

Room A

Wed. Sep 14

Invited Lecture

Takeshi Serizawa, presiding

10:25 1A04IL Design of hydrogel particles showing protein-like dynamic functions
Yu Hoshino

Takahiro Ichikawa, presiding

11:15 1A06IL Control of pDNA packaging by block copolymers and application as gene
delivery system
Kensuke Osada

Yukio Nagasaki, presiding

12:55 1A08IL New development of tough hydrogels
Jian Ping Gong

Kohzo Ito, presiding

13:45 1A10IL Photoalignment of Liquid Crystalline Polymers: Toward New directions
Takahiro Seki

Tsutomu Yokozawa, presiding

14:35 1A12IL Organic Semiconductors Based on Heteroaromatic compounds
Kazuo Takimiya

Thu. Sep 15

Award Lecture

Teruaki Hayakawa, presiding

10:00 2A03AL Development of a Versatile Patterning Method for Engineering Plastics
Based on Reaction Development
Toshiyuki Oyama

Naotoshi Nakashima, presiding

10:50 2A05AL Design and Synthesis of Insulated π -Conjugated Polymer and Its
Application to Molecular Electronics
Jun Terao

Katsuhiko Fujita, presiding

12:55 2A08AL Designing Nanoarchitectures by using Biotemplates
Kuniharu Ijiro

Kohtaro Osakada, presiding

14:10 2A11AL Development of functional hybrids based on random-type
polysilsesquioxane
Kimihiko Matsukawa

Hiroshi Jinnai, presiding

15:00 2A13AL Conformational Analysis of Single Polymer Chains by Super-resolution Optical Microscopy
Hiroyuki Aoki

Hideaki Yokoyama, presiding

15:50 2A15AL Study on Dynamic Self-organization Using Bio-molecular Motors
Akira Kakugo

Fri. Sep 16

Invited Lecture

Kenichi Oyaizu, presiding

10:25 3A04IL CO₂ Separation by Innovative Polymer Membrane Processing Gas Permeable Nano-space
Hiroyoshi Kawakami

Takamasa Sakai, presiding

11:15 3A06IL Stimulus-Response Behavior of Liquid Crystal Elastomers and Gels
Kenji Urayama

Kotaro Satoh, presiding

12:55 3A08IL Recent Progress in Precision Addition Polymerization: Control of Side-Chain Sequence and Main-Chain Topology
Makoto Ouchi

Toshiki Aoki, presiding

13:45 3A10IL Development of Chiral Materials Utilizing Structural Features of Helical Polymers
Katsuhiro Maeda

Room B

Wed. Sep 14

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Takahiro Uno, presiding

10:00 1B03 Control of Solution- and Solid-State Emission by Fusing Based on Boron Pyridinoiminate Complexes and Their Polymerization
Madoka Yamaguchi, Amane Hirose, Shunichiro Ito, Kazuo Tanaka, Yoshiki Chujo

10:25 1B04 Synthesis and Electronic State of Pentaazaphenalene-containing Conjugated Polymers
Hiroyuki Watanabe, Masataka Hirose, Kazuyoshi Tanaka, Kazuo Tanaka, Yoshiki Chujo

Kazuo Tanaka, presiding

10:50 1B05 Synthesis and Structure Control of Polymers Containing Diketopiperazine Moieties in the Main Chain
Noritaka Shimosaraya, Yu Miyagi, Fumio Sanda

11:15 1B06 Preparation of Polymer Catenane Using Solid-Phase Condensation Agent
Akihiro Yamaji, Takahiro Uno, Takahito Itoh, Masataka Kubo

11:40 1B07 Synthesis of hyperbranched poly(N-isopropylacrylamide) and their application for optical materials
ominami seiichi, hiroto kudo

Arihiro Kanazawa, presiding

12:55 1B08 Development of Multi-Joint Polymers and Their Unique Self-Assembling Behaviors
Yuki Tsujimoto, Tsuneaki Sakurai, Shu Seki

13:20 1B09 Synthesis of macromolecular [2]rotaxane bearing Pd-containing macrocycles and its crystallization behavior.
Miya Hiroi, Daisuke Aoki, Hiromitsu Sogawa, Toshikazu Takata

13:45 1B10 Synthesis of various cyclic polymers by insertion reaction of thiiranes into cyclic-carbamic thioesters.
kazunori Naritomi, hiroto Kudo

Hiroto Kudo, presiding

14:10 1B11 Synthesis of acid-degradable linear polymers via cyclotrimerization reactions of conjugated dialdehydes with vinyl ethers or styrene derivatives using Lewis acid catalysts.
tadashi naito, arihiro kanazawa, syokyoku kanaoka, sadahito aoshima

14:35 1B12 Precise Synthesis of Amphiphilic Vinyl Ether Copolymers via Living Cationic Polymerization: Synthesis of Template Polymers for Controlled Assembly of Inorganic Nanoparticles
Shintaro Araoka, Chisato Atsumi, Ayae Narutaki, Chikara Ohtsuki, Arihiro Kanazawa, Sadahito Aoshima

15:00 1B13 Design and Synthesis of Networked Polymer Through β -Sheet Formation of Oligopeptide
Shuhei Yamada, Mitsuaki Goto, Takeshi Endo

Hideaki Oike, presiding

15:25 1B14 Synthesis and properties of star-shaped poly(N-isopropylacrylamide)
Yosuke Miyashita, Hiroto Kudo

15:50 1B15 Synthesis of N-heterocyclic carbene (NHC)-containing block copolymers having CO₂-absorbing and stimuli-responsive properties
Yu Sato, Kazuhiro Nakabayashi, Hideharu Mori

16:15 1B16 Dynamics of polyrotaxane glass with different inclusion ratios
Akihiro Ohara, Kazuaki Kato, Koichi Mayumi, Hideaki Yokoyama, Kohzo Ito

Hideaki Yokoyama, presiding

16:40 1B17 Precision Synthesis of Amphiphilic In-Chain Ring Polymers via Cyclopolymerization: Characteristics and Functions derived from Side Chain Structure
Yoshihiko Kimura, Takaya Terashima, Mitsuo Sawamoto

17:05 1B18 Single-Chain Crosslinked Star Polymers via Self-Folding of Amphiphilic Random Copolymers: Multicompartmentalization and Structure Control by Block Functionalization
Mayuko Matsumoto, Takaya Terashima, Mitsuo Sawamoto

17:30 1B19 Imine-Functionalized Microgel or Single-Chain Star Polymers: From Precision Synthesis to Reversible Structure Control and Unique Functions
Azuma Yusuke, Takaya Terashima, Mitsuo Sawamoto

17:55 1B20 Synthesis of an segmented block copolymer based on N-substituted polyamide and poly(ethylene glycol).
Toshiki Mori, Yoshiyuki Oishi, Yuji Shibasaki

Thu. Sep 15

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Kotaro Satoh, presiding

- 9:10 2B01 Synthesis and polymerization of α -functionalized acrylamide
Yoshiaki Tanimoto, Yasuhiro Kohsaka
- 9:35 2B02 Controlled synthesis of periodic glycopolymers by RAFT polymerization
Yohei Yamamoto, Tomonari Tanaka, Jin Motoyanagi, Masahiko Minoda
- 10:00 2B03 Synthesis of well-defined periodic copolymers via RAFT copolymerizations of functionalized vinyl ethers and electron-deficient monomers
Hitoshi Kumadani, Satoyo Miyaji, Tomonari Tanaka, Jin Motoyanagi, Masahiko Minoda

Jin Motoyanagi, presiding

- 10:25 2B04 Introduction of Various Functional Groups into Living Polymer Chains by Repetitive Photo-Switchable Concurrent Cationic and Radical Polymerization
Ryoma ISHIBASHI, Kotaro SATOH, Masami KAMIGAITO
- 10:50 2B05 Synthesis of Various Functionalized Polyacrylate via Combination of Living Radical Polymerization and Selective Amidation
Yukako Ishigami, Kotaro Satoh, Masami Kamigaito
- 11:15 2B06 Synthesis of Sequence-Regulated Vinyl Polymer by Metathesis Reactions of Sequenced Telechelic Oligomer Prepared via Atom Transfer Radical Addition
Masato MIYAJI, Kotaro SATOH, Masami KAMIGAITO
- 11:40 2B07 Controlled/Living Radical Polymerization of exo-Methylene Cyclic Carbonate Derived from Glycerol and Carbon Dioxide
Teigo OKOSHI, Kotaro SATOH, Masami KAMIGAITO

Yasuyuki Nakamura, presiding

- 12:55 2B08 Design and properties of networked polymers based on radical ring-opening polymerization of multifunctional vinyloxiranes
Shinya Maeda, Takeshi Endo
- 13:20 2B09 Synthesis and Radical Ring Opening Polymerization of Vinylcyclopropane Derivatives with Amino Acid Moieties Bearing Carboxylic Acid Moieties on the Side Chains
Naoya Takahashi, Takeshi Endo
- 13:45 2B10 Selective Vinyl Copolymerization of Maleimide Derivatives and Vinyl Ethylene Carbonate
Yoshiaki Yoshida, Takeshi Endo
- 14:10 2B11 Radical Copolymerization of N-Substituted Maleimides with Olefin and Diene Monomers: Monomer Structure Design and Copolymerization Reactivity Control
Suguru Terada, Kenta Nomura, Haruyuki Okamura, Akikazu Matsumoto

Makoto Ouchi, presiding

- 14:35 2B12 Synthesis of Organoheteroatom Initiators via Radical Trapping Reaction and Their Uses for Living Radical Polymerization
Zhiren Huashen, Yasuyuki Nakamura, Shigeru Yamago
- 15:00 2B13 Living emulsion polymerization using water-soluble TERP agent
Weijia Fan, Shigeru Yamago, F. Michael Cunningham
- 15:25 2B14 Controlled radical polymerization of ethylene by TERP

Yasuyuki Nakamura, Bastian Ebeling, Arne Wolpers, Vincent Monteil, Franck D'Agosto, Shigeru Yamago

- 15:50 2B15 Development of an Efficient Method for Tellurium Recovery and Recycling from Polymer-ends by Using Fluorous Tellurol and Fluorous Extraction
Toyomitsu Seki, Mengmeng Yu, Yasuyuki Nakamura, Shigeru Yamago

Yasuhiro Kohsaka, presiding

- 16:15 2B16 DFT study on the effect of Lewis acid in radical polymerization of acrylamide
Takehiro Fujita, Shigeru Yamago
- 16:40 2B17 Sequence-Controlled Vinyl Polymers via Iterative Cyclization: New Molecular Design with Embedded Leaving Group for Living Radical Polymerization for More Efficient Construction
Yuki Kametani, Makoto Ouchi, Mitsuo Sawamoto
- 17:05 2B18 Functional Polymers via Living Radical Polymerization Coupled with Transesterification
Yusuke Ogura, Takaya Terashima, Mitsuo Sawamoto

Fri. Sep 16

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Eiji Ihara, presiding

- 9:10 3B01 Reaction of various Grignard reagents toward living polythiophene termini: Investigation of nickel catalyst transfer
Koji Takagi, Junpei Kawai
- 9:35 3B02 Synthesis of conjugated polymers via sequential bromination and direct arylation polycondensation
Hitoshi Saito, Chen Jieran, Junpei Kuwabara, Takaki Kanbara
- 10:00 3B03 Investigation of Pd catalyst for intra- and intermolecular catalyst transfer A₂+B₂ polycondensation
Kentarou KOSAKA, Kotetsu NANJO, Yoshihiro OHTA, Tsutomu YOKOZAWA

Koji Takagi, presiding

- 10:25 3B04 Ideal copolymerization of lactones in a living fashion
Nobuyoshi Nomura, Nobutaka Taoka, Masataka Oishi, Hikari Tsusaka, Azusa Akita
- 10:50 3B05 Synthesis of Novel Cyclopolymers by Cyclopolymerization of Bifunctional Diazocarbonyl Compounds
Misaki Kikuchi, Junya Aoyama, Hiroaki Shimomoto, Tomomichi Itoh, Eiji Ihara
- 11:15 3B06 Synthesis of poly(*N*-alkylcarbamoylmethylene)s via polymerization of fluoroaryl diazoacetates followed by postmodification.
Tomohiko Kudo, Hiroaki Shimomoto, Tomomichi Itoh, Eiji Ihara
- 11:40 3B07 Development of Novel Polymerization System Based on Alternative Insertion of Isocyanide and Acetylene to Palladium Complex
Yuki Kataoka, Naoya Kanbayashi, Taka-aki Okamura, Kiyotaka Onitsuka

Daisuke Takeuchi, presiding

- 12:55 3B08 Polymerization of Substituted Acetylenes Using Well-Defined Rhodium Complex Catalyst
Ayaka Nito, Yu Miyagi, Fumio Sanda
- 13:20 3B09 Polymerization of Disubstituted Acetylene Monomers by Pd Catalyst Bearing Bulky Phosphine Ligand
Yuta Goto, Yu Miyagi, Natsuhiko Sano, Fumio Sanda

- 13:45 3B10 Rare-Earth-Catalyzed Polymerization of Methoxy-Substituted Styrenes: Step-Growth vs. Chain-Growth Polymerization
Xiaochao Shi,Masayoshi Nishiura,Zhaominh Hou
- Masayoshi Nishiura, presiding**
- 14:10 3B11 Asymmetric Polymerization of Styrene by Pd Complexes with HUGPHOS Ligands
Matthieu Jouffroy,Dominique Armspach,Dominique Matt,Daisuke Takeuchi,Kohtaro Osakada
- 14:35 3B12 syntheses and properties of stereoregular hydrogenated polynorbornenes (1)
Shigetaka Hayano,Yuki Nakama
- 15:00 3B13 Regioselective oligomerization of 1-hexene using zirconium complexes bearing aryl-substituted [OSSO]-type ligands
Kazuaki Nakamura,Norio Nakata,Akihiko Ishii

Room C

Wed. Sep 14

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Shin-ichi Matsuoka, presiding

- 10:00 1C03 Structure-Activity Relationship of Complex Catalysts in Cationic Polymerization Using Initiating Systems Consisting of Phenoxyimine-Type Ligands and Metal Chlorides
Sensho Kigoshi,Arihiro Kanazawa,Shokyoku Kanaoka,Sadahito Aoshima
- 10:25 1C04 Metal-Free Photoinitiated Controlled Cationic Polymerization of Vinyl Ethers Using Diphenyliodonium Salts
Tsuyoshi Nishikawa,Arihiro Kanazawa,Sadahito Aoshima
- 10:50 1C05 Design of a new initiating system for living cationic polymerization of *N*-vinylcarbazole and stereospecific polymerization using a Lewis acid catalyst
Hironobu Watanabe,Arihiro Kanazawa,Sadahito Aoshima

Kotaro Satoh, presiding

- 11:15 1C06 Addition polymerization of vinyl monomers containing acidic proton catalyzed by Lewis acid
Naoki Awano,Atsushi Shimizu,Shin-ichi Matsuoka,Masato Suzuki
- 11:40 1C07 Anionic cyclopolymerization of α -linked diacrylate
Seungmin CHOI,Nobuya TANAKA,Takehiro KITAURA,Yasuhiro KOHSAKA,Tatsuki KITAYAMA

Naoki Haraguchi, presiding

- 12:55 1C08 Anionic polymerization of 2-phenyl-1,3-butadiene derivatives containing 1,3-dioxolane and N-alkylimino group on the aromatic ring
Katsuhiko Takenaka,Tomoyuki Toda,Masamitsu Miya
- 13:20 1C09 Living Cationic Polymerization of Glycerol-Based Vinyl Ethers with Various Substituents
Akito KAJITA,Kotaro SATOH,Masami KAMIGAITO
- 13:45 1C10 Cationic Polymerization of Naturally-Derived Alicyclic Conjugated Dienes with a Reactive exo-Methylene Group
Takenori NISHIDA,Kotaro SATOH,Masami KAMIGAITO

14:10 1C11 Halogenation of Growing Terminal in Anionic Polymerization of Hydrocarbon Monomers Followed by Various Mechanistic Transformation and Post-Polymerization Modification
Yuya MORI, Kotaro SATOH, Masami KAMIGAITO

Tomoyuki Toda, presiding

14:35 1C12 Concurrent cationic vinyl-addition and coordination ring-opening copolymerization: Synthesis of vinyl ethers— ϵ -caprolactone graft copolymers through alkoxy group exchange reactions at propagating ends with acetal structures
Motoki Higuchi, Arihiro Kanazawa, Sadahito Aoshima

15:00 1C13 Concurrent Cationic Vinyl-Addition, Ring-Opening, and Carbonyl-Addition Terpolymerization of Vinyl Ether, Oxetane, and Ketone via a One-Way Cycle of Crossover Reactions: Possibility of Generation of Long-Lived Propagating Species
Arihiro Kanazawa, Sadahito Aoshima

15:25 1C14 Concurrent Cationic Vinyl-Addition and Ring-Opening Copolymerization of Vinyl Ethers with Oxiranes: Toward Controlled Copolymerization Mediated by Long-Lived Species
Daisuke Hotta, Arihiro Kanazawa, Sadahito Aoshima

15:50 1C15 Concurrent cationic vinyl-addition and ring-opening copolymerization of β -methylglycidyl ethers with vinyl ethers: Effects of electron-withdrawing substituents on copolymerization
Yurika Miyamae, Arihiro Kanazawa, Sadahito Aoshima, Ken-ichi Tamaso, Kazuhide Morino

Masaru Yoneyama, presiding

16:15 1C16 Synthesis of cyclic polyphenylene and poly(phenylene-thiophene) from unstoichiometric Suzuki-Miyaura polycondensation
Hajime Sugita, Masataka Nojima, Yoshihiro Ohta, Tsutomu Yokozawa

16:40 1C17 Synthesis and Characterization of Cardo-type Aromatic Polyesters from 2,5-Furandicarboxylic Acid
Fumika Nao, Hironori Atarashi, Shinichi Yamazaki, Kunio Kimura

17:05 1C18 Synthesis of chiral diamine polymer using coupling reaction and their application to asymmetric catalysis
Yujiro Kawakami, Naoki Haraguchi, Shinichi Itsuno

Yoshihiro Ohta, presiding

17:30 1C19 Diameter Control of Aramide Hollow Spheres prepared by Reaction-induced Phase Separation during Polymerization
Naoto Adachi, Hironori Atarashi, Shiniti Yamazaki, Kunio Kimura

17:55 1C20 Synthesis of polyureas from aliphatic diamines and CO₂ using various catalysts
Yuuto Nishida, Hiroki Hashizume, Masaru Yoneyama

Thu. Sep 15

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Eiji Ihara, presiding

9:10 2C01 Anionic polymerization of 4-halostyrenes
Taro Koizumi, Reina Kurakake, Satoshi Uchida, Takashi Ishizone

9:35 2C02 Synthesis of Chain End Sequence-Controlled Polymers by Anionic Addition Reaction of 1,1-Diphenylethylene Derivatives

Naoki Aizawa, Masashi Nagao, Satoshi Uchida, Takashi Ishizone

10:00 2C03 Cationic ring-opening polymerization of 1,3-dehydroadamantane possessing trimethylsilylmethyl substituent
Reo Kurashima, Satoshi Uchida, Takashi Ishizone

10:25 2C04 Construction of Unique Macromolecular Chains by Embedded Hemiacetal Ester Bond for Ring-Expansion Cationic Polymerization
Taizo Yamamoto, Makoto Ouchi, Mitsuo Sawamoto

Takashi Ishizone, presiding

10:50 2C05 Atropos Polymerization of (Meth)acrylates: Spontaneous Controls of Molecular Weight and End-Functionality by Programmed Termination
Yasuhiro Kohsaka, Shoya Ishihara, Kentaro Shirota, Shu Kano, Tatsuki Kitayama

11:15 2C06 Atropos Polymerization of (Meth)acrylates: Application to one-pot synthesis of graft copolymer
Shu Kano, Yasuhiro Kohsaka, Tatsuki Kitayama

11:40 2C07 Anionic Polymerization of Acrylates Initiated by Onium Salts with Aluminum Lewis-Acid Activator
Kentaro Shirota, Yasuhiro Kohsaka, Tatsuki Kitayama

Arihiro Kanazawa, presiding

12:55 2C08 Continuous Operation of Anionic Polymerization Using a Flow Microreactor
aiichiro NAGAKI, Yuichi NAKAHARA, Mai FURUSAWA, Tomoya SAWAKI, Tetsuya YAMAMOTO, Hideaki TOUKAIRIN, Shinsuke TADOKORO, Toshiya SHIMAZAKI, Toshihide ITO, Masakazu OTAKE, Hidenori ARAI, Naoya HODA, Keita OHTSUKA, Katsuyuki HIROSE, Jun-ichi YOSHIDA

13:20 2C09 Facile Synthesis of Polypeptide from Activated Urethane Derivative of N-Methyl Alanine
Yusuke Shiraki, Syuhei Yamada, Takeshi Endo

13:45 2C10 Control of Crystal Structure and Solid-State Polymerization of Unsymmetrical Substituted 7,7,8,8-Tetrakis(alkoxycarbonyl)quinodimethanes
Fumiaki Kondo, Takahiro Uno, Masataka Kubo, Takahito Itoh, Norimitsu Tohnai, Mikiji Miyata

14:10 2C11 Thermal Solid-State Polymerizations of 7,7,8,8-Tetrakis(aryloxycarbonyl)quinodimethanes
Hiroto Nakajima, Takahiro Uno, Masataka Kubo, Takahito Itoh, Norimitsu Tohnai, Mikiji Miyata

Masaru Yoneyama, presiding

14:35 2C12 Synthesis of Water-soluble Polyhydroxyurethanes from Trimethylolpropane and Their Hydrolytic Property
Hiroyuki Matsukizono, Takeshi Endo

15:00 2C13 Synthesis of bifunctional monomer containing tetrathiaspiro-ring and application to high refractive index material
Naoto Aoyagi, Takeshi Endo

Takuji Hirose, presiding

15:25 2C14 Synthesis of Poly(diphenylacetylene) Derivatives Bearing Optically Active Pendants and Their Conformational Control by External Stimuli
Yuki SAKAI, Tomoyuki IKAI, Shigeyoshi KANO, Katsuhiko MAEDA

15:50 2C15 Precise Syntheses of Ring-Based Graft Polymers via Ring-Expansion Controlled Polymerization of Vinyl Monomers
Reina Kojima, Makoto Ouchi, Mitsuo Sawamoto

16:15 2C16 Anionic addition reaction of vinylidene compounds possessing α -phenyl group

- Taichi Kamijo, Satoshi Uchida, Takashi Ishizone
- 16:40 2C17 Novel Synthetic Approach of Helical Non-natural Polypeptide via Asymmetric Polymerization and Post-Polymerization Conversion
Yuki Ishido, Naoya Kanbayashi, Taka-aki Okamura, Kiyotaka Onitsuka

Fri. Sep 16

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Jin Motoyanagi, presiding

- 9:10 3C01 Polymerization and synthesis of telechelic α -helical peptide
Shinya Takaoka, Yu Miyagi, Fumio Sanda
- 9:35 3C02 Control of the End Structures of Conjugated Helical Polymers and Reaction of the Polymers
Takeru Kamada, Yu Miyagi, Fumio Sanda
- 10:00 3C03 Enzymatic tandem polymerization and function of hyperbranched polysaccharide coated peptide nanogels
Akina Yamada, Tomoki Nishimura, Shin-ichi Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi

Takaya Terashima, presiding

- 10:25 3C04 Synthesis and Applications of Cross-linked Polymer Nanostructures by Living Coordination Block Copolymerization of Allene Derivatives Accompanying Spontaneous Formation of Nanostructured Materials
Akira Yamauchi, Yoshiyuki Oguchi, Takeshi Wakiya, Tadashi Iwamoto, Hiroki Nishiyama, Shinsuke Inagi, Ikuyoshi Tomita
- 10:50 3C05 Synthesis of Self-standing 2D Polymer Membranes (11): Synthesis, characterization and application of soluble 2D-containing graft polymers from rigid cis-cisoidal poly(phenylacetylene)s as template polymers
Kaori Sono, Madoka Moriya, Mari Miyata, Masahiro Teraguchi, Takashi Kaneko, Toshiki Aoki

Shin-ichi Sawada, presiding

- 11:15 3C06 Synthesis and functional properties of brush-shaped conjugated polymer having well-defined poly(vinyl ether)s pendants
Jin Motoyanagi, Tomonori Yamada, Shinya Kawamura, Masahiko Minoda
- 11:40 3C07 Precision Nanoaggregates Created with Amphiphilic Random Copolymers: Self-Sorting and Thermoresponsive Properties Programmed into Primary Structure
Shota Imai, Takaya Terashima, Mitsuo Sawamoto

Hiromitsu Sogawa, presiding

- 12:55 3C08 Self-Assembly of Amphiphilic Copolymers with Precision Primary Structure in Water: Effects of Monomer Sequence and Rigidity on Nanoaggregates
Goki Hattori, Takaya Terashima, Mitsuo Sawamoto
- 13:20 3C09 Self-Assembly of Amphiphilic Random Copolymers in Water: Molecular Design for Precision Nanoaggregates and Gelation
Takaya Terashima, Mitsuo Sawamoto
- 13:45 3C10 Synthesis of Block Copolymers using Umpolung or Treatment of Living Cationic Propagating End
Ryota Seto, Takeshi Endo

Fumio Sanda, presiding

- 14:10 3C11 Synthesis of high molecular weight multibranched polystyrenes using

		multifunctional macroinitiators and their rheological properties. <u>Junki Fukuda</u> , Shoki Nakano, Kaoru Adachi, Yasuhisa Tsukahara
14:35	3C12	Helicity Induction and Memory in Poly(biphenylylenediethynylene) Derivatives Bearing Crown Ether Moieties <u>Mari Miyazaki</u> , Katsuhiko Maeda, Tomoyuki Ikai, Shigeyoshi Kanoh
15:00	3C13	Synthesis and Catalyst-free Linking of Polymer Nitrile N-Oxide Utilizing the Initiator with Nitroalkane moiety <u>Hiromitsu Sogawa</u> , Toyokazu Tsutsuba, Shohei Takamatsu, Toshikazu Takata

Room D

Wed. Sep 14

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Daisuke Taura, presiding

10:00	1D03	Synthesis of Platinum-containing Optically Active Conjugated Polymers and the Ligand Exchange Reaction <u>Yu Miyagi</u> , Natsuhiko Sano, Fumio Sanda
10:25	1D04	Synthesis of platinum-containing conjugated polymers having bipyridine ligands <u>Manabu Marumoto</u> , Yu Miyagi, Natsuhiko Sano, Fumio Sanda

Fumio Sanda, presiding

10:50	1D05	Assemblies of Aromatic Conjugated Polymers Formed through π - π and Hydrogen Bonding Interactions and Their Optical Properties <u>Kyosuke Harada</u> , Kensuke Notsu, Kazuo Akagi
11:15	1D06	Chiral Template-Directed Enantioselective Photodimerization of Anthracene Derivatives <u>Junki Tanabe</u> , Daisuke Taura, Naoki Ouska, Eiji Yashima
11:40	1D07	Supramolecular nanofiber formation from the multicomponent self-assembly of nucleotide bolaamphiphiles and heteropolymeric DNA as a template <u>Rika Iwaura</u> , Yoshikazu Kanai, Mayumi Ohnishi-Kameyama

Takeharu Haino, presiding

12:55	1D08	Formation of Ion-Pairing Assemblies Based on Designed π -Electronic Ions <u>Ryohei Yamakado</u> , Hiromitsu Maeda
13:20	1D09	Dimension-Controlled Assemblies of Modified Oligopyrrole π -Systems <u>Kazuto Nakamura</u> , Hiromitsu Maeda
13:45	1D10	Dimension-Controlled Assemblies of Anion-Responsive π -Systems <u>Yasunao Tani</u> , Hiromitsu Maeda

Hiromitsu Maeda, presiding

14:10	1D11	Formation of Pseudopolyrotaxane by Immersing Solid State Pillar[n]arene into Molten State Poly(ethylene glycol) <u>Ryosuke Kojima</u> , Ryuta Sueto, Takahiro Kakuta, Tomoki Ogoshi, Tada-aki Yamagishi
14:35	1D12	Phase separation control of polymer solution by use of charge-transfer interaction between π electron donating polymer and π electron accepting molecules

Kyohei Uenishi, Kenta Kokado, Kazuki Sada

- 15:00 1D13 Cooperativity on the self-assembly of planar π -conjugated molecules possessing phenylisoxazoles
Toshiaki Ikeda, Hiroaki Adachi, Tatsuya Iijima, Ryo Sekiya, Takeharu Haino

Kaoru Adachi, presiding

- 15:25 1D14 Synthesis and Photoluminescence Properties of Diiminate Complexes Containing Group 13 Elements with Various Kinds of Substituents
Shunichiro Ito, Madoka Yamaguchi, Amane Hirose, Kazuo Tanaka, Yoshiki Chujo

- 15:50 1D15 Synthesis and Characterization of Side Chain Modified Polyaniline
Haoyue SHEN, Hiromasa Goto

Tomoki Ogoshi, presiding

- 16:15 1D16 The synthesis and AFM imaging of cyclic molecular brush with PS-b-P2VP branches
Takayuki Kono, Kaoru Adachi, Yasuisa Tsukahara

- 16:40 1D17 Optically Active Conjugated Polymers Bearing Germole/Silole Moieties, and Control of the Higher Order Structures
Yuki Takahashi, Yu Miyagi, Masashi Nakamura, Joji Oshita, Fumio Sanda

- 17:05 1D18 Synthesis and Properties of Conjugated Polymers Bearing Schiff-Base in the Main Chain
Kazuki Tada, Yu Miyagi, Fumio Sanda

Thu. Sep 15

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Koichi Ute, presiding

- 9:10 2D01 Preparation of Network Polymer with Movable Cross-Linking Points via Click Reaction of Polypseudorotaxane
Masataka Kubo, Kana Wakabayashi, Takahiro Uno, Takahito Itoh

- 9:35 2D02 Synthesis of triblock copolymer by radical induced coupling reaction
Yusuke Kaneko, Reiko Saito

- 10:00 2D03 The effect of stereoregularity on template polymerization of multi-vinyl monomer
Tomonori Kon, Reiko Saito

Nobuhiro Kihara, presiding

- 10:25 2D04 Mechanoactivity of organic-inorganic hybrids with mechanochromophore
Takahiro Kosuge, Keiichi Imato, Raita Goseki, Hideyuki Otsuka

- 10:50 2D05 Development of Mechanochromic Polymers Containing Tetraarylsuccinonitrile Units and Control of Mechanical Responsiveness Based on Electronic State Change
Toshikazu Sumi, Marina Nukui, Raita Goseki, Hideyuki Otsuka

- 11:15 2D06 Synthesis of Mechanochromic Polymers with Diarylbibenzothiophenonyl Unit and Their Mechanochromism Caused by Main Chain Scission
Kuniaki Ishizuki, Hironori Oka, Raita Goseki, Hideyuki Otsuka

- 11:40 2D07 Influence of atmosphere on degradation of recombinant spider silk
Koyuru Nakayama, Anh T. N. Dao, Jun'ichi Shimokata, Kengo Takeuchi, Toshiaki Taniike

Takuya Yamamoto, presiding

- 12:55 2D08 Synthesis and Properties of Vinyl-type Rotaxane Cross-Linked Polymers

- Using Cyclodextrin-Containing Supramolecular Cross-Linker
Keisuke Iijima, Daisuke Aoki, Toshikazu Takata
- 13:20 2D09 Efficient Catalyst- and Solvent-free Polymer Linking using Polymer Nitrile N-Oxides
Toyokazu Tsutsuba, Hiromitsu Sogawa, Toshikazu Takata
- 13:45 2D10 Syntheses and Properties of Functional Polymers Bearing Carbosilane Segment
Ayumu Karimata, Kozo Matsumoto, Takeshi Endo
- 14:10 2D11 Monomer sequence analysis of poly(vinyl alcohol-co-vinyl acetate)s prepared by various polymer reactions (II)
Misaki Senoo, Shuhei Ogawa, Miyuki Oshimura, Tomohiro Hirano, Koichi Ute
- Toshiaki Taniike, presiding**
- 14:35 2D12 Construction of Reversible Crosslinking - Decrosslinking System Consisting of a Polymer Bearing Vicinal Tricarbonyl Structure and Poly(ethylene glycol)s
Tatsuya Yuki, Kakeru Suetsugu, Morio Yonekawa, Kozo Matsumoto, Ikuyoshi Tomita, Takeshi Endo
- 15:00 2D13 Helix-sense-selective photocyclic aromatization (SCAT) of cis-cisoidal racemic helical poly(substituted acetylene)s using circularly polarized light: Selectivity improvement and mechanism of the helix-sense-selective degradation
Mari Miyata, Masahiro Teraguchi, Takashi Kaneko, Toshiki Aoki
- 15:25 2D14 Change in higher-order structure induced by dynamic exchange reaction of polypeptide side chains utilizing dynamic covalent bonds
Kazutoshi NAKAGAWA, Yukina KITAHARA, Yuki INOUE, Yuichiro TOKORO, Toshiyuki OYAMA
- Raita Goseki, presiding**
- 15:50 2D15 Oxidative degradation of polyacylsemicarbazide
Midori Katayama, Nobuhiro Kihara
- 16:15 2D16 Synthesis of Polymers Possessing Phosphametalocene Units in the Main Chain and Application to Hydrogen Storage Materials
Hiroki NISHIYAMA, Mitsuru MATSUMOTO, Naoki HASEGAWA, Takashi KUZUYA, Kazunobu ISHIBASHI, Hiroyuki KAWAGUCHI, Shinsuke INAGI, Ikuyoshi TOMITA
- 16:40 2D17 Synthesis and Robust Multicomponent Postpolymerization Modification of Bio-Based Polymers
Satoshi YOSHIDA, Ryohei KAKUCHI, Tomoyuki IKAI, Katsuhiko MAEDA, Sigeyoshi KANO

Room E

Wed. Sep 14

S1.Strategy for Developing Advanced Polymeric Materials Utilizing Inorganic Elements

- 9:50 1ESO Introductory Remarks S1
Kazuo Tanaka, Hiroyo Segawa
- Soji Shimizu, presiding**
- 10:00 1E03 Exploitation of New Functional Element Blocks Based on Carborane Clusters
Akihiro Ito

10:25 1E04 Synthesis of Fused Azobenzene-Boron Complexes and Application to Polymer Materials
Masayuki Gon, Kazuo Tanaka, Yoshiki Chujo

Yousuke Ooyama, presiding

10:50 1E05 Poly(silylene/phenylene/borane) as Ultraviolet Emitter via Thermally Activated Delayed Fluorescence
Puhup Puneet, Raman Vedarajan, Noriyoshi Matsumi

11:15 1E06 Preparation of Precisely Controlled Organosilicon Polymers Catalyzed by Transition Metal Complexes and Their Properties
Makoto TANABE, Shunsuke IWASE, Kohtaro OSAKADA

11:40 1E07 Development of Phosphine Element Blocks based on Versatile P-C Cross-coupling
Minoru Hayashi

Minoru Hayashi, presiding

12:55 1E08 Synthesis of Poly(4,4-dithienogermole)s
Masashi Nakamura, Shinjiro Hayakawa, Makoto Nishino, Yousuke Ooyama, Joji Ohshita

13:20 1E09 Synthesis and Characterization of Germa[*M*]pericyclines, Cyclic Skipped Polyynes Composed of Germanium and Acetylenes
Hiroki Tanimoto, Tomohiko Nagao, Taro Fujiwara, Junta Mori, Kiyomi Kakiuchi

13:45 1E10 Creation of Low-coordinated Germanium Element Blocks and Its Application toward the Oligomerization of Alkynes
Takahiro Sasamori, Tomohiro Sugahara, Jing-Dong Guo, Shigeru Nagase, Norihiro Tokitoh

Takahiro Sasamori, presiding

14:10 1E11 Synthesis and dynamic behavior of twisted porphyrin oligomers
Satoru Hiroto, Satoru Ito, Hiroshi Shinokubo

14:35 1E12 Conformational confinement of porphyrin dimers by quadrupolar interaction
Ikuya Ueno, Masaki Shimizu, joji Ohshita, Mitsuhiko Morisue

15:00 1E13 Conjugated Porphyrin Glass Exhibiting Near-Infrared Excimer Emission
Mitsuhiko Morisue, Ikuya Ueno, Masaki Shimizu, Sono Sasaki, Shinichi Sakurai, Jun Matsui, Takayuki Nakanishi, Yasuchika Hasegawa

15:25 1E14 Lanthanide Coordination Clusters with Photo-functional Properties
Takayuki Nakanishi, Yasuchika Hasegawa

Takayuki Nakanishi, presiding

15:50 1E15 Development of Novel Organoiridium Complexes Bearing Carrier-Transporting Moieties. Photoluminescence Properties and Application to Organic Light-Emitting Diodes
Shigeyuki Yagi, Naoki Okamura, Takeshi Maeda

16:15 1E16 Preparation and association behavior of element-blocks having multiple orthogonal intermolecular interaction sites
Take-aki Koizumi, Tomohiro Hariu, Hirofumi Ogawa

16:40 1E17 Preparations and Properties of Phenazasiline with Various Degree of Polymerization
Hideki Hayashi, Yuzo Ishigaki, Take-aki Koizumi

Mitsuhiko Morisue, presiding

17:05 1E18 Fabrication of stimuli-responsive molecular wires based on TTF-annulated phthalocyanine and its analogue
Soji Shimizu, Koya Uchihara, Hiroyuki Furuta

17:30 1E19 Hierarchical molecular construction utilizing helical metal complexes as the building blocks

Takashi Nakamura, Kou Tashita, Hikaru Kimura, Tatsuya Nabeshima
17:55 1E20 Heterometallic one-dimensional chain complexes constructed by two kinds of multinuclear element-block showing electronic structure modulations
Kazuhiro Uemura, Daiki Ito, Masahiro Ebihara

Thu. Sep 15

S1.Strategy for Developing Advanced Polymeric Materials Utilizing Inorganic Elements

Hiroyo Segawa, presiding

9:10 2E01 Amphiphilic compounds based on incompletely condensed polyhedral oligomeric silsesquioxanes: investigation on their structures and functions
Hiroaki Imoto, Yuka Nakao, Kensuke Naka, Sayaka Ohno, Shin-ichi Yusa, Syuji Fujii, Yoshinobu Nakamura

9:35 2E02 Preparation and Properties of One-dimensional Soluble Polysilsesquioxane Containing Phosphonate Side-chain Groups
Akiyuki Harada, Kazuhiro Shikinaka, Joji Ohshita, Yoshiro Kaneko

10:00 2E03 Preparation and properties of amorphous POSS indicating room temperature ionic liquid nature
Daisuke Maeda, Akiyuki Harada, Joji Ohshita, Yoshiro Kaneko

10:25 2E04 Interfacial Design of Polymer Surface by Segregation of Star Shaped Elemental Block
Kentaro Yamamoto, Daisuke Kawaguchi, Kensuke Naka, Keiji Tanaka

Hiroaki Imoto, presiding

10:50 2E05 Amphiphilic Cyclosiloxane as a Versatile Building Block for Functional 2D and 3D Assemblies
Huie Zhu, Buket Akkus, Yida Liu, Yu Gao, Shunsuke Yamamoto, Jun Matsui, Tokuji Miyashita, Masaya Mitsuishi

11:15 2E06 Development of aerogels and xerogels from organo-bridged alkoxy silanes
Kazuyoshi Kanamori, Taiyo Shimizu, Kazuki Nakanishi

11:40 2E07 Synthesis of element-block polymers having cage structure
Takahiro Gunji, Satoru Tsukada

Kazuo Tanaka, presiding

12:55 2E08IL Creation of Polymeric Materials Based on Element-Blocks Aimed for Functional New Materials
Kensuke Naka

Takahiro Gunji, presiding

13:45 2E10 Fabrication of polymer hybrids using polylactic acid and nanosheets derived from layered perovskite
Kenta Inamori, Kenji Shintani, Naokazu Idota, Takashi Nishino, Yoshiyuki Sugahara

14:10 2E11 Nano silica materials based on silica provided from perhydropolysilazane
Reiko Saito

14:35 2E12 Preparation of a single-structured cyclic tetrasiloxane containing carboxylate side-chain groups, formation of its two-dimensional layered aggregate, and application to hybrid hydrogels
Makoto Yanagie, Nobuyoshi Miyamoto, Yoshiro Kaneko

Yoshiro Kaneko, presiding

15:00 2E13 Ionic Conductivity of Metallo-Supramolecular Polymers

Masayoshi Higuchi

15:25 2E14 Development of adhesive and coating materials using aromatic biomass
Masanobu NAITO

15:50 2E15 Fabrication of laminated alumina hybrid films by ac anodization
Hiroyo Segawa, Kenji Wada

Reiko Saito, presiding

16:15 2E16 Versatile new reactor granule technology for fabrication of polyolefin-based nanocomposites and its application to PP/Al₂O₃ nanocomposites
Bulbul maira, Patchanee chammingkwan, Minoru terano, Toshiaki taniike

16:40 2E17 Preparation and characterizations of silica sol with chirality via thermo-hydrolysis of chiral silica
Xinling Liu, Tatsuhito Ozawa, Ren-hua Jin

17:05 2E18 Micropatterning of TiO_x Ultrathin Film from Ti-containing Polymer Templates
Asami Ono, Shunsuke Yamamoto, Tokuji Miyashita, Masaya Mitsuishi

Fri. Sep 16

S1.Strategy for Developing Advanced Polymeric Materials Utilizing Inorganic Elements

Masayuki Gon, presiding

9:10 3E01 Precise Photo-Curing: Emerging Gradient Nano-domains and their Hybrid Materials
Takeo Suga, Kari Katayama, Eigo Ando, Hiroyuki Nishide

9:35 3E02 Electric Property of Polysilsesquioxane Hybridized with Aluminum Complex
Seiji Watase, Yasuhiro Imoto, Masashi Nakamura, Koji Mitamura, Mitsuru Watanabe, Noboru Nishioka, Hiroyoshi Naito, Kimihiro Matsukawa

10:00 3E03 Development of Fluorescence Sensors Based on Anthracene-Phenylboronic Acid Ester for Detection, Quantification and Visualization of a Trace Amount of Water
Yousuke Ooyama

Seiji Watase, presiding

10:25 3E04 Fabrication of Composites Based on Two-Dimensional Element-Block Nanomaterials and Their Photophysical Properties
Tomokazu Umeyama, Jinseok Baek, Hiroshi Imahori

10:50 3E05 Direct Observation of Hole Transfer from Perovskite to Polymer Layer: Unraveling the Correlation of Solar Cell Outputs with Kinetic and Energetic Properties
Akinori Saeki

11:15 3E06 Anodic Chlorination of Chalcogenophenes in Conjugated Polymers
Shinsuke Inagi, Daichi Okazaki, Naoki Shida, Hiroki Nishiyama, Ikuyoshi Tomita

11:40 3E07 Development of polymer materials with metal complexes as element block
Satoru Tsukada

Shinsuke Inagi, presiding

12:55 3E08 Electrical conductivity of doped thin films of liquid-crystalline perylene tetracarboxylic bisimide derivatives bearing polymerizable cyclotetrasiloxane rings and a triethylene oxide chain
Masahiro Funahashi

13:20 3E09 Preparation of polymer thin films based on π -conjugated ferroelectric liquid

		crystals by in situ polymerization <u>Atsushi Seki</u> , Masahiro Funahashi
13:45	3E10	Development of hybrid steroid alkaloid glycosides / functional metal complexes and the specific nano architectures Souta Touhara, Souichi Otsuka, Yasuaki Tanaka, Tsuyoshi Ikeda, <u>Keita Kuroiwa</u>
14:10	3E11	Synthesis of novel pure organic molecular conductor exhibiting metallic conduction <u>Yuka Kobayashi</u> , Takeshi Terauchi, Yoshitaka Matsushita, Satoshi Sumi
		Keita Kuroiwa, presiding
14:35	3E12	Functional hybrid interface containing metal nanoparticles and hemoproteins <u>Akira Onoda</u>
15:00	3E13	Development of Highly-Sensitive ¹⁹ F NMR Probes by Using POSS <u>Takahiro Kakuta</u> , Kazuo Tanaka, Yoshiki Chujo
15:25	3E14	Hybrid Materials of π -Conjugated Compounds and Biopolymers for Tumor Imaging and Therapy <u>Koji Miki</u> , Kentaro Kojima, Yui Kakiuchi, Kouichi Ohe

Room F

Wed. Sep 14

S3. Creation of New Functional Materials Driven by Fusion Material Science

9:50	1FSO	Introductory Remarks S3 <u>Toshihiro Okamoto</u>
		Toshihiro Okamoto, presiding
10:00	1F03	Ring-Expansion Living Polymerization: Precision Syntheses of Ring-Based Polymers and the Functions <u>Makoto Ouchi</u> , Hajime Kammiyada, Taizo Yamamoto, Reina Kojima, Mitsuo Sawamoto
10:25	1F04	Synthesis of Catechol-Containing Polymers via RAFT Polymerization of Naturally-Derived Styrenes for Preparing Functional Fusion Materials <u>Hisaaki TAKESHIMA</u> , Kotaro SATOH, Masami KAMIGAITO
10:50	1F05	Unique Reactivity of Highly Lewis Acidic Diborane(4) <u>Makoto Yamashita</u>
11:15	1F06	Synthesis and blood compatibility evaluation of novel PMEAs having precisely placed side-chain branches via regio/stereo-selective ring-opening metathesis polymerization. <u>Toshiki Sonoda</u> , Shingo Kobayashi, Masaru Tanaka
11:40	1F07	'Non-osmotic' Hydrogels : a Rational Strategy for Safely Degradable Hydrogels <u>Akihiro Yamamoto</u> , Ung-il Chung, Takamasa Sakai
		Makoto Ouchi, presiding
12:55	1F08	Controlled Cationic Copolymerization of Polylactide-Containing Vinyl Ether Macromonomers and Functional Vinyl Ethers <u>Fumina Koga</u> , Arihiro Kanazawa, Syoukyoku Kanaoka, Sadahito Aoshima
13:20	1F09	Development of Colloidal Liquid Crystals Based on Mineral/Polymer Hybrid Nanoparticles <u>Masanari Nakayama</u> , Satoshi Kajiyama, Tatsuya Nishimura, Akihito

- Kumamoto, Yuichi Ikuhara, Takashi Kato
- 13:45 1F10 Preparation of Pickering emulsion of biodegradable coacervate droplets by using CaCO₃
Yui IKEDO, Satomi ISHIDA, Shuuhei KOMATSU, Taka-Aki ASOH, Ryo ISHIHARA, Akihiko KIKUCHI
- 14:10 1F11 Peculiar dynamics and deformation behavior attributed to the interlocked structure in polyrotaxane glass
Kazuaki Kato, Akihiro Ohara, Kaito Nemoto, Hideaki Yokoyama, Hideaki Yokoyama, Kohzo Ito
- Kazuaki Kato, presiding**
- 14:35 1F12 Porous Carbon Materials by Calcination of Supramolecular Assemblies Consisting of Pillar[n]arenes Based on Geometric Design
Tomoki Ogoshi, Kumiko Yoshikoshi, Ryuta Sueto, Takahiro Kakuta, Tada-aki Yamagishi
- 15:00 1F13 Creation of Novel Phosphorus-containing Functional Pi-conjugated Molecules based on Diketophosphanyl Scaffold
Youhei Takeda
- 15:25 1F14 Light-melt adhesive that works at high temperature
Shohei Saito
- 15:50 1F15 Fluorescent Organic Single Crystal with Fibrous Character: Mechanical Property and Fluorescence
Shotaro Hayashi, Toshio Koizumi
- Shohei Saito, presiding**
- 16:15 1F16 Electron density distribution in the solid-state materials derived from X-ray structure analysis
Daisuke Hashizume
- 16:40 1F17 Novel molecular magnetism governed by the local structure
Minamitani Emi
- 17:05 1F18 Biological fusion materials: structural advantages for fracture toughness and strength
Ko Okumura
- 17:30 1F19 Understanding the Mechanism of Biomolecular Adhesion of Liquid Crystalline Monolayer by Using Molecular Dynamics Simulation
Go Watanabe, Hiroki Eimura, Nicholas L. Abbott, Takashi Kato
- 17:55 1F20 On-surface synthesis of conjugated polymer and its mechanical properties
Shigeki KAWAI

Thu. Sep 15

S3. Creation of New Functional Materials Driven by Fusion Material Science

Tasuku Nakajima, presiding

- 9:10 2F01 Fabrication of Carbon Nanotube/Hydroxyapatite Fusion Materials Using Poly(amidoamine) Dendrimer
Yutaka Takaguchi, Tomohiro Tanaka, Shunichi Nishimura, Tomoyuki Tajima, Hideaki Miyake, Ill Yong Kim, Chikara Ohtsuki
- 9:35 2F02 Formation of Hydroxyapatite from Calcium Salts of Phosphoric Esters in Simulated Body Fluid
Chikara Ohtsuki, Akiyoshi Mio, Ayae Sugawara, Narutaki, Taishi Yokoi
- 10:00 2F03 A multi-functional hydrogel consisting of self-sorted supramolecular

nanofibers

Hajime Shigemitsu, Takahiro Fujisaku, Wataru Tanaka, Ryou Kubota, Itaru Hamachi

Chikara Ohtsuki, presiding

- 10:25 2F04 Enzymatic Synthesis and Characterization of Cellulose-based Nanocomposite Hydrogels
Yuuki Hata, Tomoya Kojima, Toshiki Sawada, Takamasa Sakai, Takeshi Serizawa
- 10:50 2F05 Properties of polythiophene having ability to recognize biomolecules (V) - Effect of side chain structures -
Takahiro Ishiyama, Masahiro Fujita, Yuko Takeoka, Masahiro Rikukawa
- 11:15 2F06 Fabrication and biomedical application of lipid nanotube-hydrogel fusion material
Yoshihiro Sasaki, Takuto Kosai, Sada-atsu Mukai, Shinichi Sawada, Kazunari Akiyoshi
- 11:40 2F07 Construction of dynamic artificial cell model based on self-oscillating polymers
Ryota Tamate, Takeshi Ueki, Mitsuhiro Shibayama, Ryo Yoshida

Toshihiro Okamoto, presiding

- 12:55 2F08IL Design and Function of Fluorescent π -Electron Materials
Shigehiro Yamaguchi

Ayae Narutaki, presiding

- 13:45 2F10 Unique Lamellar Structure Formed by a Liquid Crystalline Azobenzene Random Copolymers with a POSS Side-Chain Unit
Miho Nagai, Mitsuo Hara, Shusaku Nagano, Takahiro Seki
- 14:10 2F11 Structural control of macroscopic-sized hierarchical structure formed by inorganic nanosheet liquid crystals
Emiko Mouri, Jie Zhang, Teruyuki Nakato
- 14:35 2F12 Morphology Control of Inorganic Crystals in Lyotropic Liquid Crystals
Hiroki Higuchi, Kengo Nagaoka, Yasushi Okumura, Chikara Ohtsuki, Tatsuya Nishimura, Takashi Kato, Hirotsugu Kikuchi
- 15:00 2F13 Metal/Silica Integrated Chiral Nano-Materials and Their Optical Property
Seiji Tsunega, Dong-Dong Yao, Katsuya Kaikake, Ren-Hua Jin

Hiroki Higuchi, presiding

- 15:25 2F14 Preparation of Various Fusion Materials Composed of Stimuli-Responsive Gels and Gold Nanoparticles
Atsushi Saka, Yuki Matsubara, Masaya Yamada, Akifumi Kawamura, Takashi Miyata
- 15:50 2F15 Preparation of photo-stimuli responsive supramolecular materials and its functionalization
Yoshinori Takashima, Kazuhisa Iwaso, shogo Hatanaka, Masaki Nakahata, Hiroyasu Yamaguchi, Akira Harada
- 16:15 2F16 Anisotropic Deformation of the Gel/Bilayer Fusion Materials
Tasuku Nakajima, Kei Mito, Md. Anamul Haque, Corentin Durand, Takayuki Kurokawa, Jian Ping Gong
- 16:40 2F17 Silicon-containing block copolymer lithography materials combined nanostructure formation and perpendicular orientation capability
Teruaki Hayakawa, Rin Odashima, Yutaka Takenaka, Takehiro Seshimo, Daisuke Kawana, Katsumi Ohmori
- 17:05 2F18 Fabrication of 3D Ordered Porous Film using Microfluidic Device
Yoshiaki Uchida, Yosuke Iwai, Hiroshi Yabu, Norikazu Nishiyama

Fri. Sep 16

S3. Creation of New Functional Materials Driven by Fusion Material Science

Yoshiaki Uchida, presiding

- 9:10 3F01 π -Electronic Ion-Pairing Dimension-Controlled Assemblies
Hikomitsu Maeda
- 9:35 3F02 Solution based step-by-step growth of metal-organic framework nanolayers on inorganic particle surfaces and application for secondary battery electrode materials
Rie Makiura
- 10:00 3F03 Stimuli-responsive properties of organic layered compound through the intercalation of organic molecule
Yukiko Ishijima, Yuya Oaki, Hiroaki Imai

Hikomitsu Maeda, presiding

- 10:25 3F04 Development of
Itaru Osaka, Kazuaki Kawashima, Kohsuke Kawabata, Masahiko Saito, Kazuo Takimiya
- 10:50 3F05 Kinetics of polyrotaxane formation revealed through the inclusion complex formation of polymer brush and cyclodextrin
Hideaki Yokoyama, Shoko Takahashi, Kohzo Ito, Norifumi Yamada
- 11:15 3F06 Multiple Utility of Functionalized TiO₂ Nanotube Hybrids in Energy Applications
Raman Vedarajan, Kazuki Nakade, Tatsuya Nakata, Shoto Ikeda, Noriyoshi Matsumi
- 11:40 3F07 Fabrication of Dimming Materials Based on Molecular Reorientation of Polymer-Stabilized Liquid Crystals
Atsushi Shishido, Jing Wang, Erika Katayama

Atsushi Shishido, presiding

- 12:55 3F08 Friction Process Simulations for Design of Super-Low Friction Materials by Computational Science
MOMOJI KUBO, YUJI HIGUCHI
- 13:20 3F09 Synthesis of Functional Nanofibers from Elastin-Like Block Polypeptides
Ayae Sugawara-Narutaki, Duc H. T. Le, Noriki Kubota, Yoko Tsutsui, Hiroshi Yukawa, Yoshinobu Baba, Chikara Ohtsuki

Takeshi Sakamoto, presiding

- 13:45 3F10 Dispersion state and mechanical properties of cellulose nanofiber composites
Yuji Matsumoto, Atsuomi Shundo, Hisato Hayashi, Nobutomo Tsuruzoe, Keiji Tanaka
- 14:10 3F11 Release behavior of model drugs from PEG-DNA hybrid hydrogel
Kazuki Fukushima, Shizuma Tanaka, Kenta Wakabayashi, Shinsuke Yukami, Akinori Kuzuya, Yuichi Ohya
- 14:35 3F12 Development of Boron-Cluster-containing Redox Nanoparticles for High Performance Boron Neutron Capture Therapy Leading to High Therapeutic Efficiency and Low Adverse Effects
Zhenyu Gao, Yukichi Horiguchi, Kei Nakai, Akira Matsumura, Minoru Suzuki, Koji Ono, Yukio Nagasaki

Room G

Wed. Sep 14

S19. Recent trends of electronics developed by microfabrication and printed electronics technologies

- 9:50 1GSO Introductory Remarks S19
Akira Watanabe,Koji Itano
- Haruyuki Okamura, presiding**
- 10:00 1G03 Synthesis of main chain scission hyperbranched polyacetals for extreme ultraviolet (EUV) photoresist materials and their applications for next generation resist materials.
Hiroya Takeda,kento Hira,Hiroto Kudo
- 10:25 1G04 Development of Novel Resist Materials containing Tellurium
Fukunaga Mari,Hiroto Kudo
- 10:50 1G05 Synthesis of calixarene-polymer with pendant haloalkyl groups and their application for Resist materials.
Hiroki Ogawa,Hiroto Kudo
- Koji Asakawa, presiding**
- 11:15 1G06IL Current Status of Advanced Lithography and Photosensitized Chemically Amplified Resist (PSCAR) as Game Changer
Seiichi Tagawa
- Shinji Takeoka, presiding**
- 12:55 1G08 Printed Electronics without Using Inks
Masatoshi Sakai
- 13:20 1G09 Development of next-generation products conducted by SCIVAX's cutting edge nanoimprint technology.
Hideki Yoshida
- 13:45 1G10 The inkjet manufacturing system for the 3D Micro Circuit Module
Akihiro Kawajiri,Kenji Tsukada,Yoshitaka Hashimoto,Katsuaki Makihara,Masatoshi Fujita,Takeshi Sato
- Akira Watanabe, presiding**
- 14:10 1G11 Evaluation of insulating property of polymer thin films for substrates of multilayered circuits
Marin Okamoto,Shinji Takeoka,Eiji Iwase,Hiroyasu Iwata,Toshinori Fujie
- 14:35 1G12 Surface Wettability Controllable Polyimides by UV Light Irradiation
Yusuke Tsuda
- 15:00 1G13 Development of Block Copolymers Forming Perpendicular Oriented Nanostructures with Underlayer-Free and their Miniaturization of Domains
Ryuichi Nakatani,Teruaki Hayakawa
- Toshinori Fujie, presiding**
- 15:25 1G14 Novel Photo-thermal Dual-cured Acrylic Anchor Resins for Screen Printing
Haruyuki Okamura,Tetsuya Matoba,Kohei Takada,Munenori Yamashita,Masamitsu Shirai,Akikazu Matsumoto
- 15:50 1G15 Carbon nanotube based flexible transparent conducting film
Ying Zhou,Satoru Shimada,Reiko Azumi,Yasuo Norikane

- 16:15 1G16 High-performance carbon micro-supercapacitors by laser direct writing
Jinguang Cai, Akira Watanabe
- 16:40 1G17 Development of Surface Strain Analysis Method for Bending Polymer Films toward Development of Flexible Devices
Atsushi Shishido, Norihisa Akamatsu, Motoyuki Fukuhara
- Koji Itano, presiding**
- 17:05 1G18 Maskless Exposure System by Using Point Array Method
Nobuo Takeda, Fumitaka Nakajima, Takashi Nakagawa, Eiji Ohta, Masahiro Tachikawa, Niro Nishimoto
- 17:30 1G19 Adhesion Contrast Planography for On-demand Fabrications of Electronic Devices
Yasuyuki Kusaka, Noritaka Yamamoto, Hirobumi Ushijima
- 17:55 1G20 On-demand micropatterning by laser direct writing and the device application
Akira Watanabe, Jinguang Cai

Thu. Sep 15

S2. Development of Organocatalytic Synthesis of Polymers and Their Properties

- 12:45 2GSO Introductory Remarks S2
Shin-ichi Matsuoka
- Ryohei Kakuchi, presiding**
- 12:55 2G08 Ring-Opening Polymerization of *rac*-Lactide Using Thiourea- and Guanidine-Based Organocatalysts
Miyuki Oshimura, Yuki Terai, Yukihiro Arakawa, Tomohiro Hirano, Keiji Minagawa, Yasushi Imada, Koichi Ute
- 13:20 2G09 Ring-opening polymerization of cyclic hemiacetal ester possessing acryloyl skeleton by organic molecular catalyst
Yosuke Matsushashi, Yasuhiro Kohsaka
- 13:45 2G10 Polymer synthesis via sequential nucleophilic reactions of α -(halomethyl)acrylates
Keito Hagiwara, Yasuhiro Kohsaka
- Yasuhiro Kohsaka, presiding**
- 14:10 2G11 Metal-Free Living Cationic Polymerization via Reversible Chain-Transfer Mechanism
Mineto UCHIYAMA, Kotaro SATOH, Masami KAMIGAITO
- 14:35 2G12 Metal-Free Cationic and Radical Step-Growth Polymerization between Dithiol and Divinyl Ether
Masahiro OSUMI, Mineto UCHIYAMA, Kotaro SATOH, Masami KAMIGAITO
- Miyuki Oshimura, presiding**
- 15:00 2G13 Controlled ring-opening polymerization of lactide with Lignophenol as initiator by concerted acid-base organocatalyst
Joji Kadota, Akinori Okada, Hiroshi Hirano, Yasuyuki Agari, Masamitsu Funaoka
- 15:25 2G14 A Robust cellulose modification reactions by optimizing organocatalytic properties of imidazolium salts
Ryohei Kakuchi, Ryo Ito, Shuhei Nomura, Hadi Abroshan, Kazuaki Ninomiya, Tomoyuki Ikai, Katsuhiko Maeda, Hyung Kim, Kenji Takahashi
- 15:50 2G15 Synthesis and property of macromolecular [2]rotaxane via living ring-opening polymerization with organocatalyst

Daisuke Aoki, Toshikazu Takata

Daisuke Aoki, presiding

- 16:15 2G16 Ring-opening polymerization of cyclic esters using various organic acid salts as a catalyst
Yusuke Aizawa, Tatsuya Saitoh, Takuya Isono, Takuya Yamamoto, Kenji Tajima, Toshifumi Satoh
- 16:40 2G17 Ring-opening polymerization of epoxide using t-Bu-P4 catalyst
Yusuke Satoh, Takuya Isono, Toshifumi Satoh

Fri. Sep 16

S2. Development of Organocatalytic Synthesis of Polymers and Their Properties

Mineto Uchiyama, presiding

- 9:10 3G01 Dimerization and Polycondensation of Vinyl Monomers Catalyzed by N-Heterocyclic Carbene
Shin-ichi Matsuoka, Miharuru Arimoto, Yuki Fukumoto, Masato Suzuki
- 9:35 3G02 Organic-Base-Initiated Anionic Polymerization of Thioacrylates and Thioimethacrylates
Takumi Kaneko, Shin-ichi Matsuoka, Koji Takagi, Masato Suzuki

Shin-ichi Matsuoka, presiding

- 10:00 3G03IL Synthesis of chiral polymer catalysts for asymmetric reactions
Shinichi Itsuno

Naoki Ousaka, presiding

- 10:50 3G05 Synthesis of main-chain chiral polymers having MacMillan catalyst for asymmetric reaction
ThanhLiem Nguyen, Naoki Haraguchi, Shinichi Itsuno
- 11:15 3G06 Resin-supported flavopeptides that catalyze aerobic oxidation reactions
Yukihiro Arakawa, Ken Yamanomoto, Keiji Minagawa, Yasushi Imada
- 11:40 3G07 Exploration of novel peptide catalyst by means of library screening
Kazuaki Kudo, Kengo Akagawa

Yukihiro Arakawa, presiding

- 12:55 3G08 Synthesis of Asymmetric Organocatalysts Based on a Complementary Double-Stranded Helical Structure and Their Application to Asymmetric Catalysis
Kohei Shimomura, Daisuke Taura, Naoki Ousaka, Eiji Yashima
- 13:20 3G09 Development of Polymer Catalysts toward Element Strategy
Gen-ichi Konishi

Room H

Wed. Sep 14

S4. Integrated Understanding of Inter-Hierarchical Interactions in Softmaterials

- 9:50 1HSO Introductory Remarks S4
Isamu Akiba
- Yohei Miwa, presiding**
- 10:00 1H03 Relation between Spatial Distribution and Retention Stability of Hydrophobic Compounds Incorporated in Polymer Micelles
Shota Sasaki, Ryosuke Nakanishi, Isamu Akiba
- 10:25 1H04 SAXS and anomalous SAXS study on phase-separated structure induced by addition of iron bromide and the distribution of iron and bromine elements of polystyrene-*b*-poly (2-vinylpyridine) in THF solution
Katsuhiro Yamamoto, Kanie Shiho
- Katsuhiro Yamamoto, presiding**
- 10:50 1H05 Visualization of element-selective local structure for complex liquid using the X-ray absorption spectroscopy
Kazutaka Kamitani, Maiko Nishibori, Tomoyasu Hirai, Ken Kojo, Atsushi Takahara
- 11:15 1H06 Characterization of polymer/inorganic-nanoparticles composite thin film by using small-angle x-ray scattering and x-ray absorption spectroscopy
Maiko Nishibori, Tomomi Takahashi, Kazutaka Kamitani, Atsushi Takahara, Koichi Suematsu
- 11:40 1H07 Infrared Spectroscopy by High Brilliant Synchrotron Radiation
Yuka Ikemoto
- Isamu Akiba, presiding**
- 12:55 1H08 Syntheses and Characteristics of Polymers with Fluoroalkyl Side Chain
Takahiro Mori, Atsushi Noro, Yushu Matsushita
- 13:20 1H09 Formation of Ordered Structure in Ethylene Ionomer by the Room-Temperature Aging
Yohei Miwa, Hajime Furukawa, Tomoyo Kondo, Shoichi Kutsumizu
- 13:45 1H10 Research on Density fluctuation of Polycarbonate by time-resolved small-angle X ray scattering
Yuki Watanabe, Shotaro Nishitsuji, Hiroshi Ito, Masaru Ishikawa, Takashi Inoue, Mikihiro Takenaka
- Mikihiro Takenaka, presiding**
- 14:10 1H11 Crystal Structures and Interactions of Polymer-Iodine Complexes
Kohji Tashiro
- 14:35 1H12 Structural Evolution Process and Role of Intermediate Phase In the Melt-Isothermal Crystallization of Polymers
Kohji Tashiro, Hiroko Yamamoto, Daisuke Tahara, Hai Wang, Taiyo Yoshioka
- Shotaro Nishitsuji, presiding**
- 15:00 1H13 Molecular Interaction of Poly(ϵ -caprolactone) Studied by Terahertz Spectroscopy
Takuya Toyouchi, Harumi Sato, Hiromichi Hoshina
- 15:25 1H14 Elucidation of time-space hierarchy in crystalline polymers under strain by quantum beam experiments
Mikihiro Takenaka, Junhyeok Jang, Kazuki Mita
- 15:50 1H15 Higher-order Structure Change in the Mechanical Deformation Process of Elastomers: the Reproduction of the Observed 2D-WAXS/SAXS Patterns by the Monte Carlo Simulation Technique
Daisuke Tahara, Kohji Tashiro
- Taiki Hoshino, presiding**
- 16:15 1H16 Contrast variation small-angle neutron scattering by proton spin polarization - nano-structural analysis of tire rubber materials

Yohei Noda, Satoshi Koizumi, Tomomi Masui, Ryo Mashita, Yasumasa Bito, Hiroyuki Kishimoto, Daisuke Yamaguchi, Takayuki Kumada, Shin-ichi Takata, Kazuki Ohishi, Jun-ichi Suzuki

16:40 1H17 Quasielastic neutron scattering and molecular dynamics simulation studies of methanol diffusion confined in cross-linked phenolic resins
Yasuyuki Shudo, Atsushi Izumi, Katsumi Hagita, Toshio Nakao, Mitsuhiro Shibayama

17:05 1H18 The combination of Probe-SAXS on hydrogels under elongation and cylindrical distribution function analysis
Kengo Nishi, Mitsuhiro Shibayama

Kohji Tashiro, presiding

17:30 1H19 Local Structures of clay/polymer blend hydrogels
Hiroyuki Takeno, Yohei Noda, Hideki Izunome, Satoshi Koizumi

17:55 1H20 Deconstruction and restructuring of cellulose partially dissolved in an ionic liquid
Takatsugu Endo, Shota Hosomi, Shunsuke Fujii, Kazuaki Ninomiya, Kenji Takahashi

Thu. Sep 15

S4. Integrated Understanding of Inter-Hierarchical Interactions in Softmaterials

Ken Terao, presiding

9:10 2H01 Micelle Formation of Amphiphilic Cyclic Peptide in Aqueous Solution
Eri Tabata, Satoshi Kanazawa, Isamu Akiba

9:35 2H02 pH responsiveness of polyhedral micelles consisting of amino acid-based zwitterions bearing calix[4]arene lipids
Shota Fujii, Kazuo Sakurai

10:00 2H03 3D structure estimation of molecular assembly in aqueous solution by SAXS and computational chemistry
Tadashi Okobira, Tomoya Ueda, Koudai Ikesue, Yusuke Sanada, Shota Fujii, Kazuo Sakurai

Yasuhiro Matsuda, presiding

10:25 2H04 Structural analysis of polymer assemblies formed in solution by small angle X-ray scattering
Takahiro Sato, Rintaro Takahashi, Kai Uramoto, Masahiro Kondo, Ken Terao

10:50 2H05 Micelle formation of amphiphilic amylose derivatives in saline solution
Ken TERAQ, Yuki KAMEYAMA, Shinichi KITAMURA, Takahiro SATO

So Fujinami, presiding

11:15 2H06 Second virial coefficient of polymacromonomers consisting of sodium poly(styrene sulfonate) in aqueous sodium chloride
Teppey Kushida, Yusuke Kitagawa, Yusuke Hasegawa, Yo Nakamura

11:40 2H07 Local and global structural change of renatured xanthan
Yasuhiro Matsuda, Fumitada Sugiura, Kazuya Okumura, Shigeru Tasaka

Hiroki Ogawa, presiding

12:55 2H08 Nano-Imaging Under Controlled Environment Using Xray Free-Electron Lasers
Yoshinori Nishino, Takashi Kimura, Akihiro Suzuki, Tairo Oshima, Yasumasa Joti, Yoshitaka Bessho

- 13:20 2H09 Grazing incidence small angle neutron scattering studying model catalyst layer for polymer electrolyte fuel cell
Satoshi Koizumi,Satoru Ueda,Akihiro Ohira,Seiichi Kuroda,Henrich Frielinghaus
- 13:45 2H10 Measurement of Brownian motion under shear condition by X-ray photon correlation spectroscopy
Taiki Hoshino,So Fujinami,Tomotaka Nakatani,Yoshiki Kohmura
- Yuji Higaki, presiding**
- 14:10 2H11 Individual image reconstructions of patterned Au nanoparticles and block copolymer thin films
Hiroki Ogawa,Yukihiro Nishikawa,Mikihito Takenaka,Akihiko Fujiwara,Masaki Takata,Toshiji Kanaya
- 14:35 2H12 Swelling Behavior of Thin Thermo-responsive Polymer Films in Water and Its Effect on Protein Adsorption
Toyoaki Hirata,Hisao Matsuno,Keiji Tanaka
- 15:00 2H13 Quantitative analysis of the kinetics of dynamic polymer brush formation by time-resolved neutron reflectivity
Hirokazu Tanoue,Manabu Inutsuka,Norifumi Yamada,Kohzo Ito,Hideaki Yokoyama
- Hisao Matsuno, presiding**
- 15:25 2H14 Counterion-specific Hydration Structure of Poly(ammonium cation) Brushes
Yoshihiro Inutsuka,Yuji Higaki,Norifumi L. Yamada,Atsushi Takahara
- 15:50 2H15 Local structure analysis of nylon12 films under bulge testing using micro beam wide-angle X-ray diffraction measurement
Chigusa Nagano,Shuhei Nozaki,Aya Fujimoto,Kazutaka Kamitani,Ya-ting Hsieh,Hirohmi Watanabe,Ken Kojio,Atsushi Takahara
- 16:15 2H16 Effect of the 3-hydroxyhexanoate Component on Lamellar Orientation in Melt-crystallized Poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) Thin Films
Mami Goda,Md. Amran Hossain,Junichiro Hasegawa,Shun Miyamoto,Shinichi Sakurai,Hideki Yamane,Hiroyasu Masunaga,Takaaki Hikima,Masaki Takada,Tomoyasu Hirai,Atsushi Takahara,Sono Sasaki
- Shinichi Sakurai, presiding**
- 16:40 2H17 Research on Flemion membrane under elongation by time-resolved small and wide angle X-ray scattering
So Fujinami,Taiki Hoshino,Tomotaka Nakatani,Masaki Takata
- 17:05 2H18 Mechanism of surface treatments of adhesion of polypropylene and hierarchical structures in the adhesion interfaces
Shin Horiuchi,Akihisa Akiyama,Takayuki Miyamae,Chiaki Sato

Room I

Wed. Sep 14

S8. Creation and Application of Functional Nanotemplates

- 9:50 1ISO Introductory Remarks S8
Takashi Uemura,Kazunori Matsuura

Takashi Uemura, presiding

- 10:00 1I03 Properties of the porous thin film obtained by layer-by-layer assembled

stereocomplex of it-PMMA and st-PMAA
Hiroharu AJIRO, Steffen SEITZ, Tatsuaki UYAMA, Masumi
MAEGAWA, Daisuke KAMEI, Mitsuru AKASHI

- 10:25 1I04 Preparation of Methacrylate Functionalized Polymer Brushes with Well-
Controlled Stereoregularity and Evaluation of Its Thin Film Structure
Tomoki Kato, Masanao Sato, Tomoyasu Hirai, Atsushi Takahara
- 10:50 1I05 Metal Organic Frameworks Nanofilms Assembled on Polymer Nanosheets
Template
Hiroaki OHARA, Shunsuke YAMAMOTO, Tsunenobu ONODERA, Hitoshi
KASAI, Hidetoshi OIKAWA, Tokuji MIYASHITA, Noboru OHTA, Masaya
MITSUISHI
- 11:15 1I06 Formation of Nanowires through intra-track polymerization of small
molecular materials triggered by high energy single particles
Tsuneaki SAKURAI, Akifumi HORIO, Shu SEKI
- 11:40 1I07 Sequence Control for Vinyl Monomers by Means of Template
Makoto Ouchi, Dongyoung Oh, Kana Nishimori, Yuki Kametani, Yuki
Sano, Mitsuo Sawamoto

Tomoyasu Hirai, presiding

- 12:55 1I08 Synthesis of functional-composite microgels prepared by soap-free seeded
emulsion polymerization in the presence of microgels as template
Takumi Watanabe, Chiaki Kobayashi, Chihong Song, Kazuyoshi
Murata, Takuma Kureha, Daisuke Suzuki
- 13:20 1I09 One-pot Synthesis and the Mechanical Properties of Poly(N-
isopropylacrylamide) Gels with Homogeneous Polymer Network Structure
Yuto Jochi, Yukikazu Takeoka, Takahiro Seki, Kotaro Satoh, Masami
Kamigaito, Kenji Urayama
- 13:45 1I10 Janus-type materials synthesized using polymer particles adsorbed to interface
Syuji Fujii, Masaya Ito, Yoshinobu Nakamura
- 14:10 1I11 Functional Star-shaped Polymers for Organic Memory Device Applications
Junko AIMI, Wen-Chang Chen

Yukikazu Takeoka, presiding

- 14:35 1I12 Selective introduction of precursors of inorganic materials into polymer
blocks of block copolymers for permanent magnets and Li battery
electrodes
Hiroaki Wakayama, Yasuaki Kawai, Hirotaka Yonekura
- 15:00 1I13 Self-formation and -organization of Gold Nanoparticles on Silica
Microspheres in Solutions of Poly(ethylene oxide)-containing Block
Copolymers: Temperature and Solvent Effect
Toshio Sakai, Takahisa Watanabe
- 15:25 1I14 Morphological behavior of organic-silica nanocomposites based on
microphase separation of block copolymers
Hisanori Hashimoto, Reiko Saito
- 15:50 1I15 Alignment of Ferritin Protein By Using Nano Pattern of Block Copolymers
Naruhisa Higashino, Mikihiro Takenaka, aisyah siti shamsudin, kaoru
Yamaguchi

Mikihiro Takenaka, presiding

- 16:15 1I16 Self-organization and templating function of Comb-like block copolymers
Wenli Wang, Katsuya Kaikake, Ren-hua Jin
- 16:40 1I17 Creation of crosslinked polyimide films with periodic nanostructures with
block copolymer templates
Takahiro Komamura, Ryohei Kikuchi, Teruaki Hayakawa

Teruaki Hayakawa, presiding

17:05	1I18	Structure-dependent Redox-activity of Amphiphilic Block Copolymers <u>Daisuke Matsukuma</u> , Hiroki Kawana, Yukie Maejima, Hidenori Otsuka
17:30	1I19	Fabrication and Characterization of Platinum Nanoparticles within Amphiphilic Copolymer Micelle as a Template Controlling Metal Ion Concentration <u>Hikari Satoh</u> , Akane Takagi, Daisuke Matsukuma, Hidenori Otsuka
17:55	1I20	Diatom-templated gold nanohole-arrayed tips <u>Taro Fujiwara</u> , Teiko Park, Tomokazu Iyoda, Kaori Kamata, Yasushi Okumura, Tanaka Takuo

Thu. Sep 15

S8. Creation and Application of Functional Nanotemplates

Kazunori Sugiyasu, presiding

9:10	2I01	Dendrimer Supramolecular Polymer Template for Metal Salts Accumulation <u>Yuta Tobari</u> , Ken Albrecht, Shin Mendori, Kimihisa Yamamoto
9:35	2I02	Immobilization of enantiomeric counterion-induced helical secondary structure through sol-gel template polymerization <u>Naoya Ryu</u> , Yutaka Okazaki, Makoto Takafuji, Emilie POUGET, Reiko ODA, Shoji Nagaoka, Hirotaka Ihara
10:00	2I03	Development of co-assembling system based on non-chiral dye-on-chiral template for high-purity circularly polarized luminescence <u>Yutaka Okazaki</u> , Taisei Goto, Masahiro Ueki, Yutaka Kuwahara, Makoto Takafuji, Hirotaka Ihara
10:25	2I04	Function of Supramolecular Hydrogel with Glucoside Integrated Surface <u>Masamichi Yamanaka</u>

Makoto Takafuji, presiding

10:50	2I05	Design of supramolecular polymers with spontaneous curvature <u>Shiki Yagai</u>
11:15	2I06	Control over differentiation of supramolecular self-assembly <u>Kazunori Sugiyasu</u> , Tomoya Fukui, Masayuki Takeuchi
11:40	2I07	Control of Conformation and Chirality of Polythiophene Derivatives by One-Dimensional Soft Nanospaces <u>Naohiro Kameta</u> , Masaru Aoyagi, Mitsutoshi Masuda

Shiki Yagai, presiding

12:55	2I08	Isolation of thiols onto 2D molecular template adlayer at an electrochemical interface <u>Soichiro Yoshimoto</u>
13:20	2I09	Curvature-dependent thermoresponsive assembly of gold nanoparticles <u>Ryo Iida</u> , Hideyuki Mitomo, Kenichi Niikura, Kuniharu Ijiro
13:45	2I10	Facile synthesis of core-shell metal nanoparticles in nano-scale reaction field and its selective catalysis <u>Takato Mitsudome</u>

Takane Imaoka, presiding

14:10	2I11	Synthesis and Morphogenesis of the Composite of Conductive Polymers/Quinone Derivatives on the Surface of Oxidant Crystals and Their Application to Electrode Material <u>Kosuke Sato</u> , Hirotaka Masaki, Mirei Arayasu, Yuya Oaki, Hiroaki Imai
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- 14:35 2I12 Formation of cross-linked polymer network using micelle-dispersed carbon nanotube as a template and their bioapplication
Tsuyohiko Fujigaya, Yukiko Nagai, Minoru Kawaguchi, Koichiro Mori, Naotoshi Nakashima
- 15:00 2I13 Solvent free polymerization of 3-hexylthiophene using iron(III) chloride particles in porous materials
Yusuke Nagae, Tomoyasu Hirai, Atsushi Takahara
- 15:25 2I14 Lyotropic Liquid Crystal Phase Transition in Inorganic Polymer Matrix
Mitsuo Hara, Taiki Orito, Naoyuki Wakitani, Shusaku Nagano, Takahiro Seki
- Tsuyohiko Fujigaya, presiding**
- 15:50 2I15 Synthesis of metal subnanoparticles from precise coordination templates
Takane Imaoka, Kimihisa Yamamoto
- 16:15 2I16 Construction of precisely controlled reaction fields based on a helical metallomacrocyclic-assembled porous crystal
Shohei Tashiro, Hirotaka Yonezawa, Kousuke Nakata, Mitsuhiko Shionoya
- 16:40 2I17 Photon upconversion based on chromophore assembly on inorganic nanomaterials
Kazuma Mase, Keisuke Okumura, Nobuhiro Yanai, Nobuo Kimizuka
- 17:05 2I18 Synthesis of linear polymers by using click reaction in porous crystals
Shizuka Anan, Yumi Mochizuki, Kenta Kokado, Kazuki Sada

Fri. Sep 16

S8. Creation and Application of Functional Nanotemplates

Akira Onoda, presiding

- 9:10 3I01 Synthesis and property of metal oxides in chiral silica
Masumi Sugimoto, Katsuya Kaikake, Ren-Hua Jin
- 9:35 3I02 Preparation of hydrogels with a capability for controlled release composed of liquid crystalline filamentous virus
Toshiki Sawada, Miyuki Yanagimachi, Takeshi Serizawa
- 10:00 3I03 Protein display on artificial viral capsid
Kazunori Matsuura, Takahide Honjo, Yuriko Shiomi, Junpei Ohta, Hiroshi Inaba

Kazunori Matsuura, presiding

- 10:25 3I04 Modulating dynamic assembly of cell-division protein FtsZ using an exogenous protein
Akira Onoda
- 10:50 3I05 Design of biomaterials using crystalline protein templates
Satoshi Abe, Takafumi Ueno
- 11:15 3I06 Fabrication of ordered nano-space composed of grafted nucleo-peptide assembly acted as templated for mineralization
Kaede Inagaki, Masahiro Higuchi

Room J

Wed. Sep 14

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Reiko Saito, presiding

- 10:00 1J03 Optoelectrical properties of polythiophene constrained in coordination nanospaces
Takashi Kitao, Michael MacLean, Takashi Uemura, Susumu Kitagawa
- 10:25 1J04 Formation of unprecedented interfaces between unsubstituted polythiophene and C60 using porous metal complexes
Yotaro Sasaki, Takashi Kitao, Takashi Uemura, Susumu Kitagawa
- 10:50 1J05 Synthesis of Fibrous Gels Gold Nanoparticles are uniformly dispersed by Cross-linking Reaction of Poly(vinylalcohol) Derivative Containing Sulfur and Gold ions
Moeko Morita, Masaki Shimazaki, Daisuke Nagai, Hiroki Uehara, Takeshi Yamanobe
- 11:15 1J06 Investigation of thermal stability of electrochromic devices using metallo-supramolecular polymer
Yuki Seino, Miki Kanao, Masayoshi Higuchi
- 11:40 1J07 Additional effects of ionic liquid doped polypropylene-carbonate to high density-polyethylene
Miho Mae, Koh-Hei Nitta, Kiyoshi Nishioka

Tasuku Nakajima, presiding

- 12:55 1J08 Preparation of protic ionic liquids containing cyclic oligosiloxane frameworks
Tomotada Hirohara, Takashi Kai, Joji Ohshita, Yoshiro Kaneko
- 13:20 1J09 Control of Properties of Polymer Composites Containing Modified POSS Having Various Types of Substituents
Kazunari UEDA, Kazuo TANAKA, Yoshiki CHUJO
- 13:45 1J10 Synthesis and Evaluation of Highly Luminescent Molecules Based on POSS
Keita Sato, Masayuki Gon, Kazuo Tanaka, Yoshiki Chujo
- 14:10 1J11 Preferential synthesis of ammonium-group-containing cage-like decasilsesquioxane and preparation of POSS-linking polymers
Kenta Imai, Yoshiro Kaneko

Seigou Kawaguchi, presiding

- 14:35 1J12 Effect of silica component on the properties of epoxy-silica nanocomposite
Akio Takasugi, Reiko Saito
- 15:00 1J13 Precise synthesis of polyamide with POSS side chain and evaluation of its scratch functional properties
Tomoyasu Hirai, Yusuke Nagae, Atsushi Takahara
- 15:25 1J14 Polyurethane-silica nanocomposites provided from perhydropolysilazane: synthesis and its reaction mechanism
Joo Yeon Lee, Reiko Saito
- 15:50 1J15 Synthesis of core-shell silica-polyisoprene hybrid particles and mechanical properties of the composites
Kyoko Takahashi, Kaoru Adachi, Yasuhisa Tsukahara

Kazuo Tanaka, presiding

- 16:15 1J16 Invention of organic-inorganic hybrid optical materials throughout photocurable reaction.
Hiroshi Aoyama, Kazushi Enomoto, Moriya Kikuchi, Seigou Kawaguchi, Kimihiro Matsukawa
- 16:40 1J17 Unique Optical Property of Epoxied Based Organic-inorganic Nano-hybrid

		Films <u>Kazushi Enomoto</u> ,Moriya Kikuchi,Atsushi Narumi,Seigou Kawaguchi
17:05	1J18	Fabrication and mechanical properties of highly ductile polypropylene/silica nanocomposite using functional polypropylene containing hydroxyl group <u>Ryota Watanabe</u> ,Hideaki Hagihara,junji Mizukado,Hiroyuki Suda,Masao Kunioka
17:30	1J19	Tough Hydrogel Bondable to Bone <u>Takayuki Nonoyama</u> ,Susumu Wada,Ryuji Kiyama,Nobuto Kitamura,Takayuki Kurokawa,Task Nakajima,Kazunori Yasuda,Jian Ping Gong
17:55	1J20	Fabrication of low-melting alloy composite hydrogels toward obtaining advanced functional materials <u>Riku Takahashi</u> ,Daniel King,Takayuki Nonoyama,Tasuku Nakajima,Takayuki Kurokawa,Jian Ping Gong

Thu. Sep 15

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Kenji Ogino, presiding

9:10	2J01	DNA/gold nanoparticle hydrogel prepared by polymerase chain reaction <u>Yuka Eguchi</u> ,Tomoharu Kato,Tsutomu Tanaka,Tatsuo Maruyama
9:35	2J02	Enhanced Photocatalytic Properties of Metal Nanoparticle-Graphene Oxide Complex Crosslinked by Oligopeptides <u>Tsukasa Mizutaru</u> ,Kohsakowski Sebastian,Marzun Galina,Barcikowski Stephan,Yohei Yamamoto
10:00	2J03	Rheology of Concentrated Colloidal Dispersions -Viscoelastic Behavior and microstructure of the Dispersions Containing Colloidal Crystals- <u>Hiroshi Nakamura</u> ,Masashi Harada,Naomi Kumano,Masahiko Ishii
10:25	2J04	Micrometer-sized copper oxide tubes prepared by using nanoparticle-loaded fibers as a template <u>Masato Shigemasu</u> ,Kazuhide Ueno,Hiromori Tsutsumi

Tatsuo Maruyama, presiding

10:50	2J05	Thermo-mechanical Properties of Transparent Self-reinforced Polylactide Composites with Stereocomplex Polylactide Nanofibers <u>Naruki Kurokawa</u> ,Atsushi Hotta
11:15	2J06	Quick preparation of moisture-saturated carbon fiber-reinforced plastics and their accelerated ageing tests using heat and moisture <u>Masao Kunioka</u> ,Tomio Shimada,Hideaki Hagihara,Masahiro Funabashi,Hideyuki Suda,Hideki Horizonono
11:40	2J07	Relationship between Mechanical Anisotropy and Thermal Expansion in Polymer Composites <u>Satoshi Noma</u> ,Yukihiro Nishikawa,Kenji Urayama,Kazuaki Okamoto

Tomoki Maeda, presiding

12:55	2J08	Characterization and fabrication of polydiacetylene composite having thermochromic behavior <u>Toru Hashizume</u> ,Shinji Kanehashi,Kenji Ogino
13:20	2J09	Significant enhancement of thermal diffusivity of polymerization-induced phase-separated composite films consisting of soluble polyimide and maleimide <u>Shoya Uchida</u> ,Ryohei Ishige,Shinji Ando

S21. Polymer processing for leading higher polymer performance

- 14:00 2JSO Introductory Remarks S21
Takeharu Isaki
- Takeharu Isaki, presiding**
- 14:10 2J11IL Development of High Performance Fibers and Films via Higher-order Structure Control in Elongational Process
Takeshi Kikutani
- 15:00 2J13 Effects of spinning speed on fiber structure formation of Polypropylene
KyoungHou KIM, Naoki KOIKE, Ren TOMISAWA, Toshihumi IKAGA, Yutaka OHKOSHI, Kazuyuki OKADA, Hiroo KATSUTA, Masato MASUDA, Yoshitsugu FUNATSU, Toshiji KANAYA, Hiroyasu MASUNAGA
- 15:25 2J14 Observation and Analytical Study of Electrospinning Process
Ikuo Uematsu, Kenya Uchida, Yasutada Nakagawa, Hidetoshi Matsumoto
- Yutaka Ohkoshi, presiding**
- 15:50 2J15 Rhea-raman studies of uniaxial deformation behavior of semicrystalline polymers
Takemitsu Kida, Yusuke Hiejima, Koh-hei Nitta
- 16:15 2J16 Molecular structure and physical properties of metallocene catalyzed long chain branched polypropylene
Shinichi Kitade, Kuninori Takahashi, Kazuo Asuka, Masaaki Ito, Takao Tayano
- 16:40 2J17 Enhancement of melt tension by the addition of an immiscible acrylate polymer with low molecular weight
Masayuki Yamaguchi, Jiraporn Seemork
- 17:05 2J18 Structural changes in pelletizing polypropylene
Yutaka Kobayashi

Fri. Sep 16

S21. Polymer processing for leading higher polymer performance

Hideyuki Uematsu, presiding

- 9:10 3J01 Control of three dimensional refractive indices in uni-axial stretched cellulose acetate film
Shogo Nobukawa, Masayuki Yamaguchi
- 9:35 3J02 Progression of Thermoplastic Polymer Processing by Radiation Heating
Takushi Saito, Tatsuya Kawaguchi, Isao Satoh
- 10:00 3J03 Effect of cooling rate on solidification and crystallization of carbon fiber reinforced nylons
Takaya Hirayama, Tetsuya Yamamoto, Yuichi Masubuchi
- 10:25 3J04 Slip and Roughness at the Interface between Immiscible Polymeric Liquids
Sathish K. Sukumaran, Ryohei Komuro, Takuya Ito, Masataka Sugimoto, Kiyohito Koyama
- Takushi Saito, presiding**
- 10:50 3J05 Rheology and Application of Aqueous Solution of Hydrophobically Modified Alkali Swellable Emulsion (HASE)
Hideyuki Uematsu, Hitoshi Go, Shuichi Tanoue

- 11:15 3J06 Evaluation of Higher-order Structure and Engineering Properties of PC/PMMA Blend Obtained by Special Melt Mixing Process.
Takuya Konno, Akira Ishigami, Shotaro Nishituji, Masaru Ishikawa, Hiroshi Ito
- 11:40 3J07 Phase Separation of Polymer Blends via Nano-imprinting with AAO Template
Paritat Muanchan, Akira Ishigami, Akihiko Nemoto, Takashi Kyotani, Hiroshi Ito
- Shogo Nobukawa, presiding**
- 12:55 3J08 Development of UHMWPE/CNT composite for high abrasion resistant material
Kazuki Miyamae, Takumi Okihara
- 13:20 3J09 Elongational crystallization of PET and PEN forms nano oriented crystals (NOCs) with high performance
Masamichi Hikosaka, Kiyoka Okada, Yoshitaka Tanaka, Yoko Minami, Taizo Kabe, Hiroyasu Masunaga
- 13:45 3J10 Property and Functionality Development of Ultra-High Molecular Weight Polyethylene by Melt-Drawing Technique
Hiroki Uehara, Takeshi Yamanobe
- 14:10 3J11 Order-disorder transition in acrylonitrile-butadiene random copolymer(NBR)
Yoshiki Nagano, Mikihito Takenaka
- Hiroki Uehara, presiding**
- 14:35 3J12 Fabrication of Asymmetric Permeable Membrane via Anisotropic Phase-segregation of Liquid Crystalline Block Copolymers
Yusuke Hibi, Yuki Oguchi, Yuta Shimizu, Tomokazu Iyoda
- 15:00 3J13 Orientation behavior and inter- and intra-molecular interactions of miscible polymer blend: poly(methyl methacrylate)/poly(styrene-co-acrylonitrile)
Mizuho Takagi, Keiichi Kuboyama, Toshiaki Ougizawa
- 15:25 3J14 Crystalline morphology of polyesters immobilized on solid substrates
Toshiyuki Kataoka, Yu Sakakibara, Kenshiro Okamura, Takayuki Ikehara

Room K

Wed. Sep 14

S20.Recent advancement of networked polymers

- 9:50 1KSO Introductory Remarks S20
Hiroto Kudo, Ken-ichi Shinotani
- Hajime Kishi, presiding**
- 10:00 1K03 Thermal curing reaction of benzoxazine resin derived from calix[4]resorcinarene
Yonekawa Morio, Hajime Kimura, Keiko Otsuka
- 10:25 1K04 Development of novel composite materials by the ring-opening copolymerization of ϵ -caprolactam and epoxides.
Kentaro Buya, Hiroto Kudo
- 10:50 1K05 High Order Structure Analysis for Phenolic Cured LC Epoxy Resin with Copolymer Component
Shingo Tanaka, Fusao Hojo, Yuka Yoshida, Kenji Tanaka, Yoshitaka Takezawa
- Atsushi Sudo, presiding**
- 11:15 1K06 Dissimilar Materials Bonding Using Epoxy Monoliths

- Fai Uehara, Yuka Sugimoto, Yukihiro Nishimura, Haruyuki Okamura, Akikazu Matsumoto
- 11:40 1K07 Effect of a small amount of catalyst on nano-phase structures of epoxy / block copolymer blends
Hajime Kishi, Jin Kimura, Kazuyoshi Yamada
- Akikazu Matsumoto, presiding**
- 12:55 1K08IL Development of Toughness and High Thermal Conductivity Epoxy Resins
Miyuki Harada
- Bungo Ochiai, presiding**
- 13:45 1K10 Relationship between high order structures of mesogenic epoxy resins and hydrogen gas barrier properties
Kazumasa Fukuda, Yoshitaka Takezawa, Tetsushi Maruyama, Shin Nishimura
- 14:10 1K11 Dynamic Covalent Network Polymers Based on Thermal Bond Exchange Reactions of Bis(dialkylamino)disulfides
Akira Takahashi, Raita Goseki, Hideyuki Otsuka
- 14:35 1K12 Effect of axle component structure of rotaxane cross-linker on the physical property of rotaxane cross-linked polymer
Jun Sawada, Daisuke Aoki, Toshikazu Takata
- Hideyuki Otsuka, presiding**
- 15:00 1K13 Development of multifunctional epoxides from myo-inositol
Atsushi Sudo, Takuya Takahashi, Masanori Shigetou, Masumi Iwamoto
- 15:25 1K14 Development of tough film via solventless radical cyclocopolymerization
Kazuki Chiba, Ochiai Bungo
- 15:50 1K15 Synthesis and property of functional gel compounds containing Noria-templated molecular holes.
Tsubasa Miyamae, Hiroto Kudo
- Naoko Yoshie, presiding**
- 16:15 1K16 Application of Poly(γ -glutamic acid)s to Adhesives by Partial Modification and Crosslinking
Kozo Matsumoto, Haruka Antoku, Mikiyasu Ishitobi, Takumi Maeta, Takeshi Endo
- 16:40 1K17 One-dimensional Swelling-Shrinkage of Bacterial Cellulose-Crosslinked Poly(acrylic acid) Nanocomposite Sheet
Xingyu Xiang, Hyunhee Shim, Hiroshi Uyama
- 17:05 1K18 Synthesis and polymerization of monomers bearing benzocyclobutene moieties and their applications to networked polymers
Takahiro Miyata, Takeshi Endo

Thu. Sep 15

S20.Recent advancement of networked polymers

Kozo Matsumoto, presiding

- 9:10 2K01 Toughening mechanism of Host-Guest gel through precise analysis of large deformation behavior
Hisataka Kajita, Takuya Katashima, Masaki Nakahata, Yoshinori Takashima, Akira Harada, Tadashi Inoue
- 9:35 2K02 Enhancing Mechanical Performance of Elastomers by Bioinspired Multiphase Design with Different Cross-Linking Densities

Shoma Yoshida, Hiroataka Ejima, Naoko Yoshie

10:00 2K03 Synthesis of Thermally Curable Hyperbranched Polymers Containing Dense Degradable Groups and Their Application to Degradable Cured Materials
Yoji Yamashita, Eriko Sato, Takashi Nishiyama, Hideo Horibe

Hideo Horibe, presiding

10:25 2K04 Preparation of microcapsules including Grubbs catalysts and their application to thermal curing materials
Hiroki Matsutani, Masahiro Furutani, Koji Arimitsu

10:50 2K05 Highly sensitive anionic UV curing of epoxy resins based on cascade reactions
Koji Arimitsu, Nobuhisa Shimoda, Masahiro Furutani

Koji Arimitsu, presiding

11:15 2K06 Synthesis of novel calixarene including branched aromatic hydroxyl group unit and evaluation of resist performance for electron beam lithography
Sadaaki Kuroiwa, Seiichiro Takabayashi, Shohei Hashima, Kazuhiro Yamabuki, Kenjiro Onimura

11:40 2K07 Characterization of Cross-Linking Structure in UV and EB Cured Acrylic Copolymer Resins by MALDI-High Resolution-MS Combined with Supercritical Methanolysis
Makoto Miyazawa, Hajime Ohtani

Kenjiro Onimura, presiding

12:55 2K08 A scaling relation between gelation time and UV intensity during photorheometry measurements
Kentaro Taki, Hiroki Kondo

13:20 2K09 Correlation between Aggregation State and Hydrogen-Bonding Strength of Polyimide Containing Amide Linkages in the Main Chain under Very High Pressure
Eisuke Fujiwara, Hiroshi Fukudome, Ryohei Ishige, Shinji Ando

13:45 2K10 Volumetric Thermal Expansion Behaviors of Main-Chain-Type Crosslinkable Polyimide Films
Tomohiro Okada, Takafumi Shimizu, Nobuyuki Miyaki, Shuuichi Sugawara, Ryohei Ishige, Shinji Ando

Ryohei Ishige, presiding

14:10 2K11 Control of polymer networks and refractive indices of polysilane/diphenylfluorene blended films
Masashi Iseki, Haruyuki Okamura, Akikazu Matsumoto, Keiko Minokami, Sinsuke Miyauchi

14:35 2K12 Studies on decrease of curing temperature and toughening of cyanate ester resins
Toshiyuki Oyama, Manabu Isono, Takashi Kobayashi, Naohiro Wada, Keisuke Izu, Yuichiro Tokoro, Akio Takahashi

15:00 2K13 Preparation of Organic-Inorganic Hybrid Materials from Phenolic Polymers
Naohiro YOSHIDA, Takafumi HAYASHI, Tada-aki YAMAGISHI, Tomoki OGOSHI, Takahiro KAKUTA

Haruyuki Okamura, presiding

15:25 2K14 Dynamic self-assembly of thermoplastic elastomer based on polyrotaxane
Rina Maeda, Shuntaro Uenuma, Koichi Mayumi, Hideaki Yokoyama, Kohzo Ito

15:50 2K15 Hierarchical Heterogeneity in An Epoxy Reaction System
Mika Aoki, Atsuomi Shundo, Keiji Tanaka

16:15 2K16 Network Polymer Synthesis and Fluorescence Behavior by Strain-Promoted Alkyne-Azide Cycloadditions
Satomi Fukushima, Tsuyoshi Michinobu

Room L

Wed. Sep 14

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Ryohei Ishige, presiding

- 10:00 1L03 Synthesis of p- and n-type ultra-low energy gap polymers and application for NIR-photo-thermo-electric conversion devices
Tsukasa Hasegawa, Minoru Ashizawa, Takaaki Manaka, Susumu Kawauchi, Hidetoshi Matsumoto
- 10:25 1L04 Stochastic Resonance Phenomenon in Polymer Transistors
Yoshiharu Suzuki, Teruo Kanki, Hidekazu Tanaka, Naoki Asakawa
- 10:50 1L05 Fabrication of Organic Crystal Field-Effect Transistors with Dual Gate Contacts
Hiroki Sano, Yuhi Inada, Takeshi Yamao, Shu Hotta
- 11:15 1L06 Simulation of nanofiber formation mechanism of the derivatives of polythiophenes
Taiki Ito, Toshiaki Miura, Takeshi Shimomura
- 11:40 1L07 Thermoelectric Property of P3HT Nanofibers with Alignment Control
Hikari Narita, shinzi kanehashi, takeshi shimomura

Takeshi Shimomura, presiding

- 12:55 1L08 Transistor Characteristics of Nanofiber Composite Film
Morito Yagi, Shinji Kanehashi, Takeshi Shimomura
- 13:20 1L09 Synthesis and Characterization of Self-doped Conductive Polymer by Phosphonation of Polyaniline
Toru Amaya, Izumi Kurata, Masato Daijo, Tomohiro Hatai, Toshikazu Hirao
- 13:45 1L10 Enhancement of electrical conductivity and rubber elasticity by heating of two components, polyaniline and phosphoric liquid dopant
Teruya Goto, Hiroshi Awano, Tatsuhiko Takahashi, Koichiro Yonetake
- 14:10 1L11 Correlation between Dianhydride Structures and Dark-current Properties in Polyimide Films Having the Triphenylamine Structure in the Diamine Moiety
Teppey Chino, Sho Fukuchi, Kazuhiro Takizawa, Shigeo Asai, Ryohei Ishige, Shinji Ando
- 14:35 1L12 Solid-state emission and luminescent chromic properties of carbon-boron cluster compounds
Kenta Nishino, Kazuo Tanaka, Yoshiki Chujo

Eriko Sato, presiding

- 15:00 1L13 Synthesis of Stimuli Responsive Aromatic Micelles and their Encapsulation/Release of Large Molecules
Mai Kishimoto, Kei Kondo, Michito Yoshizawa, Munetaka Akita
- 15:25 1L14 Network Structure and Memory Effect of Shape-memory Gels Exhibiting Molecularly Stimuli-responsive Behavior
Takashi Miyata, Masayoshi Hayashi, Akifumi Kawamura
- 15:50 1L15 Preparation of Self-healing and Stimuli-responsive Color Changing Supramolecular Material
Koki Yonekura, Masaki Nakahata, Yoshinori Takashima, Akira Harada, Hiroyasu Yamaguchi

- 16:15 1L16 Synthesis of amphiphilic thermosensitive polymers using poly(N-alkyl-N-vinylamide) derivatives.
Ryo Kawatani, Kai Kan, Mituru Akashi, Hiroharu Ajiro
- Hiroyasu Yamaguchi, presiding**
- 16:40 1L17 Effect of Relatively Hydrophobic Substances on Phase Transition Behavior of Thermosensitive Polymer
Hidenobu Shimizu, Risei Wada, Masaru Okabe
- 17:05 1L18 Effects of Additives on Thermoresponsive Behavior of Coumarin Derivative Polymers in Organic Solvents
Hiroki Ueda, Eriko Sato, Takashi Nishiyama, Hideo Horibe
- 17:30 1L19 Preparation of Temperature-Responsive Self-Assemblies Using Amphiphilic Liquid Crystalline Polymers Exhibiting Phase Transition at Body Temperature and Their Applications as Drug Carriers
Yasuaki Inoue, Akifumi Kawamura, Takashi Miyata
- 17:55 1L20 Design of Photo- and Thermo-responsive Polymers for Cell Regulation and Their Responsive Gelation
Takashi Miyata, Akana Matsuda, Akifumi Kawamura

Thu. Sep 15

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Takashi Miyata, presiding

- 9:10 2L01 Free surface command system for the control of out-of-plane LC polymer orientation
Takashi NAKAI, Mitsuo HARA, Shusaku NAGANO, Takahiro SEKI
- 9:35 2L02 Formation and Photoalignment of Hetero Smectic Lamella Structure of LC Random Copolymer with Azobenzene and Oligo(ethylene oxide) Side Chains
Reona Noda, Mitsuo Hara, Shusaku Nagano, Takahiro Seki
- 10:00 2L03 Photoalignment of Liquid Crystal Polymers by Photopolymerization with Non-polarized Light
Yosuke Kurata, Kyohei Hisano, Atsushi Shishido

Atsushi Shishido, presiding

- 10:25 2L04 Anisotropic Stretching Behavior of an Oriented Film of the Tripodal Triptycenes Based on the Reversible Absorption of the Solvent Vapor
Seiki Noriya, Fumitaka Ishiwari, Yoshiaki Shoji, Takashi Kajitani, Takao Someya, Takanori Fukushima
- 10:50 2L05 Optoelectronically Functionalized "Liquid" Materials
Takashi Nakanishi, Fengniu Lu, Avijit Ghosh, Hiroaki Isago, Tomohisa Takaya, Izuru Kawamura, Yuki Yamamoto, Shigehiko Hayashi
- 11:15 2L06 Touch-sensor using polyurethane sheet with high photoelasticity
Masahiko Mitsuzuka, Satoshi Ymasaki, Yoshiro Tajitsu
- 11:40 2L07 The effect of polymerization method from the point of view of structure and functions of Gel material for optical device
Eri Ito, Katsuhiko Yamamoto

Akifumi Kawamura, presiding

- 12:55 2L08 Photo-responsiveness and mechanical property of gel topologically cross-linked by rotaxane
Yuki Hayashi, Kazuhisa Iwaso, Yoshinori Takashima, Akira Harada, Hiroyasu Yamaguchi

- 13:20 2L09 Mechanical Properties of Composite Gels using TEMPO-oxidized Cellulose Nanofiber
Ueda Kosuke, Kenji Urayama, Kenichi Niihara, Takashi Miura, Toru Noguchi
- 13:45 2L10 Synthesis of tough hydrogels by cross-linking with transition metal ions
Takuma Ikai, Riku Takahashi, Daniel R. King, Tasuku Nakajima, Takayuki Nonoyama, Takayuki Kurokawa, Jian Ping Gong
- 14:10 2L11 Microscopic morphology control of gel-based biomaterials by dissipative structure formation
Tatsuya Fujimoto, Sada-atsu Mukai, Shin-ichi Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi
- Keiji Fujimoto, presiding**
- 14:35 2L12 Preparation of Soft Materials Cross-linked by Host-guest Complexes and Influences of kinds of Side Chains
Yuki Sawa, Kazuhisa Iwaso, Masaki Nakahata, Yoshinori Takashima, Akira Harada, Hiroyasu Yamaguchi
- 15:00 2L13 Preparation of gel emulsion via in-situ synthesis of supramolecular gelators
Yuki Nishida, Akiko Tanaka, Tatsuo Maruyama
- 15:25 2L14 Preparation and Evaluation of pKa of Zwitter ionic Nanogel particles
Toshiki Jibiki, Masahiko Nakamoto, Yu Hoshino, Yoshiko Miura
- 15:50 2L15 Preparation of Functional Microgels and Assemblies at Water-Oil Interfaces
Haruka Minato, Takumi Watanabe, Daisuke Suzuki
- Takeshi Serizawa, presiding**
- 16:15 2L16 Functionalization of gel particles by chemical modification with catecholamine
Yukiho Takata, Yuuka Fukui, Keiji Fujimoto
- 16:40 2L17 Preparation and aggregation of mussel adhesive protein mimetic gel particles
Shinji ABE, Shingo TAMESUE, Tetsu MITSUMATA, Norio TSUBOKAWA, Takeshi YAMAUCHI
- 17:05 2L18 Control of functional properties of titania by mineralization using bimolecular templates
Kazuki MURAI, Takashi TOMOZE, Keitaro HORIBA, Yoshihiro NOMURA, Mutsuyoshi MATSUMOTO

Fri. Sep 16

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Mitsuo Hara, presiding

- 9:10 3L01 Functional polymeric materials based on molecular recognition of boronic acids
Shoko Mori, Masaki Nakahata, Yoshinori Takashima, Hiroyasu Yamaguchi, Akira Harada
- 9:35 3L02 Synthesis of functionally graded rubber for tailor-made products with reactive 3D printing
Makoto Fujio, Takuya Matsumoto, Chizuru Hongo, Takashi Nishino
- 10:00 3L03 Uniaxial deformation behavior of thermoplastic elastomers with various soft segment contents.
Taisei Sasaki, Yuske Hiejima, Koh-hei Nitta
- 10:25 3L04 Preparation and Evaluation of Physical Properties of Elastomer Cross-linked by Polyrotaxane
Kohei Koyanagi, Yoshinori Takashima, Akira Harada, Hiroyasu Yamaguchi

Yoshinori Takashima, presiding

- 10:50 3L05 Smectic phase and lamella structure in liquid crystalline polymers with azobenzene mesogen and sulfo group side chains
Ryosuke Goto, Mitsuo Hara, Yutaro Ono, Yuki Nagao, Syusaku Nagano, Takahiro Seki
- 11:15 3L06 Controlling photoinduced motions of liquid-crystalline elastomers with dynamic covalent bonds
Toru Ube, Kyohei Kawasaki, Haruna Tsunoda, Tomiki Ikeda
- 11:40 3L07 Polymer brush structure formed by surface segregation of liquid crystalline block copolymer
Koji Mukai, Mitsuo Hara, Shusaku Nagano, Takahiro Seki

Yuki Nagao, presiding

- 12:55 3L08 Helical director orientation in cholesteric gels via chiral imprinting method
Haruki Tokumoto, Kenji Urayama
- 13:20 3L09 Formation of uneven structure on a photoinitiator-conjugated polydimethylsiloxane substrate during photoinitiated graft polymerization
Hiroaki Kudo, Tatsuo Aikawa, Takeshi Kondo, Makoto Yuasa
- 13:45 3L10 Functionalization of polymeric materials having hydroxyl groups using benzoxaborole-based copolymers
Youhei Kotsuchibashi, Mitsuhiro Ebara
- 14:10 3L11 Sub-nanoporous carbon thin film fabricated with plasma-enhanced chemical vapor deposition method and its reverse osmosis characteristics
Sadaki Samitsu, Izumi Ichinose

Room M

Wed. Sep 14

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Gaku Fukuhara, presiding

- 10:00 1M03 Enhancement of Solvent Dependence on the Screw-sense Induction of Poly(quinoxaline-2,3-diyl)s by Tuning of Chiral Side Chain
Yuuya Nagata, Yusuke Kakihara, Tsuyoshi Nishikawa, Michinori Suginome
- 10:25 1M04 Highly Efficient Chirality Transfer from Naturally Occurring Chiral Solvents to Helical Main Chain of Poly(quinoxaline-2,3-diyl)s
Yuuya Nagata, Ryohei Takeda, Michinori Suginome
- 10:50 1M05 Chiral Recognition and Deracemization Reaction of a Spiroborate-Based Double-Stranded Helicate Bearing a Bisporphyrin
Shinya YAMAMOTO, Hiroki IIDA, Naoki OUSAKA, Eiji YASHIMA
- 11:15 1M06 Chiral Recognition Ability of Monoclonal Antibodies for Chiral Binaphthyl Derivatives
Takuma ADACHI, Tomoki ODAKA, Akira HARADA, Hiroyasu YAMAGUCHI
- 11:40 1M07 Development of Poly(biphenylacetylene)-Based Chiral Stationary Phases Based on Helicity Induction and Memory Strategy
Ryoma Ishidate, Tomoyuki Ikai, Katsuhiko Maeda, Shigeyoshi Kanoh, Eiji Yashima

Yoshinori Takashima, presiding

- 12:55 1M08 Inclusion Ability of Cage-type Cyclodextrin Dimers towards Various Guests

Shogo Ito, Toshiyuki Kida

- 13:20 1M09 Allosterically Amplified Peptide-Sensing by Permethylated Cyclodextrin-Polythiophene Conjugates in Aqueous Media
Gaku Fukuhara, Yuki Ishida, Tadashi Mori, Yoshihisa Inoue
- 13:45 1M10 Novel water-soluble supramolecular complex for catalytic oxygen reduction in water
Riku Kubota, Hiroyoshi Kawakami
- 14:10 1M11 Characterization of UCST-type thermoresponsive polymer modified surface and control of protein interaction
Takuya KORiyAMA, Naohiko SHIMADA, Ryo ISHIHARA, Atsushi MARUYAMA, Akihiko KIKUCHI
- 14:35 1M12 The carbon dioxide permeability of crosslinked membranes composed of poly(vinyl ether)s: The effect of oxyethylene chain length and sequence on permeability
Shinya Yamazaki, Toshikazu Sakaguchi, Tamotsu Hashimoto

Takashi Kaneko, presiding

- 15:00 1M13 Preparation of amine-containing polymeric membranes for CO₂ separation over H₂
Mai Yoshizawa, Ikuo Taniguchi
- 15:25 1M14 Ultra-high CO₂ permeability of polymer composite membranes containing novel surface-modified heteromorphic silica nanoparticles
Yuri Kameyama, Manabu Tanaka, Hiroyoshi Kawakami
- 15:50 1M15 Desilylation of Si-containing poly(diphenylacetylene) membranes and the gas permeability
Yi Lin, Toshikazu Sakaguchi, Tamotsu Hashimoto
- 16:15 1M16 Chemical Resistant Organic-Inorganic Hybrid Separation Membrane
Takahiro Tokuyama, Hiroki Minehara, Hiroki Tomioka, Masahiro Kimura

Hiroyoshi Kawakami, presiding

- 16:40 1M17 Fabrication of permeable membrane with perpendicular nano-transport channels via phase segregation of liquid crystalline block copolymers
Yuta Shimizu, Yuki Oguchi, Tomokazu Iyoda, Yusuke Hibi
- 17:05 1M18 Permeation of 2D Polymer Membranes(3): Oxygen permselectivity of the polymer membranes containing the compounds of 2D structure synthesized by highly selective photocyclic aromatization
Shun Takeo, Kaori Sono, Madoka Moriya, Mari Miyata, Masahiro Teraguchi, Takashi Kaneko, Toshiki Aoki
- 17:30 1M19 Water vapor permeation property of ABA-type triblock copolymers derived from polyimide with POSS
Akihiro Yoshida, Masato Ichikawa, Shota Ando, Kazukiyo Nagai
- 17:55 1M20 Fabrication of composite membranes of poly(substituted acetylene)s with metal compounds and the gas permeability
So Nakao, Toshikazu Sakaguchi, Tamotsu Hashimoto

Thu. Sep 15

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Mitsuo Hara, presiding

- 9:10 2M01 Controlled Drug Delivery System using Mesoporous Silica covered by Elastin Mimic Peptide

Ryota Kato, Masahiro Higuchi

- 9:35 2M02 Fabrication of ordered self-assemblies composed of β -sheet peptide coated gold nanoparticles and its reversible photoelectric conversion ability
Terumi Banno, Masahiro Higuchi
- 10:00 2M03 Catalytic Reaction with AuNPs/Diblock Ionomers (IV) -Effect of hydrophobic species for the catalytic ability -
Haruka Furukawa, Masahiro Fujita, Yuuko Takeoka, Masahiro Rikukawa
- 10:25 2M04 Size-Controlled Synthesis of Polymer Nanoparticles Using Tandem Acoustic Emulsification and Photopolymerization
Miharu Koshino, Yuki Hirai, Yoshimasa Matsumura, Mahito Atobe

Mahito Atobe, presiding

- 10:50 2M05 Wiring of gold nanorod array electrodes by a π -conjugated polymer
Takehiro Kawauchi, Akihisa Yamaguchi, Keiji Nose, Tomokazu Iyoda
- 11:15 2M06 Growth of Photoinduced Surface Reliefs on Thin Films of Photochromic Naphthacenequinone Dendrimers
Shuhei Kai, Tomomi Ueshima, Koji Mukai, Shusaku Nagano, Takahiro Seki, Masaya Moriyama
- 11:40 2M07 Whispering Gallery Mode Lasing from Conjugated Polymer Spheres
Yohei Yamamoto, Soh Kushida, Daichi Okada, Fumio Sasaki

Takeshi Maeda, presiding

- 12:55 2M08 Multicolor π -Conjugated Polymer Microdisk Arrays
Yusuke Aikyo, Junpei Kuwabara, Takaki Kanbara, Yohei Yamamoto
- 13:20 2M09 Self-assembly of Hydrogen-Bonding Oligothiophenes and Their Application to BHJ Solar Cells
Hayato Ouchi, Takahiro Kizaki, Ken-ichi Nakayama, Shiki Yagai
- 13:45 2M10 Morphologies and electrical properties of inter-electrode stretched DNA nanowires which are modified by conducting polymer in various methods
Taiki Kunikyo, kazuki Nakamura, Norihisa Kobayashi
- 14:10 2M11 Molecular recognition and catalytic properties of nano-spaced Phthalocyanine Polymers having organic rigid frameworks
Rei Tamura, Mutsumi Kimura

Kazuki Nakamura, presiding

- 14:35 2M12 Construction of p-n-Heterojunction by Self Assembly of Diad Molecules Composed of Functional Dyes
Takeshi Maeda, Naoki Okamura, Imari Nakamura, Shigeyuki Yagi, A. Ajayaghosh
- 15:00 2M13 Preparation and evaluation of photoluminescent color of hydrogen-bonded dye/acid mechanochromic complex
Mizuho Kondo, Seiya Miura, Reisuke Ikeuchi, Nobuhiro Kawatsuki
- 15:25 2M14 Photosensitized Hydrogen Evolution from Water Using Single-Walled Carbon Nanotube/Fullerodendron/TiO₂ Supramolecular System
Tomoyuki TAJIMA, Kurniawan KIKI, Yosuke KUBO, Hideaki MIYAKE, Yutaka TAKAGUCHI
- 15:50 2M15 ALIGNMENT OF SIDE CHAINS CHROMOPHORES ALONG PEPTIDE NANOTUBE OF CYCLIC PEPTIDE
Yuki Tabata, Shunsaku Kimura

Yohei Yamamoto, presiding

- 16:15 2M16 Preparation and function of glyconanotube using lipid bilayer membrane as template
Takuto Kosai, Shinichi Sawada, Sadaatsu Mukai, Yoshihiro Sasaki, Kazunari Akiyoshi
- 16:40 2M17 Generation of DNA-based nano-structures in nanodroplets prepared from

- W/O miniemulsion.
Daiki Kako, Yuuka Fukui, Keiji Fujimoto
- 17:05 2M18 Synthesis and Chiral Induction of a Novel Foldamer Composed of Dithienyl Ketone and Benzene
Shuichi Tani, Takuya Ogaki, Eisuke Ohta, Yasunori Matsui, Hiroshi Ikeda

Fri. Sep 16

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Atsushi Shishido, presiding

- 9:10 3M01 Creation of Metastable Supramolecular Polymers with Well-defined Higher Order Conformations
Kengo Wakita, Mituaki Yamauchi, Takashi Karatsu, Shiki Yagai
- 9:35 3M02 Morphology Control of Complexes Formed by Mixing of Cationic Low Molecular Weight Surfactant and Anionic Diblock Copolymer
Keita Nakai, Shin-ichi Yusa, Kazuhiko Ishihara
- 10:00 3M03 Fabrication and functionalization of the nano-multilayered films based on the self assembly of block-copolymers
Yuri Yamada, Kota Ito, Tatsuhiro Fukano, Atsushi Miura, Hiroaki Wakayama
- 10:25 3M04 Hierarchical self-sorting of hydrogen-bonding π -conjugated molecules
Keisuke Aratsu, Takashi Karatsu, Shiki Yagai

Shiki Yagai, presiding

- 10:50 3M05 Aqueous Self-Sorting of Hexagonal Structures with Ultra-large Lattice Formed by Cylindrical Polymer Brushes
Yoshihiro Yamauchi, Kuniyo Yamada, Noriko Horimoto, Yasuhiro Ishida
- 11:15 3M06 Thixotropic molecular hydrogels composed of new glutamine-based derivatives
Yutaka Ohseido, Masashi Oono, Kowichiro Suruhashi, Hisayuki Watanabe, Nobuyoshi Miyamoto
- 11:40 3M07 Creation of Cucurbit[6]uril Nonwovens by Electrospinning
Koki Miyazawa, Hiroaki Yoshida, Toshiyuki Kida

Yutaka Ohseido, presiding

- 12:55 3M08 Birefringence Control of Colorless Polyimides (17). Strategy for decreasing CTE and birefringence
Masatoshi Hasegawa, Soichi Tsukuda, Shinya Takahashi, Junichi Ishii
- 13:20 3M09 Transparent Thermoplastic Polyimides (10). Thermal and UV-stability
Junichi ISHII, Risa MAKIMURA, Naomi SHINDO, Masatoshi HASEGAWA
- 13:45 3M10 Bending behavior analysis of flexible polymer films by means of a surface labeled grating method using a thin silicone elastomer label
Motoyuki Fukuhara, Shigenori Fujikawa, Atsushi Shishido
- 14:10 3M11 The grafted styrene-chain lengths onto the CNT surface by ATRP improve the dispersity of CNT and the mechanical properties of CNT/polystyrene composites
Fuyuki Endo, Ryohei Mizukami, Atsushi Hotta
- 14:35 3M12 Influence of Structure of a Core in Star Polymers for the Formation of Porous Structure
Masanao Horikawa, Yumiko Naka, Takeo Sasaki

Room N

Wed. Sep 14

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Takeo Sasaki, presiding

- 10:00 1N03 Selective introduction of functional groups onto photo-irradiated surface of polyetherimide film by reaction development patterning
Hisashi OGASAWARA, Yuichiro TOKORO, Toshiyuki OYAMA
- 10:25 1N04 Adsorption behavior to the polymer surface of silane coupling agent using the quartz crystal microbalance method and combining AFM and thermal analysis, nanoscale infrared spectroscopy
Hidetoshi Hirahara, Saori Hiyama, Sumio Aisawa, Jing Sang
- 10:50 1N05 Boronic acid as an anchor group for surface modification of solid polyvinyl alcohol
Ryuhei Nishiyabu, Ai Shimizu, Yuji Kubo
- 11:15 1N06 Fabrication of ZnO site-selective growth substrate using a wrinkle structure
Toru Kimura, Yoshiro Imura, Takeshi Kawai, Hiroshi Endo
- 11:40 1N07 Morphological Control of Crystalline Nanofiber Derived from Amphiphilic Diamide Derivative which Induces the Thixotropic Ability
Manami Iizuka, Yuto Nakagawa, Eiichi Sato, Atsuhiko Fujimori

Masaya Mitsuishi, presiding

- 12:55 1N08 Control of Molecular Arrangement by Formation of Interfacial Films of Polyamide Derivatives with Bulky Aromatic Substituent
Yusaku Shidara, Kenta Shimooka, Yuji Shibasaki, Atsuhiko Fujimori
- 13:20 1N09 Preparation of High Ordered Porous Films Based on Well-defined Liquid-Crystalline Star Polymer
Teruhisa Koyama, Yumiko Naka, Takeo Sasaki
- 13:45 1N10 Development of thermosensitive PSAs bearing a side-chain crystalline unit
Hiroto Murakami, Satoshi Yamaguchi, Seiya Tabuchi, Shin'ichiro Kawahara
- 14:10 1N11 Acrylic Polymers for Pressure-Sensitive Type Dismantlable Adhesives Using Cross-linking and Foaming
Eriko Sato, Shusei Iki, Keisuke Yamanishi, Takashi Nishiyama, Hideo Horibe, Akikazu Matsumoto

Toshiyuki Oyama, presiding

- 14:35 1N12 Adhesion of Poly- α -olefins by Polysilane and its Interfacial Analysis
Yutaka Godai, Takuya Matsumoto, Chizuru Hongo, Takashi Nishino
- 15:00 1N13 Preparation of Adhesive Interface Based on Surface Enrichment and Entanglement of Hydrophilic Chain
Hiroki Tsuchii, Atsushi Kimoto, Junji Watanabe
- 15:25 1N14 Synthesis of entirely ionic diblock copolymers having sulfobetaine and PIC micelle formation
Tsubasa Yagi, Keigo Sasaoka, Hideki Matsuoka

Takashi Nishino, presiding

- 15:50 1N15 Analysis of lamellar structure of poly(N-alkylacrylamide)s formed in water and their application to ionic materials
Kazuki Ebata, Ryosuke Goto, Shusaku Nagano, Yuki Nagao, Shunsuke

- Yamamoto, Masaya; Mitsuishi, Jun; Matsui
- 16:15 1N16 Mechanism of the lamellar structure formation in poly(*N*-dodecyl acrylamide) by humid annealing
Yuki Hashimoto, Ryosuke Goto, Yuki Nagao, Shunsuke Yamamoto, Masaya Mitsuishi, Shusaku Nagano, Jun Matsui
- 16:40 1N17 Surface modification of metal nanoparticles using a novel polymerizable surfactant
Chisato Higashi, Yuichi Funasaki, Tatsuo Maruyama
- Hiroshi Endo, presiding**
- 17:05 1N18 Fine Structural Analysis, Formation of Interfacial Molecular Films, and Metal-scavenging properties in the Condensation-type Fluorescent Polymers having Triazine Ring and Its Annular Units
Shuntaro Miura, Kenta Shimooka, Yuji Shibasaki, Atsuhiko Fujimori
- 17:30 1N19 Preparation of electroless copper plating on carbon nanospheres particles
Hidetoshi Hirahara, Thi Thanh Thuong Nguyen, Sumio Aisawa, Jing Sang
- 17:55 1N20 Preparation of keratin-based particles and their functionalization as a color material.
Mai Fukuzawa, Yuuka Fukui, Keiji Fujimoto

Thu. Sep 15

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Hideyuki Nakano, presiding

- 9:10 2N01 Single-Molecule Imaging of Structural Dynamics in a polymer chain of a Functionalized SBR
Ken-ichi Shinohara, Yuu Makida
- 9:35 2N02 AFM observation of single chain movements in a polymer blend LB monolayer
Masaaki Ootomo, Jiro Kumaki
- 10:00 2N03 Emission Properties of Linear Polymers / Oligomers Consisting of 1,4-dialkoxybenzene Units Connected by Methylene-Bridged at Para-Position
Hironu TSUCHIDA, Tomoki OGOSHI, Takahiro KAKUTA, Tada-aki YAMAGISHI

Kazuki Nakamura, presiding

- 10:25 2N04 Reversible color change and emission modulation of binary films composed of amorphous molecular materials and p-toluene sulfonic acid
Hideyuki Nakano, Eisuke Nagata, Tomohiro Nishimura, Ryoji Ichikawa
- 10:50 2N05 Inter-boundary light exchange of dye-doped polymer optical fiber
So Kamimura, Rei Furukawa
- 11:15 2N06 Development of Light-Emitting Device Using Organic Oligomers Equipped with a Dielectric Multi-layer Mirror
Koki Nishimura, Yuhi Inada, Takeshi Yamao, Shu Hotta
- 11:40 2N07 Spectrally-narrowed Emissions by One-dimensional Gratings Directly Engraved on Surfaces of Organic Single Crystals
Shusuke Yamashita, Hiroyuki Yamamoto, Yuhi Inada, Takeshi Yamao, Shu Hotta

Tomoki Ogoshi, presiding

- 12:55 2N08 Spectrally-Narrowed Emissions from Organic Crystals Equipped with a Diffraction Grating Fabricated on Their Surfaces by Interference Exposure
Yoshihiro Kawata, Kazuki Aoki, Yuhi Inada, Takeshi Yamao, Shu Hotta
- 13:20 2N09 Effect of interaction mode between DNA and chiral Ru(phen) complex on its

- enhanced emission
Haruki Minami, Natsumi Itamoto, Kazuki Nakamura, Norihisa Kobayashi
- 13:45 2N10 Luminescence and structural properties of the self-assembled luminescent lanthanide complexes in the mesocrystal of sea urchin spines
Shuhe Ogata, Ryota Tanabe, Ayumi Ishii, Miki Hasegawa
- 14:10 2N11 UV curing based on a redox polymerization with base proliferation reactions
Kazuki Nakamoto, Masahiro Furutani, Koji Arimitsu

Shuji Okada, presiding

- 14:35 2N12 Development of novel photobase generators based on a photocyclization reaction and their application to photoreactive materials
Keijiro Ohbora, Masahiro Furutani, Koji Arimitsu
- 15:00 2N13 Preparation of microcapsules by a photopolymerization and evaluation of their functionality
Haruka Takahashi, Masahiro Furutani, Takeshi Wakiya, Koji Arimitsu
- 15:25 2N14 Effect of the Molecular weight of Poly(olefin sulfone)s Possessing Photo-reactive Cross linking Moiety on adhesive strength.
Ryousuke Komori, Takeo Sasaki
- 15:50 2N15 Photoinduced mass transfer by surface hetero structure in photo responsive polymer film
Issei Kitamura, Mitsuo Hara, Shusaku Nagano, Takahiro Seki

Syu Hotta, presiding

- 16:15 2N16 Synthesis of structure-controlled polymers by using a new type of pseudo-living addition-condensation polymerization and photochemical behavior
Haoxuan Guo, Hiroyuhi Aota
- 16:40 2N17 Electric-Field-Induced Orientation of Nonlinear Optical Chromophores with a Pyrrolone-Type Acceptor in Polymers
Kazuki Kashiwabara, Shuji Okada
- 17:05 2N18 Control of relative geometry between porphyrins accumulated at phase segregation interface of normally oriented cylindrical nanostructure through axial coordination
Junya Takehisa, Gensuke Akimoto, Sadayuki Asaoka

Fri. Sep 16

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Katsuhiko Maeda, presiding

- 9:10 3N01 Proposal and Synthesis of Temperature-Independent Zero-Zero-Birefringence Polymer
Hiroaki Nagahama, Mio Shikanai, Akihiro Tagaya, Yasuhiro Koike
- 9:35 3N02 Enhancement of optical chirality in photo-functional hybrid film based on DNA-CTMA and chiral Eu(III) complex
Natsumi ITAMOTO, Kazuki NAKAMURA, Norihisa KOBAYASHI
- 10:00 3N03 Synthesis of polydiphenylacetylene derivatives bearing chiral side chains and their optical properties.
Hiroki Matsuyama, Fuyuki Ota, Kazuo Akagi
- 10:25 3N04 Synthesis of disubstituted polyacetylene derivatives bearing chiral side chain aromatic that exhibit circularly polarized luminescence
Fuyuki Ota, Kazuo Akagi

Katsuhiko Fujita, presiding

- 10:50 3N05 Photovoltaic Cells Using Thiophene/Phenylene Co-oligomers: Anneal Effects on Device Performance
Yuji Urabe, Yuhi Inada, Takeshi Yamao, Shu Hotta
- 11:15 3N06 Charge Generation from Interfacial Charge-Transfer Excitons in Polymer/Fullerene Blend Films
Takumu Okuyama, Yasunari Tamai, Hiroaki Benten, Hideo Ohkita
- 11:40 3N07 Singlet Exciton Diffusion in Crystalline Conjugated Polymer Films
Kento Yamaguchi, Yasunari Tamai, Hiroaki Benten, Hideo Ohkita
- Ken Albrecht, presiding**
- 12:55 3N08 Open-circuit voltage of organic solar cells based on crystalline polymers with different side chains
Takuto Hidani, Hideo Ohkita, Hiroaki Benten, Masahiko Saito, Itaru Osaka
- 13:20 3N09 Development and application of cationic oligoether
Shigetaka Hayano, Keisuke Ota, Yohei Tateishi
- 13:45 3N10 Preparation of acid/base blend polymer nanofibers and their fuel cell application
Risa Sakaguchi, Manabu Tanaka, Hiroyoshi Kawakami
- Itaru Osaka, presiding**
- 14:10 3N11 Thermally Activated Delayed Fluorescence Dendrimer for OLEDs with Fully Solution Processed Organic-Layers
Ken Albrecht, Kenichi Matsuoka, Katsuhiko Fujita, Kimihisa Yamamoto
- 14:35 3N12 Fabrication of Light-Emitting Diodes Based on Layered Thin Films of Thiophene/Phenylene Co-oligomers
Shunsuke Kamen, Yuhi Inada, Takeshi Yamao, Shu Hotta

Room O

Wed. Sep 14

S13. Effects of water on polymeric products in informative and energy applications

- 9:50 1OSO Introductory Remarks S13
Kazukiyo Nagai, Hiromi Gocho
- Kazuyoshi Ogawa, presiding**
- 10:00 1O03 What is the water structure? - Scale dependency of fractal hydrogen-bonding network
Shin Yagihara
- 10:25 1O04 Temperature Dependencies of Hydration Numbers of Some Saccharides Determined by Dielectric Relaxation Techniques
Kengo Arai, Toshiyuki Shikata
- Shin Yagihara, presiding**
- 10:50 1O05 Viscoelastic measurements for aqueous polymer solution using dynamic light scattering techniques
Naoya Sagawa, Toshiyuki Shikata
- 11:15 1O06 Viscoelastic Behavior of Aqueous Solution of Chemically Modified Celluloses
Toshiyuki Shikata, Kengo Arai
- 11:40 1O07 Complex Formation between Cu(II) ions and Microgel Consisting of N-Isopropylacrylamide and N-Vinylimidazole

Kazuyoshi Ogawa

Hiromi Gocho, presiding

- 12:55 1O08 Development of bleaching agents using peroxidases under vast range washing conditions
Miyuki Morita, Manami Matsubayashi
- 13:20 1O09 Fundamental properties and evaluation method involved in the washing for the fine bubble water
Yoko Yamaguchi, Yayoi Nakamura, Kumiko Shimomura
- 13:45 1O10 Surface Modification Technology by Ampholitic Amphiphilic Copolymers and the Application to Detergent
Shin-ichiro Kabashima
- 14:10 1O11 From the viewpoints of roles of water in laundry according to the kind of dirt
Masaru Oya
- 14:35 1O12 Detergency evaluation in mixed surfactant systems using quartz crystal microbalance
Yu Kanasaki, Yuki Isokawa, Naoji Tokai, Rie Kakehashi, Keiko Gotoh

Kazukiyo Nagai, presiding

- 15:00 1O13 Flexible substrates for organic electronics
Tadahiro Furukawa
- 15:25 1O14 Liquid crystal photoalignment characteristics of TeMPD-based polyimides
Shuichi Sato, Hironaga Matsumoto
- 15:50 1O15 Analysis of Water Vapor Transmission of High-barrier Film by Calcium Test
Satoshi Maji, Hiroshi Nakatake
- 16:15 1O16 Continuous Measurement of Hydrogen Peroxide in Water in ppb Level Using Monolithic Ion Exchange Resin
Hitoshi Takada, Masayuki Kawakami, Daisaku Yano, Koji Yamanaka
- 16:40 1O17 NMR spectral observations of the water molecules in polymers
Hiroaki Yoshimizu

Hiroaki Yoshimizu, presiding

- 17:05 1O18 Effect of water vapor on CO₂ separation performance of polymeric membranes
Shinji Kanehashi, Kenji Ogino, George Chen, Sandra Kentish
- 17:30 1O19 Washing effect of ultra-fine bubble mixtures applied with strong external stimuli
Akiomi Ushida, Maiko Watanabe, Yoshinori Nakamoto, Tomiichi Hasegawa, Takatsune Narumi
- 17:55 1O20 Changes in the mechanical properties of DNA bio-films by temperatures and relative humidity
Hidetaka MAKINO, Takashi AOKI

Thu. Sep 15

S13. Effects of water on polymeric products in informative and energy applications

Noriyuki Kumazawa, presiding

- 9:10 2O01 Study on gelation mechanism in mixed polysaccharide solutions through the observation of micro rheology by particle tracking method
Lester Geonzon, Faith B. A. Descallar, Rommel G. Bacabac, Shingo Matsukawa

- 9:35 2002 Electrokinetic properties of colloidal particle adsorbed with polyelectrolyte and neutral polymer
Yasuhisa Adachi, Yunxiao Wu
- 10:00 2003 Vibrational Spectroscopic Study of Hydration of Temperature- Responsive Polymers
Yasushi Maeda, Narumi Katakawa, Shinji Sugihara
- Shingo Matsukawa, presiding**
- 10:25 2004 A new decontamination method of Fukushima forest using a poly-ion complex and bentonite
Noriyuki Kumazawa
- 10:50 2005 Effect of coagulation on the structure of heterogeneous amphoteric charged membranes containing fine ion-exchange resin
Ryotaro Kiyono, Ryosuke Kodama, Ryuta Iwaura
- 11:15 2006 Preparation and characterization of ion exchange membranes using poly(vinyl alcohol) (PVA)-based block copolymers
Masahiro Yasukawa, Taiko Mizuno, Marika Anno, Mitsuru Higa
- 11:40 2007 Dynamic wettability of high antifouling hybrid surface of fluorine-acryl emulsion
Daisuke Ishii, Shun Hirata, Rie Suzuki, Shingo Nishioka, Kimihiko Yoshii, Manabu Sekiguchi

S6. Dynamics, Structure, and Function Studies of Polymers Using NMR

- 12:45 20SO Introductory Remarks S6
Tsunenori Kameda
- Tsunenori Kameda, presiding**
- 12:55 2008 Applications of Recent Solid State NMR Techniques to Polymers
Jun Ashida, Yusuke Nishiyama
- 13:20 2009 Structural analysis of cross-linked polyvinyl alcohol using by high field DNP-NMR.
Taiji Kanda, Mayuka Kitawaki, Tomoya Fujita, Shuusaku Mandai, Yoh Matsuki, Toshimichi Fujiwara
- 13:45 2010 In-situ NMR Structural Analysis during Deformation of Cross-Linked Silicone Elastomer
Hiroki Uehara, Takeshi Yamanobe
- 14:10 2011 Glycerin-Induced Conformational Change of Bombyx mori Silk Fibroin Film monitored by solid state NMR
Yugo Tasei, Misaki Hirayama, Yuki Arai, Masanori Endoh, Akihiro Aoki, Tetsuo Asakura
- Ryosuke Kusumi, presiding**
- 14:35 2012 Structure and dynamic properties of Ti-binding peptide bound to TiO₂ nanoparticles
Yu Suzuki, Heisaburo Shindo, Tetsuo Asakura
- 15:00 2013 Solid state NMR analysis of Hornet Silk
Tsunenori Kameda, Taiyo Yoshioka
- Hiroaki Yoshimizu, presiding**
- 15:25 2014 Structure Analysis of α -1,3-glucan using Solid-state NMR Spectroscopy
Ryosuke Kusumi, Masahisa Wada, Tsunehisa Kimura
- 15:50 2015 Structure analysis of silica aerogel using surfactant and silane coupling agent by solid state NMR

16:15 2016 Yasunari Kusaka, Keigo Oowashi, Takeshi Endo, Daisuke Abiko, Hideki Sakai
Study on the network structures in mixed kappa and iota carrageenan gels
by NMR measurements
Bingjie Hu, Yefeng Yao, Shingo Matsukawa

Hiroki Uehara, presiding

16:40 2017 Higher-ordered structures and gas transport properties of the
polyglutamates studied by NMR methods
Hiroaki Yoshimizu

17:05 2018 Synapse-mimicking device driven by magnetic resonance
Naoki Asakawa, Kitami Yusuke, Fukuda Kunito

Fri. Sep 16

S6. Dynamics, Structure, and Function Studies of Polymers Using NMR

Yasunari Kusaka, presiding

9:10 3001 Development of solid-state ^{33}S NMR for understanding of cross-linked
structures in rubbers
Kazuhiko YAMADA

9:35 3002 Structure and Dynamics of Polymers via NMR Relaxation Analysis
Atsushi Asano

10:00 3003 Latex state NMR spectroscopy for Quantitative analysis of primary structure
of rubbery polymer
Seiichi Kawahara, Kewwarin Sae-heng, Kenichiro Kosugi

Atsushi Asano, presiding

10:25 3004 Structural analysis of synthetic polymers by multivariate analysis of NMR
spectra
Hikaru Momose

10:50 3005 Sequence analysis of MMA-BnMA copolymer by ^1H NMR - Monomer
reactivity ratios determined from a single sample
Tomohiro Hirano, Daishi Matsumoto, Miyuki Oshimura, Koichi Ute

11:15 3006 Syntheses and properties of stereoregular hydrogenated polynorbornenes (2)
Yuki Nakama, Shigetaka Hayano

11:40 3007 The NMR observations of glassy polymers via the gases in polymer
Hiroaki Yoshimizu

Room Q

Wed. Sep 14

S7. Frontier of Computational Science for Polymeric Materials

9:50 1QSO Introductory Remarks S7
Takeshi Aoyagi

Takashi Honda, presiding

- 10:00 1Q03 The shear large deformation simulation of glassy polymers by coarse-grained molecular dynamics method
Naoki Kobayashi, Jun-ichi Takimoto
- 10:25 1Q04 Entanglements in miscible polymer blends
Jun-ichi Takimoto, Sukumaran Sathish, Suzuki Yuta, Sugiyama Mitsunari
- Naoki Kobayashi, presiding**
- 10:50 1Q05 Molecular dynamics simulation of polymer crystallization under large deformation and flow
Takashi Yamamoto
- 11:15 1Q06 Effect of Stereoregularity on Hydration Structure of Thermoresponsive Polymers
Kohei Kamada, Susumu Fujiwara, Masato Hashimoto, Tomoko Mizuguchi, Takashi Aoki, Yoshinori Tamai
- 11:40 1Q07 Dynamic viscoelasticity simulations at GHz-level frequencies: a breakthrough approach in computational materials design of polymers
Satoru Kuwajima
- Takeshi Aoyagi, presiding**
- 12:55 1Q08IL Soft Matter Physics in Material Processing of Long Fiber Reinforced Thermoplastic
Yuichi Masubuchi
- Hitoshi Washizu, presiding**
- 13:45 1Q10 Modeling of Thermal Shrinkage Behavior of Isotactic Polypropylene
Takashi Uneyama, Kana Murotani, Koh-hei Nitta
- 14:10 1Q11 Gyroid Structure from ABCD tetrablock copolymers studied by a Monte-Carlo Simulation
Jiro Suzuki, Atsushi Takano, Yushu Matsushita
- 14:35 1Q12 Disorder-order transition simulation of a diblock copolymer to gyroid structure with SCF theory introducing hydrodynamics effect
Takashi Honda
- Takashi Uneyama, presiding**
- 15:00 1Q13 Large scale coarse grained molecular dynamics simulations and its computer science
Katsumi Hagita
- 15:25 1Q14 On the calculation of tensile properties of real rubber using molecular dynamics simulation
Osamu Hino, Hiroaki Ooe, Takezawa Hironori
- 15:50 1Q15 Coarse-grained simulation and analysis techniques of rubber materials in the point of view of informatization
Hiroshi Morita
- Hiroshi Morita, presiding**
- 16:15 1Q16 Molecular simulations for ionic soft materials
Hitoshi Washizu
- 16:40 1Q17 Simulation of the interaction between nanoparticles in a polymer solution
Taku Ozawa, Tatsuhiro Iwama, Hiroshi Sasaki, Takashi Honda, Kei Morohoshi, Toshihiro Kawakatsu
- 17:05 1Q18 Multiscale Simulation of Polymer Melt Flow
Takahiro Murashima

Thu. Sep 15

S5. A New World of Polymer Particles

- 9:00 2QSO Introductory Remarks S5
Hiroshi Yabu, Hitoshi Kasai
- Hiroshi Yabu, presiding**
- 9:10 2Q01 Polymerization-Induced Self-Assembly of Various Block Copolymer Nano-objects via RAFT Process
Shinji Sugihara, Masahiro Sudo, Satoshi Irie, Yasushi Maeda
- 9:35 2Q02 Preparation of organic/inorganic hybrid particles by using polymer colloidal particles modified with graft polymers as a template
Tatsuo Taniguchi, Michinari Kohri, Keiki Kishikawa
- 10:00 2Q03 Thermally-induced phase separations of polymer/ionic-liquid blend films controlled by polymer-brush-grafted particles
Yoshikazu Yahata, Yohei Nakanishi, Shoko Marukane, Takaya Sato, Yoshinobu Tsujii, Kohji Ohno
- Tatsuo Taniguchi, presiding**
- 10:25 2Q04 Synthesis of sulfur-rich nanoparticles using self-assembly of amphiphilic block copolymer and site-selective cross-linking reaction
Tomoki Takahashi, Kazuhiro Nakabayashi, Hideharu Mori
- 10:50 2Q05 Preparation of hybrid nanoparticles by mineralization and polymerization inside water nano-droplets
Yuuka Fukui, Hideyuki Takamatsu, Kouhei Tabayashi, Keiji Fujimoto
- 11:15 2Q06 Encapsulation of one or more silica particles in polymer capsules
toyoko suzuki, satoshi ikubo, Hide Minami
- 11:40 2Q07 Structural control of silica particles by surfactant on particle formation with perhydropolysilazane in W/O emulsion
Kaoru Kuramochi, Reiko Saito
- Hitoshi Kasai, presiding**
- 12:55 2Q08IL Precision Synthesis of Subnano Metal-particles Using a Dendrimer Reactor
Kimihisa Yamamoto
- 13:45 2Q10 Functionalization of Vesicular Membranes by Membrane Protein Mimics
Takahiro Muraoka
- 14:10 2Q11 Surface functionalization of quantum dots with well-defined cytocompatible polymers
Kazuhiko Ishihara, Yihua Liu, Yuuki Inoue
- Takahiro Muraoka, presiding**
- 14:35 2Q12 Deformation of spherical particles to disk-shaped particles and their 2D interactions
Yosuke Okamura, Daiki Sogabe, Kenichi Ishikura, Atsushi Nakagawa, Yu Nagase
- 15:00 2Q13 Polyion complex (PIC) micelles and vesicles composed of pH-responsive unimer micelles and diblock copolymers
Shin-ichi Yusa, Sayaka Ohno, Kazuhiko Ishihara
- 15:25 2Q14 Preparation of pH/reducing environment-responsive Gel Particles for Intracellular Delivery Carrier and Their Drug Release Behavior
Akifumi Kawamura, Ayaka Harada, Shunsuke Ueno, Takashi Miyata
- 15:50 2Q15 Control of cellular functions by magnetic nanogels with molecular chaperone like activity
Riku Kawasaki, Yoshihiro Sasaki, Kiyofumi Katagiri, Shin-ichi Sawada, Sada-atsu Mukai, Kazunari Akiyoshi
- Sada-atsu Mukai, presiding**

- 16:15 2Q16 Design of nano-structured coacervates and site-specific incorporation of functional nanomaterials using ABA-type double hydrophilic block copolymers
Yujiro Hamada, Takeshi Mori, Yoshiki Katayama, Akihiro Kishimura
- 16:40 2Q17 Study of polymer-surface functionalized fillers produced by polymerizations with particles (PwPs)
Toshihiko Arita
- 17:05 2Q18 Proton conductivity of poly(acrylic acid)-b-polystyrene coated silica synthesized by RAFT Polymerization with Particles
Keiji Shito, Jun Matsui, Toshihiko Arita, Yuki Takahashi, Akito Masuhara

Fri. Sep 16

S5. A New World of Polymer Particles

Yoshihiro Sasaki, presiding

- 9:10 3Q01 Light-responsive liquid marble toward material delivery system
Syuji Fujii, Hisato Kawashima, Hiroyuki Mayama, Maxime Paven, Hans-Jurgen Butt, Yoshinobu Nakamura
- 9:35 3Q02 Development of inorganic and organic composite material with high transparency and toughness, formed by the union of fine silica particles aggregation with short-range order and flexible polymer gel.
Kenta WATANABE, Motoki SUZUKI, Abu&Bin IMRAN, Yukikazu TAKEOKA, Takahiro SEKI, Kenji URAYAMA
- 10:00 3Q03 Morphology-Control in Conjugated Polymer Nanocrystals and Their Optical Functions
Hidetoshi Oikawa, Tsunenobu Onodera, Yoshihiko Takeda
- 10:25 3Q04 pH-responsive complex formation of oligoethylene glycol-coated gold nanoparticles with anion polymers
Yu TORII, Naotoshi SUGIMURA, Kenichi NIIKURA, Hideyuki MITOMO, Kuniharu IJIRO

Hidetoshi Oikawa, presiding

- 10:50 3Q05 Synthesis of core-shell composite microgel containing a hard-ellipsoidal particle as a core and their assembly at air-water interface
Yuka Sazuka, Takumi Watanabe, Kojirou Iizuka, Daisuke Suzuki
- 11:15 3Q06 Development of structural color materials based on polymer particles with different blackness
Michinari Kohri, Ayaka Kawamura, Kenshi Yanagimoto, Shigeaki Yamazaki, Tatsuo Taniguchi, Keiki Kishikawa
- 11:40 3Q07 Preparation of block copolymer particles having dot patterns on their surface and control of phase separated structures by mixing homopolymer
Yutaro Hirai, Hiroshi Yabu, Takeshi Wakiya, Tadashi Iwamoto

Michinari Kohri, presiding

- 12:55 3Q08 Synthesis of Polymer Particles Containing Reduced Graphene Oxide Utilizing Poly(ionic liquid)
Mitsuyoshi Yamane, Masayoshi Tokuda, Stuart C. Thickett, Per B. Zetterlund, Hideto Minami
- 13:20 3Q09 Control over surface and body of functional polymer particles prepared by dispersion polymerization
Tomomichi Itoh, Tetsuo Tamamitsu, Katsuaki Kojima, Kento Tsutsui, Hiroaki Shimomoto, Eiji Ihara

- 13:45 3Q10 Surface Wettability and Structures of Fluorinated Amphiphilic Polymer Nanoparticles Films
Yongjoon IM, Yu GAO, Huie ZHU, Shunsuke YAMAMOTO, Jun MATSUI, Tokuji MIYASHITA, Masaya MITSUISHI
- Syuji Fujii, presiding**
- 14:10 3Q11 Electric-field-assisted control over the motions of inner movable cores incorporated into rattle-type colloidal crystals
Kanako Watanabe, Haruyuki Ishii, Mikio Konno, Daisuke Nagao
- 14:35 3Q12 Encapsulation Strategy Utilizing Spongy Cellulose Particles
Taro Omura, Kaori Imagawa, Toyoko Suzuki, Hideto Minami
- 15:00 3Q13 Hybrid Materials Templated by polyethyleneimine μ -gel
Daiki Soma, Katsuya Kaikake, Ren-hua Jin

Room R

Wed. Sep 14

S9. Recent studies on nanocarbon-based dimensionally controlled materials-from materials design to bioapplications-

- 9:50 1RSO Introductory Remarks S9
Naotoshi Nakashima
- Naotoshi Nakashima, presiding**
- 10:00 1R03 Molecular design of nanocarbon materials for controlling photoinduced electron transfer
Hiroshi Imahori
- 10:25 1R04 Structure/property control of carbon nanotube ---Recent evolutions in CVD synthesis, separation, and material processing---
Takeshi Saito
- 10:50 1R05 Synthesis of Fluorescent Graphene Quantum Dots
Takeharu Haino, Yuichiro Uemura, Kaho Suzuki, Ryo Sekiya
- Hiroshi Imahori, presiding**
- 11:15 1R06 APEX Polymerization for Structurally Well-defined Graphene Nanoribbons
Yuuta Yano, Nobuhiko Mitoma, Hideto Ito, Kenichiro Itami
- 11:40 1R07 Construction of Covalent Organic Nanotubes by Light-induced Cross-linking of Helical Polymers
Hideto Ito, Kaho Maeda, Michihisa Toya, Liu Hong, Taishi Nishihara, Yusuke Nakanishi, Yuhei Miyauchi, Ryo Kitaura, Naoki Ousaka, Eiji Yashima, Kenichiro Itami
- Kazuki Fukushima, presiding**
- 12:55 1R08 Thermal and Thermo-oxidative Stability of Thermoplastic Polymer Nanocomposites with [60]Fullerene Derivatives
Ken Kokubo, Akio Harada, Takeshi Noguchi
- 13:20 1R09 Low-dimensional structure and physical properties of fullerene anion radical crystals stabilized by dye cations
Hiroshi Moriyama, Takahito Sugiura, Shouhei Yamamoto, Tetsuya Nakamura, Nami Fujita
- 13:45 1R10 Relationship between characteristic structure of CNT and solubility parameter

Seisuke Ata, Shigeki Tomonoh, Takeo Yamada, Kenji Hata

Masato Tominaga, presiding

- 14:10 1R11 Development of a novel microscopy to visualize nanocarbons dispersed in solution
Yutaka Matsuno, Yu-uya Sato, Hikaru Sato, Masahito Sano
- 14:35 1R12 Developments of characterization methods for carbon nanotubes (CNTs) and CNT-based near infrared fluorescent probes
Toshiya Okazaki
- 15:00 1R13 Molecularly-designed near infrared emission from chemically-modified carbon nanotubes
Tomohiro Shiraki, Tomonari Shiraiishi, Hisashi Onitsuka, Naotoshi Nakashima

Toshiya Okazaki, presiding

- 15:25 1R14 Chemical derivatization of single-walled carbon nanotubes
Yutaka Maeda
- 15:50 1R15 Chemical requirement for selective sorting of semiconducting-single-walled carbon nanotubes using Vitamin B2 analogues
Fumiyuki Toshimitsu, Naotoshi Nakashima, Masashi Fukuzawa, Keita Ozono, Kanako Nishimura
- 16:15 1R16 Artifact-Metrics Using Photoluminescence Imaging of Single-Walled Carbon Nanotube Composite Paper
Masahiro Ito, Makoto Akiba, Takahide Oya, Yoshikazu Homma

Masahito Sano, presiding

- 16:40 1R17 Chemical Warfare Agent Sensor Composed of Carbon Nanotube and Supramolecular Polymer
Shinsuke Ishihara, Joseph M. Azzarelli, Krikorian Markrete, Timothy M. Swager
- 17:05 1R18 Nanosize-dependent acceleration of the heterogeneous electron-transfer rate of laccase with nanocarbon materials
Masato Tominaga, Aiko Sasaki, Makoto Togami

Yutaka Maeda, presiding

- 17:30 1R19 Functional nanocarbons for nanobiosystems
Eijiro Miyako
- 17:55 1R20 Double-walled carbon nanotube transparent conductive film for next generation flexible
Imazu Naoki, Oi Takashi, Nishino Hidekazu, Watanabe Osamu, Honda Shiro, Suzuki Motoyuki

Thu. Sep 15

S9. Recent studies on nanocarbon-based dimensionally controlled materials-from materials design to bioapplications-

Tsuyohiko Fujigaya, presiding

- 9:10 2R01 Molecular Dimer Formation on Carbon Nanotubes
Tomokazu Umeiyama, Jinseok Baek, Hiroshi Imahori
- 9:35 2R02 N-type doping of carbon nanotubes and its application in thermoelectrics
Yoshiyuki Nonoguchi, Tsuyoshi Kawai
- 10:00 2R03 Aqueous photon upconversion by cationic molecular assemblies with controlled ion pair interactions
Hironori Kouno, Nobuhiro Yanai, Nobuo Kimizuka

Yoshiyuki Nonoguchi, presiding

- 10:25 2R04 Nano-bio applications of biodegradable block copolymers incorporating supramolecular assembly motifs
Kazuki Fukushima, Masashi Oji, Haruka Tsuchiya, Shunta Hakozaiki, Kodai Matsuzaki, Shunsuke Sato, Masaru Tanaka
- 10:50 2R05 Evaluation of Encapsulation Behavior for Poly(methyl methacrylate) Brushes with Well-controlled Stereoregularity and its Structural Analysis
Masanao Sato, Tomoyasu Hirai, Atsushi Takahara

Shinji Kawasaki, presiding

- 11:15 2R06 Creation of Fullerene-functionalized Supramolecular Nonwovens at the Molecular Level
Ken Kikuta, Hiroaki Yoshida, Toshiyuki Kida
- 11:40 2R07 Organic Synthesis of Endohedral Fullerenes by Molecular Surgery
Yasujiro Murata

Naotoshi Nakashima, presiding

- 12:55 2R08IL Discovery of genuine one-dimensional nanowires
Sumio Iijima

Taishi Takenobu, presiding

- 13:45 2R10 Battery electrode properties of single-walled carbon nanotube encapsulation systems
Shinji Kawasaki, Yosuke Ishii
- 14:10 2R11 Iontronic properties and functions of chalcogenide nanomaterials
Yoshihiro Iwasa

Yutaka Ohno, presiding

- 14:35 2R12 Optical Properties and application in Low-dimensional Nano-carbon Materials
Kazunari Matsuda
- 15:00 2R13 Novel functional devices of large-area atomically thin films
Taishi Takenobu

Kazunari Matsuda, presiding

- 15:25 2R14 Fabrication and optical properties of atomic-layer heterostructures
Okada Mitsuhiro, Yuhei Miyauchi, Kazunari Matsuda, Kenji Watanabe, Takashi Taniguchi, Hisanori Shinohara, Ryo Kitaura
- 15:50 2R15 Flexible device applications of carbon nanotubes
Yutaka Ohno
- 16:15 2R16 Proton conductivity in thin Nafion film including carbon nanotubes
Daisuke Kawaguchi, Yudai Ogata, Norifumi Yamada, Keiji Tanaka

Tomokazu Umeyama, presiding

- 16:40 2R17 Mesh-like Network Dispersion Technology of Carbon Nanotubes
Kazufumi Kobashi, Seisuke Ata, Takeo Yamada, Don Futaba, Toshiya Okazaki, Kenji Hata
- 17:05 2R18 The Single Wall Carbon Nanotube Synthesized by Super-Growth Method and its Application
Mitsugu Uejima

Fri. Sep 16

S9. Recent studies on nanocarbon-based dimensionally controlled materials-from materials design to bioapplications-

Yutaka Takaguchi, presiding

- 9:10 3R01 Dispersion at Nanometer Size of Organic-modified Nanodiamond in the Matrix of Crystalline Transparent Polymers
Taira Tasaki, Mamun Muhammad Abdullah Al, Qi Meng, Yifei Guo, Shuichi Akasaka, Atuhiko Fujimori
- 9:35 3R02 Fabrication of Transparent Nanohybrids with Heat Resistance using High-density Amorphous Formation and Uniform Dispersion of Nanodiamond.
Yusuke Kasahara, Mamun Muhammad Abdullah Al, Yifei Guo, Shuichi Akasaka, Atsuhiko Fujimori

Seisuke Ata, presiding

- 10:00 3R03 Electro-optical properties of aqueous dispersion of inorganic nanosheet near critical concentrations between isotropic and liquid crystal phases
Yasushi Okumura, Masaki Tateshi, Nobuyoshi Miyamoto, Hiroki Higuchi, Hirotsugu Kikuchi
- 10:25 3R04 Photosensitizing Hydrogen Evolution from Water Using Coaxial Nanowires based on Single-Walled Carbon Nanotube
Yutaka Takaguchi, Noritake Murakami, Kango Ishimoto, Yuto Tango, Tomoyuki Tajima, Hideaki Miyake
- 10:50 3R05 Improvement of mass activity and durability of electrode catalyst by polymer-wrapping of nanocarbon
Tsuyohiko Fujigaya, Naotoshi Nakashima

Daisuke Kawaguchi, presiding

- 11:15 3R06 Application of N-methylated polybenzimidazole as an electrolyte for anion exchange membrane fuel cell
Ziyi Han, Tsuyohiko Fujigaya, Naotoshi Nakashima
- 11:40 3R07 Development of Lithium Air Battery using Polyimide-wrapped Carbon Nanotube as Cathode
Ryota Kanamori, Tsuyohiko Fujigaya, Il-Chang Jang, Tatsumi Ishihara, Naotoshi Nakashima

Naotoshi Nakashima, presiding

- 12:55 3R08 Development of Iron-Nitrogen-Doped Vertically Aligned Carbon Nanotube Electrocatalyst for the Oxygen Reduction Reaction
Satoshi Yasuda, Yosuke Uchibori, Ryo Osaka, Kei Murakoshi
- 13:20 3R09 Synthesis of Two-Dimensional Polymers at Solid-Liquid and Gas-Liquid Interfaces
Yoshito Tobe

Room S

Wed. Sep 14

S17. Bioplastics and Resource Circulation in Polymeric Materials

- 9:50 1SSO Introductory Remarks S17
Tadahisa Iwata, Yuushou Nakayama

Haruo Nishida, presiding

- 10:00 1S03 Crystallization of Poly(L-2-hydroxy-3-methylbutanoic acid)

Hironori Marubayashi, Shuichi Nojima

10:25 1S04 Distribution of crystalline in the blends of poly(L-lactic acid)/poly(D-lactic acid)
Hiroaki Sato, Go Matsuba

10:50 1S05 Low-Temperature process of degradable block copolymers from renewable
resources and the mechanism
Ikuo Taniguchi, Kazunari Masutani

Tadahisa Iwata, presiding

11:15 1S06 Synthesis and thermal properties of epoxy resins with ester chains derived
from lignin and glycerol
Shigeo Hirose, Makoto Shimizu, Kumi Zaito, Shoko Inada

11:40 1S07 Synthesis of block copolymer-based nano particles from unutilized woody
biomass
Kentaro Miki, Hiroshi Kamitakahara, arata yoshinaga, Toshiyuki Takano

12:55 1S08IL Molecular design of high-performance polymers using exotic aromatic
biomolecules
Tatsuo Kaneko

Yasuhiko Iwasaki, presiding

13:45 1S10 Kinetic analysis of thermal degradation behavior of biomass/plastic
composites
Haruo Nishida, Yuki Kawasaki

14:10 1S11 Excellent Impact Bio-Alloys
Jumpei Kawada, Makoto Mouri, Arimitsu Usuki, Masayuki Kitou, Toshiyuki
Ario, Osamu Kitou

14:35 1S12 Preparation and evaluation of physicochemical properties for poly(ethylene
carbonate) composites filled with non-denatured lignin
Yuki Kubota, Kazuhiro Shikinaka, Yuichiro Otsuka, Masaya Nakamura, Yoichi
Tominaga

15:00 1S13 Creation of Superhydrophobic Materials without Fluorine Compounds
Hiroaki Yoshida

Hironori Marubayashi, presiding

15:25 1S14 High-strength silk composite films with telechelic-type polyalanine
Kousuke Tsuchiya, Hiroyasu Masunaga, Keiji Numata

15:50 1S15 Stereo-regular poly-gamma-glutamate, possessing the potential of
cooperative adsorption for critical metal ions
Yuichi Hakumai, Shota Oike, Yuka Shibata, Makoto Ashiuchi

16:15 1S16 Low-temperature processable block copolymers that preserve the function of
blended proteins
Yasuhiko Iwasaki, Kyohei Takemoto, Ikuo Taniguchi

16:40 1S17 Synthesis and characterization of flexible segmented stereoblock
polylactides using lactyl segments
Kazunari Masutani, Masaki Yamamoto, Yoshiharu Kimura, Hideki Yamane

Jun-ichi Kadokawa, presiding

17:05 1S18 Analysis of effect of alcohol addition to dilute acid pretreatment.
Chiaki Ogino, Hiroshi Teramura, Kengo Sasaki, Hideo Kawagushi, Takashi
Sazuka, Akihiko Kondo

17:30 1S19 The Evaluation of Lignin Ester Obtained by the Direct Trans-esterification of
Woody Biomass with Ionic Liquids
Shiori Suzuki, Yoshiki Shibata, Kenji Takada, Ryohei Kakuchi, Kenji Takahashi

17:55 1S20 Synthesis and Evaluation of Cellulose Derivatives in Ionic Liquids (II) -
Regioselectivity of Acetylation-
Hideki Hanabusa, Masahiro Fujita, Yuko Takeoka, Masahiro Rikukawa

Thu. Sep 15

S17. Bioplastics and Resource Circulation in Polymeric Materials

Hiroshi Uyama, presiding

- 9:10 2S01 Preparation of Thermoplastic Cellulose Film by Regeneration from Ion Gel
Jun-ichi KADOKAWA, Yasuhiro HABU, Akihiko TAKADA, Kazuya YAMAMOTO
- 9:35 2S02 Highly functional cellulose-type bioplastics and their application to durable products
Masatoshi Iji
- 10:00 2S03 Preparation of bio-based wrinkled surfaces inspired by wood cell wall
Noriko Okuda, Arisu Moriyama, Hironori Izawa, Shinsuke Ifuku, Minoru Morimoto, Hiroyuki Saimoto

Yuya Tachibana, presiding

- 10:25 2S04 Development of high-performance biomass-based plastics produced from β -1,3-glucan and α -1,3-glucan
Tadahisa Iwata, Puanglek Sakarin, Satoshi Kimura, Hironori Marubayashi, Taizo Kabe, Masahisa Wada, Takaaki Hikima, Masaki Takata
- 10:50 2S05 Preparation and characterization of poly(β -substituted α , β -unsaturated carboxylate)s.
Yasumasa Takenaka, Hideki Abe
- 11:15 2S06 Renewable Aromatic polyesters from vanillin-derived bisphenol
Koichiro Tachibana, Hideki Abe
- 11:40 2S07 Synthesis and properties of sequence-controlled copolymer consisting of lactic acid, terephthalic acid and ethylene glycol
Wataru Yagumo, Ryou Tanaka, Yuushou Nakayama, Takeshi Shiono, Chikara Tsutsumi

Yuushou Nakayama, presiding

- 12:55 2S08IL Plastic Wastes Pollution in the Marine Environment-Biodegradable Plastics and Deep-sea Bacteria
Haruyuki Kanehiro

Keiji Numata, presiding

- 13:45 2S10 Biodegradation-Control by reductive cleavage of disulfide bonding in polymer
Takuro Baba, Yuya Tachibana, Ken-ichi Kasuya
- 14:10 2S11 Structure and function of poly(Asp) Hydrolase
Tomohiro Hiraishi, Tamao Hisano, Hideki Abe, Yoshitsugu Shiro, Mizuo Maeda
- 14:35 2S12 Properties and biodegradability of lactate-based polymers biosynthesized by synthetic biology
Ryosuke Kadoya, Kenji Takizawa, Camila Utsunomia, Daisuke Ishii, Ken'ichiro Matsumoto, Toshihiko Ooi, Tadahisa Iwata, Seiichi Taguchi

Kazutoshi Ikenaga, presiding

- 15:00 2S13 Biosynthesis of Microbial Polyesters Bearing Phenyl Groups in Side-Chain
Shoji Mizuno, Tosiaki Fukui, Takeharu Tsuge
- 15:25 2S14 Synthesis of Cross-linked Polyurethane Having Thiourethane Cross-linking point and Its Properties Under UV Irradiation
Suguru Motokucho, Takahiro Matsumoto, Takeshi Matsumoto, Hisayuki Nakatani
- 15:50 2S15 Oxidatively degradable transparent crosslinked polymer

Kazuya Yanaze, Nobuhiro Kihara

Masatoshi Iji, presiding

- 16:15 2S16 Synthesis and Properties of Recyclable Carbon Fiber-Reinforced Plastics (CFRP) with Bisphenol A-based Epoxy Resins Containing Acetal Linkage
Yoshinori Kakichi, Michio Urushisaki, Toshikazu Sakaguchi, Tamotsu Hashimoto, Kazumasa Kawabe, Keiichi Kondo, Hirohumi Iyo
- 16:40 2S17 Preparation of Bacterial Cellulose/Polymer Composites Having Hierarchical Layered Structure
Shun Takawa, Hiroshi Uyama
- 17:05 2S18 Stress Transfer Analyses of Cellulose Nanofibers / Clay Nanocomposites using X-ray diffraction
Takuya Ohashi, Seira Morimune-Moriya, Takuya Matsumoto, Chizuru Hongo, Takashi Nishino

Fri. Sep 16

S17. Bioplastics and Resource Circulation in Polymeric Materials

Hideki Abe, presiding

- 9:10 3S01 Promotion of stereocomplexation of PLA with self-assembly.
Yuya Tachibana, Hitomi Takayama, Ken-ichi Kasuya
- 9:35 3S02 Stereocomplex formation of cyclic stereoblock polylactides with a parallel and antiparallel orientation at air/water interface studied by AFM
Kenta Iwashima, Tomomi Ishihara, Yasuyuki Tezuka, Takuya Yamamoto, Jiro Kumaki
- 10:00 3S03 Quaternary, ternary, and dual stereocomplexation between enantiomeric homopolymers and random copolymers of lactic acid and substituted lactic acids.
Hideto Tsuji, Tadashi Sobue, Takeru Tawara

Hisayuki Nakatani, presiding

- 10:25 3S04 Pressurized microwave solvolysis and recycling of waste GFRP from the Great Kumamoto Earthquake
Kazutoshi Ikenaga, Arasi Morihira, Hiroki Nagamitsu
- 10:50 3S05 Effect of reduce burden on the environment and economic effect using small scale liquefaction at an isolated island
Takashi Yamawaki, Hiroyuki Haga, Natsuko Matsuoka, Hitoshi Sakurai
- 11:15 3S06 High performance and recycling technology of Expanded polystyrene
Michihiro Takeda
- 11:40 3S07 Methods for evaluating bio-based contents
Masanori Momochi

Daisuke Ishii, presiding

- 12:55 3S08 Basic chemicals prepared by bio and catalytic technology
TAKASHI ARAI, Kiyoharu Tsutsumi
- 13:20 3S09 Development of cashew nut shell liquid-based polymer materials
Shinji Kanehashi, Kenji Ogino, Tetsuo Miyakoshi
- 13:45 3S10 Synthesis of Bio-Based Polymer by Radical Copolymerization of β -Caryophyllene
Tomohiro ISHIKAWA, Kotaro SATOH, Masami KAMIGAITO

Hideto Tsuji, presiding

- 14:10 3S11 Ring opening polymerization of cyclic carbonate over acid-base catalyst

		<u>Masayoshi Honda</u> , Hideki Abe
14:35	3S12	Polystyrene photodecomposition with a novel TiO ₂ nanoparticle catalyst <u>Hisayuki Nakatani</u> , Shiho Miyagawa, Ryouyusuke Hamachi, Suguru Motokucho
15:00	3S13	Ring-Opening Polymerization of Lactones by Using Bulky Lewis Pairs and Lewis Acids as Catalysts <u>Yuushou Nakayama</u> , Shunsuke Kosaka, Kentaro Yamaguchi, Gentaro Yamazaki, Ryo Tanaka, Takeshi Shiono

Room T

Wed. Sep 14

S12. Science and Technology of Polymer Gels

9:50	1TSO	Introductory Remarks S12 <u>Kenji Urayama</u> , Takashi Aoki Koichi Mayumi, presiding
10:00	1T03	Dynamic Light Scattering Study on the Gelation Process of Tetra-armed PEG Solutions <u>Shintaro Nakagawa</u> , Nobuyuki Watanabe, Takamasa Sakai, Xiang Li, Mitsuhiro Shibayama
10:25	1T04	SANS Study on Critical Polymer Clusters near Gelation Point <u>Xiang Li</u> , Kazu Hirose, Takamasa Sakai, Mitsuhiro Shibayama Kenji Urayama, presiding
10:50	1T05	quantitative analysis of inhomogeneity in polymer gels by small angle X-ray scattering <u>Takafumi Asakura</u> , Koichi Mayumi, Kazuaki Kato, Hideaki Yokoyama, Kohzo Ito
11:15	1T06	Internal Structure Analysis of Gels via Scanning Microscopic Light Scattering (SMILS) <u>Hiroaki Kumagai</u> , Kazuyuki Sakai, Hidemitsu Furukawa
11:40	1T07	Internal structural analysis of particle double-network gels using the scanning microscopic light scattering SMILS and its applications. <u>Mei Abe</u> , Kazuyuki Sakai, Hidemitsu Furukawa Takamasa Sakai, presiding
12:55	1T08	Excluded Volume Effects of Branched Molecules <u>Kazumi Suematsu</u>
13:20	1T09	Fracture behavior of Slide-ring gels <u>Koichi Mayumi</u> , Chang Liu, Kazuaki Kato, Hideaki Yokoyama, Kohzo Ito
13:45	1T10	Stretching Driven Swelling of Slide-Ring Gels with Various Filling-Ratios of Ring Molecules Akira Tanaka, <u>Kenji Urayama</u> , Kazuaki Kato, Kohzo Ito
14:10	1T11	Visualization of internal fracture of double network hydrogels by mechanochemistry <u>Runa KAWAKAMI</u> , Takahiro MATSUDA, Tasuku NAKAJIMA, Takayuki KUROKAWA, Jian Ping GONG Hidemitsu Furukawa, presiding
14:35	1T12	Biaxial Extension of Double-Network Gels with Uniform Network Structures

- Hiroki Koike, Akira Tanaka, Kenji Urayama, Takahiro Matsuda, Tasuku Nakajima, Takamasa Sakai, Jian Ping Gong
- 15:00 1T13 Extracting Mechanical Properties of Ultimately-Extended Polymer Chains from DN Gels
Takahiro Matsuda, Tatiana B. Kouznetsova, Tasuku Nakajima, Takamasa Sakai, Takayuki Kurokawa, Stephen L. Craig, JianPing Gong
- 15:25 1T14 Effects of permanent network structure on rheological properties of IPN
Kana Yamazaki, Takuya Katashima, Takamasa Sakai, Tadashi Inoue
- Atsushi Noro, presiding**
- 15:50 1T15 Anionic amphiphilic model conetworks synthesized by end-linking of tetra-arm copolymers
Kazuyuki Oshima, Yoshiro Mitsukami
- 16:15 1T16 Development and nano-structure evaluation of new nanogel tectonic materials
Sada-atsu Mukai, Yoshiro Tahara, Tomoki Nishimura, Shin-ichi Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi
- 16:40 1T17 Birefringence of mixed clay nanocomposite gel polymerized in a magnetic field
Masafumi Yamato, Shoma Mochizuki, Noriyuki Hirota, Hiroyoshi Kawakami
- Takuya Katashima, presiding**
- 17:05 1T18 Mechanical properties and strain-induced crystallization behavior of sulfur cross-linked dandelion natural rubber
Yuko Ikeda, Junkong Preeyanuch, Yuta Sakaki, Takumi Ohashi, Atitaya Tohsan, Katrina Cornish
- 17:30 1T19 Preparation and Mechanical Properties of Block Copolymer-Based Supramolecular Elastomers
Takato Kajita, Atsushi Noro, Yushu Matsushita
- 17:55 1T20 Experimental verification for the breakdown of the classical theories of rubber elasticity
Kengo Nishi, Ung-il Chang, Mitsuhiro Shibayama, Takamasa Sakai

Thu. Sep 15

S12. Science and Technology of Polymer Gels

Takashi Aoki, presiding

- 9:10 2T01 Directional Control of Diffusion and Swelling in Megamolecular Polysaccharide Hydrogels Towards Anisotropic Soft Materials
Gargi JOSHI, Kosuke OKEYOSHI, Maiko K. OKAJIMA, Tatsuo KANEKO
- 9:35 2T02 Design of a gradient self-oscillating polymer brush with controlled unidirectional motion
Tsukuru Masuda, Kenta Homma, Aya Mizutani Akimoto, Kenichi Nagase, Teruo Okano, Ryo Yoshida
- 10:00 2T03 Synthesis of novel thermosensitive bilayer gels by acylation and their bending behaviour
Takashi Iizawa, Shunro Yoshimura, Daisuke Matsumoto

Tatsuo Kaneko, presiding

- 10:25 2T04 Control of Performance of Lithium Battery by LCST Thermo-sensitive Ion Gel Electrolytes
Yumi KOBAYASHI, Yuzo KITAZAWA, Kei HASHIMOTO, Hisashi KOKUBO, Masayoshi WATANABE
- 10:50 2T05 The Structure and CO₂ Separation Property of Ionic Liquid/Sulfonated

- Polyimide Composite Membranes
Akika Ito, Tetsuro Yoshioka, Akihiro Yoshida, Kazukiyo Nagai, Xiang Li, Mitsuhiro Shibayama, Tomohiro Yasuda, Masayoshi Watanabe
- 11:15 2T06 Heat storage material of organogel
Kei Suzuki, Toshio Sakai
- 11:40 2T07 Swelling behavior of superabsorbent polymer for organic solvents based on phosphonium salt
Soukurou Sunaga, Kenta Kokado, Kazuki Sada
- Kenta Kokado, presiding**
- 12:55 2T08 Design of Multiple Stimuli-responsive Polymers Exhibiting Sol-gel Phase Transition Using 4-armed Polymers
Chisa Norioka, Kohei Okuma, Kazuma Okita, Akifumi Kawamura, Takashi Miyata
- 13:20 2T09 Relationship between Network Structures and Responsive Behavior of Stimuli-Responsive Hydrogels with Molecular Recognition Sites
Saya Yamafuji, Akifumi Kawamura, Takashi Miyata
- 13:45 2T10 Highly tolerant and durable adhesion between hydrogels utilizing intercalation of cationic substituents into layered inorganic compounds.
Shingo Tamesue, Kento Yasuda, Tetsu Mitsumata, Takeshi Yamauchi
- Daisuke Suzuki, presiding**
- 14:10 2T11 Syntheses of Inclusion Complex-containing Network Polymers by Thiol-ene Reaction and the Applications to Polymer Gel Electrolyte
Kazuhiro YAMABUKI, Kenjiro ONIMURA
- 14:35 2T12 Synthesis and characterization of biodegradable and thermoresponsive hydrogel having ester groups in the polymer backbone prepared by radical ring-opening polymerization
Syuuhei KOMATSU, Taka-Aki ASOH, Ryo ISHIHARA, Akihiko KIKUCHI
- 15:00 2T13 Creation of injectable hydrogel with controlled degradability
Ryo Kagami, Yuichi Tei, Takamasa Sakai
- 15:25 2T14 Application of Biocompatible Self-healing Hydrogel As Temporal Framework of the 3D Hydrogel Devices.
Takeshi Sato, Takao Aoyagi, Mitsuhiro Ebara
- Taka-aki Asoh, presiding**
- 15:50 2T15 Self-organization of polymer hydrogel microspheres through drying of aqueous dispersions
Daisuke Suzuki, Yuka Sazuka, Haruka Minato, Koji Horigome, Yuki Sakurai, Daichi Aoki, Masaya Takizawa
- 16:15 2T16 Novel elastomer particles crosslinked with rotaxane cross-linkers synthesised by miniemulsion polymerization and their application to film formation
Seina HIROSHIGE, Takuma KUREHA, Daichi AOKI, Jun SAWADA, Daisuke AOKI, Toshikazu TAKATA, Daisuke SUZUKI
- 16:40 2T17 Hydrogel adhesion by wrinkle-structure formation of gel-film
Masatoshi KATO, Yasuyuki TSUBOI, Taka-Aki ASOH
- 17:05 2T18 The control of fouling on a polymeric surface by a polymer-condensed layer
Takashi AOKI, Kanta NOGAMI

Fri. Sep 16

S12. Science and Technology of Polymer Gels

Shohei Ida, presiding

- 9:10 3T01 Preparation and analysis of the hydrogel which has comb-type polymer network only in the surface region
Ko Matsukawa, Tsukuru Masuda, Aya Mizutani Akimoto, Ryo Yoshida
- 9:35 3T02 Fabrication of Tough Hydrogels Showing Cooling-induced Dissolution
Yasutaka Ono, Hiroaki Yoshida
- 10:00 3T03 Preparation of the thermosensitive Tetronic hydrogels and their physical properties
Midori Fujiki, Shintaro Yashima, Masahiko Annaka

Masahiko Annaka, presiding

- 10:25 3T04 Development of a highly fluorescent crosslinker exhibiting quenching and photocleavage selectively in chloroform
Shunsuke Sasaki, Yoshiyuki Sugita, Gen-ichi Konishi
- 10:50 3T05 Synthesis of homogeneous polymer gel by condensation reaction between terminations of tetra-branched poly(N -isopropylacrylamide) .
Yuumi Okaya, Yuto Jochi, Yukikazu Takeoka, Takahiro Seki, Kotaro Satoh, Masami Kamigaito
- 11:15 3T06 Effect of Monomer Sequence on Thermoresponsive Behavior of Polymer Gels toward Design of Novel Amphiphilic Conetwork
Shohei Ida, Yoshitsugu Hirokawa
- 11:40 3T07 Phase Transitions of Networks based on Liquid-Crystalline Polymers
Seiji Ujiie, Masanori Nata, Shioiri Tomitaka, Yuko Iwami

Yukikazu Takeoka, presiding

- 12:55 3T08 Preparation and physical properties of supramolecular materials crosslinked by inclusion complex with fluorinated guest molecules and cyclodextrins
Suguru Nomimura, Masaki Nakahata, Yoshinori Takashima, Hiroyasu Yamaguchi, Akira Harada
- 13:20 3T09 Evaluating mechanical properties of polymeric material using inclusion complex between cyclodextrin and viologen derivative.
Kohei Otani, Masaki Nakahata, Yoshinori Takashima, Akira Harada, Hiroyasu Yamaguchi
- 13:45 3T10 Solid-State Polymerization and Properties of Linear or Cyclic Butadiyne Derivatives
Kohei Kikuchi, Shuji Okada
- 14:10 3T11 Photoinduced phase transition behavior of poly(benzyl methacrylate) and its derivative polymers in ionic liquid blends containing azobenzene moieties
Caihong Wang, Yumi Kobayashi, Kei Hashimoto, Yuzo Kitazawa, Hisashi Kokubo, Masayoshi Watanabe

Room U

Wed. Sep 14

S14. Biomimetic Innovation of Materials Engineering Based on Biodiversity and Informatics

- 9:50 1USO Introductory Remarks S14

Masatsugu Shimomura

Takuya Ohzono, presiding

- 10:00 1U03 Decorating structural color for curved surface by coated colloidal crystal film
Hiroshi Fudouzi, Takahiko Hariyama
- 10:25 1U04 Development of biomimetic structural color ink with structural control of colloid particles at microscopic area
Ayaka Kawamura, Michinari Kohri, Tatsuo Taniguchi, Keiki Kishikawa, Gen Morimoto
- 10:50 1U05 Powdered two-liquid mixing type adhesive created based on pungency generation mechanism of wasabi
Syuji Fujii, Kohei Kido, Mori Naoki, Yoshinobu Nakamura

Syuji Fujii, presiding

- 11:15 1U06 Creation of functional materials -learning from the interaction between bio and materials
Ken-Ichi Sano, Kuniharu Ijiro, Yoshihito Osada
- 11:40 1U07 A new material world of precise kinetic control in programable microflow fields
Munenori Numata

Olaf Karthaus, presiding

- 12:55 1U08 Nanowires modeled after physical defense mechanism of cicada wing
Takao Yasui, Takeshi Yanagida, Noritada Kaji, Kazuki Nagashima, Sakon Rahong, Masaki Kanai, Tomoji Kawai, Yoshinobu Baba
- 13:20 1U09 Artificial amoeba: Self-oscillating polymeric fluids with autonomous sol-gel transition
Michika Onoda, Ryota Tamate, Takeshi Ueki, Mitsuhiro Shibayama, Ryo Yoshida
- 13:45 1U10IL A bio-inspired search tool for new materials developers
Riichiro Mizoguchi

Daisuke Ishii, presiding

- 14:35 1U12 New Information Science for Material Development -Realization of Biomimetics Image Platform-
Miki Haseyama
- 15:00 1U13 Construction and application of bio-TRIZ database supporting development of polymer materials
Takeshi Yamauchi, Hidetoshi Kobayashi, Toru Kobayashi
- 15:25 1U14 Wettability of The Aqueous Solution of Jellyfish Mucin As A Surface Activating Polymer
Kiminori Ushida, Ayaka Oohata, Gai Kawamura, Asuka Murakami, Minami Sugiyama, Hiroshi Inui, Shiori Kaise

Naoki Asakawa, presiding

- 15:50 1U15 Synthesis of Photo-cleavable RGDS Peptide-grafted PHEMA and its Cell-binding Properties
Shinnosuke Nishimura, Yukiko Taki, Yusuke Morita, Ayaha Hirata, Nobuyuki Higashi, Tomoyuki Koga
- 16:15 1U16 Development and Designing Wrinkled Hydrogels for Cell Culture
Saori Sasaki, Hiroyuki Ebata, Takuya Ohzono, Satoru Kidoaki
- 16:40 1U17 Preparation of hierarchically ordered surface structure by a combination of nanoimprinting and surface-initiated controlled polymerization
zhe yang, tomomi uemura, jin motoyanagi, masahiko minoda

Takeshi Yamauchi, presiding

- 17:05 1U18 Stochastic resonance and noise-robustness in polymer field effect transistor

		<u>Naoki Asakawa</u> , Yoshiharu Suzuki, Ayumi Matsuoka, Kiyohiko Matsubara
17:30	1U19	Flame Treatment for Hierarchical Microstructures of PDMS <u>Koki KAWAI</u> , Shuto ITO, Daisuke ISHII
17:55	1U20	Fabrication and optimization of the open channel mimicking legs of Ligia Exotica <u>Daisuke Ishii</u> , Shuto Ito

Thu. Sep 15

S14. Biomimetic Innovation of Materials Engineering Based on Biodiversity and Informatics

Hiroshi Fudouzi, presiding

9:10	2U01	Frictional properties of firebrat scales <u>Yuji Hirai</u> , Naoto Okuda, Naoki Saito, Takahiro Ogawa, Ryuichiro Machida, Shuhei Nomura, Masahiro Ohara, Miki Haseyama, Masatsugu Shimomura
9:35	2U02	Friction on shape-tunable wrinkles <u>Takuya Ohzono</u> , Kosuke Suzuki
10:00	2U03	Biomimetic Materials: Self-lubricating Organogels (SLUGs) Showing Dynamic Surface Functionalities <u>Atsushi Hozumi</u> , Chihiro Urata, Tomoya Sato, Liming Wang, Matt England

Atsushi Hozumi, presiding

10:25	2U04	Evaluation of antifreeze peptide-polymer hybrid for recrystallization inhibition on glass surface <u>Yoshiaki Hirano</u> , Ayane Oka, Sachiro Kakinoki, Hidehisa Kawahara
10:50	2U05	Preparation of a redox enzyme-mimic modified sensor for detection of cell-derived superoxides <u>Atsushi Nakagawa</u> , Tatsuo Aikawa, Takeshi Kondo, Shigenobu Kasai, Shigeo Aoyagi, Ryo Matsuoka, Makoto Yuasa
11:15	2U06	Label-free Specific Virus Detection using Conducting Polymer-modified with Sialyl Lactose <u>Wenfeng Hai</u> , Tatsuro Goda, Akira Matsumoto, Yuji Miyahara
11:40	2U07	Conducting polymer functionalized with zwitterionic groups for non-fouling electrodes <u>Masahiro Toya</u> , Tatsuro Goda, Akira Matsumoto, Yuji Miyahara

Shigeru Deguchi, presiding

12:55	2U08	Morphological change in heparin-imprinted nanoparticle by specific interaction with the template <u>Yasuo Yoshimi</u> , Daichi Oino
13:20	2U09	Basic consideration about the crystalline supramolecular interaction of side chain crystalline block co-polymer <u>Shigeru Yao</u> , Yuri Kanazawa, Ryoko Nakano, Hiroshi Sekiguchi
13:45	2U10	Synthesis of triblock type side chain crystalline block copolymers and their TR fluid function <u>Yuri Kanazawa</u> , Hiroshi Sekiguchi, Ryoko Nakano, Shigeru Yao

Yuji Hirai, presiding

14:10	2U11	Functional analysis and modification of diatom cell walls composed of biosilica <u>Yoshiaki Maeda</u> , Yuta Niwa, David Kisailus, Tomoko Yoshino, Tsuyoshi Tanaka
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14:35 2U12 Biomimetics from Marine and Deep-Sea Organisms
Remi Tsubaki,Satoshi Okada,Ken Takai,Shigeru Deguchi

S18. Upcoming 3D-printing era in polymer science

15:15 2USO Introductory Remarks S18
Go Matsuba

Yoshito Andou, presiding

15:25 2U14 Development of the low-cost opensource 3D gel printer "RepRap SWIM-ER"
Kei Sato,Azusa Saito,Samiul Basher,Takafumi Ota,Taishi Tase,Kyuichiro Takamatsu,Masaru Kawakami,Hidemitsu Furukami

15:50 2U15 Development and evaluation of gel materials for use with a 3D gel printer "SWIM-ER"
Taishi Tase,Takafumi Ota,Kei Sato,Kyuichiro Takamatsu,Azusa Saito,Masaru Kawakami,Hidemitsu Furukawa

16:15 2U16 Design of the mechanical properties of the gel by the 3D gel printer "SWIM-ER"
Azusa Saito,Takafumi Ota,Taishi Tase,Kyuichiro Takamatsu,Masaru Kawakami,Hidemitsu Furukawa

Jin Gong, presiding

16:40 2U17 Characterization of Scalelike Magnetite-polymer Composite and Application for 3D Printable Materials
Yoshito ANDOU,Kubra EKSILER,AYAKO MASUNAGA,Hidekazu NISHIGUCHI

17:05 2U18 3D tissue engineering using sol-gel transition of thermoresponsive polymer
Yoshinori Kakizawa,Phassamon Piyapakorn,Kazuhiro Tanahashi,Mitsuru Akashi

Fri. Sep 16

S18. Upcoming 3D-printing era in polymer science

Masato Makino, presiding

9:10 3U01 Characterization of flexible and glossy PLA filament
Kazunari Masutani,Yoshiharu Kimura

9:35 3U02 3D printable crystalline gels
Jin Gong,Yuchen Mao,Reona Sakakibara,Kyohei Hosoya,Takuya Miyazaki,Takumi Oikawa

Kentaro Taki, presiding

10:00 3U03IL Multi-material, multi-scale 3D manufacturing for real mechatronics
Seiichi Hata,Mizue Mizoshiri

Kazunari Masutani, presiding

10:50 3U05 Numerical simulation of conversion distribution in a part formed by UV inkjet type 3D printer
Kentaro Taki

11:15 3U06 3D printing and Physics Education
Masato Makino

11:40 3U07 Development of new analysis method for nano-scaled structure with 3D printer
Go Matsuba

Room V

Wed. Sep 14

S15. Biomaterials for handling, controlling and treatment of cells

- 9:50 1VSO Introductory Remarks S15
Hiroyoshi Kawakami, Tsuyoshi Kimura
- Tsuyoshi Kimura, presiding**
- 10:00 1V03 Encapsulation of single living cell by a mild polymerization approach
Jianmin Yang, Naoki Kawazoe, Guoping Chen
- 10:25 1V04 Engineering growth factor with binding affinity to various material surfaces
Hongli Mao, Shinhye Park, Seiichi Tada, Yoshihiro Ito
- 10:50 1V05 Large-scale fabrication of porous polymer nanosheets in the application of artificial basement membranes for manipulating cells
Toshinori Fujie, Shoichiro Suzuki, Keisuke Nishiwaki, Shinji Takeoka
- Naohiko Shimada, presiding**
- 11:15 1V06 Novel photoresponsive polymer to implement cell detachment
Kimio Sumaru, Toshiyuki Takagi, Kana Morishita, Toshiyuki Kanamori
- 11:40 1V07 Caged PEG-Lipid surface for patterning of multi-types of cells
Shinya Yamahira, Satoshi Yamaguchi, Teruyuki Nagamune
- Kimio Sumaru, presiding**
- 12:55 1V08 Cell surface modification using single-stranded DNA-poly(ethylene glycol)-lipid conjugates with different base length
Yusuke Arima, Yosuke Matsuoka, Hiroo Iwata
- 13:20 1V09 Controlled cell-cell interactions of immune cells via metabolic glycoengineering
Shunsuke Sugimoto, Yasuhiko Iwasaki, Takeshi Mori
- 13:45 1V10 Reversible 2D/3D cell culture switching by UCST-type ureido polymers
Naohiko Shimada, Minako Saito, Atsushi Maruyama
- 14:10 1V11 Preparation of Photo-Responsive Polymer Films to Easily Form Cell Patterns
Takafumi Noguchi, Akifumi Kawamura, Takashi Miyata
- Masaya Yamamoto, presiding**
- 14:35 1V12 Preparation of visible light-responsive cell scaffold and pinpoint cell separation of various cells
Chie Kojima, Yusuke Nakajima, Naoya Oeda, Takeshi Kawano, Yusuke Taki
- 15:00 1V13 Construction of 3D-engineered cardiac tissue model by controlling cell adhesion using polymer nanofilms.
Yasushi Takamura, Fumiaki Shima, Mitsuru Akashi
- 15:25 1V14 A combination technique of polymer patterning and cell sheet manipulation for producing structurally organized tissue constructs
Hironobu Takahashi, Tatsuya Shimizu, Masamichi Nakayama, Masayuki Yamato, Teruo Okano
- Chie Kojima, presiding**
- 15:50 1V15 Fabrication of gel nanofiber for 3D cell culture scaffold
Satoshi Fujita, Yuka Wakuda, Shin-ichiro Suye

- 16:15 1V16 Design of sugar-responsive hydrogels to fabricate vascularized cell scaffolds
Masaya Yamamoto,Seiji Muratani,Kosuke Arimoto,Yasuhiko Tabata
- 16:40 1V17 Construction of 3D-Cancer Tissues by Fabrication of Nanoscaffold on Cell Surfaces and Their Application for Stromal Invasion and Intravasation
Michiya Matsusaki,Akihiro Nishiguchi,Mitsuru Akashi
- Michiya Matsusaki, presiding**
- 17:05 1V18 Design of 4D cell culturing gel that can apply reversible mechanical stimuli to cells
Erika Hasuike,Aya Mizutani Akimoto,Hiroto Tada,Ryota Tamate,Kenichi Nagase,Teruo Okano,Hideko Kanazawa,Ryo Yoshida
- 17:30 1V19 Physical to chemical hydrogels: photodimerization-induced dynamic viscoelastic changes of ABA triblock copolymer-based hydrogels for 3D cell culture
Ryota Tamate,Takeshi Ueki,Yuzo Kitazawa,Morinobu Kuzunuki,Masayoshi Watanabe,Aya Akimoto,Ryo Yoshida
- 17:55 1V20 Analysis of dynamics of mechano-signal input for stem cells cultured on the micro-elastically patterned hydrogels
Hiroyuki Ebata,Kousuke Hamano,Satoru Kidoaki

Thu. Sep 15

S15. Biomaterials for handling, controlling and treatment of cells

Atsushi Tamura, presiding

- 9:10 2V01 Design of hybrid materials with exosome engineering
Shin-ichi Sawada,Kaori Umezaki,Yuko Sato,Asako Shimoda,Sadaastu Mukai,Yoshihiro Sasaki,Kazunari Akiyoshi
- 9:35 2V02 Preparation of thermoresponsive core-corona type rod-shaped particles for controlled phagocytosis
Akihiko Kikuchi,Takuma Suzuki,Takuya Matsuyama,Ryo Ishihara,Taka-Aki Asoh
- 10:00 2V03 Design of amphiphilic polymer for cell surface modification
Masaya Sato,Tatsuo Aikawa,Takeshi Kondo,Makoto Yuasa

Akihiko Kikuchi, presiding

- 10:25 2V04 Study on the interfacial fine structure at biomaterial/water interfaces
Daiki Murakami,Yoko Kitahara,Tomoya Ueda,Shingo Kobayashi,Masaru Tanaka
- 10:50 2V05 Modulation of cellular function using molecularly mobile surfaces based on polyrotaxane and its application possibility as biomaterials
Yoshinori Arisaka,Ji-Hun Seo,Atsushi Tamura,Sachiro Kakinoki,Tetsuji Yamaoka,Nobuhiko Yui
- 11:15 2V06 A novel design of biointerface suppressing immune response on the substrate surface
Yutaka Ikeda,Tomoki Yoshinari,Kouya Akasaka,Hirotohi Miyoshi,Yukio Nagasaki
- 11:40 2V07 Control of nano-environment between cells and surfaces using cell-adhesive-molecule-immobilized phospholipid polymer brush layer
Misaki Ito,Yuuki Inoue,Kazuhiko Ishihara

Yuuki Inoue, presiding

- 12:55 2V08 Development of fluorine-modified substrate having a non-adhesive ability of

the cells

Yoshiko Koizumi, Koji Kubota, Masamichi Morita, Noriyuki Kioka, Kaumitsu Ueda

- 13:20 2V09 The effect of functional groups on the adhesion and detachment of cells over the temperature-responsive surfaces prepared by hyperbranched polymers
Yu Sudo, Ryuki Kawai, Yuta Nabae, Teruaki Hayakawa, Masa-aki Kakimoto
- 13:45 2V10 Effect of cultivation substrate on cardiac differentiation and beating behavior of iPS cells
Tetsuji Yamaoka, Mitsuki Hiram
- 14:10 2V11 Analysis of Chondrogenic Differentiation Behaviors of Bone Marrow-derived Mesenchymal Stem Cells in Interpenetrating Polymer Network Gels Consisting of Polysaccharides and Peptides
Kazutoshi Iijima, Shohei Ishikawa, Daisuke Matsukuma, Mineo Hashizume, Hidenori Otsuka

Masaru Tanaka, presiding

- 14:35 2V12 Development of Polymer Scaffolds with Controlled Pore Structures for Tissue Engineering
Guoping Chen, Shangwu Chen, Naoki Kawazoe
- 15:00 2V13 Fabrication of hierarchical biodegradable tubular structures immobilizing endothelial cell-recognition peptides for regenerative artificial blood vessels
Kazuki NISHIMURA, Akinori KUZUYA, Atsushi MAHARA, Tetsuji YAMAOKA, Yuichi OHYA
- 15:25 2V14 Bio-imaging by polymer nanomaterials which sense temperature and oxygen
Shinji Takeoka

Atsushi Mahara, presiding

- 15:50 2V15 Fluorescent nanoprobe with phospholipid polymer platform for supersensitive tracking of biomolecules in cells
Yuuki Inoue, Yuuki Tamagaki, Kazuhiko Ishihara
- 16:15 2V16 Imaging of macrophages' biological functions by polymer-based biomaterial technologies
Jun-ichiro Jo, Mikio Tatsutomi, Yu Yoshimoto, Yasuhiko Tabata
- 16:40 2V17 Enhanced anticancer activity of metal complex based on the polymeric structure with multivalent function and its intracellular behavior observation
Daisuke Kozuma, Hironao Shimada, Hirohumi Fujikura, Daisuke Matsukuma, Hidenori Otsuka
- 17:05 2V18 Near-infrared fluorescent polymeric micelles for Over-1000 nm in vivo imaging
Masao Kamimura, Shoko Takahiro, Moe Yoshida, Kohei Soga

Fri. Sep 16

S15. Biomaterials for handling, controlling and treatment of cells

Koji Nagahama, presiding

- 9:10 3V01 Enhanced vascular inducible functions of silk fibroin hydrogels by a peptide modification
Yusuke Kambe, Akie Murakoshi, Hiroshi Urakawa, Yoshiharu Kimura, Tetsuji Yamaoka
- 9:35 3V02 Fabrication of stem cell transplantation carrier for tissue defect treatment
Keisuke Nishiwaki, Shimpō Aoki, Manabu Kinoshita, Shinji Takeoka, Toshinori Fujie

- 10:00 3V03 Design and function of nanogel-integrated material for bone regeneration
Rie Fujihara, Yoshihide Hashimoto, Eriko Marukawa, Shinich Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi
- 10:25 3V04 Cell surface modification with short peptides and PEG-lipids and the application to cell manipulation and transplantation
Yuji Teramura
- Yuji Teramura, presiding**
- 10:50 3V05 Improvement of lysosomal metabolism by acid-labile polyrotaxanes for therapeutic applications
Atsushi Tamura, Nobuhiko Yui
- 11:15 3V06 Surface Modification with Antibodies via light-immobilization of peptide nano-sheets onto polypropylene non-woven fabric
Yota Okuno, Masashi Ohmae, Shunsaku Kimura
- 11:40 3V07 Induction of cytotoxic T lymphocytes by adjuvant and antigenic peptide using polysaccharide
Shinichi Mochizuki, Hiromi Morishita, Kazuo Sakurai
- Kanjiro Miyata, presiding**
- 12:55 3V08 Design of Cell Nuclear Transporters and Development of Protein Nuclear Delivery Systems
Koji Nagahama, Yoshinori Sano, Kenta Nakanishi, Saeko Maekawa
- 13:20 3V09 Effect of side chain structures of carboxylated polysaccharide derivative-modified liposomes on their pH-sensitivity and antigen delivery functions
Eiji YUBA, Shinya UESUGI, Atsushi HARADA, Kenji KONO
- 13:45 3V10 Delivery of sonosensitizers exhibiting different intracellular distribution and their sonodynamic therapeutic effect
Atsushi Harada, Ryoma Teranishi, Takayuki Matsuda, Eiji Yuba, Kenji Kono
- 14:10 3V11 Treatment of Refractory Cancer and Lymph Node Metastasis with Cyclic RGD Peptide-Decorated Polymeric Micelles Incorporating Platinum Anticancer Drugs
Yuki Mochida, Horacio Cabral, Jun Makino, Ming Wang, Yutaka Miura, Nobuhiro Nishiyama, Kazunori Kataoka
- Nobuhiro Nishiyama, presiding**
- 14:35 3V12 Preparation and drug release behavior of biodegradable polymeric nanoparticles made by ring-opening radical polymerization
Satomi Ishida, Syuuhei Komatsu, Taka-Aki Asoh, Ryo Ishihara, Akihiko Kikuchi
- 15:00 3V13 Structural regulation of siRNA-loaded polyion complexes using block cationomers for their systemic delivery
Kanjiro Miyata, Kotaro Hayashi, Mizuki Naito, Hyun Jin Kim, Kazunori Kataoka
- 15:25 3V14 Zn²⁺/pDNA Co-Delivery System to Suppress Hepatic Insulin Degradation for Diabetes Therapy
Shoichiro Asayama, Mizuki Sakata, Hiroyoshi Kawakami

Room W

Wed. Sep 14

S16. Novel axis for biopolymers generated by molecular assembly: from molecules, particles, and interface to biological cells

- 9:50 1WSO Introductory Remarks S16
Yoshihiro Sasaki, Kenichi Niikura
- Yoshihiro Sasaki, presiding**
- 10:00 1W03 Conformational regulation of DNA aptamer driven by phase transition behavior of PNIPAAm gel
Aya Mizutani Akimoto, Erika Hasuike, Heiko Kuroda, Ko Matsukawa, Yuki Hiruta, Hideki Kanazawa, Ryo Yoshida
- 10:25 1W04 Novel Strategy for Highly Functionalized Oligonucleotide Therapeutics Artificial Nucleic Acids Inspired by Biomolecules
Msahito INAGAKI, Hiroka SUGAI, Ryouhei UEMATSU, Yasuyuki ARAKI, Seiji SAKAMOTO, Hiromu KASHIDA, Satoru ISHIBASHI, Hiroyuki ASANUMA, Takanori YOKOTA, Takehiko WADA
- 10:50 1W05 Development of fluorescent labeled pre-miRNA for visualization analysis of miRNA
Hiroshi Kamimoto, Yukiko Kamiya, Hiroyuki Asanuma
- Takehiko Wada, presiding**
- 11:15 1W06 Effect of pH on gelation of PEG-DNA copolymers
Shizuma Tanaka, Kazuki Fukushima, Kenta Wakabayashi, Akinori Kuzuya, Yuichi Ohya
- 11:40 1W07 Force curve analyses of surface force between DNA brush layers directed by terminal base-pairing
Naoki Kanayama, Taito Sekine, Kazunari Ozasa, Takashi Nyu, Tomohiro Hayashi, Mizuo Maeda
- Atsushi Harada, presiding**
- 13:20 1W09 Nucleic acids loaded polyplex micelle with hydrophobic core-protective barrier ~ Thermo-switchable segment to form hydrophobic barrier and its effect to enhance the stability of polyplex micelle ~
Shigehito Osawa, Kensuke Osada, Dirisala Anjaneyulu, Kazunori Kataoka
- 13:45 1W10 Role of chirality and introduction of methyl group on serinol linker for the incorporation of dyes into DNA
Keiji Murayama, Hiromu Kashida, Hiroyuki Asanuma
- 14:10 1W11 Directed self-assembly of anisotropic nanoparticles modified with DNA duplexes
Guoqing Wang, Naoki Kanayama, Tohru Takarada, Mizuo Maeda
- Michiya Matsusaki, presiding**
- 14:35 1W12 Regulation of enzymatic reactions depending on topologies of non-canonical nucleic acids structure
Shuntaro Takahashi, Naoki Sugimoto
- 15:00 1W13 Correlation of aspect ratio and transfection efficiency for multi-arm PEG-coating polyplexes
Atsushi Harada, Yukiko Katsuen, Kenta Nomura, Eiji Yuba, Kenji Kono
- 15:25 1W14 Structural analysis of stilbene-modified DNA by using orientation-dependent FRET system
Hayato Kawai, Tetsuya Doi, Hiromu Kashida, Hiroyuki Asanuma
- Masaru Tanaka, presiding**
- 15:50 1W15 Construction of Human iPSC-derived 3D-Cardiac Myoblast Tissues by Fabrication of Nanoscaffold on Cell Surfaces and Their High Drug Tolerance Induced by Cell Assembly
Michiya Matsusaki, Yuto Amano, Akihiro Nishiguchi, Shigeru Miyagawa, Yoshiki Sawa, Mitsuru Akashi
- 16:15 1W16 Influence of the gold nanoparticle shape on the activity enhancement of

intranasal influenza vaccine
Taiyu Tazaki, Katsuyuki Nambara, Kenichi Niikura, Tadaki Suzuki, Akira Aina, Yuki Ohara, Shintaro Kobayashi, Yasuko Orba, Hideyuki Mitomo, Hirofumi Sawa, Kuniharu Ijio

- 16:40 1W17 Development of self-assembling peptide hydrogels with functional sequences and application for culture of osteoblast cells
Hiroshi Tsutsumi, Megumi Kawamura, Kazuto Fukunaga, Hisakazu Mihara
Hiroshi Tsutsumi, presiding
- 17:05 1W18 Correlation between blood-compatibility and in-plane phase separation structure at the biocompatible polymer/water interface.
Yoko Kitahara, Daiki Murakami, Shingo Kobayashi, Masaru Tanaka
- 17:30 1W19 In vitro degradable property of free-standing polymer nanosheets
Yuya Ishizuka, Toshinori Fujie, Shinji Takeoka
- 17:55 1W20 Construction of three-dimensional tissue models by cell manipulation for drug development and regenerative medicine
Takami Akagi, Akashi Mitsuru

Thu. Sep 15

S16. Novel axis for biopolymers generated by molecular assembly: from molecules, particles, and interface to biological cells

Naohiko Shimada, presiding

- 9:10 2W01 Enzymatic Synthesis of Oligo(ethylene glycol)-Bearing Cellulose Oligomers and their Self-Assembly Driven Hydrogel Formation
Takatashi Nohara, Toshiki Sawada, Hiroshi Tanaka, Takeshi Serizawa
- 9:35 2W02 Self-Assembly in the Deep-Sea Extreme Environments and the Origin of Life
Shigeru Deguchi
- 10:00 2W03 Regulation of Molecular Adsorption and Release by Structural Transition of Molecular Recognition Polypeptide Hydrogels Designed via Molecular Imprinting
Kazuya Matsumoto, Yoshinori Ito, Akifumi Kawamura, Takashi Miyata

Shigeru Deguchi, presiding

- 10:25 2W04 Correlation between secondary structure and UCST-type thermoresponsibility of ureido polypeptide
Sotaro Kuroyanagi, Naohiko Shimada, Atsushi Maruyama
- 10:50 2W05 Design and function of polysaccharide nanogel cross-linked gel for enzyme-degradable scaffold
Shigeo Takeda, Keiji Okita, Shin-ichi Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi

Toshiki Sawada, presiding

- 11:15 2W06 Construction of artificial viral capsid bearing coiled-coil on the surface.
Seiya Fujita, Shouya Yamamoto, Kazunori Matsuura
- 11:40 2W07 Design of self-assembling peptide nanofibers for antigen delivery carriers
Tomonori Waku, Takehiro Deromachi, Shigeru Kunugi, Naoki Tanaka

Kazunori Matsuura, presiding

- 12:55 2W08 Evaluation of tissue detaching system employing polysaccharide derivative.
Asuka Kato, Mitsuru Akashi
- 13:20 2W09 Design of glyco polymer vesicles with molecular permeability and their bio-application.

Tomoki Nishimura, Sada-atsu Mukai, Shinichi Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi

- 13:45 2W10 Supramolecular Chirality : Vesicle-to-Chiral Helix Transition of the Micelles Consisting of a Sugar-Bearing Calix[4]arene Surfactant
Shunsuke Sakamoto, Shota Fujii, Kenta Yoshida, Kazuo Sakurai

Kenichi Niikura, presiding

- 14:10 2W11IL Development of virus detection method using oligosaccharide/peptide libraries
Toshinori Sato

Yoshiko Miura, presiding

- 15:00 2W13 Investigate the functions of mucin in tear liquids using extracted from jellyfish
Ayaka Oohata, Kimirori Ushida, Gai Kawamura

- 15:25 2W14 Systematic interaction analysis of synthetic glycopeptides with proteins using glycoblotting-type microarray system
Hiroshi Hinou

Hiroshi Hinou, presiding

- 15:50 2W15 Binding and catalytic analyses of various chitinases to chitin interfaces by AFM force-distance curves
Toshiaki Mori, Saki Kato, Asuka Masui, Yuko Nakagawa

- 16:15 2W16 Protein Separation by Glycopolymer monolith
Yoshiko Miura, Makoto Shibuya, Hirokazu Seto, Yu Hoshino

Toshiaki Mori, presiding

- 16:40 2W17 QCM analysis of interaction between glycopolymers with pendant oligosaccharides and glycoproteins
Masaru Okamoto, Tomonari Tanaka

- 17:05 2W18 Synthesis and Assay of Human and Avian Influenza Virus-Recognizing Glycopolymers Bearing Sialyloligosaccharides
Yiting Zhou, Chihiro Tamoto, Yuuki Kurebayashi, Tadanobu Takahashi, Takashi Suzuki, Yoshiko Miura, Tomonari Tanaka

Fri. Sep 16

S16. Novel axis for biopolymers generated by molecular assembly: from molecules, particles, and interface to biological cells

Kazuma Yasuhara, presiding

- 9:10 3W01 Synthesis of Blood Compatible Nanoparticle Compositated Hydrogel Microspheres
Takuma Kureha, Daisuke Suzuki

- 9:35 3W02 Design of PEG-b-Poly(L-Arginine) based nanoparticle for macrophage-targeting cancer immunotherapy
Yukio Nagasaki, Shinpei Kudo

- 10:00 3W03 Preparation of dendron lipid assemblies with structural transition properties at acidic pH and their application to cytoplasmic delivery system
Eiji YUBA, Tomohiro DOURA, Megumi YAMADA, Atsushi HARADA, Kenji KONO

Seiji Sakamoto, presiding

- 10:25 3W04 Peptide-modified polymeric nanoparticles with precisely controlled size
Kiyoshiro Narimatsu, Nobuyuki Higashi, Tomoyuki Koga

- 10:50 3W05 Formation of lipid bilayer nanodiscs by amphiphilic random copolymers
Kazuma Yasuhara, Jin Arakida, Masaya Inoue, Jun-ichi Kikuchi
- Eiji Yuba, presiding**
- 11:15 3W06 Affinity-based collection of proteins using peptides that bind to thermoresponsive polymers
Seigo Suzuki, Toshiki Sawada, Takashi Ishizone, Takeshi Serizawa
- 11:40 3W07 Characterization and functional evaluation of enzyme-loaded polyion complex vesicles as in vivo nanoreactors working in the circulating blood
Daiki Sueyoshi, Yasutaka Anraku, Kazunori Kataoka
- Toshiki Sawada, presiding**
- 12:55 3W08 In vivo crystallization of polyhedra for encapsulating exogenous proteins
Makoto Kasamatsu, Satoshi Abe, Hajime Mori, Takafumi Ueno
- 13:20 3W09 Supramolecular Enantiodifferentiating Photocyclodimerization of 2- and 2,6-Anthracenecarboxylate Derivatives with Molecular Assembled Proteins & Polymer Hybrids as Chiral Reaction Media
Mitsuru OKUGI, Souta TOYOOKA, Yuya FUJISHIRO, Masaki NISHIJIMA, Yasuyuki ARAKI, Seiji SAKAMOTO, Yutaka IKEDA, Yukio NAGASAKI, YOSHIHISA INOUE, Takehiko WADA
- 13:45 3W10 Higher-Order Assembling Structures and Functions of Photosynthetic Membrane Proteins in lipid bilayers
Takehisa Dewa, Koji Momota, Soichiro Hayashi, Nobutaka Takeda, Mikano Matsuo, Masaharu Kondo, Mamoru Nango
- Takehisa Dewa, presiding**
- 14:10 3W11 Effect of deformation rate on the mechanical properties of spider dragline silk
Kenjiro Yazawa, Hiroe Watanabe, Keiji Numata
- 14:35 3W12 Construction of photo-induced CO releasing cell-puncturing protein needle for regulation of cellular functions
Takeya Sho, Takafumi Ueno
- Hiromu Kashida, presiding**
- 15:00 3W13 Development of the hybrid of single chain Fv and nanoparticles prepared by cell-free protein synthesis.
Risako Miura, Mitsuru Ando, Shin-ichi Sawada, Yoshihiro Sasaki, Kazunari Akiyoshi
- 15:25 3W14 Effect of the cationic graft copolymer and the membrane active peptide complexes on the cell membranes
Wakako Sakamoto, Nozomi Kume, Naohiko Shimada, Atsushi Maruyama

Room X

Wed. Sep 14

S10. Functional polymer chemistry for energy conversion and storage

- 10:40 1XSO Introductory Remarks S10
Hiromori Tsutsumi
- Shiro Seki, presiding**
- 10:50 1X05 Preparation and characterization of poly(oxetane)-based solid electrolytes having various side chains

Ryansu Sai, Kazuhide Ueno, Seiko Hirata, Hiromori Tsutsumi
11:15 1X06 Properties of Solid Polymer Electrolytes using Poly(trimethylene carbonate) Derivatives
Kaito Nakamura, Takahiro Uno, Masataka Kubo, Takahito Itoh

11:40 1X07 The relationship between hierarchical molecular mobility and conductivity of carbonate oligomer-based electrolytes
Katsuhiko Kaetsu, Kazutoshi Yokomachi, Ken Kojio, Atsushi Takahara

Noriyoshi Matsumi, presiding

12:55 1X08 Preparation of PEO-Based Polymer Electrolyte Utilizing Ring-Penetration of Cyclic PEO as a Plasticizer
Masashi Noba, Takahiro Uno, Takahito Itoh, Nobuyuki Imanishi, Masataka Kubo

13:20 1X09 Analysis and Imaging of Ionic Transport and electrode interface of Polymer Electrolytes
Shiro Seki, Takeshi Kobayashi, Katsuhiko Takei, Kikuko Hayamizu, Masayoshi Watanabe

13:45 1X10 Development of ion conductive interface based on three-dimensional periodic minimal surface
Takahiro Ichikawa, Takashi Kato, Hiroyuki Ohno

Takahiro Uno, presiding

14:10 1X11 Development of Self-Assembled Liquid-Crystalline Electrolytes and Their Application to Lithium-Ion Batteries
Taira Onuma, Junji Sakuda, Kenichiro Arai, Motokuni Takenouchi, Eiji Hosono, Masafumi Yoshio, Haoshen Zhou, Takashi Kato

14:35 1X12 Synthesis of Polycarbosilanes Having 5-Membered Cyclic Carbonate Structure and their Application to Ion Conducting Materials
Kozo Matsumoto, Miho Kakehashi, Hirotaka Ouchi, Takeshi Endo

15:00 1X13 Design of lithium ion conductive matrices scaffolded by crystalline boron compounds
Noriyoshi Matsumi, Prerna Joshi, Raman Vedarajan

Hiromori Tsutsumi, presiding

15:25 1X14 Synthesis of Three-functional Alkenyl Ester Network Polymer by Thiol-ene Reaction and Application to Electrolyte for Li-ion Batteries
Seiya Tanji, Kazuhiro Yamabuki, Kenta Fujii, Masayuki Morita, Nobuko Yoshimoto

15:50 1X15 Polymer Electrolyte Properties of Physical Ion-gels using Self-assembly of Ionomer Block Copolymers
Takayuki KAWAZOE, Yumi KOBAYASHI, Yuzo KITAZAWA, Kei HASHIMOTO, Hisashi KOKUBO, Masayoshi WATANABE

16:15 1X16 Nearly Ideal Polymer Network Ion Gel for Li-ion Batteries
Kenta Fujii, Jyunki Yamamoto, Nobuko Yoshimoto, Masayuki Morita

16:40 1X17 High Performance of Polymer Actuators Based on Tetra-PEG Polymer Electrolytes
Ryosuke Shioiri, Yumi Kobayashi, Tatsuhiko Horii, Hisashi Kokubo, Masayoshi Watanabe

Hisashi Kokubo, presiding

17:05 1X18 Preparation and evaluation of ion conductive polymer nanofiber framework for all-solid-state lithium ion battery
Tsukasa Watanabe, Manabu Tanaka, Hiroyoshi Kawakami

17:30 1X19 Synthesis and Evaluation of Magnesium Secondary Battery Electrolytes (II) - Effect of anion species of ionic liquids-
Daisuke Fukuma, Masahiro Fujita, Yuko Takeoka, Masahiro Rikukawa

17:55 1X20 Synthesis of PEDOT Fibers by Bipolar Electropolymerization
Shinsuke Inagi, Yuki Koizumi, Masato Ohira, Hiroki Nishiyama, Ikuyoshi Tomita

Thu. Sep 15

S10. Functional polymer chemistry for energy conversion and storage

Kazunari Soeda, presiding

9:10 2X01 Composites of Polypyrrole and Quinone Derivatives Synthesized on the Crystal Surface

Mirei Arayasu, Kosuke Sato, yuya Oaki, Hiroaki Imai

9:35 2X02 Polymer Redox Capacitor Materials for Fast and High Density Charge Storage

Kenichi Oyaizu, Hiroyuki Nishide

10:00 2X03 All-Organic Flexible Supercapacitors Using Conducting Polymer

Haruki Saito, Hiromi Takezawa, Hidenori Okuzaki

Kenichi Oyaizu, presiding

10:25 2X04 Copolymers prepared from sulfur and alkenyl derivatives having long-alkyl chain and their electrochemical properties in an organic liquid electrolyte

Kohei Nagata, Kanae Itaka, Kazuhiro Yamabuki, Kazuhide Ueno, Hiromori Tsutsumi

10:50 2X05 Characterization of porous carbon nanofiber prepared by electrospinning method and its application for lithium-sulfur batteries

Jun Toshimitsu, Kazuhide Ueno, Hiromori Tsutsumi

11:15 2X06 Rechargeable Li Battery Performance Enhanced by Modified Polymer Binder

Masashi Ishikawa, Naoki SHIMOWASA, Masaki Yamagata, Kazunari Soeda, Satoshi Uchida, Yukiko Matsui

S11. Polymer materials for energy diversification and efficient energy conversions

12:45 2XSO Introductory Remarks S11

Takeo Yamaguchi

Junpei Kuwabara, presiding

12:55 2X08 Construction of nanofiber frameworks with continuous proton conductive pathways and their fuel cell applications

Manabu Tanaka, Takeru Wakiya, Takahito Makinouchi, Takahiro Ogura, Hiroyoshi Kawakami

13:20 2X09 A series of ion conductive polymer nanofiber framework: Fabrication and electrolyte performances

Tsukasa Watanabe, Manabu Tanaka, Hiroyoshi Kawakami

Junpei Miyake, presiding

13:45 2X10 Correlation study of proton conductivity and mechanical properties of the polymer electrolyte membrane by AFM

Seiichi Kuroda, Makoto Yamaguchi, Akihiro Ohira

14:10 2X11 The structural evaluation of the microphase-separated structures of poly(p-phenylene) hydrocarbon diblock copolymers for polymer electrolytes

Hidekazu Sugimori, Makoto Yamaguchi, Akihiro Ohira, Ken-ichi Ogu, Masahiro Rikukawa

- 14:35 2X12 Highly proton conductive polyimide thin films with organized structure
Yutaro Ono,Ryousuke Goto,Mitsuo Hara,Shusaku Nagano,Takashi Abe,Yuki Nagao
Takeo Yamaguchi, presiding
- 15:00 2X13IL Hydrogen Energy Technology: Current status and future perspectives
Kazunari Sasaki
Yasunari Maekawa, presiding
- 15:50 2X15 Synthesis and evaluation of diblock electrolytes (II) -Correlation of ion exchange capacity and gas permeability-
Ikuma Sakamoto,Masahiro Fujita,Yuko Takeoka,Masahiro Rikukawa
- 16:15 2X16 Synthesis and evaluation of graft-type hydrocarbon polymer electrolytes (VI) - Effect of graft density -
Ryo Ide,Masahiro Fujita,Yuko Takeoka,Masahiro Rikukawa
Shoji Miyanishi, presiding
- 16:40 2X17 Synthesis and Properties of Novel Sulfonated Polyphenylenes
Junpei Miyake,Ryunosuke Taki,Ryo Akiyama,Ryo Shimizu,Kenji Miyatake
- 17:05 2X18 Sacrificial Reducing Agent Free Photo-generated Pt Nano Particles on Carbon/TiO₂ Substrate for Efficient Oxygen Reduction Reaction
Rajashekar Badam,Raman Vedarajan,Noriyoshi Matsumi

Fri. Sep 16

S11. Polymer materials for energy diversification and efficient energy conversions

Makoto Yamaguchi, presiding

- 9:10 3X01 Advanced polymer electrolyte membranes for fuel cells
Je Deok Kim
- 9:35 3X02 Characterization of perfluorinated block copolymer electrolytes as a material for PEFCs
Takeshi Hirai,Atsushi Watakabe,Tatsuya Miyajima,Hiroyuki Watabe,Tetsuji Shimohira
- 10:00 3X03 The Modeling of Chemical Degradation and Lifetime Prediction of Polymer Electrolyte Membrane for Fuel Cells
Atsushi Hiraide

Junpei Miyake, presiding

- 10:25 3X04 Development of anion conductive all-aromatic polyelectrolytes with spirosegment and analysis of their property
Shoji Miyanishi,Takeo Yamaguchi
- 10:50 3X05 Structure and property of graft-type anion-conducting polymer electrolyte membranes consisting of imidazolium groups
Yasunari Maekawa,Kimio Yoshimura,Yue Zhao,Akihiro Hiroki,Hideyuki Shishitani,Yoshihiro Kishiyama,Susumu Yamaguchi,Hirohisa Tanaka

Manabu Tanaka, presiding

- 11:15 3X06 Stability of aromatic copolymer anion exchange membranes for fuel cell applications: Impact of varying ammonium structure
Ahmed Mohamed Ahmed Mahmoud,Ahmed Mohamed Mohamed Elsayghier,Kenji Miyatake
- 11:40 3X07 Cationic Extended Organic Framework: Construction of One-Dimensional Anion Conduction Channels

SHINJI ANDO, TAKANORI FUKUSHIMA, TAKEO YAMAGUCHI

Hiroko Yamada, presiding

- 12:55 3X08 Photoelectric conversion property of conjugated polymer prepared by direct arylation polycondensation
Junpei Kuwabara, Yohei Fujie, Keisuke Maruyama, Takeshi Yasuda, Takaki Kanbara
- 13:20 3X09 An Efficient Perovskite Solar Cells through Molecular Structure of Hole Transporting Polymer
Hirofumi Maruo, Risano Nakajima, Yusuke Sasaki, Sugaru Tanaka, Kenichi Oyaizu, Hiroyuki Nishide

Kenichi Oyaizu, presiding

- 13:45 3X10 Influence of Polymer Side Chains and Molecular Weights on Thin-Film Structure and Photovoltaic Properties in Phenanthrothiophene-Based Semiconducting Polymers
Hiroki Mori, Ryosuke Takahashi, Shuto Hara, Yasushi Nishihara
- 14:10 3X11 Semiconducting and elastomeric block copolymers
Tomoya Higashihara, Seijiro Fukuta, Satoshi Miyane
- 14:35 3X12 Control of nano-structure of low-molecular organic photovoltaics by solution process
Hiroko Yamada, Mitsuharu Suzuki, Yuji Yamaguchi, Ken-ichi Nakayama

Room ESA

Wed. Sep 14

E. POLYMERS AND ENVIRONMENT “English Session”

Takeshi Shiono, presiding

- 10:25 1ESA04 Preparation of polylactide bearing chromophore at chain end and their functionalization
Kai KAN, Hiroharu AJIRO, Michiya FUJIKI, Mitsuru AKASHI
- 10:50 1ESA05 Ultrafast permeation composite membrane based on metal-organic framework for water filtration
Xuan Dai Trinh, Toshiaki Taniike

Hiroharu Ajiro, presiding

- 11:15 1ESA06 Physical properties of injection-molded products of virgin and recycled blends system
Aya Tominaga, Hiroshi Sekiguchi, Ryoko Nakano, Shigeru Yao, Eiichi Takatori
- 11:40 1ESA07 Underwater Corrosion Resistance Assessment of Bio-based Adhesive Coating Inspired by Mussel in Magnesium Alloy
siqian wang

D. BIOPOLYMERS AND BIORELATED POLYMERS “English Session”

Tooru Ooya, presiding

- 12:55 1ESA08 MIP-Nanogels 1: Synthesis of Molecularly Imprinted Nanogels Targeting Serum Proteins

Reo Sasao, Yukiya Kitayama, Toshifumi Takeuchi

- 13:20 1ESA09 MIP-Nanogels 2: Molecularly Imprinted Nanogels Bearing Stealth Property Induced by Cloaking Albumin in situ
Yukiya Kitayama, Reo Sasao, Toshifumi Takeuchi, Yu Matsumoto, Kazunori Kataoka, Toshifumi Takeuchi
- 13:45 1ESA10 Smart Nanofiber Meshes for Combined Thermo-chemotherapy Controlled by Alternating Magnetic Field
Eri Niiyama, Chun Man Lee, Mitsuhiro Ebara

Yukiya Kitayama, presiding

- 14:10 1ESA11 Evaluation of water-soluble polymers for dissolution of poorly soluble drugs
Motomi Kimura, Tooru Ooya
- 14:35 1ESA12 LAYERED SACRAN HYDROGELS WITH ANISOTROPIC PORE STRUCTURES PREPARED BY SIMPLE FREEZE-DRYING
Saranyoo SORNKAMNERD, Kazuaki MATSUMURA, Kosuke OKEYOSHI, Maiko K. OKAJIMA, Tatsuo KANEKO

Ikuyoshi Tomita, presiding

- 15:00 1ESA13 Transparent nanocrystalline polymer hydrogel for 3D artificial neuronal network culture
Myung-Han Yoon, Dongyoon Kim
- 15:25 1ESA14 Solid-state NMR structural study of photoreceptor membrane proteins
Izuru Kawamura
- 15:50 1ESA15 Site-Specific Bioconjugation of Biopolymers Using Non-Natural Amino Acids
Inchan Kwon, Sung In LIM, Byungseop YANG
- 16:15 1ESA16 Spider silk-like polypeptides: Enzymatic synthesis and materials design with water molecules.
Keiji Numata

Yukio Nagasaki, presiding

- 16:40 1ESA17 Straightforward incorporation of theranostic oligodeoxyribonucleotides onto self-assembled lipid-DNA micelles via base-pairing
Haein PARK, Jan Willem de Vries, Andreas Herrmann, Jun-O JIN, Minseok Kwak
- 17:05 1ESA18 Facile Synthesis of Glycopolymers from Free Sialyloligosaccharides and Their Binding Assay with Influenza Viruses
Tomonari Tanaka
- 17:30 1ESA19 Synthesis and Characterization of Poly(EGDMA-HEMA) Micro-sized Beads through Electro-spraying Method with Photo-polymerization
Hyunjung Lee, Soohyun Kim, Tian Qiao
- 17:55 1ESA20 Hierarchical Heterogeneity in an Aqueous Dispersion of Cellulose Nanofibers
Atsuomi Shundo, Yuji Matsumoto, Hisato Hayashi, Nobutomo Tsuruzoe, Keiji Tanaka

Thu. Sep 15

D. BIOPOLYMERS AND BIORELATED POLYMERS “English Session”

Atsushi Mahara, presiding

- 9:10 2ESA01 Reprogramming of human MSCs into human iPSCs cultured on ECM-derived oligopeptide grafted hydrogels having different elasticity via Sendai virus transduction
Hsing-Fen Li, Akon Higuchi

- 9:35 2ESA02 Human pluripotent stem cells culture on surface coated with thermoresponsive nanosegments and ECM-derived nanosegments under xeno-free conditions
Akon Higuchi
- 10:00 2ESA03 Molecular design of nanosegment-immobilized surface for human ES and iPS cell culture
Li Hua Chen,Hsing-Fen Li,Akon Higuchi
- 10:25 2ESA04 Xeno-free culture of human ES and iPS cells on nanosegment-immobilized surface
Meng Pei Li,Hsing-Fen Li,Akon Higuchi

Akon Higuchi, presiding

- 10:50 2ESA05 Polymeric MRI contrast agent for visualization of brain microvessel
Atsushi Mahara,Yui Hsu,Jun-ichiro Enmi,Hidehiro Iida,Tetsuji Yamaoka
- 11:15 2ESA06 A Novel Design of Polyion Complex (PIC) with The Pyruvate-Reactive Function toward Enhanced Cytosolic Release of siRNA
Chihling Wang,Hiroyasu Takemoto,Takahiro Nomoto,Keishiro Tomoda,Makoto Matsui,Nobuhiro Nishiyama
- 11:40 2ESA07 Material Fluidity Induced Senescence Type of Cell Death in Cancer Cells: A Novel Approach to Cancer Therapy
Sharmy Saimon Mano,Koichiro Uto,Mitsuhiro Ebara

Hiroataka Ejima, presiding

- 12:55 2ESA08 Analysis of growth inhibitory mechanisms in PHA producing plants
Takeshi Yoshizumi,Keiji Numata
- 13:20 2ESA09 Metabolome analysis of stable isotope-labeled algae by Raman spectroscopy
Yusuke Yonamine,Yuta Suzuki,Takuro Ito,Tomohisa Hasunuma,Yoshiko Miura,Keisuke Goda,Yasuyuki Ozeki,Yu Hoshino
- 14:10 2ESA11 The combination of Nanosuit and EDS methods revealed the elements of biopolymer included in alive sample
Haruko Matsumoto,Yasuharu Takaku,Masatsugu Shimomura,Takahiko Hariyama

Yu Hoshino, presiding

- 14:35 2ESA12 Regulation of bacterial cell-to-cell signaling using self-assembly of triblock copolymer
Chigusa Okano,Eri Nasuno,Tomohiro Morohoshi,Ken-ichi Iimura,Norihiro Kato
- 15:00 2ESA13 Antioxidant and adsorption properties of polyphenol-mimetic polymers: a comparative study of catechol and gallol
Kan Zhan,Hiroataka Ejima,Naoko Yoshie
- 15:25 2ESA14 Immunomodulatory Effect of Apoptotic Cell Membrane Inspired Polymer (MPS) for Post-inflammation Therapy
Yasuhiro Nakagawa,Atsuhiro Saito,Takao Aoyagi,Mitsuhiro Ebara

Norihiro Kato, presiding

- 15:50 2ESA15 Molecular design of protein crystals for construction of functional supramolecular architectures
Hashiru Negishi,Tien Khanh Nguyen,Satoshi Abe,Takafumi Ueno
- 16:15 2ESA16 Proteinase K derivatized with heavy atoms enhanced activities both in hydrolysis and aminolysis
Kenjiro Yazawa,Michihiro Sugahara,Katsuhide Yutani,Keiji Numata
- 16:40 2ESA17 Structure-activity relationship of calixarene antimicrobial agents
Kazuma Yasuhara,Hideto Kibata,Takuto Nakano,Satoru Yoshizumi,Jun-ichi Kikuchi

17:05 2ESA18 Interaction of CRAC-motif peptide and Cholesterol in Fluid Phospholipid Bilayers
masaru Mukai, Steven L. Regen

Fri. Sep 16

D. BIOPOLYMERS AND BIORELATED POLYMERS “English Session”

Hironmu Kashida, presiding

9:10 3ESA01 Cell adhesion events mediated by E-cadherin-binding DNA aptamer that forms parallel type G-quadruplex with three long loops
Ryo Maruyama, Toru Yoshitomi, Fumiya Wayama, Koji Wakui, Hitoshi Furusho, Keitaro Yoshimoto

9:35 3ESA02 Development of siRNA-conjugated polymer with coil-globule transition behavior for an artificially controlled gene silencing activity.
Noor Faizah Che Harun, Hiroyasu Takemoto, Takahiro Nomoto, Keishiro Tomoda, Makoto Matsui, Nobuhiro Nishiyama

10:00 3ESA03 DNA aptamer selection by beads based capillary electrophoresis
Koji Wakui, Maho Tsuchida, Shingo Saito, Masami Shibukawa, Hitoshi Furusho, Keitaro Yoshimoto

Nobuhiro Nishiyama, presiding

10:25 3ESA04 Development of a linear probe tethering Cy3 for RNA detection in cell.
Hironmu Kashida, Kazuhiro Morimoto, Hiroyuki Asanuma

10:50 3ESA05 Design of Zeolite-polymer Composite Nanofiber Meshes as a New Treatment of Kidney Failure Diseases
Ryo Takai, Rio Kurimoto, Mitsuhiro Ebara

11:15 3ESA06 Precise Control of Vascular Networks in 3D Tissues Based on Controlled Sol-Gel Transition of Gellan Gum
Haruki Ikeguchi, Yuto Amano, Michiya Matsusaki

11:40 3ESA07 A Novel Purifying Method for Biomarkers using Clickable Thermo-responsive Polymer
Naoto Nomura, Akihiko Kikuchi, Mitsuhiro Ebara

Yasutaka Anraku, presiding

12:55 3ESA08 Improvement of adhesiveness of biocompatible star polymer coatings consisting of hydrophilic/hydrophobic chains
Yuji Kinoshita, Masayasu Totani, Mime Kobayashi, Kayo Terada, Tsuyoshi Ando, Masao Tanihara

13:20 3ESA09 Evaluation of plasma proteins adsorbed on poly(tetrafluoroethylene-co-vinyl alcohol) coating
Masayasu Totani, Tsuyoshi Ando, Masao Tanihara, Haruhiko Mouri, Yoshito Tanaka, Tadashi Kanbara, Takuma Kawabe, Jun Miki

13:45 3ESA10 Antioxidative nanotherapeutics for inflammatory bowel disease and evaluation of its safety
Long Binh Vong, Toru Yoshitomi, Hirofumi Matsui, Makoto Kobayashi, Yukio Nagasaki

Keitaro Yoshimoto, presiding

14:10 3ESA11 Development of dual ligands-decorated polymeric micelles with targeting ability in brain parenchyma
Takuya Watanabe, Yasutaka Anraku, Mao Hori, Kazunori Kataoka

14:35 3ESA12 Synthesis and Evaluation of Poly[N-isopropylacrylamide]-based Boron

Containing Polymer Nanomicelle
Shuichiro Yoneoka, Ki Chul Park, Yasuhiro Nakagawa, Mitsuhiro
Ebara, Takehiko Tsukahara

Room ESB

Wed. Sep 14

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

Nobuhiro Kihara, presiding

- 10:00 1ESB03 Sequence-regulated radical copolymerization using a porous metal complex as a template
Shuto Mochizuki, Naoki Ogiwara, Masayoshi Takayanagi, Masataka Nagaoka, Takashi Uemura, Susumu Kitagawa
- 10:25 1ESB04 Synthesis of conjugated polymers via aerobic oxidative coupling reaction using copper catalyst
Alanna Faradhiyani, Qiao Zhang, Junpei Kuwabara, Takaki Kanbara
- 10:50 1ESB05 Spontaneous helix-sense-selective polymerization of achiral acetylenes in the absence of chiral sources during polymerization
Guanwu Yin, Masahiro Teraguchi, Takashi Kaneko, Toshiki Aoki
- 11:15 1ESB06 Control of the helical sense of helix-sense-selective polymerization by changing "achiral condition" using an identical chiral source and its mechanism
Guanwu Yin, Masahiro Teraguchi, Takashi Kaneko, Toshiki Aoki
- 11:40 1ESB07 Palladium-Catalyzed Polycondensation Utilizing Chain-walking of Non-conjugated dienes
Liyi Tan, Daisuke Takeuchi, Kohtaro Osakada

Toshiki Aoki, presiding

- 12:55 1ESB08 Fabrication of oriented conjugated polymer films with network structure by electrochemical polymerization in liquid crystals
Jiuchao Dong, Hiromasa Goto
- 13:20 1ESB09 Synthesis of cysteine-contained poly(styrene) zwitterionic polymer and its application to metal adsorption
Huseyin Akbulut, Shuhei Yamada, Takeshi Endo
- 13:45 1ESB10 Synthesis and properties of tetra-functional benzoxazine monomer
Sini N K, Takeshi Endo
- 14:10 1ESB11 Synthesis and oxidative degradation of novel polyamide bearing diacylhydrazine moiety
Md. Masud Parvez, Nobuhiro Kihara
- 14:35 1ESB12 Luminescence Originated from Thermo-Oxidative Degradation of Recombinant Spider Silk
Anh T.N. Dao, Koyuru Nakayama, Jun'ichi Shimokata, Kengo Takeuchi, Toshiaki Taniike

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS “English Session”

Yasuchika Hasegawa, presiding

- 15:00 1ESB13 Red Fluorescent Azobenzene Aggregates
Mina Han, Sung June Cho, Yasuo Norikane, Takahiro Seki
- 15:25 1ESB14 White Color Luminescence from a Single Polymer Material: Controlling the Luminescent Color with External Stimuli
Osama Younis, Shigeyuki Yamada, Osamu Tsutsumi
- 15:50 1ESB15 Flexible UV detector application using catechol functionalized polysiloxanes
Yida Liu, Huie Zhu, Shunsuke Yamamoto, Tokuji Miyashita, Masaya Mitsuishi
- Masaya Mitsuishi, presiding**
- 16:15 1ESB16 Development of Polymer Electrolyte Membrane Based on Sulfoalkylated Polybenzimidazoles
Hoon Han, Tsuyohiko Fujigaya, Naotoshi Nakashima
- 16:40 1ESB17 Slide ring material based solid polymer electrolyte with macromolecular crosslinker
Ying-Cheng Lin, Hideaki Yokoyama, Kohzo Ito
- 17:05 1ESB18 Preparation of low viscosity thermoplastics based on supramolecular chemistry and the thermal property control
Mikihiro Hayashi, Francois Tournilhac
- Mikihiro Hayashi, presiding**
- 17:30 1ESB19 Superhydrophobic Surfaces of Cellulose Nanofiber Nanoassemblies
Md Mahbubul Bashar, Huie Zhu, Shunsuke Yamamoto, Tokuji Miyashita, Masaya Mitsuishi

Thu. Sep 15

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS “English Session”

Atsushi Kameyama, presiding

- 9:10 2ESB01 Controlling the laponite and PLGA-PEG-PLGA composition for the thermoresponsive sol-gel transition of an aqueous PLGA-PEG-PLGA/laponite solution
Tomoki Maeda, Makoto Miyazaki, Atsushi Hotta
- 9:35 2ESB02 Pt(II)-based metallo-supramolecular polymer with multi-responsive emission
Chanchal Chakraborty, Satoshi Moriyama, Masayoshi Higuchi
- 10:00 2ESB03 Multi-Chromic Response of Polythiophene Nanoparticles in Aqueous Media
Krishnachary Salikolimi, Pan He, Toshiro Aigaki, Yoshihiro Ito, Masuki Kawamoto

Masayoshi Higuchi, presiding

- 10:25 2ESB04 Photophysical properties of Eu(III) coordination polymers dependent on metal complex ligands
Masanori Yamamoto, Takayuki Nakanishi, Yuichi Kitagawa, Tomohiro Seki, Hajime Ito, Koji Fushimi, Yasuchika Hasegawa
- 10:50 2ESB05 Nanostructuring of PEDOT in Porous Coordination Polymers for Tunable Porosity and Conductivity
Benjamin Le Ouay, Takashi Kitao, Takashi Uemura, Susumu Kitagawa

Takashi Uemura, presiding

- 11:15 2ESB06 Transparent polyrotaxane-silica hybrid aerogel with strong mechanical property
Lan Jiang, Kazuaki Kato, Koichi Mayumi, Hideaki Yokoyama, Kohzo Ito
- 11:40 2ESB07 Microphase-separated Structure of Random Copolymers of POSS

Methacrylate and Butylmethacrylate
Hossein Taherzadeh,Yoshihito Ishida,Atsushi Kameyama

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

Shigeru Okamoto, presiding

- 12:55 2ESB08 Stereocontrol and Helicity Generation of Polymethacrylates Bearing Dynamic Thiahelicene Unit as the Pendant
Yoko Nambu,Toshikazu Takata,Toru Taniguchi,Kenji Monde
- 13:20 2ESB09 Crystal Structure Evolution Behavior of Poly (butylene adipate) during Heat Treatment Based on Simultaneous Measurements of Wide-Angle X-ray Diffraction (WAXD) and Differential Scanning Calorimetry (DSC)
Mengfan WANG,Kohji TASHIRO,Yukihiko OZAKI
- 13:45 2ESB10 Blend Effect of Amorphous Poly(DL-lactide) on Magnetic Oriented Poly(L-lactide) Films
Rei Nakayama,Shuto Watanabe,Hiroki Ikake,Kimio Kurita,Shigeru Shimizu,Satoshi Kurumi,Kaoru Suzuki,Kohki Takahashi,Hiroyuki Nojiri

Jin Gong, presiding

- 14:10 2ESB11 SVD Analysis of SAXS in OBDD-OBDDG Transition - Intermediate Structure? -
Shigeru Okamoto,Koudai Suzuki
- 14:35 2ESB12 Structural Study with Distortion in OBDD and OBDDG Transition by SCFT Simulation and SAXS Analysis Based on Paracrystal Theory
Koudai Suzuki,Kengo Nomura,Shigeru Okamoto,Takashi Honda
- 15:00 2ESB13 Molecular orientation of unoriented crystalline polymer films under bulge testing
Ken Kojio,Aya Fujimoto,Chigusa Nagano,Shuhei Nozaki,Kazutaka Kamitani,Hirohmi Watanabe,Atsushi Takahara
- 15:25 2ESB14 Evaluation of dynamic viscoelastic properties in isotactic polypropylene based on synchrotron radiation dynamic x-ray diffraction technique
Shuhei Nozaki,Ken Kojio,Atsushi Takahara,Kohki Aoyama,Hiroyasu Masunaga

Ken Kojio, presiding

- 15:50 2ESB15 The effects of different monomers on the thermal and crystal properties of phase change microcapsules
Yuchen MAO,Takuya MIYAZAKI,Kyohei HOSOYA,Reona SAKAKIBARA,Takumi OIKAWA,Jin GONG,Meifang ZHU
- 16:15 2ESB16 UV Patterned Calixarene-Derived Supramolecular Gels and Films with Spatially Resolved Mechanical and Fluorescent Properties
JI HA LEE,Jong Hwa Jung,Kazuo Sakurai
- 16:40 2ESB17 Structural Analysis and Application of Cellulose Acetate and Zirconium Alkoxide Hybrid Fibers
Hanako Asai,Koji Nakane,Fumihiko Nishimura,Susumu Yonezawa,Hiroaki Nitani
- 17:05 2ESB18 Rapid phase separation in aqueous solution of thermoresponsive poly(N,N-diethylacrylamide) by modification of the first-order structure
Mitsuhiro Matsumoto,Taka-Aki Asoh,Tatsuya Shoji,Yasuyuki Tsuboi

Fri. Sep 16

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

Hisao Matsuno, presiding

- 9:10 3ESB01 Time-Resolved Nanostructural Analysis of Thin-Film Formation Process from Nafion Solution by Synchrotron X-ray Scattering
Yuichi Konosu, Matsumoto Hidetoshi, Masatoshi Tokita, Hiroyasu Masunaga, Takaaki Hikima, Takashi Sasabe, Toshihiko Yoshida, Shuichiro Hirai
- 9:35 3ESB02 Ionic Strength Dependence of Zwitterionic Polymer Brush Chain Conformation
Yuji Higaki, Yoshihiro Inutsuka, Norifumi L. Yamada, Yuka Ikemoto, Atsushi Takahara
- 10:00 3ESB03 Adsorption Layer Structure of Triblock Copolymer at Silica Surfaces Determined by Surface Forces and Neutron Reflectivity Measurements
Yuvaraj Sivalingam, Masashi Mizukami, Norifumi L Yamada, Koichiro Hori, Shin-ichi Yusa, Katsumi Tanigaki, Kazue Kurihara

Ryohei Ishige, presiding

- 10:25 3ESB04 Surface Aggregation States of Poly(vinyl ether-b-lactide) in Thin Films and Its Effect on Cell Adhesion Properties
Hisao Matsuno, Shunya Irie, Toyoaki Hirata, Ruriko Matsuyama, Yukari Oda, Yukiko Seki, Sadahito Aoshima, Keiji Tanaka
- 10:50 3ESB05 Influence of the Polymer Topology on the Stability of Silver Nanoparticles
Jose Enrico Quijano Quinsa, Takuya Yamamoto
- 11:15 3ESB06 Local Conformation and Relaxation Behavior of Polyisoprene on a Solid Substrate
Shin Sugimoto, Manabu Inutsuka, Keiji Tanaka
- 11:40 3ESB07 Molecular simulation study of perfluorosulfonic acid polymer membranes using multiscale molecular modeling
An-Tsung Kuo, Wataru Shinoda, Susumu Okazaki

Yuji Higaki, presiding

- 12:55 3ESB08 Micellization behavior of amphiphilic random copolymers bearing various hydrophobic groups in aqueous solution
Mari Fujimoto, Takahiro Sato
- 13:20 3ESB09 Complexation of globular protein and surfactant in aqueous solution
Yan Li, Takahiro Sato

Takahiro Sato, presiding

- 13:45 3ESB10 Hierarchical Dynamics of Poly(butylene oxide) Studied by Broadband Dielectric Spectroscopy
Osamu Urakawa, Minoru Yamane, Shota Tomie, Tadashi Inoue
- 14:10 3ESB11 Molecular Conformation and Intermolecular Interactions of Rigid Cyclic Polymers in Solution: Cyclic Amylose Carbamate Derivatives
Ken Terao, Akiyuki Ryoki, Hiromi Ichikawa, Shinichi Kitamura
- 14:35 3ESB12 Control of translocation speed toward more accurate single molecule polymer analysis using a nanopore
Makoto Takemasa, Masahiro Fujita, Mizo Maeda