

Room A

Mon. May 19

Initiatives of the Industrial Sector on Carbon and Resource Circulation

Isaki Takeharu, presiding

9:00 1A01IL Initiative for the circular economy
Takayuki Nagai

Shimizu Fumihiko, presiding

9:45 1A04IL Microwave process approach to chemical recycling
Keiji Kitani

Ogawa Shuichiro, presiding

10:30 1A07IL Study and Development on DFM-CCU process
Koji Kuramoto

Messages from the Advanced Chemical Industry

Katsuragi Toshiya, presiding

15:00 1A20IL Ambidexterity and new business/technology development
Shunsuke Yokotsuka

Yoshida Youichi, presiding

15:45 1A23IL Efforts Toward GX and Carbon Neutrality Through Innovation in MeOH
Production Technology
Toshihiro Nomura

Umetani Hiroyuki, presiding

16:30 1A25IL Kuraray's innovation
Toshihiro Omatsu

Tue. May 20

INVITED LECTURES

Kamigaito Masami, presiding

9:00 2AY1IL Precise Synthesis and Functions of Dense Triazole Polymers
Yuri Kamon, Masaki Nakahata, Akihito Hashidzume

9:20 2AY2IL Polymer Synthesis and Function Design Based on Radical
Polymerization of Vinylboronic Acid Derivatives and Side-Chain
Replacement
Tsuyoshi Nishikawa

9:40 2AY3IL Development of Proton Transfer Anionic Polymerization (PTAP) with C-
H Bond as Dormant Species
Mineto Uchiyama

Hayakawa Teruaki, presiding

10:00 2AY4IL Photocontrol of polymer structure and properties by thermally bistable
molecular photoswitches
Keiichi Imato

10:20 2AY5IL Precision Mineralization Utilizing Polymer Hydrogel Template

Takayuki Nonoyama,Ryuji Kiyama,Maradhana Agung Marsudi,Shinji Noguchi,Jian Ping Gong

10:40 2AY6IL Fuctionalization of linear polysiloxanes through ionization and high-density integration
Mitsuo Hara

Wed. May 21

INVITED LECTURES

Tanaka Keiji, presiding

9:00 3AY1IL Raman Spectroscopic Analysis of Mechanical properties and Structural Changes of Polyolefin Materials
Takumitsu Kida

9:20 3AY2IL Polymerization-induced microphase separation
Rintaro Takahashi

9:40 3AY3IL Polymer structural chemistry by dynamic light scattering
Takashi Hiroi

Furukawa Hidemitsu, presiding

10:00 3AY4IL Development of Sim2Real Materials Informatics Fundamentals in Polymeric Materials
Yoshihiro Hayashi

10:20 3AY5IL Nanoporous Crystals for Microstructural Recognition and Separation of Polymers
Nobuhiko Hosono

10:40 3AY6IL Construction of bio-functional supramolecules based on peptide amphiphiles
Rie Wakabayashi

Fri. May 23

AWARD LECTURES

Serizawa Takeshi, presiding

9:30 5A03AL Photooxidative degradation and fragmentation behaviors of oriented isotactic polypropylene
Yingjun AN,Tomoko KAJIWARA,Adchara PADERMSHOKE,Thinh Van NGUYEN,Sinan FENG,Hiroyasu MASUNAGA,Yutaka KOBAYASHI,Hiroshi ITO,Sono SASAKI,Atsuhiko Isobe,Atsushi TAKAHARA

Yasuda Takuma, presiding

10:00 5A05AL Post-functionalization of alternating π -conjugated copolymers containing fluorene moieties via anodic chlorination using $AlCl_3$
Tomoyuki Kurioka,Ikuyoshi Tomita,Shinsuke Inagi

Ikeda Masato, presiding

10:30 5A07AL Morphology of polymer chains spun onto solid substrates
Yuma Morimitsu

Ouchi Makoto, presiding

11:00	5A09AL	Synthesis of Degradable Polymers via 1,5-Shift Radical Isomerization Polymerization of Vinyl Ether Derivatives with a Cleavable Bond <u>Mineto Uchiyama</u> Nomura Kotohiro, presiding
13:00	5A12AL	Synthesis, Structure Control and Functions of Coordination Polymers Containing Conjugated Transition Metal Complex Moieties <u>Fumio Sanda</u> Nitta Koh-hei, presiding
13:45	5A15AL	Development of Efficient Multi-Chain Coarse-Grained Models of Polymers <u>Yuichi Masubuchi</u> Sada Kazuki, presiding
14:30	5A18AL	Development of methods for controlling biological functions using synthetic peptides <u>Kazunori Matsuura</u> Ishida Yasuhiro, presiding
15:15	5A21AL	Secondary Structure Control and Functionalization of Synthetic Polymers by Ladderization <u>Tomoyuki Ikai</u> Sada Kazuki, presiding
16:00	5A24AL	Development of Science on the Adsorption of Polymer Microgels at Fluid Interfaces Using Precision Particle Synthesis <u>Daisuke Suzuki</u>

Room B

Mon. May 19

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Uchiyama Mineto, presiding

9:00	1B01	Living Anionic Addition Reaction of 1,1-Diphenylethylene Derivative Possessing Fluoro Group <u>Muhammad Rafi Yusman</u> , Tomohiko Nishijima, Chihiro Homma, Takashi Ishizone
9:15	1B02	Precise and facile control of monomer sequence via living anionic addition reaction of 1,1-diphenylethylene derivatives <u>Tomohiko Nishijima</u> , Chihiro Homma, Takashi Ishizone
9:30	1B03	Anionic polymerization of N-tert-butyl-N-(4-vinylbenzylidene)amine in hydrocarbon solvent <u>Kohei Takimoto</u> , Rinya Kawashima, Chihiro Homma, Takashi Ishizone

Li Feng, presiding

9:45	1B04	Dual Control of Molecular Weight and Tacticity in Proton Transfer Anionic Polymerization of Various Acrylic Monomers with C-H Bonds as Dormant Species <u>Katsutoshi SAGAWA</u> , Hironobu WATANABE, Mineto UCHIYAMA, Masami KAMIGAITO
10:00	1B05	Synthesis of New Alkyl Sorbate Monomers with Bulky Substituents and Anionic Polymerization with Base Catalyst <u>Chiya Nakashima</u> , Yuto Ide, Akinori Takasu

Homma Chihiro, presiding

- 15:00 1B20 Ring-opening polymerization of 1,3-dioxo-2-silacycloalkanes: Living polymerization and monomer regeneration by depolymerization
Ikuto Tanaka, Sadahito Aoshima, Arihiro Kanazawa
- 15:15 1B21 Cationic Copolymerization of Spiroorthoesters and Vinyl Ethers for Alternating Sequence Control
Kota Yamamoto, Sadahito Aoshima, Arihiro Kanazawa
- 15:30 1B22 Cationic Terpolymerization of Styrene Derivatives, Oxiranes, and Aromatic Aldehydes: Precise Synthesis of ABC-type Periodic Sequence-Controlled Degradable Polymers
Yuto Eguchi, Sadahito Aoshima, Arihiro Kanazawa
- 15:45 1B23 Cationic polymerization of styrene derivatives using diaryliodonium salts as organic Lewis acid catalysts: Investigation of the photoinduced-acceleration mechanism
Yutaka Yokawa, Sadahito Aoshima, Arihiro Kanazawa

Tue. May 20

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Watanabe Hironobu, presiding

- 9:00 2B01 Cationic terpolymerization of vinyl ethers, styrenes, and aldehydes : Synthesis of polymers with various sequences bearing two kinds of acidically degradable structures
Kaoru Sugai, Sadahito Aoshima, Arihiro Kanazawa
- 9:15 2B02 Cationic Ring-Opening Copolymerization of Cyclic Esters and Cyclic Hemiacetal Esters: Effects of Difference in the Number of Ring Members of Cyclic Hemiacetal Esters
Manami Banno, Sadahito Aoshima, Arihiro Kanazawa
- 9:30 2B03 Cationic Alternating Copolymerization of Cationically Nonhomopolymerizable *N*-Vinyl Monomer and Cyclic Hemiacetal Ester
Momo Okada, Arihiro Kanazawa

Isono Takuya, presiding

- 9:45 2B04 Photoinduced Cationic RAFT Polymerization of Vinyl Ethers by Various Non-Ionic Photoredox Catalysts
Akiho SHIMADA, Hironobu WATANABE, Mineto UCHIYAMA, Masami KAMIGAITO
- 10:00 2B05 Ring-opening polymerization of 5-cyclic carbonate derived from myo-inositol with linear alkyl group
Yuto Oshima, Hayato Tnanno, Shota Hiraga, Osamu Haba, Tatsuro Toda, Hisanari Yoneda

Matsuoka Shin-ichi, presiding

- 15:00 2B20 Modulation of Cyclic Monomer Reactivity by Fluorine-Incorporation for Efficient Self-Switchable Block Copolymer Synthesis via Alternating Copolymerization
Chun-Yao Ke, Takuya Isono, Feng Li, Takuya Yamamoto, Guey-Sheng Liou, Toshifumi Satoh
- 15:15 2B21 Polymer Synthesis and Hybridization of Polyurea and Phenolic Resin from Diphenyl Carbonate through Phosgene-free Method
Fumiyuki Toshimitsu, Yoshio Furusho, Yuji Kosugi, Takeshi Endo
- 15:30 2B22 Synthesis and degradation of polyesters from coumarin derivatives using photo and click reaction
Miyuki Oshimura, Hikari Saito, Tomohiro Hirano

15:45 2B23 Synthesis of Poly(esterimide)s Containing Double-Decker
Silsesquioxane for Low Dielectric Constants
Natsuko Sashi, Erina Yoshida, Hayato Maeda, Kan Hatakeyama, Yuta
Nabae, Ririka Sawada, Shinji Ando, Teruaki Hayakawa

Wed. May 21

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Hirano Tomohiro, presiding

9:00 3B01 Synthesis and Dielectric Properties of Poly(phenylene ether) with Bulky
Substituents on Side Chains
Kentaro Sone, Hayato Maeda, Kan Hatakeyama, Yuta Nabae, Teruaki
Hayakawa

9:15 3B02 Synthesis of Negative-Type Photosensitive Polyimides Using 2-
Hydroxyethyl Methacrylate as a Crosslinking Agent and its Dielectric
Properties.
Koki Matsuo, Hayato Maeda, Riku Takahashi, Makiko Irie, Kazuaki
Ebisawa, Kan Hatakeyama, Yuta Nabae, Teruaki Hayakawa

9:30 3B03 Synthesis of Silicon-Containing Hydrocarbon-Based Polymers via
Polyaddition of Dihydrosilanes and Diynes
Yuka Azuma, Riku Takahashi, Kan Hatakeyama, Yuta Nabae, Teruaki
Hayakawa

Nishikawa Tsuyoshi, presiding

9:45 3B04 Selective isomerization polymerization of α -olefins with siloxy groups by
Pd catalysts
Rintaro Hamada, Daisuke Takeuchi

10:00 3B05 Alternating Cyclocopolymerization of N-allyl-N-tosylacrylamide and α -
olefins catalyzed by palladium complexes
Kyoji Oshima, Daisuke Takeuchi

Takeuchi Daisuke, presiding

15:00 3B20 Coordination polymerization of borylacetylene derivatives: Monomer
design and post-polymerization transformation based on unique
properties of boron
Sota Ueyama, Tsuyoshi Nishikawa, Makoto Ouchi

15:15 3B21 Synthesis and properties of fluorene-containing polycyclopentenenes via
ring-opening metathesis polymerization.
Shota Kihara, Akane Nakajima, Yoshiya Ota, Shin-ichi Matsuoka

15:30 3B22 Synthesis of Alternating Copolymers of Indene with Acrylic Acid
Derivatives via Radical Copolymerization and Pendant Transformation
and Evaluation of the Physical Properties
Yuma Hanaura, Aoto Ishikawa, Makoto Ouchi

15:45 3B23 Synthesis of Acrylamide Alternating Copolymers Carrying Amine
Pendant and the Sequence-Specific Properties
Seungchul Kwak, Makoto Ouchi

Thu. May 22

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Kubo Tomohiro, presiding

9:00	4B01	Analysis of side reaction in surface-initiated atom transfer polymerization under high-pressure condition <u>Yuki Seike</u> , <u>Yuji Kinose</u> ,Yoshinobu Tsujii
9:15	4B02	Synthesis of Itaconic Acid-Derived Poly(<i>N</i> -vinylpyrrolidone) Derivatives and Functionalization via Introduction of Functional Groups in the Side Chains <u>Shione KURITA</u> ,Hironobu WATANABE,Mineto UCHIYAMA,Masami KAMIGAITO
9:30	4B03	Radical Polymeirzation of Thioamides: Synthesis of Polymers with Tunable Degradability and Special Structures via Design of Pendant Groups <u>Toshiki IIDA</u> ,Hironobu WATANABE,Mineto UCHIYAMA,Masami KAMIGAITO
Kinose Yuji, presiding		
9:45	4B04	Radical Polymerization of Formaldehyde in the Presence of Metal Salts: Synthesis and Properties of Copolymers with Oxygen Atoms in the Backbone <u>Ryogo MURAKAMI</u> ,Hironobu WATANABE,Mineto UCHIYAMA,Masami KAMIGAITO
10:00	4B05	Radical polymerization of exo-methylene six-membered cyclic monomers containing nitrogen atom introducing various substituents <u>Sota Takashima</u> ,Tomohiro Kubo,Kotaro Satoh
Kanazawa Arihiro, presiding		
15:00	4B20	Degradation and Depolymerization of Polymers Triggered by Radical Generation via HAT Reaction <u>Masaya Kinugawa</u> ,Makoto Ouchi
15:15	4B21	Monomer Design for Synthesis of Methacrylate-Styrene Alternating Copolymers Carrying Functional Groups and the Sequence Properties <u>Haruto Nitanda</u> ,Makoto Ouchi
15:30	4B22	Precision Synthesis of Poly((meth)allyl Alcohol) by One-Pot Cascade Process from Controlled Radical Polymerization to Reduction of Pendant Groups Using (PNNP)Mt Complexes <u>Ryoga HIRATA</u> ,Chihaya MURATA,Hironobu WATANABE,Mineto UCHIYAMA,Naoki NOTO,Susumu SAITO,Masami KAMIGAITO
15:45	4B23	Development of Photocontrolled Polymerization via Reversible Decarboxylation Using Carboxylate Groups as Dormant Species <u>Haruyuki KATADA</u> ,Hironobu WATANABE,Mineto UCHIYAMA,Masami KAMIGAITO

Room C

Mon. May 19

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Kametani Yuki, presiding

9:00	1C01	Circularly Polarized Dual-Emission Properties of <i>o</i> -Carborane Derivatives with Chiral π -Conjugated Units <u>Kazuhiro Yuhara</u> ,Kazuo Tanaka
9:15	1C02	Luminescent Multifunctionalization of Aryl-Substituted Anionic Carboranes with Various Counter Cations <u>Takumi Yanagihara</u> ,Kazuo Tanaka

9:30	1C03	Development of Near-Infrared Light-Emitting Polymers with Electron-Accepting Properties of Hypervalent Silicon Compounds <u>Masayuki Gon</u> , Ippei Kanetani, Kazuo Tanaka
		Terashima Takaya, presiding
9:45	1C04	Helicity Control of Poly(diphenylacetylene) Derivatives upon Photoirradiation <u>Yuki Nishikawa</u> , Daisuke Hirose, Katsuhiro Maeda
10:00	1C05	MOF-templated synthesis of one-dimensionally crosslinked polymers <u>Yuki Kametani</u> , Takashi Uemura
		Gon Masayuki, presiding
15:00	1C20	Synthesis and Microphase Separation of Maleic Acid Derivatives/Vinyl Ether Alternating Copolymers <u>Hiroyuki Kouno</u> , Makoto Ouchi, Takaya Terashima
15:15	1C21	Microphase Separation of Statistical Copolymers Bearing Imidazolium Cations and Alkyl Groups into Controlled Morphology <u>Keita Iuchi</u> , Makoto Ouchi, Takaya Terashima
15:30	1C22	Microphase Separation of Acrylonitrile-Based Statistical Copolymers: Phase Transition and Orientation Control of Lamellar Structures <u>Takaya Terashima</u> , Kenshiro Iguchi
15:45	1C23	Direction control of the photoinduced topochemical polymerization of diacetylenes in the side-chain liquid crystalline polymer film <u>Sadayuki Asaoka</u> , Seiya Yokogi, Hikaru Oota, Shinichi Sakurai

Tue. May 20

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Hirai Tomoyasu, presiding

9:00	2C01	Water-Intercalated and -Responsive Lamellar Materials via the Self-Assembly of Sodium Acrylate Random Copolymers <u>Takaya Terashima</u> , Yuki Horiike
9:15	2C02	Self-Assembly and Micelle Formation in the Mixtures of Cationic/PEG Random Copolymers <u>Teruya Machino</u> , Makoto Ouchi, Takaya Terashima
9:30	2C03	Photo or Salt-Responsive Self-Sorting of Amphiphilic Random Copolymer Micelles <u>Rikuto Kanno</u> , Makoto Ouchi, Takaya Terashima

Ida Shohei, presiding

9:45	2C04	Synthesis and thermo-response behavior of carbon chain polymers with gem-bisPEG side chain by malonic ester synthesis-type polymerization method <u>Tatsuma Aiuchi</u> , Taichi Meno, Keitaro Matsuoka, Kazuki Sada
10:00	2C05	One Handed Helicity Induction in Poly(dinaphthylacetylene)s Bearing Carboxy Groups by Chiral Guests and its Memory <u>Al Yeasin</u> , Tatsuya Nishimura, Katsuhiro Maeda

Nishimura Tatsuya, presiding

15:00	2C20	Development of circular polarized luminescence materials based on organic-inorganic hybrid polymers. <u>Shunsuke Morii</u> , Yoshinobu Nakamura, Syuji Fujii, Tomoyasu Hirai
15:15	2C21	Preparation of ordered chiral silica domain using block copolymer as template <u>Towa Shinoda</u> , Yoshinobu Nakamura, Syuji Fujii, Tomoyasu Hirai

15:30	2C22	Preparation of novel giant molecules and evaluation of its nanostructure <u>Mayu Mine</u> , Shunsuke Morii, Yoshinobu Nakamura, Syuji Fujii, Tomoyasu Hirai
15:45	2C23	Preparation of novel maleimide derivatives for circularly polarized luminescence <u>Kai Terami</u> , Yoshinobu Nakamura, Shuuji Fujii, Tomoyasu Hirai

Wed. May 21

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Kohsaka Yasuhiro, presiding

9:00	3C01	Synthesis of TPA containing Hyper Branched Polymers by Co catalyzed [2+2+2] Cycloaddition Polymerization of Alkynes and Their Conductive Properties. <u>Yuga Tsunoda</u> , Kouta Ibe, Sentaro Okamoto
9:15	3C02	Structural design of thermoresponsive star polymers for fine control of aggregation behavior Shuya Hayashi, <u>Shohei Ida</u> , Shokyoku Kanaoka
9:30	3C03	Design of Alternating Graft Copolymer toward Sequence-Specific Self-Assembly <u>Aoto Ishikawa</u> , Makoto Ouchi

Aoki Daisuke, presiding

9:45	3C04	Dismantlable adhesives using main-chain scission by transesterification from side groups <u>Yuto Kawamura</u> , Yasuhiro Kohsaka
10:00	3C05	Photocurable Dismountable Adhesives by the Combination of Radical Ring-Opening Polymerization and Intramolecular Transesterification Koki Naganuma, <u>Yasuhiro Kohsaka</u>

Kakuchi Ryohei, presiding

15:00	3C20	Synthesis, main chain editing and degradation of polyolefins bearing carbonyl groups <u>Kohei Takahashi</u>
15:15	3C21	Synthesis of composite materials using polyoxometalates and polysiloxane derivative with hydroxyl groups at the end of the alkyl chains in the imidazolium salt moiety. <u>Taishi Yoshida</u> , Takeru Ito, Tsukasa Ichikawa, Nobukatsu Nemoto
15:30	3C22	Synthesis and ammonolysis of the cross-linked polymers composed of poly(trimethylene carbonate) and β -cyclodextrin <u>Shuto Uchiumi</u> , Toyokazu Tsutsuba, Tatsuo Taniguchi, Daisuke Aoki
15:45	3C23	Synthesis of hetero-telechelic PEGs and the effect of their structure on the properties of rotaxane cross-linked polymers <u>Yuki Sueyoshi</u> , Shinya Kinoshita, Toyokazu Tsutsuba, Tatsuo Taniguchi, Daisuke Aoki

Thu. May 22

A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

Takagi Koji, presiding

9:00	4C01	Development of Cellulose Modifications via Multi-Component Reaction <u>Minoru Kuroiwa</u> , Issei Otsuka, Atsushi Narumi, Ryohei Kakuchi
9:15	4C02	Synthesis, structure, and properties of ethylene-propylene rubber crosslinked with a combined boroxine/boronic acid ester functionality <u>Ryo Tanaka</u> , Yusuke Bando, Yuushou Nakayama, Takeshi Shiono
9:30	4C03	Synthesis and Characterization of Coumarin-Modified Photoresponsive Alginate <u>Taketo Yoshida</u> , Hiromitsu Sogawa, Fumio Sanda
Tanaka Ryo, presiding		
9:45	4C04	Synthesis of Polymers Constructed by 3,5-Hydantoin Rings and their Thermal Properties <u>Tomoya Hayashi</u> , Haruto Minami, Yuji Kosugi, Takehiro Kawauchi, Yoshio Furusho, Takeshi Endo
10:00	4C05	Designing of AB Monomers and Controlled/Living Click Polymerization for Efficient Self-Immolative Degradation. <u>Yuto Nakauchi</u> , Tomohiro Kubo, Kotaro Satoh
Sogawa Hiromitsu, presiding		
15:00	4C20	Synthesis and Photoluminescence Properties of Copper Coordination Polymer obtained from Pyridine-Modified Cyclic Aromatic Amide as Chiral Ligand <u>Koji Takagi</u> , Taiga Shirai, Takuya Nakashima, Tomoyuki Ikai
15:15	4C21	The unexpected kinetics in the synthesis of glycolated polythiophenes <u>Christine Keiko Luscombe</u>
15:30	4C22	Facet-Selective Block Co-Crystallization of Two Different Metal Complexes using a Crystal Lattice Mismatch <u>Tomoya Fukui</u> , Masahiro Tsuchiya, Naoya Mita, Takanori Fukushima
15:45	4C23	Supramolecular coordination polymer formed by self-assembly of trisporphyrin <u>Naoyuki Hisano</u> , Tomoki Kodama, Takeharu Haino

Room D

Mon. May 19

B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES

Ito Asae, presiding

9:00	1D01	Comprehensive structural analysis of the stacked lamellar structure of polyethylene for an enhanced understanding of the amorphous region <u>Mirei Abe</u> , Shusuke Kanomi, Tomohiro Miyata, Hiroshi Jinnai
9:15	1D02	Electron microscopy observation of interfaces between semicrystalline polymers and inorganic substrates <u>Kazuhiro Sato</u> , Tomohiro Miyata, Shusuke Kanomi, Kai Chen, Hiroshi Jinnai
9:30	1D03	Analysis of crystallization behavior and crystal morphology of polyelectrolytes <u>Yasushi Maeda</u> , Reiya Watanabe, Atsushi Matsumoto, Shinji Sugihara

Miyata Tomohiro, presiding

9:45	1D04	The effect of copolymerization with various alpha-olefins on the crystallization of poly(4-methyl-1-pentene)
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		<u>Hiromu Hasegawa</u> , Asae Ito, Koh-hei Nitta, Yusuke Hiejima, Shuhei Ogata, Masahiko Okamoto
10:00	1D05	Visualization of spatial distribution of angstrom- to nanometer-scale structures in filler-containing epoxy resins <u>Naoto Tobita</u> , Hiroki Ogawa, Yamamoto Satoru, Tanaka Keiji, Ono Shunsuke, Takenaka Mikihiro
10:15	1D06	Influence of alkyl length on the morphology and higher-order structure of poly(amic acid) flower-like particles <u>Yuqian Chen</u> , Kan Hatakeyama, Yuta Nabae, Teruaki Hayakawa
		Ito Asae, presiding
15:00	1D20	Physical Properties of Poly(ethyl acetate) with Different Crystal Polymorphism <u>Mizuki Nakayama</u> , Takuya Matsumoto, Takasi Nishino
15:15	1D21	Crystallization process for stretched poly(trimethylene terephthalate) near the glass transition temperature III <u>Takashi Konishi</u> , Hiroshi Yokota, Yoshihisa Miyamoto
		Konishi Takashi, presiding
15:30	1D22	Effects of a temperature gradient on segregation behavior of plasticized polystyrene <u>Thoa Thi Kim Huynh</u> , Viet Quoc Do, Masayuki Yamaguchi
15:45	1D23	Role of Fibrous Nucleating Agent on Controlling Isotropic Shrinkage of Poly(lactic acid) <u>Dai Hoang Giang Vo</u> , Masayuki Yamaguchi
16:00	1D24	Flow-Induced Crystallization of Poly(lactic acid) Blends with Long-Chain Branched Polymers <u>Ruiqi Feng</u> , Masayuki Yamaguchi

Tue. May 20

B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES

Yamamoto Katsuhiro, presiding

9:00	2D01	Oxygen Diffusion in Amorphous Polymers under Low Temperatures Probed by a Phosphorescent Imide Compound <u>Rika Watanabe</u> , Marina Doi, Haonan Liu, Masatoshi Tokita, Shinji Ando
9:15	2D02	Study on the Effects of Cellulose Nanofibers on the Crystallization and Mechanical Properties of Polyvinyl Alcohol Nanocomposite <u>Farjana Shahrin Prova</u> , Akihiko Toda, Ken Taguchi
9:30	2D03	Epoxy Nanocomposites with Graphene Oxide <u>Seira Morimune-Moriya</u> , Kosuke Nogami

Morimune-Moriya Seira, presiding

9:45	2D04	The sisters of phase-separated structures with triply periodic minimal surfaces (G-, D-, and P-surfaces) in block copolymer/homopolymer blend systems <u>Katsuhiro Yamamoto</u> , Yusuke Takai, Hideaki Takagi
10:00	2D05	Pressure-Composition Phase Diagram of Baroplastic Block Copolymers <u>Hiroki Degaki</u> , Ikuo Taniguchi, Shigeru Deguchi, Tsuyoshi Koga
10:15	2D06	Investigation of Diffusion and Re-orientation in Iodine/Nylon 6 Complex [26]; Wetting Behavior of Simple Iodine under Humid Environment. <u>Akio Kawaguchi</u>

Matsuda Yasuhiro, presiding

- 15:00 2D20 Application of Viscoelastic Theory to Composite Films Containing Single-Walled Carbon Nanotubes
Hiroaki Nobuoka, Osamu Urakawa, Tadashi Inoue
- 15:15 2D21 Silica Aggregation State and Composite Viscoelastic Properties for Polystyrene/Poly(vinyl acetate) Blends with Different Compositions
Furiku Maruyama, Yoshihisa Fujii, Naoya Torikai
- 15:30 2D22 Evaluation of Hydrated Structure and Mechanical Properties of Polyethylene Glycol Hydrogels
Shuhei Ogura, Yoshihisa Fujii, Naoya Torikai

Urakawa Osamu, presiding

- 15:45 2D23 Fibrous Structure and Flow Temperature of Poly(Lactic Acid) Gels Formed at Different Temperatures
Yasuhiro Matsuda, Kaito Tamura, Kei Hosomi, Atsushi Sugita
- 16:00 2D24 Enhancement of Poly (L-Lactic Acid) Gel Mechanical and Thermal Properties: The Effects of Synthetic Polymer Additives and Fabrication Methods
Yasuhiro Matsuda, Alfitra Putra

Wed. May 21

B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES

Kawahara Seiichi, presiding

- 9:00 3D01 Deformation behavior of poly(methylmethacrylate) chains under biaxial stretching process
Aya Fujimoto, Ayumi Hamada, Kakeru Obayashi, Ken Kojio
- 9:15 3D02 The network structures and the mechanical properties of chemical crosslinking polyurea and polyurethane elastomers
Kakeru Obayashi, Ken Kojio
- 9:30 3D03 Analysis of the mechanism of stress characteristics of fluororubber using small-angle neutron scattering and atomic force microscopy
Shin-ichirou Oka, Ayako Aoyagi, Yohei Noda, Satoshi Koizumi

Kojio Ken, presiding

- 9:45 3D04 Structure, strain-induced crystallization and mechanical properties of vulcanized natural rubber
Seiichi Kawahara, Yoshimasa Yamamoto, Masaki Yamano
- 10:00 3D05 Thermal and mechanical properties of fluorine-containing liquid crystalline epoxy modified cyanate ester cured system
Tsubasa Miyauchi, Kantaro Nishio, Miyuki Harada
- 10:15 3D06 Mechanical and thermal properties of cyanate ester systems modified with POSS with epoxy groups and different side chains
Koji Kawahara, Miyuki Harada, Daisuke Tanida, Yusaku Sainohira

Shundo Atsuomi, presiding

- 15:00 3D20 Preparation and Higher-order Structural Characterization of Epoxy Resins cured with Liquid Crystalline Diamine
Rika Marui, Kan Hatakeyama, Yuta Nabae, Teruaki Hayakawa
- 15:15 3D21 Synthesis of Multifunctional Epoxy Monomer and Thermal Conductivity of Epoxy Resin
Takahisa Hiramatsu, Rika Marui, Kan Hatakeyama, Yuta Nabae, Teruaki Hayakawa

Nabae Yuta, presiding

15:30	3D22	Segmental Dynamics in Multicomponent Epoxy Resins <u>Atsushi Tokunaga</u> ,Atsuomi Shundo,Satoru Yamamoto,Keiji Tanaka
15:45	3D23	Segmental Dynamics of Dicyandiamide-Cured Epoxy Resins <u>Yuika Kamei</u> ,Atsuomi Shundo,Satoru Yamamoto,Keiji Tanaka
16:00	3D24	Mechanical properties of homo-IPN films in which cross-linked poly(methyl methacrylate) networks are interpenetrating Soma Higuchi,Shogo Nobukawa, <u>Katsuhiko Inomata</u>

Thu. May 22

B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES

Akagi Yuki, presiding

9:00	4D01	Fast Carboxy Exchange Leading to One-Pot Synthesis and Rapid Stress-Relaxation of Vitrimers-like Acryl Elastomers <u>Tomoyasu Kuniti</u> ,Mikihiko Hayashi,Yasuhiro Kohsaka
9:15	4D02	Heterogeneous thermoresponsive behavior of microgels revealed by electrophoresis <u>Yuichiro Nishizawa</u> ,Yuji Sato,Daisuke Suzuki

Nishizawa Yuichiro, presiding

9:30	4D03	Effects of thickeners on near-infrared fluorescent gels <u>Yuki Nakajima</u> ,Kaho Morinaga,Yuki Akagi
9:45	4D04	Relationship between mechanical and solvation properties in TetraPEG network ion gels <u>Tomoya Tashiro</u> ,Aran Kato,Naoyuki Sakumichi,Takamasa Sakai,Kenta Fujii
10:00	4D05	Analysis of structural change induced by swelling in the crosslinked region of polyacrylonitrile freezing and thawing gel <u>Hiroki Asada</u> ,Yutaka Tanaka

Hagita Katsumi, presiding

15:00	4D20	Exact scaling law for shear modulus of a phantom network as a function of chain density with a nontrivial exponent and its application to the elasticity of rubbers and gels <u>Tetsuo Deguchi</u> ,Erica Uehara,Jason Cantarella,Clayton Shonkwiler
15:15	4D21	Dependence of elasticity on structural inhomogeneity in a polymer network with a fixed valency via equilibrium positions of crosslinks <u>Erica Uehara</u> ,Tetsuo Deguchi
15:30	4D22	Molecular simulation of effects of concentration and polymerization mechanism on network structure of radical polymerization gels <u>Tsutomu Furuya</u> ,Tsuyoshi Koga

Furuya Tsutomu, presiding

15:45	4D23	Coarse-grained MD analysis with bond breakage for 2D scattering patterns of gel networks under stretching <u>Katsumi Hagita</u> ,Takahiro Murashima
16:00	4D24	Investigation of the local environment on the thermoresponsive hydrogel by the nanoparticle probe technique <u>Keita Namba</u> ,Takuma Kureha

Room E

Mon. May 19

B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES

Sanada Yusuke, presiding

- 9:00 1E01 Quantitative Analysis of Branched High-Density Polyethylene Content Using Spectroscopy in Terahertz region
Ayano Kitamura, Naoya Okitsu, Harumi Sato
- 9:15 1E02 Molecular dynamics of a polymeric film using ex-situ magnetic resonance imaging under static magnetic field gradient with needle-like ferromagnet
Natsuki Kawabata, Naoki Asakawa
- 9:30 1E03 Memory of orientation for crystals obtained by flow-induced crystallization
Guojuan Xu, Masayuki Yamagichi

Asakawa Naoki, presiding

- 9:45 1E04 Viscoelasticity and Theoretical Considerations of Single-Walled Carbon Nanotubes
Hiroaki Nobuoka, Osamu Urakawa, Tadashi Inoue
- 10:00 1E05 Study of phase separation-dissolution behavior of methylcellulose aqueous solution with hysteresis
Yusuke Sanada, Toshiki Hara, Yukiteru Katsumoto
- 10:15 1E06 Investigation of Lamellar Orientation and Mechanical Properties of Semicrystalline Polyethylene
Mohammed Althaf Hussain, Takashi Yamamoto, Shigeru Yao

Shundo Atsuomi, presiding

- 15:00 1E20 Effect of Interfacial Structure of Organic Interlayers on Solid Lubrication Properties of Silver Thiolate Coordination Polymers
Hiroshi Eguchi, Ren Muramatsu, Kenji Nagata
- 15:15 1E21 Thermal Stability of a Polystyrene Thin Film on the Adsorbed Layers of Random Copolymers Prepared with the Different Spin-Coated Solvents
Akane Taniguchi, Yukiko Fujita, Yoshihisa Fujii, Naoya Torikai
- 15:30 1E22 Stability of Polystyrene Adsorbed Layer and the Spin-Coated Homologue Thin Film under Different Solvent Atmosphere
Ryou Tsurui, Yoshihisa Fujii, Naoya Torikai, Yukiko Fujita

Fujii Yoshihisa, presiding

- 15:45 1E23 Glass Transition Temperature of Polymer Thin Films on Roughened Solid Interfaces
Taketo Nakasuka, Yuma Morimitsu, Keiji Tanaka
- 16:00 1E24 Preparation and Structure of Water/Oil Repellent Polymer Surface
Takashi Nishino, Taichi Takasuga, Takuya Matsumoto, Atsunori Mori

Tue. May 20

B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES

Abe Tatsuki, presiding

- 9:00 2E01 Assembly of tough poly (methyl acrylate) microparticles at the air/water interface

Yuma Sasaki, Yuichiro Nishizawa, Natsuki Watanabe, Takayuki Uchihashi, Daisuke Suzuki

9:15 2E02 Influence of Substrate Wettability on Aggregation State of Interfacial Adsorbed Chains for Polystyrene-*b*-Poly(methyl methacrylate) Diblock Copolymer
Shunei Ichimura, Yoshihisa Fujii, Naoya Torikai

9:30 2E03 Correlation Between the Positioning of Low Surface Free Energy Blocks and Microdomain Alignment in Thin Films
Ryota Uehara, Shinsuke Maekawa, Takehiro Seshimo, Ryutaro Sugawara, Takahiro Dazai, Kazufumi Sato, Kan Hatakeyama, Yuta Nabae, Teruaki Hayakawa

Torikai Naoya, presiding

9:45 2E04 Interfacial Adhesion of Thermoplastic Polymers to a Solid Substrate
Reiki Eto, Tatsuki Abe, Yuma Morimitsu, Keiji Tanaka

10:00 2E05 Depth Profiling of Cured Epoxy Compounds at the Copper Interface
Shintaro Saeki, Tatsuki Abe, Keiji Tanaka

10:15 2E06 Elucidation of the adhesive mechanism of materials for bonding different substrates
Hiromasa Yamamoto, Yasunobu Hotta, Daisuke Kusano

Matsumoto Takuya, presiding

15:00 2E20 Response of Homoimmiscible Water Separated from Bulk Water at Ice/Water Interface to Overpressure
Hiromasa Niinomi, Hiroki Nada, Tomoya Yamazaki, Tetsuya Hama, Akira Kouchi, Tomoya Oshikiri, Masaru Nakagawa, Yuki Kimura

15:15 2E21 Aggregation States of Epoxy Resins at Solid Interfaces with Different Chemical States
Koyu Eto, Tatsuki Abe, Keiji Tanaka

15:30 2E22 Aggregation States of Epoxy Resins Cured at Polyamide 6 surfaces
Shunta Tamura, Tatsuki Abe, Keiji Tanaka

15:45 2E23 Influence of Hygrothermal Aging on the Interfacial Properties of Epoxy Resins
Ko Yamaguchi, Daisuke Kawaguchi, Atsuomi Shundo, Satoru Yamamoto, Noboru Miyata, Tsukasa Miyazaki, Hiroyuki Aoki, Hironori Taguchiri, Takako Kikuchi, Keiji Tanaka

16:00 2E24 Interfacial Mobility of Epoxy Segments at Adhesive Interfaces via Evanescent Wave-Excited Fluorescence Lifetime Measurement
Honori Tajima, Yuji Yasukochi, Tatsuki Abe, Keiji Tanaka

Wed. May 21

B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES

Hayakawa Teruaki, presiding

9:00 3E01 Chain Diffusion in High-Performance Thermoplastics at the Adhered Interface
Keigo Kawahara, Tatsuki Abe, Shin Hirata, Masato Honma, Satoru Yamamoto, Keiji Tanaka

9:15 3E02 Thermal motion of P(St-*r*-VCa) chains adsorbed on an alumina surface
Shuji Morita, Yuma Morimitsu, Shiho Tanizaki, Satoru Yamamoto, Kotaro Satoh, Keiji Tanaka

9:30 3E03 Solvent-dependent structural changes of poly(phenylacetylene) derivatives bearing alanine residues in the side chains and their direct observation

Kiichi Hasegawa, Daiki Oka, Mitsuo Hara, Kazuki Miyata, Takeshi Fukuma, Tatsuya Nishimura, Katsuhiro Maeda

Morimitsu Yuma, presiding

- 9:45 3E04 Compression-Stress Responsive Layered Polydiacetylene with Polymer Guests
Reiko Takagi, Hiroaki Imai, Mitsuo Hara, Yuya Oaki
- 10:00 3E05 Development of PS-PMMA Block Copolymers Incorporating Poly(n-butyl methacrylate) for Low-Temperature Thermal Annealing toward Perpendicular Microdomain Alignment
Hsi Chih Wang, Takehiro Seshimo, Takahiro Dazai, Kazufumi Sato, Kan Hatakeyama, Yuta Nabae, Teruaki Hayakawa
- 10:15 3E06 Development of regenerable column packing materials with selective adsorption properties for bisphenol A
Masayuki Yokoyama, Haruki Hoshino, Daisuke Aoki, Tatsuo Taniguchi

Oaki Yuya, presiding

- 15:00 3E20 Topic models for analyzing trend in polymer science and classification of measurement images
Yoshifumi Amamoto, Takaaki Ohnishi
- 15:15 3E21 Exploring 3D Food Printing for Advancing 4D Printing Applications in Smart and Functional Foods
Islam Md Shaharul, Jun Ogawa, Hidemitsu Furukawa
- 15:30 3E22 Structure and physical properties of composites incorporating nanocellulose before and after organo-modification as an organic filler in a fluorinated polymer matrix
Chisato NARA, Yuya MATSUO, Rumon Rokibul Hasan, Atsuhiko Fujimori
- 15:45 3E23 Structural color occurrence by multilayer formation of organo-modified inorganic nanoparticles -effect of photopolymerization of diynoic acid between modified chains-
Shoma SAKAMOTO, Ayane YAMAZAKI, Arisa WATANABE, Katsuhiko SASAKI, Hisayoshi KOBAYASHI, Kiminori HIRAI, Atsuhiko FUJIMORI
- 16:00 3E24 Mixed Monolayers on the Water Surface of Inorganic Nanoparticles - Nanoclay and Nanodiamond -
Ryoma NAKADA, Tsubasa TAKIGUCHI, Atsuhiko FUJIMORI

Thu. May 22

B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES

Matsui Jun, presiding

- 9:00 4E01 Effect of the inner shell structure on supercooling of heat storage capsules
Nagino Mori, Soshi Kanaji, Nozomu Suzuki, Hideto Minami, Toyoko Suzuki
- 9:15 4E02 Preparation of cylindrical composite particles using stirring method
Mayuka Mishima, Asuka Ishii, Toyoko Suzuki, Nozomu Suzuki, Hideto Minami
- 9:30 4E03 Preparation of Natural Rubber Hollow Particles by Thiol-ene reaction
Mahiro Shibatani, Yusho Fujiwara, Maytawee Malineerat, Yasuyuki Yamada, Takeshi Wakiya, Nozomu Suzuki, Toyoko Suzuki, Hideto Minami

9:45	4E04	Surface modification of carbon black particles to improve electric field response. <u>Hideyoshi Murata</u> , Ryoya Takahashi, Daisuke Aoki, Tatsuo Taniguchi
10:00	4E05	Surface modification of living polymer particles synthesized by RAFT precipitation polymerization <u>Sota Kayama</u> , Daisuke Aoki, Tatsuo Taniguchi
Taniguchi Tatsuo, presiding		
15:00	4E20	Preparation of non-chemically crosslinked two-dimensional polymer sheets by exfoliation from highly oriented lamellar films <u>Mizuki Ohke</u> , <u>Jun Matsui</u>
15:15	4E21	Surface Rheological Properties of Aligned Cellulose Nanofibril Monolayer Films at the Air-Water Interface <u>Koichiro Ishida</u> , Yoshinobu Tsujii
15:30	4E22	Compression of highly water-swollen pNIPAm-based microgels at the air/water interface <u>Takahisa Kawamoto</u> , Haruka Minato, Daisuke Suzuki
15:45	4E23	L/LB films of Teflon-based polymers - a solvent-free spreading method for insoluble molecules - <u>Itsuki FUJII</u> , Naoto YOKOKAWA, Atsuhiko FUJIMORI
16:00	4E24	Mixed monolayers on the water surface of polyguanamine derivatives containing azacalixarene ring with different metal collection properties <u>Ryoma TERUI</u> , Manato YOSHINO, Yuji SHIBASAKI, Atsuhiko FUJIMORI

Room F

Mon. May 19

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Asaoka Sadayuki, presiding

9:00	1F01	Photoinduced energy/electron transfer catalytic reactions within single-chain nanoparticles <u>Masanori Nagao</u> , Kai Mundsinger, Christopher Barner-Kowollik
9:15	1F02	Photoreduction of carbon dioxide using porphyrin-cored star polymers <u>Masanori Nagao</u> , Shota Furusawa, Hikaru Matsumoto, Yoshiko Miura
9:30	1F03	Synthesis of polymeric adsorbent for selective adsorption of heavy rare earth elements <u>Hiromasa Okawara</u> , Kohei Watanabe, Azumi Akiyama, Daisuke Aoki, Tatsuo Taniguchi, Tsuyosi Ogata, Kazuhiro Narita
9:45	1F04	Synthesis and gas permeability of poly(diphenylacetylene)s having methyl and silyl groups at meta- and para-position of phenyl groups <u>Toshikazu Sakaguchi</u> , Shinpei Kajimura, Tamotsu Hashimoto

Nagao Masanori, presiding

15:00	1F20	Gas Separation Properties of Network Polymer Membranes Utilizing Diacetylene Groups <u>Shiro Yamakawa</u> , Kazukiyo Nagai
15:15	1F21	Photocatalytic reduction in the membranes having normally oriented cylindrical nanochannels <u>Sadayuki Asaoka</u> , Kiko Shiokawa, Kazuki Fukada

15:30	1F22	Synthesis of Single-Handed Helical Ladder Polymers with a Helical Cavity and Helical Grooves and Their Chiral Recognition Capabilities <u>Tomoyuki Ikai</u> , Takehiro Matsumoto, Shoki Takeda, Kosuke Oki, Eiji Yashima
15:45	1F23	Interaction of Amphiphilic Alternating Copolymers Bearing Dense Triazole Backbone with Cyclodextrins <u>Akihito Hashidzume</u> , Tomoaki Yamamoto, Ryoichi Taguchi, Zijun Yan, Ryo Ejima, Linlin Xu, Masaki Nakahata, Yuri Kamon
16:00	1F24	Cadmium ion adsorption properties of polyanions carrying carboxylate and thiol-containing amino acid residues in their side chains <u>Masaki Nakahata</u> , Chikano Okamoto, Motomu Tanaka, Akihito Hashidzume

Tue. May 20

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Kimura Kento, presiding

9:00	2F01	Unraveling Carbon Dioxide (CO ₂) Transport Behavior in Poly(fluoroalkyl acrylate) and Poly(fluoroalkyl methacrylate): A Comparative Study of Fluoropolymer Structure-Property Relationships <u>Sinan FENG</u> , Yucheng ZHANG, Roman SELYANCHYN, Shigenori FUJIKAWA, Shinichi MURATA, Atsushi TAKAHARA
9:15	2F02	Synthesis of hollow polymer microsphere-immobilized MacMillan catalysts and their application to asymmetric Diels-Alder reaction <u>Tomoya Ikke</u> , alam md rabiul, Yuri Hashimoto, Naoki Haraguchi
9:30	2F03	Exciton Dissociation in Fused-Ring π -Conjugated Molecular Films <u>Takumi NOBUOKA</u> , Yuki SATO, HyungDo KIM, Shunsuke YAMAMOTO, Hideo OHKITA
9:45	2F04	Excitation energy dependence of charge generation in polythiophene/fullerene blend films <u>Haruka Okazaki</u> , Kazuki Kohzuki, Shunsuke Yamamoto, Hideo Ohkita

Masuhara Akito, presiding

15:00	2F20	Preparation and conductivity of ionic liquid-doped rigid polymer network film for application to polymer electrolyte fuel cells Ryouhei Nishioka, Naotaka Kimura, <u>Tetsuya Uchida</u>
15:15	2F21	Singlet exciton diffusion in conjugated polymer films with different crystallinities <u>Yulong Tang</u> , Kazuma Kato, Mizuki Yamazaki, Hyung Do Kim, Shunsuke Yamamoto, Hideo Ohkita
15:30	2F22	Rheological Evaluations of Electrode Slurries Containing Solid Polymer Electrolytes <u>Kento Kimura</u> , Mana Suzuki, Masayoshi Takano, Ryuta X Suzuki, Yuichiro Nagatsu, Yoichi Tominaga
15:45	2F23	Preparation of novel platinum-substitute oxygen reduction catalysts obtained by calcination of iron phthalocyanine complexes with heterocyclic structures <u>Yuta Nakazato</u> , Chaolin Bai, Tsukasa Ichikawa, Izuru Kobayashi, Nobukatsu Nemoto, Kotaro Yoshioka, Shota Tanaka, Yuki Sakamoto, Masaji Akimoto

Wed. May 21

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Akagi Yuki, presiding

- 9:00 3F01 Powderization of Gallium-Indium Eutectic by Surface Modification and Preparation of Conductive Composites
Shunichiro Ito, Christophre Hiromi Shimamura, Kazuo Tanaka
- 9:15 3F02 Polymerization of an AB₂-type monomer with cage silsesquioxane and properties of the polymer
Naoki Yamaguchi, Cashew Nagashima, Hiroaki Imoto, Kensuke Naka
- 9:30 3F03 Fabrication of supramolecular materials using cage-shaped silsesquioxane bis-urea derivatives
Jinshiro Takeuchi, Hiroaki Imoto, Kensuke Naka
- 9:45 3F04 Surface modification using surface segregation of octaalkoxy-substituted POSSs
Nanami Okamura, Jinshiro Takeuchi, Hiroaki Imoto, Kensuke Naka

Imoto Hiroaki, presiding

- 15:00 3F20 Mechanical Properties of Polycarbonate with Reversible Cross-Links
Yuta Fukao, Ryohei Ikura, Kenji Yamaoka, Hironobu Morishita, Yoshinori Takashima
- 15:15 3F21 Fabrication and Mechanical Properties of Nanocomposites with Nano-clay Coated by a Flexible Polymer Layer
Tetsuro Kamada, Takuya Matsumoto, Takashi Nishino
- 15:30 3F22 Effects of External Solution on the Structure of PEO/silica Mixture
Tomoki Takao, Yuki Akagi, Saki Kusakabe
- 15:45 3F23 Physical properties of PEO/silica mixtures with chemical bonding
Sota Horie, Saki Kusakabe, Tomoki Takao, Yuki Akagi
- 16:00 3F24 Preparation of photo oxidized silicon oxide nano films with amphiphilic cyclosiloxanes
Chinami Habu, Yuki Irie, Aki Kashiwazaki, Masaya Mitsuishi

Thu. May 22

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Matsumoto Takuya, presiding

- 9:00 4F01 Development of nanostructure by hybridizing chitin nanofibers with polyoxometalates and their control of properties
Keita Kuroiwa, Kai Miyamoto, Yamaguchi Ayaka, Shinsuke Ifuku
- 9:15 4F02 Transparent film obtained from methacrylate with cage silsesquioxane in its side chain
Cashew Nagashima, Hiroaki Imoto, Kensuke Naka
- 9:30 4F03 Development of Various Functional Cellulose Nanofiber Composite Films Utilizing Polyaniline-Derivative Conversion Synthetic Routes
Eiichi Shoji, Mitsuaki Hatano
- 9:45 4F04 Innovation of a Polymer Actuator-Driven Low-Voltage Thin Micro Pump-Integrated Card for Microfluidic Systems
Eiichi Shoji

Kuroiwa Keita, presiding

- 15:00 4F20 Surface properties and icephobicity of polymethacrylates with various side chains

		<u>Takuya Matsumoto</u> ,Yuki Shiramatsu,Takashi Nishino
15:15	4F21	Preparation of adhesives by polymer knitting method with movable cross-links <u>Shunsei Sasaki</u> ,Sho Kosaba,Kenji Yamaoka,Ryohei Ikura,Yoshinori Takashima
15:30	4F22	Fabrication of photo-adhesive materials incorporating ortho-substituted pyridyl groups <u>Masahiro Furutani</u> ,Hinata Okada,Miku Matsui
15:45	4F23	Fluorination of Ethylene-Tetrafluoroethylene Copolymer Film at Surface in Liquid Media <u>Eisuke Yasuo</u> ,Masafumi Sugiyama,Yuichiro Ishibashi,Satoru Hommura,Takashi Okazoe,Daisuke Kawaguchi
16:00	4F24	Surface Modification of Organic Electrochemical Transistors <u>Shunsuke Yamamoto</u> ,Sakyo Abe,Sonosuke Watanabe,Masaya Mitsuishi

Room G

Mon. May 19

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Kubo Shoichi, presiding

9:00	1G01	Synthesis of dye-terminated conjugated polymers via direct arylation reaction and optical property evaluation <u>Ziwei Hu</u> ,Takaki Kanbara,Junpei Kuwabara
9:15	1G02	Structure Effect on the Photophysical Properties of Triarylamine-Derived Polyesters via Ring-Opening Alternating Copolymerization <u>Yu-Jen Shao</u> ,Feng Li,Takuya Isono,Guey-Sheng Liou,Toshifumi Satoh
9:30	1G03	Synthesis and optical properties of novel π -conjugated polymers bearing resorufin unit in the main chain <u>Haruto Tateki</u> ,Aohan Wang

Kuwabara Junpei, presiding

15:00	1G20	Polycondensation of Dithiols and Aldehydes to Develop High Refractive Index Materials <u>Masahiro Kanamaru</u> ,Shichong Zhang,Hiroaki Kishi,Souma Kitano,Taiyou Morimoto,Masashi Shiotuki
15:15	1G21	Single-Beam Recording of Polarization Hologram on Azo-Carbazole Composite Material <u>Mizuki Umeda</u> ,Kenji Kinashi,Boaz Jessie Jackin,Wataru Sakai
15:30	1G22	Novel Azomethine Carbazole Polymer for Full-Color Hologram <u>Abishaka Arul Dhas</u> ,Kenji Kinashi,Jackin Boaz Jessie,Wataru Sakai
15:45	1G23	Nonlinear optical response of dye-doped liquid crystals containing polymer-grafted nanorods <u>Shoichi Kubo</u> ,Jose Carlos Mejia,Atsushi Shishido

Tue. May 20

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Kawasaki Riku, presiding

- 9:00 2G01 Capture of bacteria by nanopillar hydrogels with different aspect ratios
Yohei Kotsuchibashi, Haruki Uchida, Rui Ikeda
- 9:15 2G02 Preparation of Thermal Conductive Film Composed of Nanosheet-Shaped Cello-oligosaccharide Crystals
Hiroto Maruyama, Yuuki Hata, Mitsuo Hara, Toshiki Sawada, Takeshi Serizawa
- 9:30 2G03 Development of Filamentous Virus-based Material for Carbon Capture and Storage
Yu-Ju Huang, Shoma Aki, Kazushi Imamura, Yu Hoshino, Toshiki Sawada
- 9:45 2G04 Development of a Polymer Thin-Film Force Sensor for Direct Application to the Skin
Takahiro Aihara, Shinji Takeoka

Kotsuchibashi Yohei, presiding

- 15:00 2G20 Synthesis of urethane methacrylate crosslinkers derived from hydroxy urethanes and their application to shape-memory polymers
tatsuki morita, yoshiaki yoshida
- 15:15 2G21 Design of Liquid Crystalline Polymers with Ligands for Target Molecules and Their Molecule-responsive Behavior
Kaito Kinoshita, Akifumi Kawamura, Takashi Miyata
- 15:30 2G22 Nonlinear Electronic Characteristics of Doped P3HT Monolayer Networks
Naoki Hara, Yuya Ishizaki, Shusaku Nagano
- 15:45 2G23 Photoinduced phase separation of compatible binary blends of polymer liquid crystals
Yuno Yokota, Yuya Ishizaki, Mitsuo Hara, Takahiro Seki, Shusaku Nagano
- 16:00 2G24 Orientation and Thermal Diffusivity of Side-Chain Liquid Crystalline Polymers with Smectic A Phases in Thin Films
Kanna Kobayashi, Yuya Ishizaki, Takahiro Seki, Shusaku Nagano

Wed. May 21

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Hayashi Mikihiro, presiding

- 9:00 3G01 Mechanical properties of gels with polymer chain entanglements and their applications to adhesive sheets
Takashi Miyata, Midori Murakami, Kano Kawamoto, Akifumi Kawamura
- 9:15 3G02 Development of stimuli-responsive liquid materials showing slow-acting change in photoluminescent color
Kyosuke Isoda, Takumi Omura, Shogo Morisako, Shuya Matsumoto
- 9:30 3G03 Preparation of rubbery soft polymer electrolyte membrane with nanomatrix channel
Yoshimasa Yamamoto, Seiichi Kawahara
- 9:45 3G04 4D Printing of Multifunctional Gels: A Polymer-Based Approach to Design and Versatility
Sabi Jahan Maliha, Jun Ogawa, Hidemitsu Furukawa

Isoda Kyosuke, presiding

15:00	3G20	Preparation of block copolymer-based TPE with bond exchangeable sub-crosslink domains <u>Mikihiro Hayashi</u>
15:15	3G21	Precise Synthesis of Polyurethane Elastomer and their Application to Photoinduced Adhesion/Dismounting Marin Takeuchi,Takenori Ikegaya,Shogo Nobukawa, <u>Yasuhiro Kohsaka</u>
15:30	3G22	Carrier transport and circularly polarized luminescence of cholesteric liquid crystals based on oligo(p-phenylenevinylene) moieties <u>Masahiro Funahashi</u> ,Eigo Shimaoka,Masaki Kunihiro,Shuhei Morishita,Noriaki Tsurumachi
15:45	3G23	Machine learning-based size prediction of hydrogel microparticles synthesized via aqueous precipitation polymerization <u>Haruka Minato</u> ,Yuji Sato,Ryuji Namioka,Yasuhiko Igarashi,Risako Shibata,Yuya Oaki,Daisuke Suzuki

Thu. May 22

C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

Liu Haonan, presiding

9:00	4G01	Higher-ordered Structure and Thermal Conductive Anisotropy of Photo-crosslinked Columnar Liquid Crystal Films <u>Yoshitaka Takezawa</u> ,Tatsuki Shimizu,Takuji Hirose,Koichi Kodama
9:15	4G02	Development of high-strength materials using hydrogels containing phosphate groups <u>Riku Fukuoka</u> ,Takuma Kureha
9:30	4G03	Development of Highly Elastic Hydrogels by Terminal Functional Groups of Side Chain <u>Yuka Wakayama</u> ,Takuma Kureha
9:45	4G04	Mechanical and electrolyte properties of TetraPEG ion gels cross-linked via metal-ion complexation <u>Yoshika Kimura</u> ,Saki Sawayama,Yuji Kamiyama,Takeshi Ueki,Kenta Fujii

Kureha Takuma, presiding

15:00	4G20	Correlation Analysis of Dielectric Properties at GHz Band, Moisture Sorption Behavior, and Molecular Mobility of Polyimides Using Infrared Spectroscopy <u>Ririka Sawada</u> ,Haonan Liu,Shinji Ando
15:15	4G21	Highly Fluorinated Polyimides Exhibiting Extremely Low Frequency and Humidity Dependence in High-Frequency Broadband (10~330 GHz) Dielectric Properties <u>Haonan Liu</u> ,Ririka Sawada,Shana Yanagimoto,Yoshiyuki Yanagimoto,Shinji Ando
15:30	4G22	Development of Low Dielectric Loss Tangent Polymers through the Utilization of Polysiloxanes with Phenyl Side Groups <u>Riku Takahashi</u> ,Kan Hatakeyama,Yuta Nabae,Teruaki Hayakawa
15:45	4G23	Aggregated Structures and Fundamental Properties of N-shaped Organic Semiconductors with Short Alkyl Chains <u>Masato Mitani</u> ,Shohei Kumagai,Takuya Seki,Go Watanabe,Toshihiro Okamoto

Room H

Mon. May 19

D. BIOPOLYMERS AND BIORELATED POLYMERS

Sawada Toshiki, presiding

- 9:00 1H01 Stimuli-responsive phase transitions designed on in-cell protein crystals
Kosuke Kikuchi, Misaki Nagama, Junko Tanaka, Haonan Kong, Satoshi Abe, Takafumi Ueno
- 9:15 1H02 Construction of Artificial Metal-free Peroxidase Using a Protein Cage
JIAXIN TIAN, Basudev Maity, Satoshi Abe, Tiezheng PAN, Tadaomi Furuta, Takafumi Ueno
- 9:30 1H03 Development of a highly selective mitochondrial targeting peptide with controlled cell penetrating by light irradiation
Naoya Abe, Taha Behrooz Kohlan, Anna Finne Wistrand, Keiji Numata
- 9:45 1H04 Intracellular drug delivery by artificial viral capsids modified with perfluoro ether peptides
Avijit Ghosh, Yuka Yamamoto, Hiroshi Inaba, Takashi Okazoe, Yu Ota, Kazunori Matsuura

Kikuchi Kosuke, presiding

- 15:00 1H20 Functional control of intracellular microtubules by bundling with tetrameric-protein
Soei Watari, Hiroshi Inaba, Takanari Inoue, Kazunori Matsuura
- 15:15 1H21 Construction of Peptide Array-Based Classification System for Water-Soluble Polymers
Yuki Tano, Toshiki Sawada, Shogo Saito, Masayoshi Tanaka, Mina Okochi, Takeshi Serizawa
- 15:30 1H22 Development of the K⁺ sensor fiber mat, by encapsulating K⁺ sensor fluorescent protein inside fiber mat nanofibers and its application to cell-incubation scaffold
Azumi Sako, Toshihisa Mizuno
- 15:45 1H23 Development of a TGF- β signaling inhibitory peptide and investigation of its working mechanism
Ryunosuke Suzuki, Toshihisa Mizuno

Tue. May 20

D. BIOPOLYMERS AND BIORELATED POLYMERS

Hata Yuuki, presiding

- 9:00 2H01 Stabilization of microtubule structures by Tau-derived peptide dimers
Hiroshi Inaba, Yui Hayakawa, Akira Kakugo, Kazunori Matsuura
- 9:15 2H02 Peroxidase-like nanozyme activity of AuNP-loaded dual pH- and temperature-responsive dendrimers
Chie KOJIMA, Hai Xia
- 9:30 2H03 Rational development of ligands that control the function of DNA tetraplexes

Lutan Liu,Shuntaro Takahashi,Joseph Openy,Guido Clever,Naoki Sugimoto

- 9:45 2H04 Development of Chimeric Artificial Nucleic Acids (CANA) with Catalytic Target RNA Cleavage Functions Toward the Cancer Therapeutics: Developments suppression of pancreatic cancer malignancy
Kosuke Machida,Mion Kino,Hiroki Baba,Yuki Igarashi,CHUAN WANGHSIN,Hieu trong Bui,Masahito Inagaki,Mitsuyo Matsumoto,Yasuyuki Araki,Hironori Hayashi,Eiichi Kodama,Kazuhiko Igarashi,Takehiko Wada

Kojima Chie, presiding

- 15:00 2H20 Evaluation of the effect of hydration state on molecular recognition of glycopolymers
Yoko Kitsuki,Masanori Nagao,Hikaru Matsumoto,Masaru Tanaka,Yukiko Tanaka,Takumi Yamaguchi,Yue Zhang,Yoshiko Miura
- 15:15 2H21 Precise Synthesis of Cyclic Glycopolymers by Post-Click chemistry
Yusuke Kumon,Masanori Nagao,Hikaru Matsumoto,Yoshiko Miura
- 15:30 2H22 Top-Down Preparation of Cello-oligosaccharides by Phosphoric Acid-Catalyzed Hydrolysis of Cellulose and Their Self-Assembly
Yuuki Hata,Kosuke Yokota,Takeshi Serizawa
- 15:45 2H23 A Discrimination of glycosaminoglycans by polymer/supramolecular complexes
Shun-ichi Tamaru

Wed. May 21

D. BIOPOLYMERS AND BIORELATED POLYMERS

Sawada Toshiki, presiding

- 9:00 3H01 Evaluation of thermodynamic effects of carbohydrate multivalency on avidity using synthetic discrete glycooligomers
Masanori Nagao,Yu Hoshino,Yoshiko Miura
- 9:15 3H02 Thermodynamic effects of self-folding behavior of synthetic polymers on the interactions with proteins
Masanori Nagao,Daichi Yoshimatsu,Hikaru Matsumoto,Yoshiko Miura
- 9:30 3H03 Evaluation of up-conversion in dye-encapsulated cationic liposomes
Yuna Imagawa,Hideki Kawai
- 9:45 3H04 Development of LYTAC agents via Siglec-E by using glycopolymers
Tsuyoshi Ochi,Masanori Nagao,Hikaru Matsumoto,Hirohiko Ise,Yoshiko Miura

Nagao Masanori, presiding

- 15:00 3H20 Droplets produced by phase separation of aqueous solutions comprising multiple zwitterionic polymers
Yuji Higaki,Haruna Shiroi
- 15:15 3H21 Formation of Robust Films via Interfacial Assembly of Surface-Alkylated Synthetic Nanocelluloses
Hiroataka Kamada,Yuuki Hata,Toshiki Sawada,Takeshi Serizawa
- 15:30 3H22 Local Deformation of Phase-Separated Giant Unilamellar Vesicle induced by Photoresponsive Peptide Nanofibers
Kazunori Matsuura,Yingbing Liang,Yasunari Takaki,Hiroshi Inaba
- 15:45 3H23 The construction and functional evaluation of hybrid nanoparticles inspired by biomembrane vesicles

Ryosuke Mizuta,Eisuke Kanao,Shinichi Sawada,Yasushi Ishihama,Kazunari Akiyoshi,Yoshihiro Sasaki

Thu. May 22

D. BIOPOLYMERS AND BIORELATED POLYMERS

Naito Mitsuru, presiding

- 9:00 4H01 One-Dimensional Graft Copolymer Assemblies with Controlled Length by Crystallization-Driven Self-Assembly
Sorami Yamagiwa,Tomoki Nishimura
- 9:15 4H02 Development of amphiphilic polymer anchors for in vivo cell surface engineering
Yuka Kitamura,Tomoki Nishimura
- 9:30 4H03 Design of UCST-Type Temperature-responsive Polymers That Undergo Liquid-Liquid Phase Separation under Physiological Ionic Strength
Takashi Miyata,Yuto Fujii,Akifumi Kawamura,Nobuyuki Morimoto
- 9:45 4H04 Preparation of biomolecule-encapsulated nanocapsule by interfacial cross-linking of emulsion
Akifumi Kawamura,Miyu Shimizu,Rika Hirabayashi,Takashi Miyata

Nishimura Tomoki, presiding

- 15:00 4H20 Tuning plasmonic activity through one-dimensional assembly of DNA-modified gold nanodiscs
Yusuke Yonamine,Melda Taspika,Hideyuki Mitomo,Kuniharu Ijio
- 15:15 4H21 Analysis of Liposomal Membrane Permeability of Sulfobetaine Polymers
Sayaka TOITA,Takuto TORIUMI,Nobuyuki MORIMOTO
- 15:30 4H22 Rearrangement of anionic moiety for diamine-based polyzwitterion toward modulated pH-responsiveness
Sachi Ibuki,Tomohiro Umeno,Makoto Oba,Hiroyasu Takemoto
- 15:45 4H23 Design of enzyme-responsive polymers that show liquid-liquid phase separation
Rei Ksunose,Yuka Morioka,Atsushi Maruyama,Naohiko Shimada

Room J

Mon. May 19

D. BIOPOLYMERS AND BIORELATED POLYMERS

Koga Tomoyuki, presiding

- 9:00 1J01 Fabrication of thermoresponsive cell assembly technology driven by triple helix formation of collagen model peptide
Kazuki Yoshida,Michiya Matsusaki
- 9:15 1J02 Development of Anisotropic Fibers Using Phase Separation of Collagen and Polyacrylic Acid and Their Application to 3D Tissue culture
Asuka Kato,Koichi Hattori,Shiro Kitano,Michiya Matsusaki
- 9:30 1J03 Molecular Design of Phosphatidylserine-inspired Polymers for Anti-inflammatory Therapy
Kosuke Sato,Ahmed Nabil,Mitsuhiro Ebara

9:45	1J04	Design of Polymers Containing Artesunate for Ferroptosis Induction <u>Natsumi Ito</u> ,Ahmed Nabil,Koichirou Uto,Mitsuhiro Ebara
Homma Kenta, presiding		
15:00	1J20	Shape memory hydrogels from poly(γ -glutamic acid)-based polymers Ayumi Toji,Shin-nosuke Nishimura, <u>Tomoyuki Koga</u>
15:15	1J21	Fabrication of Urea-Adsorbing Nanofibers for Wearable Blood Purification Devices <u>Keigo Sugahara</u> ,Makoto Sasaki,Mitsuhiro Ebara
15:30	1J22	Studies of Anion-Exchange Dyes and Durability Evaluation of their Dye-Coupled Polyethylene Film for Retinal Prosthesis <u>Md Chanmiya Sheikh</u> ,Kohei Oka,Takano Nonaka,Kosuke Sonoda,Naotaka Kimura,Tetsuya Uchida
15:45	1J23	Piezoelectric Nanofiber Meshes Based on Mn-Ti Bimetallic Organic Framework for Tumor Treating Field (TTF) <u>Shiqin Dai</u> ,Mitsuhiro Ebara

Tue. May 20

D. BIOPOLYMERS AND BIORELATED POLYMERS

Iwasaki Yasuhiko, presiding

9:00	2J01	Fabrication of senolytic polymer that recognizes senscent cell surface enzyme and forms thin-layer hydrogel <u>Kenta Homma</u> ,Riko Akehi,Michiya Matsusaki
9:15	2J02	Improvement of Escaping Endocytic Uptake by Regulating Hydrophobicity and Charge of Molecular Block That Disrupt Cell Membrane in Response to Tumor Microenvironment <u>Kazuki Moroishi</u> ,Masahiko Nakamoto,Michiya Matsusaki
9:30	2J03	Inhibition of Abeta Aggregation by Cholesterol-End-Modified PEG Vesicles and Micelles <u>Shoichiro ASAYAMA</u> ,Shota WATANABE,Motoki UEDA
9:45	2J04	Suppression of oxidative stress by Zn ion delivery into endoplasmic reticulum <u>Motoki Ueda</u> ,Misaki Shimuta,Shoichiro Asayama

Asayama Shoichiro, presiding

15:00	2J20	Development of foreign antigen delivery system for modification of cancer antigens <u>Shinichi Mochizuki</u> ,Momona Ota,Aki Kakinami,Sayaka Oitate
15:15	2J21	Design and biofunctional evaluation of biomembrane hybrid silver nanoparticles <u>Tatsuhiro Yokoyama</u> ,Hiroyuki Harada,Ryosuke Mizuta,Esuke Kanao,Shin-ich Sawada,Kazunari Akiyoshi,Yoshihiro Sasaki
15:30	2J22	Biodistribution of amphiphilic polyphosphodiester as solubilizers for lipophilic anti-cancer drugs <u>Hitomi Iisaka</u> ,Yota Okuno,Yasuhiko Iwasaki
15:45	2J23	Improving mRNA delivery efficiency to mitochondria using peptides by optimizing poly(A) tail length <u>Naoto Yoshinaga</u> ,Keiji Numata

Wed. May 21

D. BIOPOLYMERS AND BIORELATED POLYMERS

Wada Takehiko, presiding

- 9:00 3J01 Anti-cancer effects of epidermal growth factor-immobilized polymeric nanoparticles
Shota Yamamoto, Jun Nakanishi
- 9:15 3J02 mRNA delivery based on physical and chemical stimuli-responsive Zn(II)-dipicolylamine-attached polythiophene
Akira Matsumoto, Yui Sasaki, Tsuyoshi Minami
- 9:30 3J03 Development of drug loading technique for hydrophobic compounds toward extracellular vesicle.
Riku Kawasaki, Ayano Oshige, Ryosuke Mizuta, Yoshihiro Sasaki, Kazunari Akiyoshi, Minoru Suzuki, Takeshi Nagasaki, Keita Yamana, Atsushi Ikeda
- 9:45 3J04 Temperature-dependent changes in surface potential of oligo(ethylene glycol)-coated gold nanoparticles
Hideyuki Mitomo, Mitomo Nakamura, Kuniharu Ijiri

Yonamine Yusuke, presiding

- 15:00 3J20 Construction and Evaluation of Cancer Cell-Selective Drug Delivery System: Development of Efficient Intracellular Transfection Systems Based on Oligoarginine Combined with PAD derivatives
Hirari Kato, Kodai Ishikawa, Mitsuyo Matsumoto, Yasuyuki Araki, Ikuhiko Nakase, Asako Yamayoshi, Kazuhiko Igarashi, Takehiko Wada
- 15:15 3J21 Development of scaffolding material with blood vessel-like properties to control sustained release of glucose for tissue engineering
Panitporn Laowpanitchakorn, Marie Piantino, Michiya Matsusaki
- 15:30 3J22 Fabrication of Blood Capillary Micro-Tissues without Fibroblast Supporting by controlling Growth Factors and Mechanical Properties
He Li, Fiona LOUIS, Michiya Matsusaki

Thu. May 22

D. BIOPOLYMERS AND BIORELATED POLYMERS

Nagase Kenichi, presiding

- 9:00 4J01 Construction of Hybrid Cell Spheroids based on nanogel composite keratin microspheres
Hibiki Sakata, Yuki Tanaka, Wey Yih Heah, Hikaru Takaya, Yohei Yamamoto, Kazunari Akiyoshi, Ryosuke Mizuta, Yoshihiro Sasaki
- 9:15 4J02 Design of Nanofiber Meshes with Senolytic Drugs for Selective Removal of Senescent cells
Tatsuya Saito, Mitsuhiro Ebara
- 9:30 4J03 Preparation of photo-responsive poly(dimethylsiloxane) films with changeable surface properties and cell behavior on their surface.
Jun Komuratani, Neiro Kodama, Akifumi Kawamura, Takashi Miyata
- 9:45 4J04 Effects of Shape-Memory Nanofibers Substrate on Cellular Function
Nao Kawata, Koichiro Uto, Mitsuhiro Ebara

Kawamura Akifumi, presiding

- 15:00 4J20 Functional growth factor releasing nanoparticles for effective hepatocyte tissue transplantation
Kenichi Nagase, Marin Nagaoka, Yuto Nakano, Rie Utoh

15:15	4J21	Functional mixed polymer brush for effective separation of mesenchymal stem cell <u>Kenichi Nagase</u> , Haruno Wakayama, Hideko Kanazawa
15:30	4J22	Comparative Analysis of the Wound Healing Potential of Exosomes <u>Weixu Zhang</u> , Satoe Obuchi, Akiko Kuramochi, Yuji Teramura

Room K

Mon. May 19

E. POLYMERS AND ENVIRONMENT

Kabe Taizo, presiding

9:00	1K01	Biodegradability of hardly biodegradable polyamides depending on the copolymerization ratio <u>Shota Ando</u> , Takashi Masaki, Daisuke Kasai, Eri Ueno, Namiko Gibu, Yingjun An, Takako Kikuchi, Maina Yonemura, Dai-ichiro Kato, Atsushi Takahara, Kohzo Ito
9:15	1K02	Biodegradability of hardly biodegradable polyamides by cryogenic-grinding <u>Shota Ando</u> , Daisuke Kasai, Eri Ueno, Megumi Akiyama, Namiko Gibu, Takako Kikuchi, Atsushi Takahara, Kohzo Ito
9:30	1K03	Depolymerization of poly(hydroxyurethane)s to five-membered cyclic carbonates and amines <u>Yasuyuki Mori</u> , Sho Morinaga, Yoshio Furusho, Takehiro Kawauchi, Takeshi Endo
9:45	1K04	Synthesis of self-catalyzed Networked Polydithiourethanes and their application to easily disassembly adhesives <u>Tsubasa Sakiyama</u> , Yoshiaki Yoshida
10:00	1K05	Control of material properties through structural design of pressure-responsive block copolymers <u>Yutaro Shimizu</u> , Ikuo Taniguchi

Ishii Daisuke, presiding

15:00	1K20	Investigation of Thermal Cross-linking Mechanism and Evaluation of Properties of Microbial Polyesters with Unsaturated Bonds in Their Side Chains <u>Sumire Ogura</u> , Jobu Tateiwa, Taizo Kabe, Yuki Miyahara, Takeharu Tsuge, Tadahisa Iwata
15:15	1K21	Improving the tensile strength of poly(ethylene succinate) fiber and evaluating enzymatic degradability <u>Kei Ishida</u> , Taizo Kabe, Sumito Kumagai, Yasumasa Takenaka, Hideki Abe, Tadahisa Iwata
15:30	1K22	Effect of carbon numbers of dicarboxylic acids and diols on marine biodegradation of aliphatic polyesters <u>Yuushou Nakayama</u> , Tomoka Shuto, Ryo Tanaka, Takeshi Shiono, Shodai Hino, Norioki Kawasaki, Naoko Yamano, Atsuyoshi Nakayama
15:45	1K23	Development of technology for imparting biodegradability to non-degradable copolyesters by introducing degradable monomers <u>Hailin Zhou</u> , Shuhei Nishizawa, Sho Inagaki, Atsuhisa Miyawaki, Hidetomo Kai, Tomoki Dohi, Chika Harano, Takashi Mihara, Akihiro Koiso

Tue. May 20

E. POLYMERS AND ENVIRONMENT

Andou Yoshito, presiding

- 9:00 2K01 Rapid preparation of porous fibers from microbial polyester by partial melt spinning and drawing method after isothermal crystallization near T_g
taizo kabe,kohei toyosaki,tadahisa iwata
- 9:15 2K02 Development of Novel marine biodegradable polymer blends containing poly(ethylene succinate) copolymers
Sumito Kumagai,Yasumasa Takenaka,Motosuke Imada,Hideki Abe,Tomohiro Hiraishi,Noriyuki Asakura,Senri Hayashi
- 9:30 2K03 Biodegradation of P(3HB) by novel P(3HB)-degrading bacteria: effect of addition of poly(ferucluc acid-co-glycolic acid)
Daisuke Ishii,Mayu Tsuruga,Tomoko Seyama,Haruhiko Masaki,Masatake Kanai
- 9:45 2K04 Development of Oligosaccharide-Containing Block Copolymer as Additives for Toughening of Cellulose Acetate
Sho Fukushima,Takaya Kobayashi,Lang Weeranuch,Kenji Takahashi,Takuya Yamamoto,Kenji Tajima,Li Feng,Toshifumi Satoh,Takuya Isono
- 10:00 2K05 Dissolution and Reaction of Cellulose by the Addition of Bulky Organosuperbase
Tatsuya Nishida,Daisuke Hirose,Katsuhiko Maeda

Ishii Daisuke, presiding

- 15:00 2K20 Selective Deuteration of Bacterial Cellulose in Media containing Deuterium
Rintaro Furukawa,Takuya Mtsuoto,Takashi Nishino
- 15:15 2K21 Dehydration Condensation of Chitin Oligosaccharides by Carbon Catalysts with Weak Acid Sites
Takuya Sagawa,Tatsuki Yasuda,Mineo Hashizume
- 15:30 2K22 The cockscomb gel obtained from a cockscomb extract
Hironori Izawa,Tomohiro Hasebe,Masaki Nakai
- 15:45 2K23 Improvement in the Mechanical Properties of Cellulose Composites via the Interactions Between the Polymer Matrix and Fillers
Yuta Kameya,Kenji Yamaoka,Ryohei Ikura,Akihide Sugawara,Hiroshi Uyama,Yoshinori Takashima

Wed. May 21

E. POLYMERS AND ENVIRONMENT

Kitayama Yukiya, presiding

- 9:00 3K01 Synthesis of novolacs from lignoanisoles based on molecular designs in organic systems
Ritsuki Matsuoka,Mitsuru Aoyagi,Harumi Sato
- 9:15 3K02 Functionalization of sugar-based polycarbonates by block-copolymerization and their ammonolysis behaviors in aqueous media
Kazuaki Rikiyama,Tatsuo Taniguchi,Daisuke Aoki
- 9:30 3K03 Preparation and low-temperature formability of core-shell nanoparticle baroplastics

Takaya Okazaki, Fanny Gladys, Ikuo Taniguchi

- 10:00 3K05 Environmental Degradation of Prooxidant-based Polyolefins
Adchara PADERMSHOKE, Yingjun AN, Nguyen V. THINH, Yutaka
KOBAYASHI, Hiroshi ITO, Atsushi TAKAHARA

Ando Shota, presiding

- 15:00 3K20 Analysis of the biodegradation behavior of microplastics derived from
biodegradable plastics in the marine environment
Takako KIKUCHI, Hironori TAGUCHI, Nao OSAKA, Keiji TANAKA
- 15:15 3K21 Decomposition of GFRP resin by using atmospheric pressure
microwave heating
Kazutoshi Ikenaga, Kinari Oda, Katsuki Kusakabe
- 15:30 3K22 Synthesis of Degradable Polymer Capsules by Interfacial
Photocycloaddition Polymerization
Yukiya Kitayama, Misato Yamashita, Atsushi Harada
- 15:45 3K23 Enhancement of Enzyme Stability and Degradation Promotion of
Enzyme-Embedded Poly(Lactic Acid) through Thermal Processing
under a Nitrogen Atmosphere
Qiuyuan Huang, Satoshi Kimura, Tadahisa Iwata

Thu. May 22

F. INDUSTRIAL POLYMERS AND TECHNOLOGY

Koyanagi Jun, presiding

- 9:00 4K01 Innovation of food textures through laser-based additive
manufacturing of food using polysaccharides and proteins
Kazuma Miyazaki, Makoto Takemasa
- 9:15 4K02 Food texture analysis based on deep learning using dental model and
6-axis force torque sensor in the compression measurements
Ryo Sugihara, Makoto Takemasa

Takemasa Makoto, presiding

- 9:30 4K03 Prediction of strength and durability for polymer materials based on
entropy
Jun Koyanagi, Yutaka Oya
- 9:45 4K04 Design and Pneumatic Deformation of Arrowhead-shaped Auxetic Ring
Structure
Kaisei Kamiya, Kasuma Morikawa, Hiroshi Endo
- 10:00 4K05 Using 4D Printing and Hydrogel Technologies to Create Biomimetic Soft
Robot
Hossain Pintu, Jun Ogawa, Hidemitsu Furukawa

Tamai Toshiyuki, presiding

- 15:00 4K20 Development of polylactic acid molding and processing technology for
the fabrication of hollow microneedles for extraction of interstitial fluid
from subcutaneous
Kotaro Iwamoto, Yutaro Chino, Yusuke Ito, Reina Yoshizaki, Naohiko
Sugita, Madoka Takai
- 15:15 4K21 Degradation Properties of Polyimide for Noble Gas Filter
Mina Amo, Takahisa Matsuzaki, Hitoshi Narita, Tomoharu
Hashimoto, Yasutaka Aoki, Daisuke Amemiya

Takai Madoka, presiding

- 15:30 4K22 Control of mechanical properties of polypropylene using beta-
nucleating agent

Yuji Matsumoto, Shogo Masai, Naoto Ueda

15:45 4K23 Surface Modification of Polyethylene Naphthalate Substrates by Co-deposition of Polydopamine with Polyethyleneimine and its Application in Electroless Deposition
Toshiyuki Tamai, Mitsuru Watanabe, Yoshio Nakahara, Setsuko Yajima

Room S

Tue. May 20

INVITED LECTURES

Satoh Kotaro, presiding

15:00 2SS1IL Polymer Synthesis for a Sustainable Society: Perspective beyond Challenges
Mitsuo Sawamoto

15:30 2SS2IL Water-soluble Helical Poly(quinoxaline)s: Screw-sense Induction and Chiral Functions
Michinori Suginome

16:00 2SS3IL Progress of Supramolecular Polymerization: Towards a Sustainable Future
Takuzo Aida

Wed. May 21

INVITED LECTURES

Mayumi Koichi, presiding

15:00 3SS1IL Polymer Crystallization
Toshiji Kanaya

15:30 3SS2IL Recommendation of Small-angle Scattering Research
Mitsuhiro Shibayama

16:00 3SS3IL Viscoelastic effects on Glassy Materials
Mikihito Takenaka

Thu. May 22

INVITED LECTURES

Sakai Takamasa, presiding

15:00 4SS1IL From Slide-Ring Gel to Tough Polymers
Kohzo Ito

15:30 4SS2IL Creation of Nanocomposite Hydrogel: Its Essence and Developments
Kazutoshi Haraguchi

16:00 4SS3IL New Developments in Double Network Materials
Jian Ping Gong

