Reactive Zwitterionic Polymer Core
Akifumi Kawamura, Cristiam F Santa Chalarca, Todd Emrick
- 15:00 1L22 Preparation of Thermo-responsive Random Copolymers Composed of 2-Vinylpyridine (2VP) and Sodium p-Styrenesulfonate (NaSS)
Komol Kanta Sharker, Shigeta Yusuke, Shinji Ozoe, Shin-ichi Yusa

A. Kawamura, presiding

- 15:15 1L23 Visualization and quantification of compression stress using composite substrate of layered polydiacetylene and dry liquid
Minami Nakamitsu, Keigo Oyama, Hiroaki Imai, Shuji Fujii, Yuya Oaki
- 15:30 1L24 Robust Phase Separation-induced Rubbery-to-Glassy Transition at Elevating Temperature
Takayuki Nonoyama, YongWoo Lee, Kumi Ota, Keigo Fujioka, Jian Ping Gong
- 15:45 1L25 Development of Water Treatment Membranes Based on Nanostructured Polymerized Liquid Crystals
Takeshi Sakamoto, Yusuke Hayashi, Kazuma Hamaguchi, Daniel Kuo, Shotaro Torii, Takafumi Ogawa, Masahiro Henmi, Masahiro Kimura, Hiroyuki Katayama, Takashi Kato
- 16:00 1L26 Near-infrared two wavelength control of Marangoni propulsion of soft boat based on photothermal conversion of rare-earth nanoparticles
Kazuki Arikawa, Satoshi Watanabe, Syuji Fujii, Masashi Kunitake

Thu. May 28

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS “English Session”

T. Okamoto, presiding

- 9:30 2L03 Facile Hydrogen fixation and Release by Poly(vinylidimethylquinoxaline) Gel
Yusuke Kaiwa, Kouki Oka, Kenichi Oyaizu
- 9:45 2L04 Effect of ion pair structure with varying ion pair interaction energies on high dielectric constant aiming for low-voltage driving dielectric elastomer
Ryosuke Matsuno, Yota Kokubo, Shinji Kumagai, Shigeaki Takamatsu, Atsushi Takahara
- 10:00 2L05 Synthesis of zwitterion/oligoether diblock copolymers and evaluation as Li-ion conductors
Masahiro Fujita, Jun Ishii, Yuko Takeoka, Masahiro Rikukawa

R. Matsuno, presiding

- 10:15 2L06 Influence of regioregularity and side chain of Poly(3-thioalkylthiophene) (P3ST)-based Polymer Semiconductor for Organic Field Effect Transistors
Poshen Lin, Chengliang Liu, Mingchou Chen, Tomoya Higashihara, Yamato Shoji
- 10:30 2L07 Synthesis of conductive polythiophene derivative with high stability under ambient condition and its electric conductivity
Tadanori Kurosawa, Daiji Ikeda, Yu Yamashita, Shunichiro Watanabe, Toshihiro Okamoto, Junichi Takeya
- 10:45 2L08ILI Conjugated polymers and molecular machines for optoelectronic applications
Masaki Horie

D. BIOPOLYMERS AND BIORELATED POLYMERS “English Session”

K. Numata, presiding

- 12:30 2L12ILI Greener and Tougher Composites from Natural Silks
Juan Guan
- 13:00 2L14 Lipid-raft-targeted Molecular Self-assembly Inactivates YAP to Treat Ovarian Cancer
Guanying Li, Xunwu Hu, Ye Zhang

Y. Ikeda, presiding

- 13:15 2L15ILI Natural Rubber : An Indispensable Material for Sustainable Society in the 21st Century
Preeyanuch Junkong

K. Sakurai, presiding

- 13:45 2L17 Cationic amphiphilic polymer development for efficient gene editing via Cas9 mRNA local delivery
HyunJin Kim, Satomi Ogura, JongMin Yum, Mitsuru Naito, Kanjiro Miyata
- 14:00 2L18 Targeting hypersialyated B16 melanoma using a phenylboronic acid-installed polymeric nanoparticle towards a novel BNCT agent
Ahram Kim, Minoru Suzuki, Yoshitaka Matsumoto, Nobuyoshi Fukumitsu, Yukio Nagasaki
- 14:15 2L19 Design and Synthesis of Antioxidant Nanomedicine to Combat Oxidative Stress Related Diseases
Babita Shashni, Junya Tamaoki, Makoto Kobayashi, Yukio Nagasaki

Y. Nagasaki, presiding

- 14:30 2L20II Development of self-assembling polymeric nano-drugs for therapeutic applications
Binh Long Vong, Yukio Nagasaki
- 15:00 2L22 Bioactivity of cyclodextrin-based polymer nanoparticles encapsulating alpha mangostin
Van Doan, Shota Fujii, Kazuo Sakurai
- 15:15 2L23 Regulate Microtubule Dynamics via Intracellular Trafficking of pH-responsive Self-assembly through Endocytic Pathway for Cancer Treatment
Guanying Li, Xia Wu, Ye Zhang

Fri. May 29

D. BIOPOLYMERS AND BIORELATED POLYMERS “English Session”

G. Chen, presiding

- 9:30 3L03 Aptamer Based Label-free Thrombin Detection Based on Gold Nanoparticles Incorporated with Polyaniline Nanostructure
Rodtichoti Wannapob, Surachada Chuaychob, Masahiro Fujita, Mizuo Maeda
- 9:45 3L04 Bioinspired design of stable siRNA-loaded polyion complex micelles from strong Tryptophan/Tyrosine-RNA interactions for siRNA delivery
Wengian Yang, Takuya Miyazaki, Yasuhiro Nakagawa, Satoshi Uchida, Kazunori Kataoka, Horacio Cabral
- 10:00 3L05 Peptide nanotube end-sealed by cationic peptide amphiphile and salt-responsive transformation
Kon Son, Motoki Ueda, Shinji Takeoka, Yoshihiro Ito
- 10:15 3L06 High-resolution observation of the mechanical deformation of microtubules and its effect on the motor protein motility
Syeda Rubaiya Nasrin, Christian Ganser, Seiji Nishikawa, Kazuki Sada, Takayuki Uchihashi, Henry Hess, Akira Kakugo

A. Mahara, presiding

- 10:30 3L07 Biomimetic assembly of spider silk via liquid-liquid phase separation
Ali Malay, Keiji Numata
- 10:45 3L08 Supermolecule-based surfaces with intermediate mobility promote myocyte differentiation
Ruriko Sekiya, Yoshiori Arisaka, Nobuhiko Yui
- 11:00 3L09 Influence of Viscosity of Gelatin Solution Embedded in Hydrogels on Differentiation of Mesenchymal Stem Cells
Guoping Chen, Kyubae Lee, Naoki Kawazoe

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

H. Yokoyama, presiding

- 12:30 3L12 Development of polymer blend miscibility estimation method combining all-atom molecular dynamics simulation and free-energy calculation
Kazuo Yamada, Nobuyuki Matubayasi
- 12:45 3L13 Chemical Knowledge Base Extracted from Chemical Literatures
Noriko Ikeda, Hiroaki Yoshida, Junichi Shigezumi, Kazunari Tanaka, Nobuyuki Katae, Hikaru Yokono

K. Terao, presiding

- 13:00 3L14 Effect of Molecular Structure on Hydration Behavior of Poly(ethylene glycol) in

Aqueous Solution
Takeshi Fujiyabu, Kengo Arai, Takuya Katashima, Ung-il Chung, Toshiyuki Shikata, Takamasa Sakai

- 13:15 3L15 Molecular Modeling of Self-Organized Ionic Liquid Crystals: Nanochannel and the Hydration Properties
Yoshiki Ishii, Go Watanabe, Nobuyuki Matubayasi, Takashi Kato, Hitoshi Washizu
- 13:30 3L16 Direct observation of the water molecules bound to biocompatible polymers by use of dilection relaxation
Takuma Kanamaru, Rintaro Takahashi, Toshiyuki Shikata, Daiki Murakami, Masaru Tanaka, Kazuo Sakurai

I. Akiba, presiding

- 13:45 3L17 Multilamellar vesicles formation through polymerization-induced self-assembly in dilute solution: in situ observation of the formation kinetics
Rintaro Takahashi, Fabian Sobotta, Brendel Johannes, Kazuo Sakurai
- 14:00 3L18 Micellization of Hydrophobically Modified Pullulan by Octenyl Succinic Anhydride in Aqueous Media
Jia Yang, Takahiro Sato
- 14:15 3L19 Complex formation of collagen and silica nanoparticles in aqueous solution at different temperatures
Ken Terao, Mari Otsubo, Masahiro Abe

Room M

Wed. May 27

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS “English Session”

K. Oyaizu, presiding

- 10:30 1M07 Amorphous network polymers containing heteroaromatic rings and quinone moieties and their application to electrocatalyst for hydrogen evolution reaction
Akira Ishizone, Hiroaki Imai, Yuya Oaki
- 10:45 1M08 Efficient exploration of organic anode materials for lithium-ion battery by experiment-oriented materials informatics
Takumi Komura, Yasuhiko Igarashi, Hiromichi Numazawa, Hiroaki Imai, Yuya Oaki

M. Higuchi, presiding

- 11:00 1M09 Redox mediation-assisted fast charge/discharge by fluoflavin polymer/lithium iron phosphate hybrid cathodes
Kan Hatakeyama, Choitsu Go, Takahiro Kaseyama, Takuji Yoshimoto, Kenichi Oyaizu
- 11:15 1M10 Polyelectrolyte Membrane with Controlled Mass-transfer Process of Polysulfide Ions for Lithium-sulfur Batteries
Kenichi Oyaizu, Satoshi Kimura, Koji Matsuoka, Tomomi Nagatsuka
- 11:30 1M11 In plane micro-supercapacitor based on carbon-copper hybrid electrode prepared by laser direct writing
Akira Watanabe, Tomoko Kozono, Toru Yumoto

J. Matsui, presiding

- 12:30 1M12 Low-cost non-precious metal-based carbon nanotube hybrid battery design
Jin Nishida, Jyunko Matsuda, Naotoshi Nakashima

12:45 1M13 Preparation of Li-S polymer battery utilizing CNT dispersibility in highly concentrated lithium electrolytes
Ryo Motoyoshi, Shanglin Li, Jiali Liu, Aya Saruwatari, Kei Hashimoto, Kazuhide Ueno, Masayoshi Watanabe

13:00 1M14 Ni(II)-Based Metallo-supramolecular Polymer and Imidazole System for Anhydrous Proton Conduction Application
Narayana Yamineni, Masayoshi Higuchi

K. Hatakeyama, presiding

13:15 1M15 High Gain Visible Light Photocatalyst prepared from Active Organic Photovoltaic Cell
Keiji Nagai, Takayuki Kuwabara, Mohd Fairus Ahmad, Masahiro Nakano, Makoto Karakawa, Tetsuya Taima, Kohshin Takahashi

13:30 1M16 Open-Circuit Voltage Loss in Nonfullerene-Based Ternary Blend Polymer Solar Cells
Hyung Do Kim, Shohei Hosoya, Masahiko Saito, Itaru Osaka, Hideo Ohkita

13:45 1M17 Ultrasonic Spray-Assisted Method via Vacuum-extraction Technique for All-inorganic CsPbI₂Br Perovskite Solar Cells under Ambient Condition.
Yu-Dien Yu, Cheng-Liang Liu

M. Nishihara, presiding

14:15 1M19 High proton conductivity and organized structure of semi-alicyclic sulfonated polyimide thin film with a lyotropic liquid crystalline property
Yuze Yao, Hayato Watanabe, Mitsuo Hara, Jun Matusi, Shusaku Nagano, Yuki Nagao

14:30 1M20 Effect of cation size on the ion conduction properties for polyether-based electrolyte with cyanoethoxy sidechain
Soichiro Yamanaka, Riho Matuoka, Ryansu Sai, Yu Katayama, Hiromori Tutumi

A. Watanabe, presiding

14:45 1M21 Steric effects of sidechains on the ion transport properties of polyether-based electrolytes
Kousuke Matsuo, Shohei Yuasa, Ryansu Sai, Yu Katayama, Hiromori Tsutsumi

15:00 1M22 Effect of TiO₂ particles on ion conduction mechanism in polyether-based electrolyte containing cyano group
Tasuku Hitaka, Ryutaro Isobe, Koki Yamada, Ryansu Sai, Yu Katayama, Hiromori Tsutsumi

15:15 1M23 Evaluation of SPI/Si-Epoxy CT blend membrane for PEFC application
Byungchan Hwang, Masamichi Nishihara, Kazunari Sasaki, Akari Hayashi, Shoichi Kondo, Takamasa Kikuchi

Y. Katayama, presiding

15:30 1M24 Ion transport properties of weakly coordinating polymeric salts in non-aqueous solvents
XiaoXiao Yang, Yusuke Sakashita, Keita Murai, Ryoichi tatara, Hisashi Kokubo, Kazuhide Ueno, Kaoru Dokko, Masayoshi Watanabe

15:45 1M25 Partially fluorinated copolymers containing pendant piperidinium head groups as anion exchange membranes: effect of the side chain length
Daniel Koronka, Akinobu Matsumoto, Kanji Otsuji, Kenji Miyatake

16:00 1M26 Properties and Fuel Cell Performance of Reinforced Aromatic Ionomer Membranes
Junpei MIYAKE, Takayuki WATANABE, Kenji MIYATAKE

16:15 1M27 Water-soluble fullerene complex and its potential application in sonodynamic therapy.
Thi Lien Nguyen, Risa Katayama, Chie Kojima, Akikazu Matsumoto, Kazuhiko Ishihara, Shin-ichi Yusa

16:30 1M28 Introducing sacrificial bonds to rubber vulcanizes for enhancing physical properties
TAKATSUGU TANAKA, YASUHIRO SHODA, TOMOYUKI KOSAI

Thu. May 28

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS “English Session”

M. Mitsuishi, presiding

- 10:00 2M05ILI Understanding the interactions in organic solid electrolytes and composites for future battery applications
Xiaoen Wang, Fangfang Chen, Gaetan Girard, Frederick Nti, David Mecerreyes, Patrick Howlett, Maria Forsyth
- 10:30 2M07 Aqueous-processed enzyme-carbon nanotube composites using multi-functional polymers for bioelectrodes
Masaki Kawamoto, Hsiu-Pen Lin, Jun Akimoto, Yaw-Kuen Li, Yoshihiro Ito
- 10:45 2M08 Fabrication and Characterization of Conductive Polymer Composites consists of PEDOT:PSS and Silver Nanowire
Hiroaki Tanahashi, Taiki Hashimoto, Ryohei Haga, Seira Moriya-Morimune
- 11:00 2M09 Design of Liquid Crystalline Polymer- Gold Nanoparticle Hybrid Films with Controllable Optical and Electrical Properties.
Hiroki Tanaka, Akifumi Kawamura, Takashi Miyata

M. Kawamoto, presiding

- 11:15 2M10 Fabrication of Pt/WO₃-Polydimethylsiloxane Hybrid Membrane for Hydrogen Gas Sensor
Ryo Ishihara, Yuki Yamaguchi, Kanta Tanabe, Yoshihiro Makino, Keishi Nishio
- 11:30 2M11 Boronic Acid-Functionalized Polycyclosiloxanes: Synthesis and Applications
Soyeon Kim, Huie Zhu, Masaya Mitsuishi
- 12:30 2M12 Functional Cyclosiloxane Polymers Synthesized via Piers-Rubinsztajn Reaction
Huie Zhu, Shogo Hiruta, Masaya Mitsuishi
- 12:45 2M13 PEG-b-PLGA/laponite thermoresponsive hydrogel: Degradation behavior of PEG-b-PLGA diblock copolymers
Tomoki Maeda, Atsushi Hotta, Satoshi Koizumi

I. Taniguchi, presiding

- 13:00 2M14 Cooperative Influences of Nanoparticle Localization and Phase Coarsening on Thermal Conductivity of Ternary Nanocomposites
Xi Zhang, Toru Wada, Patchanee Chammingkwan, Toshiaki Taniike
- 13:15 2M15 Preparation of Perovskite Nanosheet/Poly(N-isopropylacrylamide) Composite Hydrogel with Structural Color
Wenqi Yang, Shinya Yamamoto, Keiichirou Sueyoshi, Nobuyoshi Miyamoto
- 13:30 2M16ILI Two-Dimensional Covalent Organic Frameworks: Structural Design, Synthesis, and Application
Ning Huang
- 14:00 2M18 High-flux membranes based on zeolitic imidazole framework for organic solvent nanofiltration
Hui You, Goji Y. Shangkum, Toshiaki Taniike

M. Tanaka, presiding

- 14:15 2M19 Anomalous Mass Transport Behavior through Fluorinated Nanochannels
Yoshimitsu Itoh, Ryota Hirahara, Kohei Sato, Takuzo Aida
- 14:30 2M20 Selective separation of TR-binding compounds by a receptor-mimic polymer material

- Takuya Kubo, Shuhei Yamamoto, Toyohiro Naito, Daisuke Nakajima, Koji Otsuka
- 14:45 2M21 CO₂ capture by amine-containing polymeric membranes: Effect of relative humidity on the CO₂ separation performance
Ikuo Taniguchi, Kae Kinugasa, Mariko Toyoda, Mitsunari Matsunaga
- 15:00 2M22 Recycled PET as a PDMS-Functionalized Electrospun Fibrous Membrane for Oil-Water Separation
Ngoc Hoan Doan, Phong Phu Vo, Kenji Kinashi, Wataru Sakai, Naoto Tsutsumi
- Y. Itoh, presiding**
- 15:15 2M23 Synthesis of pi-stacked poly(4,5-diazadibenzofulvene) as macromolecular ligand and its application for catalytic reactions
Yuehui Yuan, Zhiyi Song, Tamaki Nakano
- 15:30 2M24 Synthesis of Asymmetrically Substituted Poly(diphenylacetylene)s Bearing Optically Active Anilide Pendants and Their Application to Chiral Stationary Phases for HPLC
Mai Nozaki, Daisuke Hirose, Tatsuya Nishimura, Katsuhiko Maeda
- 15:45 2M25 Development of amphiphilic polymer modified calcium carbonate microspheres for application to separation material
Yuki Hiruta, Kogi Kaizu, Mai Mochida, Hiroaki Imai, Daniel Citterio
- 16:00 2M26 A microfluidic system with an extended-gate type polymer transistor for real-time glucose monitoring
Pierre Didier, Tsuyoshi Minami

Fri. May 29

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS “English Session”

N. Shida, presiding

- 9:30 3M03 Manipulate Proteins Adsorption on Phosphocholine Immobilized Conducting Polymer by Surface Potential
Jhieh Guang Wu, Shyh Chyang Luo
- 9:45 3M04 Life Prolongation and Functionalization of Antithrombotic Poly(2-methoxyethyl acrylate) Coating via Organic-Inorganic Hybrid Strategy
Shinnosuke Nishimura, Tomoya Ueda, Shingo Kobayashi, Masaru Tanaka
- 10:00 3M05 Bioinert Properties of Epoxy/Betaine Based Polymer Adhesive
Masayasu Totani, Junko Katayama, Masaaki Ozawa, Nobutomo Tsuruzoe, Hisao Matsuno, Keiji Tanaka
- 10:15 3M06 Effects of Chain Length on Bioinert Properties for Poly(2-oxazoline) Derivatives
Jinhyeok Hong, Masayasu Totani, Hisao Matsuno, Keiji Tanaka

H. Matsuno, presiding

- 10:30 3M07 Structural analysis of polymer nano-thin films reversibly photo-switching formation and disappearance of phase separation
Naoya Takeda, Masato Sakano, Haruka Umeno, Yutaro Miyake, Keiichi Imato, Yuji Tsuchido
- 10:45 3M08 Synthesis of Superhydrophobic Nanomaterials by the Living Coordination Block Copolymerization of Fluorous Allenes with Hydrophobic Allenes via Polymerization-induced Self-assembly and Their Applications to Optically Transparent Surface Coatings
Yidan CHENG, Takeshi Wakiya, Hiroki Nishiyama, Shinsuke Inagi, Ikuyoshi Tomita
- 11:00 3M09 Aqueous Dispersion of Polytetrafluoroethylene (PTFE) Nanoparticles using Biomimetic Catechol based Adhesive Polymers
Manjit Singh Grewal, Hiroshi Yabu

H. Yamagishi, presiding

- 11:15 3M10 Solvatochromism of near infrared photoluminescence from oxygen-doped single-walled carbon nanotubes
Yoshiaki Niidome, Tomohiro Shiraki, Tsuyohiko Fujigaya
- 11:30 3M11 Light-induced wavelength changes in near infrared photoluminescence from single-walled carbon nanotubes functionalized with diarylethene derivatives
Yasuto Nakagawa, Tomohiro Shiraki, Takuya Nakashima, Tsuyoshi Kawai, Tsuyohiko Fujigaya

N. Kimizuka, presiding

- 12:30 3M12 Rotation of polarized plane of electroluminescence from double chiral liquid crystalline semiconductor with the external electric field
Masahiro Funahashi
- 12:45 3M13 Novel electrochemiluminescent device with DNA/photo-electro functional molecules
Haruki Minami, Ryuki Ozawa, Kazuki Nakamura, Norihisa Kobayashi
- 13:00 3M14 Luminescent Characteristics of Organic Light Emitting Diodes Using Single Crystals Processed by a Plasma Treatment
Yuji Kobayashi, Yuhi Inada, Takeshi Yamao

M. Funahashi, presiding

- 13:15 3M15 Hydrogels showing near infrared-to-visible phototon upconversion
Nobuhiro Yanai, Yoichi Sasaki, Mio Oshikawa, Itsuki Ajioka, Moritoshi Sato, Akiko Hayashi-Takagi, Nobuo Kimizuka
- 13:30 3M16 Light-triggered welding of polymer-based optical microresonators
Hiroshi Yamagishi, Yohei Yamamoto

N. Yanai, presiding

- 13:45 3M17 Ultrahigh Cycle Stable Electrochromic Display with Metallo-Supramolecular Polymer
Sanjoy Mondal, Masayoshi Higuchi
- 14:00 3M18 Waveguide analysis of polymer optical fibers doped with phthalocyanine derivative.
Takahiro Shigeyama, Chie Hirose, Rei Furukawa
- 14:15 3M19 Surface Wettability Controllable Polyimides Containing Perfluoroalkyl Group by Photo-irradiation
Yusuke Tsuda, Koki Hara