

## Room P

### Poster Presentation

Date		Booth No.		Booth No.							
				001	002	003	004	005	.....	115	116
15 Tue.	1P		9:50~10:00	Mounting Time							
			10:00~10:20	Mounting Time							
		a	10:20~11:00	Presentation	Presentation	Presentation	Presentation	Presentation	Presentation	Presentation	Presentation
			b	Presentation	Presentation	Presentation	Presentation	Presentation	Presentation	Presentation	Presentation
			11:40~11:50	Mounting Time							
		16 Wed.	2P		12:50~13:00	Mounting Time					
13:00~13:20	Mounting Time										
c	13:20~14:00			Presentation	Presentation	Presentation	Presentation	Presentation	Presentation	Presentation	Presentation
	d			Presentation	Presentation	Presentation	Presentation	Presentation	Presentation	Presentation	Presentation
	14:40~14:50			Mounting Time							
17 Thu.	3P				14:50~15:00	Mounting Time					
		15:00~15:20	Mounting Time								
		e	15:20~16:00	Presentation	Presentation	Presentation	Presentation	Presentation	Presentation	Presentation	Presentation
			f	Presentation	Presentation	Presentation	Presentation	Presentation	Presentation	Presentation	Presentation
			16:40~16:50	Mounting Time							

	Presentation Time		Mounting Time
	Display Time		Removing Time

(C401)

#### **Tue. Sep 15**

Presentation Time

<a = 10:20~11:00>

<b = 11:00~11:40>

#### **A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS**

- 1Pa001 Polycondensation of dichloroarylene via direct arylation  
Wataru Tsuchida, Junpei Kuwabara, Takaki Kanbara
- 1Pb002 The development of polycondensation reaction via decarboxylative direct C-H arylation  
Kota Sato, Yoshito Ujii, Junpei Kuwabara, Takaki Kanbara
- 1Pa003 Synthesis of Polyazomethine Using Aromatic Dialdehyde Derived from Guaiazulene  
Masayo Igarashi, Atsushi Sudo
- 1Pb004 Synthesis of Polyspiroketal Using Silyl Ether of myo-Inositol as a Monomer  
Dai Ishida, Taichi Sano, Atsushi Sudo
- 1Pa005 Synthesis of Naphthalene Bisimide-Dithiophene Alternating Copolymers by Palladium-Catalyzed Direct Arylation and Their Characterization  
Haruka Fukuzawa, Masaya Yamada, Kazuhiro Nakabayasi, Hideharu Mori
- 1Pb006 Synthesis of  $\pi$ -Conjugated Polymers Containing Fluorinated Phenanthroline Units  
Hirokazu Izumiya, Hiroki Fukumoto, Toshio Kubota
- 1Pa007 Oxidative coupling copolymerization of 2,6-dimethylphenol derivatives with lactam moieties  
Yuki TAKAMUSHI, Shigeyuki IWAI, Shigeki HABAUE
- 1Pb008 Synthesis and Characterization of Polycyanurates As Dismantlable Adhesive  
Mao-Chun FU, Tomoya HIGASHIHARA, Takaaki UNO, Mitsuru UEDA
- 1Pa009 Study of synthesis of polypeptide by means of chain-growth condensation polymerization of amino acid monomers on polynorbornene solid-phase support

Ami MORIMITSU, Yoshihiro OHTA, Tsutomu YOKOZAWA

- 1Pb010 Investigation of catalyst-transfer condensation polymerization of thiophene-pyridine biaryl monomer.  
Yu TOKITA, Masaru KATOH, Yoshihiro OHTA, Tsutomu YOKOZAWA
- 1Pa011 Specific synthesis of acyclic and cyclic polyphenylene from nonstoichiometric Suzuki-Miyaura polycondensation  
hajime SUGITA, Masataka NOJIMA, Yoshihiro OHTA, Tsutomu YOKOZAWA
- 1Pb012 End-functionalization and control over molecular weight by means of cross metathesis of cyclic unsaturated polyesters with bifunctional olefins  
Ryouichi Okabayashi, Yoshihiro Ohta, Tsutomu Yokozawa
- 1Pa013 Synthesis of various branched  $\pi$  conjugated polymers via direct arylation of fluoroarenes  
Yuki Togawa, Shotaro Hayashi, Toshio Koizumi
- 1Pb014 Fluoride-Transfer Controlled Polymerization for Poly(p-phenyleneethylene)s  
Takanobu Sanji, Asahi Motoshige, Junko Kakinuma, Satoru Watanabe, Tomokazu Iyoda

(C402)

#### **A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS**

- 1Pa017 Synthesis and properties of a novel polycarbonate containing regioselectively ethylene glycol unit-substituted dianhydroglucitol  
Yukari Tanaka, Keito Yamaguchi, Yuzo Ishigaki, Keigo Aoi
- 1Pb018 Synthesis and properties of aromatic polycyanurate having phosphonate group in the side chain  
Arisa Takahashi, Jinichiro Noro, Yuji Shibasaki, Yoshiyuki Oishi
- 1Pa019 Synthesis and properties of high refractive index aromatic polyguanamines derived from triazinedichloride and aromatic diamines  
Mutumi Kamiyama, Satoya Sugao, Shigeko Sasaki, Yuji Shibasaki, Yoshiyuki Oishi
- 1Pb020 Synthesis of polyamides using triazine-based active acyl derivatives  
Yurika Araya, Tatsuya Kaga, Kaori Yoshida, Yuji Shibasaki, Yoshiyuki Oishi
- 1Pa021 Synthesis and adhesive properties of triazine-based aromatic polyimides  
Kazuya Sato, Yu Saito, Shota Fujiwara, Shigeko Sasaki, Yuji Shibasaki, Yoshiyuki Oishi
- 1Pb022 Synthesis and Applications of Novel Organometallic Polymers Possessing Palladacycle Units in Main Chain  
Masato Sugihara, Hiroki Nishiyama, Shinsuke Inagi, Ikuyoshi Tomita
- 1Pa023 Non-ionic polyester containing sulfide group via ADMET  
Isamu Kawarazaki, Akinori Takasu
- 1Pa025 Supramolecular polymer networks based on graphene possessing ureidopyrimidinone.  
Yuichiro Uemura, Ryo Sekiya, Takeharu Haino
- 1Pb026 Cooperative guest complexation of octaphosphonate biscavitands  
Daisuke Shimoyama, Hitomi Yamada, Toshiaki Ikeda, Ryo Sekiya, Takeharu Haino
- 1Pa027 On/off switching mechanochromic property of a novel luminescent aminomaleimide dye  
Hiroaki Imoto, Kohei Kizaki, Kensuke Naka
- 1Pb028 Color tuning of aggregation induced emission active maleimide dyes  
Hiroaki Imoto, Kohei Kizaki, Kensuke Naka
- 1Pa029 Effect of N-alkyl groups on the emission properties of aggregation induced emission active aminomaleimides.  
Katsuya Nohmi, Hiroaki Imoto, Kensuke Naka
- 1Pb030 Synthesis and Application of Double-Stranded Titanium Helicates Consisting of Oligophenol Derivatives  
Akira NAGASAKA, Tomonari HATTORI, Daisuke TAURA, Naoki OUSAKA, Eiji YASHIMA

- 1Pa031 Supra-molecular entities self-assembled from double calixarene possessing 16-carboxylates and multi-amine compounds  
Hitoshi ARAI, Takeo NAGATSUKA, Ren-Hua JIN
- 1Pb032 Syntheses of Rotaxane Network Polymer by Metathesis Reaction of 24-membered Crown Ether / Secondary Diammonium Salt Complexes  
Haruka Inoue, Kenjiro Onimura, Kazuhiro Yamabuki
- 1Pa033 Synthesis of lipophilic coordination polymer showing photon upconversion  
Masanori Hosoyamada, Nobuhiro Yanai, Nobuo Kimizuka
- 1Pb034 Multicomponent self-assembly and its structural analyses for the nucleotide-appended bolaamphiphiles with DNA as a template  
Rika Iwaura, Yoshikazu Kanai, Mayumi Ohnishi-Kameyama

(C403)

### C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

- 1Pa035 Structural Control of Microalgae toward Biotemplating Process  
Zhenzi Piao, Tomokazu Iyoda, Kaori Kamata
- 1Pb036 Biotemplating Process for 3D Metallic Microstructures  
Kaori Kamata, Zhanzi Piao, Tomokazu Iyoda
- 1Pa037 Electrical Properties of Conductive Grid Patterns  
Shiho Torashima, Kaori Kamata, Takanobu Sanji, Tomokazu Iyoda
- 1Pb038 Molecular Grid Wiring toward Molecular Circuitry  
Tomokazu Iyoda, Akihisa Yamaguchi, Yuko Yagi, Shiho Torashima, Kaori Kamata, Hideaki Komiyama, Takanobu Sanji
- 1Pa039 Surface Enhanced Raman Spectroscopy of Polymerization Grid Wiring  
Akihisa Yamaguchi, Hideaki Komiyama, Yuko Yagi, Tomokazu Iyoda, Takanobu Sanji
- 1Pb040 Optical Properties of a Gold Nanorod Array Fabricated by a Block Copolymer Templating Process  
Yuko Yagi, Hideaki Komiyama, Akihisa Yamaguchi, Tomokazu Iyoda, Takanobu Sanji
- 1Pa041 Invention of optical materials containing ZrO<sub>2</sub> nano-particles throughout thiol-ene reaction.  
Hiroshi Aoyama, Kazushi Enomoto, Moriya Kikuchi, Astushi Narumi, Seigou Kawaguchi, Kimihiro Matsukawa
- 1Pb042 High waterproof of PVA hybrid film using ZrO<sub>2</sub> nanoparticles  
Toshio Yamaguchi, Hazuki Sato, Hayato Muto, Kikuchi Moriya, Atsushi Narumi, Seigou Kawaguchi
- 1Pa043 Preparation of organic/inorganic composite particles carrying gold nanoparticles  
Yumiko Kobayashi, Masakatsu Kasuya, Michinari Kohri, Tatsuo Taniguti, Keiki Kishikawa, Shinichiro Kitahara
- 1Pb044 Synthesis and Characteristics of Optical Properties of Heat-Resistant Mechanofluorochromic Materials Based on Organic-Inorganic Hybrids  
Kazumasa Suenaga, Kazuo Tanaka, Yoshiki Chujo
- 1Pa045 Regulation of Optical Properties of Composite Films of Conjugated Polymers Containing POSS Fillers  
Kazunari UEDA, Kazuo TANAKA, Yoshiki CHUJO
- 1Pb046 Synthesis of POSS Derivatives with Multi-Functional Groups  
Hiroto Kozuka, Kazuo Tanaka, Yoshiki Chujo
- 1Pa047 Hybridization of unsubstituted polythiophene and C60 using porous metal complexes  
Yotaro Sasaki, Takashi Uemura, Susumu Kitagawa
- 1Pb048 Preparation and mechanical property of bacterial cellulose/PMMA composite materials with native network structure

Yoshihiko Shimizu, Shuhei Akimoto, Keita Sakakibara, Yoshinobu Tsujii

1Pa049 Control of Refractive Index of Organic-Inorganic Hybrid Films Containing Azobenzene Moiety

Mamiko Narita, Osamu Watanabe, Ryusuke Wada, Masahiro Tawata

1Pb050 Erosion characteristic of polymeric composite materials

Hinako Suematsu, Kenichi Yamazaki, Hiroaki Cho, Fumio Sawa, Tetsushi Okamoto

1Pa051 Fabrication of free-standing polymer-calcite composite thin films by phase transition of caged silsesquioxane-vaterite composite particles and their mechanical properties

Sakina Miyauchi, Hiroaki Imoto, Kensuke Naka

1Pb052 Stabilized chiral arrangement of gemini surfactant assemblies through sol-gel derived silica

Naoya Ryu, Shoji Nagaoka, Yutaka Okazaki, Makoto Takafuji, Hirotaka Ihara, Emilie Pouget, Reiko Oda

(C404)

### **C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS**

1Pa053 Developments and electrical properties of conductive composite films with nitrogen-doped carbon nanotubes

Ousuke Shigehiro, Toshiyuki Watanabe

1Pb054 Preparation of Hybrid Material Composed of Graphene Derivative and Silica

Kazuki Hirata, Amirah Yusof, Nabihah Abdullah, Takahiro Uno, Takahito Itoh, Masataka Kubo

1Pa055 Soft hydrogel composites with metal-like toughness

Yiwan Huang, Daniel R. King, Taolin Sun, Tasuku Nakajima, Takayuki Kurokawa, Alfred J. Crosby, Jian Ping Gong

1Pb056 Preparation of cellulose nanofiber / silver nanoparticle composite

Hiroaki ITO, Chizuru HONGO, Takashi NISHINO

1Pa057 Structure and Properties of Modified Cellulose Nanofibers Nanocomposites with Nanodiamond

Takashi KATO, Chizuru HONGO, Takashi NISHINO

1Pb058 Structure and Properties of Ultradrawn Ultra High Molecular Weight Polyethylene with Nanodiamond.

Shota OKAMOTO, Chizuru HONGO, Takashi NISHINO

1Pa059 Optical Properties of Polymer Microsphere Embedding Fluorescent Molecule.

Koshiro Yoshioka, Tsunenobu Onodera, Hitoshi Kasai, Shuji Okada, Hidetoshi Oikawa

1Pb060 Synthesis of silsesquioxane nanoparticles having fluoroalkyl groups and application to water-repellent materials

Tetsuya Kimura, Kazuhiro Nakabayashi, Hideharu Mori

1Pa061 Preparation and properties of imogolite modified with a catechol-terminated oligoester/poly lactide nanocomposites

Souta Miura, Naozumi Teramoto, Toshiaki Shimasaki, Mitsuhiro Shibata

1Pb062 Preparation PP/PP-g-SiO<sub>2</sub> with in-situ grafting: employ of PP-t-Si(OEt)<sub>3</sub> synthesis with microwave irradiation

Shouta Okihiro, Masahito Toyonaga, Patchanee Chammingkwan, Toshiaki Taniike, Minoru Terano

1Pa063 Preparation of Platinum-supported Mesoporous Silica

Haruka Suzuki, Satoru Tsukada, Takahiro Gunji

1Pb064 evaluation the behavior of chiral ion depending on the chirality of the coordination polymer

Taro Wakiyama, Teppei Yamada, Nobuo Kimizuka

(C401)

Presentation Time

<c = 13:20~14:00>

<d = 14:00~14:40>

### A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

- 1Pc001 Synthesis and Structural Characterization of  $\pi$ -Stacked Polysilanes Catalyzed by Transition Metals  
Shunsuke Iwase, Makoto Tanabe, Kohtaro Osakada
- 1Pd002 Synthesis of conjugated polymers containing 1,3,4,6,9b-pentaazaphenylene with long alkyl chains  
Hiroyuki Watanabe, Masataka Hirose, Kazuo Tanaka, Yoshiki Chujo
- 1Pc003 Synthesis and Chiroptical Properties of Novel Optically Active  $\pi$ -Conjugated Compounds Based on Planar Chiral Janus-Type Tetrasubstituted [2.2]Paracyclophanes  
Risa Sawada, Yasuhiro Morisaki, Yoshiki Chujo
- 1Pd004 Synthesis and Optical Properties of Conjugated Polymers Containing Gallium Diiminate with Unique Emission Properties  
Shunichiro Ito, Amane Hirose, Kazuo Tanaka, Yoshiki Chujo
- 1Pc005 Synthesis and Chiroptical Properties of Phenylethene Derivatives Based on the Planar Chiral Tetrasubstituted [2.2]Paracyclophane Framework  
Masayuki Gon, Yasuhiro Morisaki, Yoshiki Chujo
- 1Pd006 Synthesis and optical properties of conjugated polymers containing P-P double bond in the main chain  
Kazushi Hashimoto, Yoshinobu Onishi, Kazuo Tanaka, Yoshiki Chujo
- 1Pc007 Synthesis and Optical Properties of Conjugated Polymers Based on BODIPY Derivatives Bearing Aryl Substituents at the Boron Center  
Honami Yamane, Shunichiro Ito, Kazuo Tanaka, Yoshiki Chujo
- 1Pd008 Synthesis and optical properties of *o*-carborane-substituted  $\pi$ -conjugated system  
Hiroki Mori, Kazuo Tanaka, Yasuhiro Morisaki, Yoshiki Chujo
- 1Pc009 Synthesis and Optical Properties of Conjugated Polymers Containing Boron Diiminates with Aggregation-Induced Emission Property  
Madoka Yamaguchi, Amane Hirose, Shunichiro Ito, Kazuo Tanaka, Yoshiki Chujo
- 1Pd010 Polythiophenes containing thermocleavable and solubilizing groups for organic devices  
Pan HE, Krishnachary SALIKOLIMI, Zha LI, Takashi ISOSHIMA, Yoshihiro ITO, Masuki KAWAMOTO
- 1Pc011 Preparation and Polymerization of Cyclic Macromonomer Based on Polytetrahydrofuran  
Akihiro Yamaji, Kana Wakabayashi, Takahiro Uno, Takahito Itoh, Masataka Kubo
- 1Pd012 Molecular Design to Build Up Chain Topology: Precision Syntheses of Tadpole Block Copolymers with Ring-Expansion Living Cationic Polymerization  
Taizo Yamamoto, Hajime Kammiyada, Makoto Ouchi, Mitsuo Sawamoto
- 1Pc013 Cationic Copolymerization of Furfural and Vinyl Ethers: Possible Generation of Alternating Copolymers with Unique Sequences  
Suzuka Matsumoto, Arihiro Kanazawa, Shokyoku Kanaoka, Sadahito Aoshima
- 1Pd014 Synthesis of novel linear polymers via cyclotrimerization of conjugated aldehydes and vinyl ethers and their selective acid-degradation  
Tadashi Naito, Arihiro Kanazawa, Shokyoku Kanaoka, Sadahito Aoshima
- 1Pc015 Synthesis and Properties of Dual Stimuli-Responsive Star-Shaped Polymers with Thermal- and Photoresponsive Moieties  
Kira Landenberger, Arihiro Kanazawa, Shokyoku Kanaoka, Hiroyasu Yamaguchi, Sadahito Aoshima

1Pd016 Block Copolymer Synthesis Using Acetal Moieties as Two-Staged Latent Initiating Sites for Living Cationic Polymerization  
Norifumi Yokoyama, Arihiro Kanazawa, Shokyoku Kanaoka, Sadahito Aoshima

(C402)

#### **A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS**

1Pc017 Fluorescence behavior of edge-functionalized graphene quantum dots  
Kaho Suzuki, Ryo Sekiya, Takeharu Haino

1Pd018 Synthesis of various optically active conjugated polymers  
Yoshinori Otaki, Yu Miyagi, Fumio Sanda

1Pc019 Synthesis of Cyclic Phenyleneethynylene Bearing Optically Active Amide Groups in the Side Chains  
Tatsuya Ogawa, Yoshinori Otaki, Yu Miyagi, Fumio Sanda

1Pd020 Synthesis and Properties of Conjugated Polymers Bearing Schiff-Base in the Main Chain  
Kazuki Tada, Yu Miyagi, Yoshinori Otaki, Fumio Sanda

1Pc021 Synthesis of Optically Active Conjugated Polymers Bearing Germole/Silole Moieties, and Control of the Higher Order Structures  
Yuki Takahashi, Yoshinori Otaki, Yu Miyagi, Yushi Nakamura, Jyoji Oshita, Fumio Sanda

1Pd022 Synthesis of cyclic polyisocyanate by end-to-end linking reaction  
Kanako Tomita, Aoi Yanagihara, Shunsuke Yabuki, Hideaki Oike

1Pc023 RAFT polymerization with cyclic chain transfer agents containing alkyl and oligo(ethyleneglycol) chains  
Daiki Tajima, Hisao Kato, Yuta Nakagawa, Hideaki Oike

1Pd026 Synthesis of linear polyethylene bearing trifluoroalkyl substituent using copper-catalyzed functionalization  
Ryo Tanaka, Yuushou Nakayama, Takeshi Shiono

1Pc027 Synthesis of Reactive Polymers with a Tetraarylsuccinonitrile Unit and Their Mechanochromism Caused by Main Chain Scission  
Toshikazu Sumi, Raita Goseki, Hideyuki Otsuka

1Pd028 Synthesis and Mechanochromic Property of Crystalline Polymers with Diarylbibenzofuranone in the Center of Polymer Chains  
Shigeki Furukawa, Hironori Oka, Raita Goseki, Hideyuki Otsuka

1Pc029 Substitution reaction of solid cellulose reducing ends  
Takuma Ogasawara, Kazunari Serizawa, Masato Noguchi, Atsushi Kobayashi, Shin-ichiro Shoda

1Pd030 Synthesis of Quaternized Imidazolium Salts Based on Polysiloxane with Crosslinkable Moiety  
Tsukasa Ichikawa, Tsuyoshi Wako, Naoki Wakuzawa, Nobukatsu Nemoto

1Pc031 Synthesis of Polysiloxane Quaternized Imidazolium Salts with Different Length of Alkyl Chains  
Tsuyoshi Wako, Tsukasa Ichikawa, Naoki Wakuzawa, Nobukatsu Nemoto

1Pc033 Functionalization of quinacridone-based  $\pi$ -conjugated polymer by polymer reaction  
Syunya Okayama, Junji Watanabe, Atsushi Kimoto

1Pd034 Allylation of polythiophene side chains via C-O bond cleavage assisted by thiophene ring as a directing group  
Eisuke Baba, Yoshihiro Ohta, Tsutomu Yokozawa

(C403)

#### **A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS**

- 1Pc035 Postpolymerization Modification of Unsaturated Polyesters by N-Heterocyclic Carbenes  
Yuya Kamijo, Shin-ichi Matsuoka, Masato Suzuki
- 1Pd036 Preparation of polymer library of water-soluble phenolic polymers and screening by the affinity to nickel (II) ion  
Toru Tanigaki
- 1Pc037 Synthesis of Novel  $\pi$ -Conjugated Polymers Containing Elements-blocks via the Te-Li Exchange Reaction of Tellurophene-containing Polymers  
Yusuke KOMATSUZAKI, Hiroki NISHIYAMA, Shinsuke INAGI, Munetaka AKITA, Ikuyoshi TOMITA
- 1Pd038 Synthesis of Group 15 Elements-blocks  $\pi$ -Conjugated Polymers by Reactions of Organotitanium Polymers  
Yoshimasa Matsumura, Makoto Ishidoshiro, Yasuyuki Irie, Hiroaki Imoto, Kensuke Naka, Shinsuke Inagi, Ikuyoshi Tomita
- 1Pc039 Simultaneous Synthesis of  $\pi$ -Conjugated Polymers Possessing Multiple Elements-blocks by Reactions of Organotitanium Polymers  
Yoshimasa Matsumura, Hiroki Nishiyama, Shinsuke Inagi, Ikuyoshi Tomita
- 1Pd040 Monomer sequence distribution in the copolymers derived from poly(methacrylic acid) by stepwise esterification (2)  
Daichi Yokota, Yuka Nakanishi, Tomohiro Hirano, Koichi Ute
- 1Pc041 Spin-trapping Studies on Degradation Mechanism of Rubber Materials  
Takuma Arikawa, Kenji Kinashi, Wataru Sakai, Naoto Tsutsumi, Ryosuke Sakai, Fumito Yatsuyanagi
- 1Pd042 Spin-trapping Studies on Degradation Mechanism of Polyacetals  
Shota Ichikawa, Kenji Kinashi, Wataru Sakai, Naoto Tsutsumi, Ken Horita
- 1Pc043 Spin-trapping Studies on Degradation Mechanism of Poly(butylene terephthalate)  
Masayo SONO, Kenji KINASHI, Wataru SAKAI, Naoto TSUTSUMI
- 1Pd044 Oxidation mechanism of poly(vinyl alcohol) with persulfate anion radical as studied by spin-trapping ESR and LC/MS  
Yuko Nishihara, Tomoko Yamaguchi, Toyo Ikegami, Yusuke Miyake, Kenji Kanaori, Kunihiko Tajima

### C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

- 1Pc047 Concentration dependence of electro-optical effects in aqueous dispersions of inorganic nanosheets  
Masaki Tateshi, Yasushi Okumura, Nobuyoshi Miyamoto, Hiroki Higuchi, Hirotsugu Kikuchi
- 1Pd048 Electromagnetic Wave Shielding Effect of Plastic/Bamboo Whisker/Graphite Composites  
Masayuki Maeda, Haruo Nishida
- 1Pc049 Fabrication of surface-functionalized polymer microspheres with inorganic nanoparticles and their applications  
Nanami Hano, Natsuki Uchida, Md. Ashraful Alam, Naoya Ryu, Shoji Nagaoka, Makoto Takafuji, Hirotaka Ihara
- 1Pd050 Optical functional transmission to unmodified pyrene in chiral supramolecular gels  
Yutaka Okazaki, Ryusuke Sakaguchi, Makoto Takafuji, Hirotaka Ihara
- 1Pc051 Preparation and Evaluation of Nanoparticles Supported Leaf  
Shuheji Yoshida, Anyarat Watthanaphanit, Nagahiro Saito
- 1Pd052 Preparation and characterization of organic-inorganic composite materials consisting of carbon black having methacryloyl groups and poly(methyl methacrylate)  
Hiroki Matsunaga, Katsuhiko Inomata, Hideki Sugimoto, Eiji Nakanishi

(C404)

### C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

- 1Pc053 Synthesis of Polymer/Silica Hybrid Gel and the Application on Coating Liquid of Ink-jet Paper.  
Tian Wang, Keiji Yamashita
- 1Pd054 Synthesis Catechin-modified Chitosan by the Aid of Plasma in Liquid  
Yusuke Kondo, Anyarat Watthanaphanit, Nagahiro Saito
- 1Pc055 Synthesis of metal oxides in chiral silica with trapping ability of metal ions  
Masumi Sugimoto, Hiroki Murata, Katsuya Kaikake, Ren-Hua Jin
- 1Pd056 Synthesis and property of Ag/silica hybridized chiral materials  
Seiji Tsunega, Dong-Dong Yao, Katsuya Kaikake, Ren-Fua Jin
- 1Pc057 Preparation of cyclic siloxane ionic liquids containing ammonium groups  
Tomotada Hirohara, Yoshiro Kaneko
- 1Pd058 Preparation and characteristics of ionic liquids containing cage-like and random-structured silsesquioxanes with different types of side-chain groups  
Akiyuki Harada, Sayako Koge, Joji Ohshita, Yoshiro Kaneko
- 1Pc059 Synthesis of porphyrin polymer nanotubes as a photo-antenna  
Noritaka Takeuchi, Tsukasa Nakahodo, Hisashi Fujihara
- 1Pd060 Preparation of Stimuli-Responsive Hybrid Hydrogels Using Novel Gold Nanoparticle Monomer  
Atsushi Saka, Yuki Matsubara, Akifumi Kawamura, Takashi Miyata
- 1Pc061 Formation of Hydrogel Layers on Gold Nanoparticles by Atom Transfer Radical Polymerization in Buffer Solutions  
Masaya Yamada, Akifumi Kawamura, Takashi Miyata
- 1Pd062 Development of luminescent fusion materials of a helical terbium complex on the nacre layer  
Takahiro Kondo, Chisaki Yamada, Tomohisa Ogawa, Ayumi Ishii, Miki Hasegawa
- 1Pc063 Surface Modification and Functionalization of Polymer Nanotubes by Click Reaction  
Keiichi Yamamoto, Tsukasa Nakahodo, Hisashi Fujihara
- 1Pd064 Linearly Polarized Luminescence of Europium Complexes with a Series of Amphiphilic Phenanthroline Derivatives  
Kazuki Kondo, Ayumi Ishii, Miki Hasegawa
- 1Pc065 Synthesis of polysilsesquioxane having phosphonic acid group  
Shintaro Fujii, Satoru Tsukada, Yoshimoto Abe, Takahiro Gunji
- 1Pd066 Preparation of high refractive index TiO<sub>2</sub>/PMMA hybrid using polymer coated nanoparticles by ATRP  
Satoshi Maeda, Masato Fujita, Naokazu Idota, Kimihiro Matsukawa, Yoshiyuki Sugahara

(C405)

### E. POLYMERS AND ENVIRONMENT

- 1Pc069 Influence of supercritical carbon dioxide fluid on degradability and physical properties of poly(L-lactide)  
Chikara TSUTSUMI, Tomoya TAKEDA, Ryouyusuke IKEDA, Ryouji WATANABE, Yuushou NAKAYAMA, Takeshi SHIONO
- 1Pd070 Selective Recovery of Platinum Group Metals using Hydrogel of Poly(N-vinylimidazole)  
Kazunori Nakano, Nobuyuki Shibata, Takehiko Kinoshita, Yuzo Ishigaki, Koichi Yamaguchi, Shigendo Akita
- 1Pc071 Effects of the molecular weight and lengths of block segments on the physical properties in p(L-lactic acid)-poly(dimethyl siloxane) multiblock copolymers  
Mayu Tanaka, Ryohei Fukae



- 1Pd072 Removal of metal ion by casein-inorganic hybrid material  
Mayuna Tsuruzumi,Masanori Yamada
- 1Pc073 Oxo-biodegradation of polystyrene with visible light responsive pro-oxidant  
Kensuke Miyazaki,Hisayuki Nakatani,Takashi Yoshida
- 1Pd074 Physical properties of Eucommia Elastomer and its impact resistance improving effect  
Shuhei Yamaguchi,Shinya Takeno,Isao Yuki,Kanokwan Takeno,Nobuaki Suzuki,Nao Hosoda,Hiroshi Uyama,Yoshihisa Nakazawa
- 1Pc075 Synthesis of polyesters and polyamides from peracetylated D-glucaric acid  
Yuxin Wu,Yukiko Enomoto-Rogers,Hisaharu Masaki,Akio Takemura,Tatahisa Iwata
- 1Pd076 Preparation and Characterization of Biodegradable Polyester Nanofibers Containing 3-Hydroxybutyrate and Lactate Monomeric Units  
Daisuke Ishii,Taizo Kabe,John Nduko,Ken'ichiro Matsumoto,Seiichi Taguchi,Satoshi Kimura,Tadahisa Iwata
- 1Pc077 Investigation on synthesis conditions for PHA using the enzyme-treated starch extracted from Ulva.  
Koya Kobayashi,Masato Uenishi,Teruyuki Seino,Takanori Kobayashi,Shinji Hujita,Kenji Tajima
- 1Pd078 Carboxy-terminal modified polyhydroxyalkanoate produced by recombinant strain  
Manami Hyakutake,Takeharu Tsuge,Hideki Abe
- 1Pc079 Synthesis of Polymers Utilizing Molecular Lego Blocks Having Hydrophilic and Hydrophobic Moieties  
Shunsaku Motoki,Takeru Iwamura
- 1Pd080 Synthesis of Newly Vegetable Oil Polyols and Network Polymers Bearing Reversible Reaction Site  
Yohtaro Inoue,Hideki Tachi
- 1Pc081 Biosynthesis and Thermal Analysis of Poly(3-Hydroxybutyrate-co-3-Hydroxy-2-Methylbutyrate)  
Sho Furutate,Yoriko Watanabe,Koki Maejima,Takeharu Tsuge
- 1Pd082 Preparation and evaluation of impact resistance of polymer blends using Eucommia elastomer.  
Nao Hosoda,Chikuzen Kubota,Kinkoh Sho,Yoshihisa Nakazawa,Uyama Hiroshi
- 1Pc083 Decomposition process of the unsaturated polyester resin of GFRP with ultraviolet light irradiation  
Takato MOURI,Yasutaka MORI,Masahiko TAKAHIRO

(C406)

#### **D. BIOPOLYMERS AND BIORELATED POLYMERS**

- 1Pc085 DNA-gold nanoparticle hydrogel prepared by polymerase chain reaction  
Yuka Eguchi,Tomoharu Katou,Tsutomu Tanaka,Tatsuo Maruyama
- 1Pd086 Creation and characterization of DNA nanoparticles by using nanodroplets prepared by miniemulsion  
Daiki Kako,Yuuka Fukui,Keiji Fujimoto
- 1Pc087 A Novel Ribozyme Core to Perform Self-cleavage Reaction under low pH condition.  
Nae Sakimoto,Shoichiro Tanaka,Misaki Kameno,Natsumi Sasaki,Junji Kawakami
- 1Pc093 Two-dimensional self-assembly of amphiphilic peptide on SiC template  
Shohei Tamaoki,Takatoshi Kinoshita,Osamu Eryu,Masahiro Higuchi
- 1Pd094 Calcium Phosphate Crystallization by Phosphopeptide-based Biomineralization  
Fumitoshi Suzuki,Takatoshi Kinoshita
- 1Pc095 Fabrication of organic / inorganic nano-hybrid material based-on the grafted nucleopeptide assembly

- Kaede Inagaki, Chisato Hiraoka, Kenji Nagata, Takatoshi Kinoshita, Masahiro Higuchi
- 1Pd096 Fabrication of ordered self-assemblies composed of beta-sheet peptide coated gold nanoparticles and these application for electronic devices.  
Terumi Banno, Yuji Asano, Makiko Hirata, Masahiro Higuchi, Kenji Nagata, Takatoshi Kinoshita
- 1Pc097 Functionalization of protein surfaces using novel polymerizable surfactants  
Chisato Higashi, Yuichi Funasaki, Tatsuo Maruyama
- 1Pd098 Thermal stability of coiled-coil cell-penetrating proteins  
Tubasa Yuki, Norihisa Nakayama, Kyoji Hagiwara, Yoshihiro Ito, Kuniharu Ijio, Yoshihito Osada, Ken-Ichi Sano
- 1Pc099 Synthesis of  $\alpha$ -Helical Peptides Bearing Reactive Groups  
Shinya Takaoka, Yoshinori Otaki, Yu Miyagi, Fumio Sanda
- 1Pd100 Synthesis of antibacterial thin film made of novel degradable polyelectrolyte and protein by Layer-by-Layer assembly  
Ryuichi Hiraoka, Yuichi Funasaki, Tatsuo Maruyama

(C407)

#### **D. BIOPOLYMERS AND BIORELATED POLYMERS**

- 1Pc101 Preparation of silk hydrogel with network of physical and chemical crosslinking  
Nao Ifuku, Keiji Numata
- 1Pd102 Evaluation of membrane protein solubilized by novel surfactant  
Masahide Shibata, Shuhei Koeda, Tomoyasu Noji, Keisuke Kawakami, Shigeru Itoh, Takehisa Dewa, Nobuo Kamiya, Toshihisa Mizuno
- 1Pc103 Generation of higher-order structure by dynamic exchange of functional groups linked to a polypeptide by dynamic covalent bonds  
Kazutoshi NAKAGAWA, Yuki INOUE, Toshiyuki OYAMA
- 1Pd104 Solubilization of membrane protein by high-molecular weight surfactant  
Shuhei Koeda, Tomoyuki Suzuki, Tomoyasu Noji, Keisuke Kawakami, Shigeru Itoh, Takehisa Dewa, Nobuo Kamiya, Toshihisa Mizuno
- 1Pc105 Interaction between Methapyrilene and Human Serum Albumin  
Masami Tanaka, Keiji Minagawa, Yasushi Imada, Yukihiko Arakawa
- 1Pd106 Supramolecular Enantiodifferentiating Photocyclodimerization of 2-Anthracenecarboxylate (AC) with Proteins & Polymer Hybrids as Chiral Reaction Media-12 - Supramolecular Asymmetric photoreaction of AC mediated by PEG modified BSA -  
Haruhiko Sasaki, Mitsuru Okugi, Souta Toyooka, Masaki Nishijima, Yasuyuki Araki, Seiji Sakamoto, Yutaka Ikeda, Yukio Nagasaki, Yoshihisa Inoue, Takehiko Wada
- 1Pc107 Effect of hydration-aggregation process on catalytic activities of lipases in aqueous and nonaqueous systems  
Maho Katayama, Kenya Suzuno, Ayumi Igusa, Takashi Kuroiwa, Toru Matsui, Akihiko Kanazawa
- 1Pd108 Development of functional immunoliposomes by cell-free synthesis / liposome system  
Risako Miura, Mitsuru Ando, Shin-ichi Sawada, Sadaatsu Mukai, Yoshihiro Sasaki, Kazunari Akiyoshi

(C401)

Presentation Time

<e = 15:20~16:00>

<f = 16:00~16:40>

#### **A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS**

- 1Pe001 Effective Catalyst and Solvent-free Polymer Linking using Polymer Nitrile N-Oxides  
Toyokazu Tsutsuba,Hiromitsu Sogawa,Toshikazu Takata
- 1Pf002 Synthesis and topology transformation of mechanically linked triblock copolymer  
Hiroki SATO,Daisuke AOKI,Toshikazu TAKATA
- 1Pe003 Fabrication of polymer brushes using electrode reactions in a potential gradient  
Naoki Shida,Hiroki Nishiyama,Ikuyoshi Tomita,Shinsuke Inagi
- 1Pf004 Formation of conductor/PEDOT fiber networks by bipolar electropolymerization  
Masato Ohira,Yuki Koizumi,Hiroki Nishiyama,Ikuyoshi Tomita,Shinsuke Inagi
- 1Pe005 Development of Luminescent Polymer Particles Based on Living Coordination Dispersion Polymerization of Allene Derivatives.  
Misato Daitani,Yoshiyuki Oguchi,Takeshi Wakiya,Hiroshi Yamauchi,Hiroki Nishiyama,Shinsuke Inagi,Ikuyoshi Tomita
- 1Pf006 Synthesis of core cross-linked thermoresponsive nanoparticles and manipulation of core-shell structures by chain extension reaction in the core  
Tomoki Takahashi,Kazuhiro Nakabayashi,Hideharu Mori
- 1Pe007 Development of donor-acceptor type organic semiconductor nanoparticles by self-assembly of amphiphilic block copolymers and site-selective Suzuki coupling reaction  
Yu Watanabe,Kazuhiro Nakabayashi,Hideharu Mori
- 1Pf008 Synthesis and characterization of imidazolium salt-containing block copolymers having characteristic CO<sub>2</sub> adsorbing and thermoresponsive properties  
Yu Sato,Kazuhiro Nakabayashi,Hideharu Mori
- 1Pe009 In-Chain Ring Polyacrylamides via Molecular Recognition-Assisted Living Radical Cyclopolymerization: Precision Synthesis and Functions  
Yoshihiko Kimura,Takaya Terashima,Mitsuo Sawamoto
- 1Pf010 Crosslinked Single-Chain Block Copolymers: Connection Technologies of Crosslinked Nanospaces  
Mayuko Matsumoto,Takaya Terashima,Mitsuo Sawamoto
- 1Pe011 Rigid and  $\pi$ -Conjugated Microgel Star Polymers: Control of Network Structures and Shapes with Designer Crosslinking Agents  
Yusuke Azuma,Takaya Terashima,Mitsuo Sawamoto
- 1Pf012 DB control of hyperbranched polyguanamines based on 2-amino-4,6-dichloro-1,3,5-triazine and their properties  
Yui Hoshino,Yuji Shibasaki,Yoshiyuki Oishi
- 1Pe013 Synthesis and the properties of various arylamine-substituted cyclic guanamines  
Tomohiro Kotaki,Yuji Shibasaki,Yoshiyuki Oishi
- 1Pf014 Synthesis of high transparency semiaromatic poly(amide imide) from hydrogenated trimellitic anhydride chloride with aromatic diamines, and the influence of the monomer sequence on the physical properties.  
Yutaro Kobayashi,Yuji Shibasaki,Yoshiyuki Oishi
- 1Pe015 Synthesis of polyarbutin obtained by the C-C coupling reaction and introduction of long-chain alkyl chain, and the aggregation behavior  
Maria Hashimoto,Satoko Iwabuchi,Yuji Shibasaki,Yoshiyuki Oishi
- 1Pf016 Oxidative coupling polymerization of guaiacol and its derivative with copper-amine complex  
Kaho Furuyama,Yuji Shibasaki,Yoshiyuki Oishi

(C402)

#### **A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS**

- 1Pe017 Synthesis and properties of poly(tetrahydrofuran) and polysulfone multiblock copolymers containing branched soft segments  
Ai Satoh,Kazuya Matsumoto,Mitsutoshi Jikei

- 1Pf018 Development of optically transparent materials based on low crystalline isobutyl-substituted caged silsesquioxane derivatives.  
Takahiro Yamanaka, Hiroaki Imoto, Kensuke Naka
- 1Pe019 Syntheses and properties of three-dimensional emulsifiers based on tripodal polyhedral oligomeric silsesquioxanes  
Yuka Nakao, Hiroaki Imoto, Kensuke Naka, Syuji Fujii, Yoshinobu Nakamura
- 1Pf020 Development of the electrolyte for DSSC based on imidazolium salt-terminated polyhedral octasilicate-core dendrimer  
Yasuyuki Irie, Kensuke Naka
- 1Pe021 Alternately bi-functional polyhedral octasilicate-core dendrimer bearing carbazole and naphthalimide; synthesis and their photoluminescence properties  
Yasuyuki Irie, Takahiro Yamanaka, kensuke Naka
- 1Pf022 Synthesis and Thermoresponsive Properties of Cyclic Poly(N,N-diethylacrylamide) Using Group Transfer Polymerization  
Eiji Ichinohe, Seiya Kikuchi, Yougen Chen, Toshifumi Satoh, Toyoji Kakuchi
- 1Pe023 Synthesis of block copolymers with polyethyleneimine brush  
Satoru Eguchi, Dongdong Yao, Katsuya Kaikake, Ren-Hua Jin
- 1Pf024 Spin-labeled multibranching polymers with TEMPO by chain end functionalization  
Junki Fukuda, Kaoru Adachi, Yasuhisa Tsukahara
- 1Pe025 Synthesis and Properties of Fully Conjugated Cyclic Polythiophenes  
Masamichi Sato, Yasuyuki Tezuka, Akinori Saeki, Shu Seki, Takuya Yamamoto
- 1Pf026 Synthesis and biodegradation study of PS-PCL-PS triblock copolymer  
Yuta Kondo, Mei Okoshi, Kaneyoshi Yamamoto, Kenji Sugiyama
- 1Pe027 Synthesis and surface characterization of end-functionalized polystyrene with perfluorooctylazobenzene units  
Shota Uno, Takuya Noro, Masumi Kurasige, Kenji Sugiyama
- 1Pf028 Synthesis and photoluminescence property of poly(9,9-dihexylfluorene)-b-polystyrene  
Yuta Shiihashi, kenji Sugiyama
- 1Pe029 End functionalization of living polythiophene using various terminating reagents  
Junpei Kawai, Koji Takagi
- 1Pf030 Precise synthesis of well-controlled stereoregular polymer brush and evaluation of its functionality  
Tomoki Kato, Masanao Sato, Tomoyasu Hirai, Ken Kojio, Atsushi Takahara
- 1Pe031 Precise Synthesis and Surface Characterization of a Novel Biodegradable copolymer with Phosphorylchol and catechol blocks  
Yucheng ZHANG, Yuji HIGAKI, Ken KOJIO, Tomoyasu HIRAI, Atsushi TAKAHARA
- 1Pf032 Synthesis of ladder siloxane-containing polymers for gas permselective membrane materials  
Shuangping Xu, Masahiro Teraguchi, Takashi Kaneko, Toshiki Aoki
- 1Pe033 Synthesis of boroxine-amine complexes ( I ) - Effect of ligand amine -  
Shiori Uchida, Masahiro Fujita, Yuko Takeoka, Masahiro Rikukawa
- 1Pf034 Synthesis of polyrotaxane by intramolecular photodimerization of cinnamic acid derivatives at the ends of poly (ethylene glycol).  
Tomohiro Oshiba, Masatoshi Kidowaki, Haruhisa Akiyama, Yoko Matsuzawa
- (C403)

#### **A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS**

- 1Pe035 Thermoresponsive Property of Star-Shaped Poly(N-isopropylacrylamide): Effect of Arm Number and Arm Length  
Kohei Yoshida, Lin Tian, Takuya Isono, Kenji Tajima, Toshifumi Satoh

- 1Pf036 Synthesis of hydrophilic Hyperbranched Polyamide-*b*-Vinyl Polymer and study of microphase separation  
Kento SAKURAI, Yoshihiro OHTA, Tsutomu YOKOZAWA
- 1Pe037 Radical polymerization behavior of well-defined hyperbranched polyamide macromonomers with different N-alkyl group  
Shintarou NARUMI, Jun MATSUDA, Yoshihiro OHTA, Tsutomu YOKOZAWA
- 1Pf038 Preparation of charged fine particles in non-polar media using various polar monomers.  
Takahito Takeuchi, Moriya Kikuchi, Atsushi Narumi, Seigou Kawaguchi

### **S1. Precise Polymerization Towards Creation of Functional Materials**

- 1Pe041 Synthesis of all conjugated block copolythiophenes bearing trisiloxane linkage  
Satoshi Miyane, Hideharu Mori, Mitsuru Ueda, Wen-Chang Chen, Tomoya Higashihara
- 1Pf042 Monomer-selective copolymerization of mono-substituted oxiranes and acrylates with the aid of onium salts  
Shogo Domae, Yuki Kataoka, Takehiro Kitaura, Tatsuki Kitayama
- 1Pe043 Ring-Opening Polymerization of Vinylcyclopropane Derivative Catalyzed by Lewis Acids  
Kosuke Hayakawa, Shin-ichi Matsuoka, Masato Suzuki
- 1Pf044 Precise synthesis of graft copolymers by iterative methodology based on living anionic polymerization and their microphase separation observation  
Shotaro Ito, Satoshi Uchida, Akira Hirao, Takashi Ishizone
- 1Pe045 Anionic polymerizations of  $\alpha$ -(hydroxymethyl)acrylate derivatives and application as terminators  
Yasuhiro Kohsaka, Kazuki Yamamoto, Kazuha Suzawa, Tatsuki Kitayama

### **C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS**

- 1Pe047 Effect of Chemical Structures Introduced in the Core of Star Polymers on the Formation of Porous Structures  
Masanao Horikawa, Yumiko Naka, Takeo Sasaki
- 1Pf048 Formation of Porous Structure on the Surface of Liquid-Crystalline Star Polymer Films  
Teruhisa Koyama, Yumiko Naka, Takeo Sasaki
- 1Pe049 Preparation and surface properties of the polymer brush containing inverse phosphorylcholine group  
Yusuke Imamura, Kazuo Yamaguchi, Motoyasu Kobayashi
- 1Pf050 Temperature Dependence of Adhesion by Chain Mixing of Polystyrene Brushes  
Yujin Aoki, Kazuo Yamaguchi, Motoyasu Kobayashi
- 1Pe051 Silicone polymers containing silanol residues as additive for adhesives  
Tepei TANAKA, Miho UKAI, Hiroaki SUZUKI, Shigeki HABAUE, Masao ISHINABE, Hidenori TANAKA, Atsushi SAITO, Masato AKIMOTO
- 1Pf052 Adhesion control using modified poly(vinyl alcohol) for fabrication of silicone rubber molds  
Akira Emoto, Takashi Fukuda

(C404)

### **C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS**

- 1Pe053 Interfacial Structure of Alkyl-Side-Chain Polymer Films and its Correlation with the Peel Force  
Fumiya Mori, Shin-ichiro Kabashima, Tetsuro Kawakami, Takaichi Yamamoto, Takayuki Miyamae
- 1Pf054 Evaluation of thin membrane consisting from graft-type polymer for aqueous adhesion

Hiroki Tsuchii,Atsushi Kimoto,junji Watanabe

- 1Pe055 Formation of nanoparticles coated with amphiphilic graft polymers and their morphologies  
Takahiro Onishi,Atsushi Kimoto,Junji Watanabe
- 1Pf056 Atmospheric pressure plasma treated of polymer powders  
Tomohiro Adachi,Youichi Sano,Keiko Koga
- 1Pe057 Changes in the surface properties due to UV curing time of POSS / urethane composite films  
Shuichi Asakura,Takaaki Kurita
- 1Pf058 Sensitization of O-Acyloxime-based Photolabile Crosslinkers  
Kanji Suyama,Hideki Tachi
- 1Pe059 Microscopic observation of chalking in the TiO<sub>2</sub> particle doped PVDF sheets  
marehito shibata,masahiko maeda
- 1Pf060 Investigation of Anticorrosion Coatings for Iron using Polyaniline  
Ai Fujimatsu,Atsushi Aoki
- 1Pe061 Stereocomplex formation by solid surface contact and measurement of polymer-polymer interaction  
Shinya Fujishiro,Kai Kan,Hiroharu Ajiro,Shun Takahama,Mitsuru Akashi
- 1Pf062 A Highly Sensitive Dissolved Oxygen Sensor Application Based on Nanoporous Amphiphilic Fluorinated Polymer Thin Film  
Yu Gao,Huie Zhu,Shunsuke Yamamoto,Tokuji Miyashita,Masaya Mitsuishi
- 1Pe063 Photopatterning of Fluorinated Polymer Nanosheets and insight into surface wettability  
Yu Gao,Huie Zhu,Shunsuke Yamamoto,Tokuji Miyashita,Masaya Mitsuishi
- 1Pf064 Thermosensitive cell culture surfaces using hyperbranched polymer functionalized with ionic groups  
Ryuuki Kawai,Yu Sudo,Yuta Nabae,Teruaki Hayakawa,Masa-aki Kakimoto
- 1Pe065 Biomimetic Fabrication of Flexible Liquid Transport System made of PDMS  
Koki KAWAI,Shuto ITO,Daisuke ISHII
- 1Pf066 Design of non-ionic electrophoretic polymethacrylates  
Tomomi Kameyama,Akinori Takasu
- 1Pe067 Electrophoretic mechanism of non-ionic polymer dispersions.  
Mizuki Yokoyama,Akinori Takasu

(C405)

## **E. POLYMERS AND ENVIRONMENT**

- 1Pe069 Hydrogen bonding and coordination induced self-healing of catechol polymers in seawater  
Jincai Li,Hiroataka Ejima,Naoko Yoshie
- 1Pf070 Development of the electrostatic separation method for plastic recycle  
Motofumi Mihara,Yuichi Matsuo,Michio Murai
- 1Pe071 Synthesis of Polymers Utilizing Molecular Lego Blocks Having Triphenylimidazole Moieties.  
Kazuma Iwata,Shudai Hashimoto,Takeru Iwamura
- 1Pf072 Development of Easy Peeling Pressure Sensitive Adhesive by various stimuli (2)  
Hideki Tachi,Yohtaro Inoue
- 1Pe073 Development of high-performances bio-based polymers from 4-aminocinnamic acid photodimers  
Yusuke Ibuki,Jyoti SINGH,Phruetchika Suvannasara,Seiji Tateyama,Naoki Takaya,Tatsuo Kaneko
- 1Pf074 Development of a method for determining bio-based content of polyethylene using

liquid scintillation counter  
Yoshiyasu Nagakawa, Shunji Yunoki, Masaaki Saito

- 1Pe075 Saccharification of biomass with zwitterion/acid composites (VIII) – Effects of Acidity –  
Shiori Suzuki, Masahiro Fujita, Yuko Takeoka, Masahiro Rikukawa
- 1Pf076 Biosynthesis of biodegradable copolymers by recombinant *Escherichia coli*  
Ayaka Hokamura, Izumi Wakida, Yuki Miyahara, Takeharu Tsuge, Hideki Abe, Hiromi Matsusaki
- 1Pe077 Synthesis and characterization of poly(ferulic acid-alt-glycolic acid)  
Kotaro Ino, Daisuke Ishii, Akio Takemura, Tadahisa Iwata
- 1Pf078 Metal-organic framework-based membrane applied for nanofiltration  
Xuan Dai Trinh, Toshiaki Taniike
- 1Pe079 Radiocesium absorption properties of Prussian blue supported on different surface character of wool fibers  
Kahori Yokota, Shio Arai, Masayuki Iwasa, Ritsuko Nakamura, Hirohisa Yoshida, Mika Ito, Koushi Fukunishi, Noriyuki Okada, Hideki Omori, Takayuki Okabe
- 1Pf080 Biosynthesis and Characterization of PHBV-b-PHB-b-PHBV Triblock Copolymer  
Junya Yasui, Takahiko Nakaoki
- 1Pe081 Chemical modification of double bond at side chain for poly(3-hydroxyalkanoate) block copolymer were biosynthesized by *P. putida*.  
Takeru Michishita, Takahiko Nakaoki
- 1Pf082 Preparation and characterization of bio-based acrylic resins from  $\alpha,\beta$ -unsaturated carboxylic acid derivatives synthesized by the non-edible biomass.  
Yasumasa Takenaka, Hideki Abe
- 1Pe083 Synthesis of high-performance Polybenzimidazoles from renewable 3-amino-4-hydroxybenzoic acid  
Aniruddha Nag, Mohammad Asif Ali, Hirotohi Kawamoto, Seiji Tateyama, Tatsuo Kaneko
- 1Pf084 Design and synthesis of functional lignin gels by the combination of self- and cross condensations  
Tomoyuki Hata, Masamitsu Funaoka

(C406)

#### **D. BIOPOLYMERS AND BIORELATED POLYMERS**

- 1Pe087 Interaction Analysis of AHL Receptor SpnR in *Serratia marcescens* Quorum-Sensing and Its Application to the AHL Trapping Method  
Yuriko TAKAYAMA, Eri NASUNO, Ken-ichi IIMURA, Norihiro KATO
- 1Pf088 Inhibition of Cell-Cell Communication in Gram-negative Bacteria Using Poly(Methyl Methacrylate) Monolith  
Yuka SATO, Chigusa OKANO, Yuriko TAKAYAMA, Eri NASUNO, Ken-ichi IIMURA, Norihiro KATO
- 1Pf090 Development of polymeric nanoparticles for liver-specific ribavirin delivery  
Kohei Kaneko, Tsutomu Ishihara
- 1Pe091 In vivo evaluation of cholesterol-modified SN-38 nanoparticles  
Yoshitaka Koseki, Yoshikazu Ikuta, Tsunenobu Onodera, Hidetoshi Oikawa, Hitoshi Kasai
- 1Pf092 Controlling bacteria in anisotropic materials  
Rina Maeda, Rishi R. Trivedi, Nicholas L. Abbott, Douglas B. Weibel
- 1Pe097 Thermo-induced dynamics of water-in-oil droplet coated with lipid monolayers containing polymers  
Keitaro Horii, Kazunari Yoshida, Azusa Saito, Akito Takashima, Izumi Nishio
- 1Pf098 Effect of cosmetic base materials on the diffusion process of water in Stratum Corneum  
Shio Arai, Hirohisa Yoshida, Masayuki Iwasa

- 1Pe099 Molecular Design of Membrane-active Polymers for Lipid Bilayer Nanodisc  
Jin Arakida,Junichi Kikuchi,Kazuma Yasuhara
- 1Pf100 Preparation and function of polysaccharide nanogel/lipid nanotube hybrid  
Takuto Kosai,Hiroki Yoshitake,Shin-ichi Sawada,Sadaatu Mukai,Yoshihiro Sasaki,Kazunari Akiyoshi

(C407)

#### D. BIOPOLYMERS AND BIORELATED POLYMERS

- 1Pe101 Design of peptide-based molecular sensor bearing fluorescent chromophores and its responsibility to stimuli  
Hiroya OSHIMA,Yoshihito INAI
- 1Pf102 Screw sense of achiral segment in artificial peptide helix and its solvent effect  
Tatsuya HATTORI,Yoshihito INAI
- 1Pe103 Design of artificial peptides composed of achiral-chiral amino acid residues and their structural features  
Maiko MIZUNO,Yoshihito INAI
- 1Pf104 Effect of chiral sequence on structural features of a peptide helix  
Takashi Watanabe,Yoshihito Inai
- 1Pe105 Conformational features of a peptide helix modified by site-specific amino acid  
Takashi Watanabe,Yoshihito Inai
- 1Pf106 Arrangement of microstructures aiming at high speed water transport on open channels.  
Koji MUTO,Shuto ITO,Daisuke ISHII
- 1Pe107 pH-Responsive and Biocompatible Nanocapsules Prepared by Electrostatic Interactions  
Yoshihiro Tsuda,Shin-ichi Yusa,Kazuhiko Ishihara
- 1Pf108 The relativity between water evaporation suppression and the inner structures of plasma-polymerized film of amphiphilic molecules "Nanosuits"  
Hideto Shibagaki,Ryohei Kawamura,Daisuke Ishii
- 1Pe109 Development of Organic/Inorganic Fusion Materials Inspired by Hierarchical Structures of Biominerals.  
Oishi Ryohei,Shunichi Matsumura,Tatsuya Nishimura,Takashi Kato
- 1Pf110 Development and Functionalization of Thin-Film Hybrids Composed of Organic Polymer and Calcium Phosphate  
Misato Iimura,Yulai Han,Satoshi Kajiyama,Takeshi Sakamoto,Tatsuya Nishimura,Chikara Ohtsuki,Takashi Kato
- 1Pe111 Structure control and functions of Novel Nanogel Crosslinked Material by Non-equilibrium Microprocessing  
Tatsuya Fujimoto,Sadaatsu Mukai,Shinichi Sawada,Yoshihiro Sasaki,Kazunari Akiyoshi
- 1Pf112 Design and function of amphiphilic graft-polysaccharides  
SISHI SHEN,Tomoki Nishimura,Shinichi Sawada,Sadaatsu Mukai,Yoshihiro Sasaki,Kazunari Akiyoshi

(C401)

#### Wed. Sep 16

Presentation Time

<a = 10:20~11:00>

<b = 11:00~11:40>

#### F. POLYMER INDUSTRY AND TECHNOLOGY: PROCESSES AND PRODUCTS

- 2Pa001 Preparation of low CTE transparent hybrid materials with PMMA and alumina.  
Hiroki Kokui,Hideki Sugimoto,Katsuhiko Inomata,Eiji Nakanishi
- 2Pb002 Preparation of transparent material having impact resistance with polycarbonate diol



- Hidetoshi Sato,Go Nishino,Hideki Sugimoto,Katsuhiko Inomata,Eiji Nakanishi
- 2Pa003 Preparation of hard films with high refractive index using zirconia  
Keisuke Yamashita,Hideki Sugimoto,Katsuhiko Inomata,Eiji Nakanishi
- 2Pb004 The influence of copolymer composition on morphology and surface properties of copolymers with perfluoroalkyl side chains  
Kouki Maeda,Eri Miwada,Hideki Sugimoto,Katsuhiko Inomata,Eiji Nakanishi
- 2Pa005 Preparation of Water- and Oil-Repellent Hard Coating  
Namhee Ryu,Hideki Sugimoto,Katsuhiko Inomata,Eiji Nakanishi
- 2Pb006 Development of Non-adhesive Coating Tof-mak (7)  
Hideki Tachi,Kei Demizu,Yasuhiro Michiyama,Yohtaro Inoue,Shinya Iwata,Takeshi Kuri,Toshio Sanda
- 2Pa007 Molecular Simulation of Curing Reaction of Epoxy Resin Systems  
Tetsuya KOBAYASHI,Shin-etsu FUJIMOTO,Yuichi TANIGUCHI,Keiichi HAYASHI
- 2Pb008 Study on Neck Propagation Behavior of Injection Molded Poly(butylene terephthalate) and Poly(trimethylene terephthalate)  
Kuniaki Kawaguchi,Mika Suzuki
- 2Pa009 Study on Neck Propagation Behavior of Injection Molded Poly(trimethylene terephthalate) Copolymers  
Kuniaki Kawaguchi,Mika Suzuki
- 2Pb010 Hydrogen characteristics and smectic phase of mono-mesogen type liquid-crystalline epoxy polymer  
Shuji Kawamoto,Hirotsada Fujiwara,Shin Nishimura
- 2Pa011 Influence of types of fillers and cross-linking on hydrogen solubility in Nitrile butadiene rubber  
Hirotsada Fujiwara,Yoshinori Yosihara,Fumihiko Tanaka,Shuichi Izumi,Enomoto Kazuyuki,Shin Nishimura
- 2Pb012 Controlled radical polymerizations mediated by Bis(dodecylsulfanylthiocarbonyl) disulfide (BisRAFT): for industrial application of reversible addition-fragmentation chain-transfer (RAFT) polymerization  
Toshihiko Arita,Yu Osaki,Kyouji Okawa
- 2Pa013 High-heat-resistant temporary adhesive technologies for three-dimensionally stacked LSI  
Takafumi Fukushima,Murugesan Mariappan,Jicheol Bea,Kangwook Lee,Mitsumasa Koyanagi
- 2Pb014 Influence of liquid medium on the electrospinning of cellulose acetate in the liquid  
Masahiro Tsuchiya,Akihiro Wakisaka,Hitomi Kobara
- (C402)

#### **A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS**

- 2Pa017 Trans-1,4-Selective Polymerization of (E)-1,3-Pentadiene by Half-Sandwich Rare-Earth Metal Catalysts  
Kei Nishii,Atsushi Yamamoto,Masayoshi Nishiura,Zhaomin Hou
- 2Pb018 Cyclopolymerization of Bis(diazocarbonyl) Compounds Using Pd Complexes  
Misaki Kikuchi,Hiroaki Shimomoto,Tomomichi Itoh,Eiji Ihara
- 2Pa019 Preparation and Chemical Properties of Charge-transfer Type Conjugated Copolymers Containing Azaquinoxaline Units  
Ryouta Tsuchimochi,Toshio Kubota,Hiroki Fukumoto
- 2Pb020 Preparation of Homosalen-Al complex and polymerization of trimethylene carbonate  
Nobutaka Taoka,Masataka Oishi,Nobuyoshi Nomura
- 2Pa021 Synthesis of optically active polymers via the asymmetric allylation and analysis of

- their optical purity  
Masaaki Watanabe,Yosuke Mikasa,Nobuyoshi Nomura
- 2Pb022 Microwave-assisted synthesis of Metylauminoxane  
Akira Miyazawa,Ei-ichi Kaji
- 2Pa023 [OSO]- and [OSeO]-type Bis(phenolate) Aluminum Complexes: Synthesis and Their Application to the Ring-Opening Polymerization of Cyclic Esters  
Miki Toyoda,Norio Nakata,Akihiko Ishii
- 2Pb024 Polymerization of a-siloxy-w-olefins with zirconium complex having an [OSSO]-type ancillary ligand  
Saito Yusuke,Norio Nakata,Akihiko Ishii
- 2Pa025 Synthesis of ultra-high molecular weight polyethylene fine particles using magnesium oxide-supported Ziegler-Natta nano-catalyst  
Yusuke Bando,Patchanee Chammingkwan,Terano Minoru,Taniike Toshiaki
- 2Pb026 Controlled synthesis of poly(p-phenylene) using zincate complex,tBu<sub>4</sub>ZnLi<sub>2</sub>  
Yuto Ochiai,Eisuke Goto,Mitsuru Ueda,Tomoya Higashihara
- 2Pa027 Suzuki-Miyaura Catalyst-Transfer Condensation Polymerization with AmPhos Ligated Palladium Complex  
Kentarou KOSAKA,Yoshihiro OHTA,Tsutomu YOKOZAWA
- 2Pb028 Precise Synthesis of Helical Polyisocyanide Derivatives Bearing Quinquethiophene Pendants  
Wada Yuuya,Yuugaku Takagi,Tomoyuki Ikai,Ken-ichi Shinohara,Katsuhiko Maeda,Shigeyoshi Kanoh
- 2Pa029 Polymerization of olefins with quaternary carbon by diimine Pd complexes  
Keisuke Ito,Daisuke Takeuchi,Kohtaro Osakada
- 2Pb030 Stereoselective polymerization of chiral olefins by diimine Pdcomplexes  
Yuki Tokura,Daisuke Takeuchi,Kohtaro Osakada
- 2Pa031 Ring-Opening Polymerization of Various Lactones by Bulky Lewis Pairs  
Gentarō Yamazaki,Ryo Tanaka,Yuushou Nakayama,Takeshi Shiono
- 2Pb032 Synthesis of chromium catalyst using silsesquioxane with different molecular structures and ethylene polymerization performance  
Ryuki Baba,Yanning Zeng,Patchanee Chammingkwan,Toshiaki Taniike,Minoru Terano
- 2Pa033 Controlled Copolymerization by Metal Complex [73]. Alternating Copolymerization of Carbonyl Dioxide and Epoxides Bearing Photoreactive Groups.  
Rie Arai,Shinya Handa,Hiroshi Sugimoto
- 2Pb034 Characterization of Ziegler-Natta Catalysts with Microscopic Laser Raman Spectra  
Masayoshi Saito,Toshiya Uozumi,Toshihiko Sugano,Mamoru Komatsu,Kousaku Okada,Yuichiro Matsumoto,kaori Umeyama
- (C403)

#### **A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS**

- 2Pa035 syntheses of arsine derivatives from cyclooligoarsine  
Takuji Kato,Kensuke Naka
- 2Pb036 Preparation of polyimide films using p-bis(aminopropyl)hexaisobutyl-substituted T8-caged silsesquioxane and their properties  
Orito Miyashita,Takayuki Maegawa,Yasuyuki Irie,Hiroaki Imoto,Kensuke Naka
- 2Pa037 Solid-State Polymerization of 7,7,8,8-Tetrakis(alkoxycarbonyl)quinodimethanes with Aromatic Groups  
Hiroto Nakajima,Erika Morita,Takahiro Uno,Masataka Kubo,Takahito Itoh,Norimitsu Tohnai,Mikiji Miyata

- 2Pb038 Synthesis and cyclopolymerization of bifunctional monomers derived from monobenzalpenterythritol  
Mai Shimura, Kota Hio, Hideaki Oike
- 2Pa039 One-pot polymerization of two types of vinyl monomers by a distonic radical ion initiator  
Iori Ohara, Kayeon Cho, Masaru Tsukiji, Soichi Sakamoto, Masashi Shiotsuki
- 2Pb040 Synthesis of Functional Materials Based on the Nickel-mediated Reaction of Diarylallenes  
Hiroshi Eguchi, Hiroki Nishiyama, Shinsuke Inagi, Ikuyoshi Tomita
- 2Pa041 Controlled thermomechanical performances of bio-based copolyimides from 4-aminocinnamate photodimers and various tetracarboxylic dianhydrides  
hojoon Shin, Seiji Tateyama, Tatsuo Kaneko
- 2Pb044 Synthesis of Optically Active Polyurethanes Using Optically Active Diol Derived from myo- Inositol  
Kouhei Kaiba, Atsushi Sudo
- 2Pa045 Synthesis and complexation behaviors of *m*-phenylene-containing chiral cyclic phosphines  
Ryosuke KATO, Yasuhiro MORISAKI, Yoshiki CHUJO
- 2Pb046 Synthesis and Characterization of Heterofluorenes Containing Group 13 Elements  
Hirofumi Takamine, Takuya Matsumoto, Kazuo Tanaka, Yoshiki Chujo
- 2Pa047 Optical properties of 11-vertex nido-carborane-based conjugated compounds  
Kenta Nishino, Kazuo Tanaka, Yasuhiro Morisaki, Yoshiki Chujo
- 2Pb048 Structure-performance relationship for alkoxysilanes as an external donor in propylene homo- and copolymerization using Ziegler-Natta catalysts  
Supawadee Poonpong, Patchanee Chammingkwan, Toshiaki Taniike, Minoru Terano
- 2Pa049 Pore Architecture Design in Magnesium Ethoxide-based Ziegler-Natta Catalysts for Olefin Polymerization  
Patchanee Chammingkwan, Toshiki Funako, Toshiaki Taniike, Minoru Terano
- 2Pb050 Synthesis and Properties of Novel Schiff Base Chiral Macrocycles  
Nachika Matsumoto, Makoto Miyasaka
- 2Pa051 Synthesis of the Novel Optically Active Polymers Based on a Chiral Cyclic Structure  
Hayato Morofushi, Makoto Miyasaka
- 2Pb052 Synthesis and Optical Properties of Binaphthyl Derivatives Bearing Pendant Active Ester Groups.  
Makoto Miyasaka, Ryosuke Yamamoto

(C404)

### C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

- 2Pa053 Formation of surface-textured thin film by mist deposition of nanoparticle  
Akira Watanabe, Jinguang Cai, Gang Qin
- 2Pb054 Investigation of new cooling paints based on copolymers of temperature-responsive polymer with Butyl Acrylate  
Hayato Sasaki, Meiko Kadokura, Hisashi Honda, Hideyuki Tsukada, Yukiumi Kita, Kanako Sekimoto, Aki Tosaka
- 2Pa055 The control of thermoresponsibility on polysilsesquioxane having urea and fluorescent groups  
Yuji Kitamoto, Shin-ichi Yamamoto, Osamu Moriya
- 2Pb056 Gelation and Applications of Fluoroalkyl End-capped Oligomer/Polyaniline/Ionic Liquid Nanocomposites  
Taiki Tsuzuki-ishi, Hideo Sawada
- 2Pa057 Gelation and Application of Ionic Liquids by the Use of Fluoroalkyl End-capped

Vinyltrimethoxysilane Oligomer/Silica Nanoparticles  
Yoshitaka Sutoh, Taiki Tsuzuki-ishi, Masashi Sugiyama, Hideo Sawada

- 2Pb058 Preparation of Fluoroalkyl End-capped Oligomers/Magnesium Oxide Nanocomposites and Their Application to the Surface Modification  
Fumihiko Kasai, Yuri Oikawa, Yuki Goto, Hideo Sawada
- 2Pa061 Controlled Release of Molecules from Hybrid Hydrogels Composed of Liquid Crystalline Virus and Gelatin  
Miyuki Yanagimachi, Toshiki Sawada, Takeshi Serizawa
- 2Pb062 Liquid Crystalline Property of Filamentous Viruses Conjugated with Photo-responsive Molecules  
Takatoshi Nohara, Toshiki Sawada, Takeshi Serizawa
- 2Pa063 Network Structures and Molecular Recognition Behavior of Stimuli-Responsive Hydrogels Designed by Molecular Imprinting  
Saya Yamafuji, Akifumi Kawamura, Takashi Miyata
- 2Pb064 Preparation of Polymer Hydrogels Having Molecule-Responsive Self-Assemblies as Dynamic Crosslinks  
Shingo Yamashita, Akifumi Kawamura, Takashi Miyata
- 2Pa065 Gelation properties and self-assembled structures of two-component systems based on aliphatic amines  
Takuya Senda, Kazuhiro Yabuuchi
- 2Pb066 Preparation of the surface grafted hydrogel by ARGET-ATRP  
Ko Matsukawa, Tsukuru Masuda, Aya Akimoto, Ryo Yoshida
- 2Pa067 Interaction of basic polymer and low molecular weight galator having carboxyl group  
Yasunobu Ishikawa, Masahiro Suzuki, Kenji Hanabusa
- 2Pb068 Gelation property of novel asymmetric organogelators based on trans-1,2-diaminocyclohexane  
Haruka Nakagawa, Masahiro Suzuki, Kenji Hanabusa

(C405)

### **C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS**

- 2Pa069 Polyampholyte hydrogels; smart, soft and wet adhesive  
Chanchal Kumar ROY, Hong Lei GUO, Abu Bin IHSAN, Tao Lin SUN, Takayuki NONOYAMA, Tasuku NAKAJIMA, Takayuki KUROKAWA, Jian Ping GONG
- 2Pb070 Mechanical Properties of Hydrogels with Embedded Anisotropic Electrostatics  
Yuka Onuma, Koki Sano, Yasuo Ebina, Takayoshi Sasaki, Yasuhiro Ishida, Takuzo Aida
- 2Pa071 Improvement of off-on control on the drug-release of Itaconic Acid—HEMA hydrogels used as drug carrier  
Kenta Hataguchi, Yasuna Suzuki, Michinori Karikomi, Takao Kimura
- 2Pb072 Hydrogel materials with separating function for platinum group elements  
Ryosuke Ohata, Michinari Kohri, Taniguchi Taniguchi, Keiki Kishikawa, Hirokazu Narita, Ryuhei Motukawa
- 2Pa073 Self-assembling Behavior and Remarkable Gelation Properties of Tripodal Paraffinic Triptycenes Bearing Diacetylene Units  
Noriya Seiki, Fumitaka Ishiwari, Yoshiaki Shoji, Takashi Kajitani, Takao Someya, Takanori Fukushima
- 2Pb074 Evaluation of color changing materials based on the interaction between cyclodextrin and phenolphthalein moieties  
Koki Yonekura, Masaki Nakahata, Yoshinori Takashima, Hiroyasu Yamaguchi, Akira Harada
- 2Pa075 Physical gelation of polar aromatic liquid molecules and their dielectric properties  
Ryosuke Yamamoto, Yusuke Minami, Joseph K.-H. Hui, Masa-aki Morikawa, Nobuo

Kimizuka

- 2Pb076 Self-assembling behavior of pyridine-based monourea compounds: Gelation abilities and mesomorphic properties  
Yoshihiro Fukao, Kazuhiro Yabuuchi
- 2Pa077 Development and physical properties evaluation of supramolecular gels containing polyrotaxane  
Suguru NOMIMURA, Masaki NAKAHATA, Yoshinori TAKASHIMA, Hiroyasu YAMAGUCHI, Akira HARADA
- 2Pb078 Recognition of metal ion on metal-imprinted gel  
Isamu Fujiwara
- 2Pa079 Spectral Tuning of Gel-Immobilized Colloidal Photonic Crystals Containing Ionic Liquids  
Yui Naoi, Hiroki Yano, Tsutomu Sawada, Toshimitsu Kanai
- 2Pb080 Preparation and shape memory property of elastin - containing shape memory hydrogels  
Koichi Sakamoto, Katsuhiko Inomata, Hideki Sugimoto, Eiji Nakanishi
- 2Pa081 Easy method for preparing bio-inactive interfaces using zwitterionic polymer  
Miku Nishida, Tadashi Nakaji-Hirabayashi, Hiromi Kitano, Yoshiyuki Saruwatari
- 2Pb082 Preparation of DNA bio-plastics and their mechanical properties  
Takashi AOKI, Hidetaka MAKINO

(C406)

#### **D. BIOPOLYMERS AND BIORELATED POLYMERS**

- 2Pa085 Suppression of abnormal protein aggregation and treatment of Alzheimer's diseases by brain-permeable peptide nanofibers  
Yukako Kobayashi, Takuya Uemura, Tomonori Waku, Michiaki Okuda, Hachiro Sugimoto, Naoki Tanaka
- 2Pb086 Control of collagen gel structure by the secretion signal sequence of ovalbumin and its application to cell culture  
Yuri Narita, Kaori Kanamaru, Kimio Sumaru, Toshiyuki Kanamori, Akihiro Handa, Naoki Tanaka
- 2Pa087 Characterization of Mannose-modified Peptide Nanofibers as Vaccine Carrier  
Tadato Shibuya, Yuri Sugimura, Tomonori Waku, Shigeru Kunugi, Naoki Tanaka
- 2Pb088 Temperature dependence of the solution behavior of Poly( $\gamma$ -L-glutamic acid) containing sulfobetaine moieties  
Yuki Kojima, Eiji Nakanishi, Katsuhiko Inomata, Hideki Sugimoto
- 2Pa089 Preparation of Sulfobetaine Group Thermo-sensitive Polypeptides Containing L-Leucine  
Kento Kotani
- 2Pb090 Cell fusion and cell attachment of microcells with human artificial chromosomes (HACs) as gene-delivery vectors and U937 cells on a PEG immobilized surface  
Yuka Kanzaki, Akinori Imajo, Yasue Yamada, Kohei Shiraishi
- 2Pa091 Preparation of UCST types of thermoresponsive poly(acrylamide-co-acrylonitrile) immobilized on a glass substrate by surface initiated RAFT polymerization method and thermal stimuli-exfoliation of hiMSC  
Tatsuki Nousou, Akinori Imajo, Yasue Yamada, Kohei Shiraishi
- 2Pb092 Evaluations between cell infiltration and histological structures of HHP decellularized arteries  
Akitatsu Yamashita, Jun Negishi, Yoshihide Hashimoto, Masaki Tabuchi, Tsuyoshi Kimura, Akio Kishida, Tetsuya Higami, Seiichi Funamoto
- 2Pa093 The development of carbonyl modified poly(vinyl alcohol) (PVA) to modify surface with endothelial cell  
Nozomi Manji, Yoshihiro Kimura, Kazuaki Matsumura

- 2Pb094 Syntheses and properties of Biocompatible block copolymers containing phosphorylcholine group  
Koji Higuchi,Atsushi Iwano,Yosuke Okamura,Yu Nagase
- 2Pa095 Design of biocompatible surface by using photoreactive phospholipid polymer  
Masaru Matsuda,Tomozumi Noda,Nobuyuki Sakamoto,Shigeru Kitano,Kazuhiko Ishihara,Kyoko Fukazawa,Yuuki Inoue
- 2Pb096 Evaluation of interfacial properties of the block copolymers comprising an antithrombotic aliphatic polycarbonate and polylactides  
Yuta Haga,Yuto Inoue,Masaru Tanaka,Kazuki Fukushima
- 2Pa097 Synthesis of novel poly(vinyl acetate) derivatives and its blood compatibility evaluation  
Asuka Sekishita,Kazuhiro Sato,shingo Kobayashi,Masaru Tanaka
- 2Pb098 Development of a thermoresponsive sol-gel transition system for creation of a scaffold-free tissue  
Haruyuki Ryu,Hiroto Tada,Takeshi Ueki,Kenichi Nagase,Teruo Okano,Aya Akimoto,Ryo Yoshida

(C407)

#### **D. BIOPOLYMERS AND BIORELATED POLYMERS**

- 2Pa101 Influence of CP fraction on cell mobility on fibroin film  
Yasushi Tamada,Tomoko Hashimoto
- 2Pb102 Maintenance of human iPS cell-derived hepatocytes during culture on lactose-modified silk fibroin and extracellular matrices  
Yohko Gotoh,Rina Akahira,Kenichi Tamura,Tomohisa Watanabe,Mitsuru Inamura,Shingo Niimi
- 2Pa103 The influence of end group of poly(methyl methacrylate) on biocompatibility  
Takafumi Watanabe,Chie Yahata,Hideo Tsukamoto,Akira Mochizuki
- 2Pb104 Development of cell culture substrates that regulate chondrocyte morphology with polymers containing intermediate water  
Hiroka Maruyama,Takashi Hoshiba,Kazuhiro Sato,Guoping Chen,Masaru Tanaka
- 2Pa105 Preparation and evaluation of thermo-responsive core-corona type rod-shaped nanoparticles and their interaction with cells.  
Takuma SUZUKI,Takuya MATSUYAMA,Taka-Aki ASOH,Ryo ISHIIHARA,Akihiko KIKUCHI
- 2Pb106 Creation of cell cross-linked "living" hydrogels and their characteristic functions  
Ayaka Takemoto,Koji Nagahama
- 2Pa107 Design of organic-inorganic hybrid porous materials for potential application in regenerative medicine  
Rie Fujihara,Yoshihide Hashimoto,Eriko Marukawa,Shinichi Sawada,Sadaatsu Mukai,Yoshihiro Sasaki,Kazunari Akiyoshi
- 2Pb108 Effect of methoxy group in polymer on bio-compatibility  
Takuya Kinoshita,Akira Mochizuki,Chie Yahata
- 2Pa109 Preparation of Porous Scaffolds with Sustained Release of Dexamethasone for Bone Regeneration  
Naoki Kawazoe,Sekhar Himansu Nanda,Guoping Chen
- 2Pb110 Fabrication, Anti-Cancer Activity and Hydrolysis Behavior of Drug Nanoparticles  
Yoshikazu Ikuta,Yoshitaka Koseki,Tsunenobu Onodera,Hidetoshi Oikawa,Hitoshi Kasai

(C401)

Presentation Time

<c = 13:20~14:00>

<d = 14:00~14:40>

## A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

- 2Pc001 Anionic polymerization of 2-ethoxyethyl methacrylate and the characterization of the resulting polymers  
Kie Shinomiya,Chizuka Hirokawa,Satomi Okazaki,Osamu Nakagawa
- 2Pd002 Anionic polymerization of 2-alkoxyethyl methacrylate and 2-phenoxyethyl methacrylate and the characterization of the resulting polymers  
Megumi Amano,Rumi Kobayashi,Ayaka Sato,Osamu Nakagawa
- 2Pc003 Anionic polymerization of 2-(ethylthio)ethyl methacrylate and 2-(diethylamino)ethyl methacrylate  
Osamu Nakagawa,Rinichi Kazama,Tomoki Watanabe,Akira Faxon Ichikawa,Kensei Matsumura
- 2Pd004 Ionic Polymerization of Cyclic Sulfite Leading to an Artificial Polysaccharide  
Sangeetha Shetty,Yasuhito Koyama,Tamaki Nakano
- 2Pc005 Novel Synthetic Method for Star-Shaped Polymers and Block Copolymers via Monomer-Selective Living Cationic Copolymerization Using Biphasic System  
Tsuyoshi Nishikawa,Mayuka Yamada,Arihiro Kanazawa,Shokyoku Kanaoka,Sadahito Aoshima
- 2Pd006 Living cationic polymerization of vinyl ether using quaternary ammonium salts containing a long alkyl chain as additives: Formation of reverse micelles leading to characteristic polymerization behavior  
Kota Fujiwara,Arihiro Kanazawa,Shokyoku Kanaoka,Sadahito Aoshima
- 2Pc007 Schiff Base Type Ligands/Metal Chlorides Initiating Systems for Controlled Cationic Polymerization: Effects of Central Metals and Ligand Structures on Polymerization Behaviors  
Sensho Kigoshi,Arihiro Kanazawa,Shokyoku Kanaoka,Sadahito Aoshima
- 2Pd008 Concurrent Vinyl-Addition and Ring-Opening Cationic Copolymerization Mediated by Long-Lived Species: Copolymerization of Vinyl Ethers or Styrenes with Cyclic Acetals  
tomoka shirouchi,arihiro kanazawa,shokyoku kanaoka,sadahito aoshima
- 2Pc009 Concurrent cationic vinyl-addition and coordination ring-opening copolymerization: Synthesis of vinyl ether- $\epsilon$ -caprolactone copolymers through alkoxy group exchange at propagating ends with acetal structure  
Motoki Higuchi,Arihiro Kanazawa,Shokyoku Kanaoka,Sadahito Aoshima
- 2Pd010 Cationic Ring-Opening Copolymerization of Trioxane and Epoxide Comonomers bearing Various Spacer Length  
Shinpei Tohkai,Jun Ueda,Takahiro Uno,Masataka Kubo,Takahito Itoh,Hatsuhiko Harashina
- 2Pc011 Effect of ester compounds in anionic polymerization of methacryloyl chloride  
Shun Nakano,Takehiro Kitaura,Tatsuki Kitayama
- 2Pd012 Study on the growing species in anionic polymerization of N-(p-substituted)phenylmaleimide  
Yuki Ida,Tokio Hagiwara
- 2Pc013 Study on the polymerization reactivity of cyclization adducts N-(4-ethynylphenyl)maleimide.  
Wataru Ito,Tokio Hagiwara
- 2Pd014 Living Cationic Polymerization and Block Copolymerization of Benzofuran Derivatives  
Yuhei TANAKA,Kotaro SATOH,Masami KAMIGAITO
- 2Pc015 Photo-Switchable Interconvertible Living Cationic and Radical Polymerization by Various Radical Initiators  
Ryoma ISHIBASHI,Kotaro SATOH,Masami KAMIGAITO
- 2Pd016 Mechanistic Transformation of Growing Anionic Species in Living Anionic Polymerization of Hydrocarbon Monomers through Carbon-Halogen Bond  
Yuya MORI,Kotaro SATOH,Masami KAMIGAITO

(C402)

### A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS

- 2Pc017 Block Copolymerization of Alicyclic Conjugated Dienyl Terpene by Living Cationic Polymerization  
Keishi OSAKI, Kotaro SATOH, Masami KAMIGAITO, Yuji EGUCHI
- 2Pd018 Synthesis of Cyclic Olefin Polymer by Cationic Polymerization of  $\beta$ -Caryophyllene  
Tomohiro ISHIKAWA, Kotaro SATOH, Masami KAMIGAITO
- 2Pc019 Living Cationic Polymerization of Glycerol-Derived Vinyl Ethers and Block Copolymerization  
Akito KAJITA, Kotaro SATOH, Masami KAMIGAITO
- 2Pd020 Sequence-Controlled Polymers Carrying Vinyl Alcohol Units: Iterative Single Monomer Addition of Vinyl Ether  
Takahiro Konishi, Makoto Ouchi, Mitsuo Sawamoto
- 2Pc021 Synthesis of Chain End Sequence-Controlled Polymer by Anionic Polymerization  
Masashi Nagao, Satoshi Uchida, Takashi Ishizone
- 2Pd022 Anionic Polymerization of 4-Chlorostyrene and 4-Bromostyrene  
Taro KOIZUMI, Reina KURAKAKE, Kohei OTAKE, Satoshi UCHIDA, Takashi ISHIZONE

### B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES

- 2Pc025 Dispersion polymerization of styrene using a polystyrene/poly(acrylic acid) block copolymer as a stabilizer  
Minami Okuno, Hiroaki Shimomoto, Eiji Ihara, Tomomichi Itoh
- 2Pd026 Morphology Control of Spongy Cellulose Particles Prepared Using an Ionic Liquid  
Kaori Imagawa, Yasuhito Ihara, Toyoko Suzuki, Hideto Minami
- 2Pc027 Morphology Control of Poly(methyl methacrylate)/poly(ionic liquid) Composite Particles  
Takuto Ouchi, Ryuma Nakamura, Toyoko Suzuki, Hideto Minami
- 2Pd028 Fabrication of magnetic surfactant stabilized polydopamine black particles  
Ayaka Kawamura, Michinari Kohri, Tatsuo Taniguchi, Keiki Kishikawa
- 2Pc029 Preparation of hemispherical hollow particles by anisotropic modification of polymer particles  
Mayuka Taira, Masakatsu Kasuya, Michinari Kohri, Tatsuo Taniguchi, Keiki Kishikawa
- 2Pd030 Fabrication of free-standing polydopamine-inorganic hybrid thin films  
Hiroyuki Oku, Kosuke Hamada, Michinari Kohri, Tatsuo Taniguchi, Keiki Kishikawa
- 2Pc031 Adsorption behavior of the charged colloidal particles onto the surfaces of polymer hydrogels and polymer modified substrates.  
Naoko Sato, Akiko Toyotama, Tohru Okuzono, Junpei Yamanaka
- 2Pd032 Microwave-assisted synthesis of dendritic viologen-arranged molecules with a thiol group and their self-assembled monolayers  
Takehiro Kawauchi, Yuki Oguchi, Keiji Nagai, Tomokazu Iyoda
- 2Pc033 Synthesis of Amphiphilic Liquid Crystalline Block Copolymer Including Poly(NIPAM) and Its Microphase-Separation Structure  
Shingo Hadano, Chiho Watanabe, Kazumasa Mori, Shigeru Watanabe, Tomokazu Iyoda
- 2Pd034 GI-SWAXS, AFM, and TEM analyses of a vertically-oriented cylinder nanostructure having rhenium-complex  
Mikiko Noguchi, Midori Wakabayashi, Atsushi Izumi, Haruhiko Maeda, Satoshi Gondo, Yoshiaki Tanio, Sadayuki Asaoka

(C403)

### B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES



- 2Pc035 Synthesis of Amphiphilic Triblock Copolymers and Preparation of Porous Membrane  
Iori MAEDA, Kiyomi FUCHIGAMI, Kosuke KANEKO, Tomonori HANASAKI
- 2Pd036 Conformation of fluoropolymers in interfaces  
Kanta Iwamoto, Yasuhiro Matsuda, Shigeru Tasaka
- 2Pc037 Self-organization of  $\pi$ -conjugated polymers into microdisks by solvent vapor annealing method  
Yusuke Aikyo, Hitoshi Saito, Junpei Kuwabara, Takaki Kanbara, Yohei Yamamoto
- 2Pd038 Investigation of glass transition temperature of polymer thin films by dielectric relaxation method  
Yuta Uetake, Kaito Sasaki, Rio Kita, Naoki Shinyashiki, Shin Yagihara
- 2Pc039 Surface Potential and Helix-sense Inversion for Surface-grafted Polypeptide Thin Films Maintained Perpendicular Helix Orientation  
Kouki Shibata, Hidemine Furuya
- 2Pd040 Control of Perpendicular Helix Orientation for Surface-grafted Copolypeptide Thin Films Exhibiting Reversible Helix-sense Inversion  
Takuto Matsuzono, Hidemine Furuya
- 2Pc043 Effects of Preparation Conditions and Molecular Weights of Polysaccharides on Material Properties of Polysaccharide Composite Films Obtained Using Roll Press Techniques  
Yuichi Nikaido, Kazutoshi Iijima, Mineo Hashizume
- 2Pd044 Micro patterning of upconversion luminescent layers on wettability-patterned plastic sheets  
Satoshi Watanabe, Yoshinori Ishii, Hiroshi Hyodo, Kohei Soga, Mutsuyoshi Matsumoto
- 2Pd048 Perfect Vitrification of Poly(ethylene glycol) Aqueous Solution Investigated by Infrared Spectroscopy  
Makoto Gemmei, Takashi Miyashita, Ryosuke Kasai, Shigehiro Kagaya, Hiromi Kitano
- 2Pc049 Melting behavior analysis and property evaluation of cyclic polyolefin  
Takumi Sakamura, Hiroki Uehara, Takeshi Yamanobe, Daisuke Takeuchi
- 2Pd050 Crystallization Process and Thermal Behavior of Poly( $\epsilon$ -caprolactone) by Using Terahertz Spectroscopy and Infrared Spectroscopy  
Takuya Toyouchi, Hiromichi Hoshina, Harumi Sato
- 2Pc051 Evaluation of Free Volume for Thermosetting Resin using Positron Annihilation Lifetime Spectroscopy  
Hiroyuki Hosomi, Shigeru Yoshimoto, Yoshitomo Furushima, Yoshihiro Takai
- 2Pd052 Crystal structure and thermal behavior of low molecular weight poly(3-hydroxybutyrate) studied by vibrational spectroscopy  
Tomoya Miyai, Naoto Kadoya, Hiromichi Hoshina, Yukihiro Ozaki, Harumi Sato

(C404)

## **B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES**

- 2Pc053 The low temperature heat capacity analysis of amorphous styrene oligomer.  
Marika Yokota, Eri Nishiyama, Jun Fujimura, Itaru Tsukushi
- 2Pd054 Molecular weight dependence for enthalpy relaxation of amorphous polystyrene by using an adiabatic calorimeter (II)  
Jun Fujimura, Eri Nishiyama, Itaru Tsukushi
- 2Pc055 Proton conductivity of polymer membranes derived from crystalline polystyrene  
Toshiyuki Kataoka, Mariko Hiraga, Harumi Yamanaka, Takayuki Ikehara
- 2Pd056 Poly(vinyl alcohol)/Dimethyl Sulfoxide/ Water Film prepared from Gel by Freeze/thaw cycle  
Naohiro Onjo, Takahiko Nakaoki

- 2Pc057 Crystallinity of the Polyvinyl Alcohol Thin Film obtained by Freeze/thaw cycled Gel  
Masayuki Miyanaga, Takahiko Nakaoki
- 2Pd058 Molecular Structure and Mobility of Ultra High Molecular Weight Polyethylene by Solid-State high resolution <sup>13</sup>C NMR  
Takanari Ikenishi, Takahiko Nakaoki, hideaki Ishihara
- 2Pc059 The anisotropic dynamics of guest molecules caged in different orientational cavity of polymer crystal  
Sho Akazawa, Hideo Kobayashi, Fumitoshi Kaneko, Osamu Urakawa, Tadashi Inoue
- 2Pc061 Thermal Expansion of the Injection Molded Polymer Composites studied by X-ray CT  
Satoshi Noma, Kenji Urayama, Yukihiro Nishikawa
- 2Pd062 Measurement of Local Strains under Compression in Silica Particle / elastomer Systems.  
Jun Wu, Yukihiro Nishikawa
- 2Pc063 Effects of particles size and size distribution on viscosity in the particle dispersion systems  
Koichiro Mizoguchi, Yukihiro Nishikawa
- 2Pd064 Influence of Alkyl Chain Length in Methacrylate Monomers on the Phase Separation Induced by Photo-polymerization  
Rie Kawakubo, Hideyuki Nakanishi, Tomohisa Norisuye, Takaaki Miyata
- 2Pc065 Influence of initiator concentration on the phase separation induced by photopolymerization in a PEA/MMA mixture  
Asahi Kasue, Hideyuki Nakanishi, Tomohisa Norisuye, Qui Tran-Cong-Miyata
- 2Pd066 Micro CB ring alignment using phase separation of immiscible polymer blend  
Junhyeok Jang, Tsuyoshi Inoue, Masayuki Kawazoe, Hirohisa Yoshida
- 2Pc067 Microphase-Separated Structure of Two-Component Triblock Copolymer Blended with Homopolymer  
Keisuke Mogari, Ryusuke Himeno, Naoya Torikai, Masami Kawaguti
- 2Pd068 Computer Simulation of Dynamics of Phase Ordering of Hydrogen-bonding Supramolecular Block CopolymersII  
Ryo Arimura, Tsuyoshi Koga

(C405)

### C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

- 2Pc069 Synthesis and properties of AIE luminogen-appended polyacrylic acid-based Ca<sup>2+</sup> sensors bearing biocompatible side chains  
Satoko Matsumura, Fumitaka Ishiwari, Takao Someya, Takanori Fukushima
- 2Pd070 High strength collagen films prepared with surface structure  
Saki Tokuchi, Norihisa Akamatsu, Atsushi Shishido
- 2Pc071 Drug release and physical property evaluation of a new ointment base by functionalizing PEO that has allyl groups in the side chain  
Daichi Asai, Keiji Yamashita, Hirotaka Awata, Yasuhiro Noda
- 2Pd072 Development of polymer materials and induction of structure and property changes by reversible photocycloaddition of coumarin compounds  
Masaya Moriyama, Tomoyo Kawano, Sakurako Nagano, Makiko Uemura, Takumi Okano, Shohei Ono, Kazuhiro Yabuuchi
- 2Pc073 Design of Multi-Joint Polymers Based on pi-Conjugated Molecules  
Yuki TSUJIMOTO, Tsuneaki SAKURAI, Shu SEKI
- 2Pd074 Photolysis Self-Assembled Monolayers and a Model Compound derived from a Photodegradable 2-Nitrophenethyl Linker  
Michiko Ito, Tomoya Yamada, Yuta Yanagisawa, Daiki Sato, Kazuo Yamaguchi
- 2Pc075 Photoresponsive Self-Healing Materials Using Polymer-Brush-Afforded Silica Particles

and Azobenzene-Containing Liquid Crystals

Yuki Kawata, Takahiro Yamamoto, Hideyuki Kihara, Kohji Ohno

- 2Pd076 Photoinduced orientation of liquid crystalline copolymethacrylate films comprised of phenyl aldehyde and benzoic acid side groups doped with phenyl amine derivative  
Ryosuke Fujii, Kazutoshi Miyake, Mizuho Kondo, Nobuhiro Kawatsuki
- 2Pc077 Unique Phase Control by Photodimerization in Anthracene-Containing Ionic Liquids  
Shota Hisamitsu, Nobuhiro Yanai, Shigenori Fujikawa, Nobuo Kimizuka
- 2Pd078 Photo-induced phase transition of azobenzene polymer crosslinked by polyrotaxane.  
Shin Tomokiyo, Masatoshi Kidowaki, Haruhisa Akiyama, Yoko Matsuzawa, Kozo Ito
- 2Pc079 Mechanical Properties of Silicone Elastomers Blended with Crystalline Component  
Yukiko Isogai, Ryosuke Morita, Ayako Masuda, Hiroki Uehara, Takeshi Yamanobe, Eiichi Akiyama
- 2Pd080 Thin Film Formation of Charge Transport Liquid Crystals Based on Oligothiophene Derivatives with Polymerizable Moieties  
Ryo Yatagai, Masafumi Yoshio, Takashi Kato
- 2Pc081 Exchange behavior of DNA oligomer encapsulated in multi-layered microspheres  
Riho Takei, Nobuyuki Morimoto, Shin-ichiro Nomura, Makoto Suzuki
- 2Pd082 Orientation direction control with sublimation low molecular compound from free surface  
Kazutoshi Miyake, Mizuho Kondo, Nobuhiro Kawatsuki

(C406)

### **C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS**

- 2Pc085 Development of boronate-based pyrophosphate-responsive materials  
Daisuke Iizuka, Mai Sanjoh, Tatsuro Goda, Akira Matsumoto, Yuji Miyahara
- 2Pd086 Formation of second network and retaining orientation of liquid crystal slide-ring polymer by thermal crosslinking  
Tetsuya Shiraishi, Yusuke Nakata, Masatoshi Kidowaki, Yuki Hayashi, Kozo Ito
- 2Pc087 Syntheses and Alignment properties of side chain liquid crystalline polymers having branched structure  
Wataru Matsuno, Osamu Haba, Koichiro Yonetake
- 2Pd088 Control of thermosensitivity by length of side groups of poly(trimethylene carbonate derivatives)  
Yoshiaki HARAMIISHI, Kai KAN, Hiroharu AJIRO, Syun TAKAHAMA, Mitsuru AKASHI
- 2Pc089 Synthesis and Characterization of Redox-active N-Heteroacene Derivatives  
Kyosuke ISODA
- 2Pd090 Functionalization of Carbon Nitride Thin Film via Acid-base Treatment  
Shigeru Sakamoto, Hiroki Arazoe, Daigo Miyajima, Takuzo Aida
- 2Pc091 Ring-Opening Polymerization of Necklace Shaped Inorganic Polymers bearing a POSS cage  
Naohiro Katsuta, Yusaku Kan, Tomoyuki Ohba, Takashi Matsuo, Masashi Kunitake

### **D. BIOPOLYMERS AND BIORELATED POLYMERS**

- 2Pc093 Development of dual ligands-decorated polymeric micelles delivering to central nervous system  
Takuya Watanabe, Akihiro Mizoguchi, Yasutaka Anraku, Yu Fukusato, Mao Hori, Jooyeon Ahn, Kazunori Kataoka
- 2Pd094 Application of chitosan microparticle having CaCO<sub>3</sub> shell to pH-responsive drug carrier  
Satoshi Tanimoto, Junni Teng, Izuka Nishii, Shohei Ida, Yoshitsugu Hirokawa

- 2Pc095 Size-controlled unimer polyion complex-assembled gold nanoparticles for systemic siRNA delivery  
Yu Yi,Hyun-Jin Kim,Peng Mi,Kanjiro Miyata,Kazunori Kataoka
- 2Pd096 Effect of Molecular Weight of Model Drugs on Loading and Release Behaviors of Polysaccharide Composite Films  
Tomonori Shibata,Kazutoshi Iijima,Yu Murata,Mineo Hashizume
- 2Pc097 Controlled Drug Release System by Mesoporous Silica covered by Dual-stimuli Responsive Polymers  
Ryota Kato,Yuna Mori,Masahiro Higuchi
- 2Pd098 Modification of amine structure for regulated pH responsibility of polyation toward PIC-based siRNA delivery  
Hiroyasu Takemoto,Hui Gao,Kanjiro Miyata,Nobuhiro Nishiyama,Kazunori Kataoka
- 2Pc099 Intracellular delivery and the behavior of PEG-sulfobetaine copolymer nanospheres  
Masaru Wakamura,Nobuyuki Morimoto,Masafumi Nakayama,Wataru Shoji,Makoto Suzuki
- 2Pd100 Fabrication of collagen/PLLA coaxial nanofiber for controlled drug release  
Arata Kato,Onon Batnyam,Shin-ichiro Suye,Satoshi Fujita

(C407)

#### **D. BIOPOLYMERS AND BIORELATED POLYMERS**

- 2Pc101 The novel antioxidative therapy by epigenetics control carrier.  
Yutaro Asaba,Motoyuki Matsuho,Shoichiro Asayama,Hiroyoshi Kawakami
- 2Pd102 Fabrication of biodegradable nanofibers by electrospinning (I) - Synthesis and characterization of MPEG-b-PLLA -  
Miku Ohkimoto,Masahiro Fujita,Yuko Takeoka,Masahiro Rikukawa
- 2Pc103 Performance Prediction by Observation of Surface Potential on Dye-coupled Polyethylene Films as Prototypes of Retinal Prostheses  
Makoto Nitta,Tetsuya Uchida
- 2Pd104 DNA aptamer crosslinked thermoresponsive gel for novel affinity chromatography  
Erika HASUIKE,Mizutani Aya AKIMOTO,Reiko KURODA,Yuki HIRUTA,Hideko KANAZAWA,Ryo YOSHIDA
- 2Pc105 Design of 4D cell-culturing system for application of reversible mechanical stimuli to cells by PEG crosslinked PNIPAAm gel  
Aya Mizutani Akimoto,Erika Hasuike,Hiroto Tada,Ryota Tamate,Kenichi Nagase,Teruo Okano,Hideko Kanazawa,Ryo Yoshida
- 2Pd106 Solubilization of fullerene in water by thermo-responsive polymer  
Junki Yano,Shin-ichi Yusa,Tetsuya Ohata,Kazuhiko Ishihara
- 2Pc107 Precise synthesis of tri-block copolymers possessing both PEG and poly(amino acid)s and evaluation of their functionalities as nanoaggregates.  
Kyosuke Matsumoto,Shunya Sakuma,Kei Nishii,Carmen Scholz,Michihiro Iijima
- 2Pd108 Synthesis and evaluation of PLLA diblock copolymer nanofiber (VI) - Biom mineralization-  
Momoko Kasatani,Masahiro Fujita,Yuko Takeoka,Masahiro Rikukawa
- 2Pc109 Synthesis of Bio-based Polymers with Ferulic Acid Moieties and Its Properties  
Hironori Atarashi,Airi Takashima,Hideji Osuga,Hidefumi Sakamoto
- 2Pd110 Gelation behavior of collagen/crosslinker mixed solution of which fibril formation is accelerated  
Hirosuke Hatayama,Shunji Yunoki,Yoshimi Ohyabu,Toshio Uraoka
- 2Pc111 Effects of location and ligands type of affinity ligands within thermoresponsive polymer grafted surfaces on protein interaction.  
Masaki ISHIKAWA,Takuya KORiyAMA,Ryo ISHIHARA,Akihiko KIKUCHI

- 2Pd112 Pro-Angiogenic Hydrogen Sulfide Releasing Micelles  
JiaYu Chen, Andre J. van der Vlies, Hiroshi Uyama, Urara Hasegawa
- 2Pc113 Mussel-inspired binding bone morphogenetic protein 2 for functionalization of titanium surfaces  
Chen Zhang, Hideyuki Miyatake, Yoshihiro Ito
- 2Pd114 Graphite Oxide/Cellulose Beads for DNA Extraction Applications  
Garbis Atam AKCEOGLU, Oi Lun LI, Nagahiro SAITO

(C401)

Presentation Time

<e = 15:20~16:00>

<f = 16:00~16:40>

#### **A. POLYMER CHEMISTRY: SYNTHESIS AND REACTIONS**

- 2Pe001 RAFT Polymerization of HPMA using Chain Transfer Agent bearing Porphyrin Moiety  
Yuya Tsutsui, Makoto Obata
- 2Pf002 Synthesis of Block Copolymer consisting Poly(L-lysine) and Glycopolymer Segments via RAFT Polymerization and Click Chemistry  
Hiroshi Mizukoshi, Makoto Obata
- 2Pe003 Preparation of Composite Materials by Surface-Initiated Graft Polymerization from Self-Assembled Chitin Nanofibers  
Ryo Endo, Kazuya Yamamoto, Jun-ichi Kadokawa
- 2Pf004 Radical Cyclopolymerization of Dimethacrylimide Derived from 2,4,6-Tribromoaniline  
Hiroki Furuhashi, Tomio Sakue, Keisuke Kataoka, Katsuyori Yashiki, Atsushi Sudo
- 2Pe005 Controlled radical copolymerization of vinyl monomers in a porous metal complex with coordinatively unsaturated sites  
Shuto Mochizuki, Takashi Uemura, Susumu Kitagawa
- 2Pf006 Radical polymerization of  $\alpha$ -(aminomethyl)acrylates: Spontaneous post-polymerization reaction triggered by the cleavage of intramolecular hydrogen-bond  
Yasuhiro Kohsaka, Yusuke Matsumoto, Tatsuki Kitayama
- 2Pe007 Radical Copolymerization of Sequence-Regulated Oligomonomer Containing Acid and Base Units and Complexation of Their Copolymers  
Takamasa SOEJIMA, Kotaro SATOH, Masami KAMIGAITO
- 2Pf008 Synthesis and Thermo-responsive Aggregation Behavior of Poly(NIPAM) with Periodic Carboxyl- Groups by Simultaneous Chain- and Step-Growth Radical Polymerization  
Hiroki SAKAGUCHI, Kotaro SATOH, Masami KAMIGAITO
- 2Pe009 Novel Specific Sequenced Polymer by Iterative Selective Amidation at the Growing Terminal of Living Radical Polymerization  
Yukako ISHIGAMI, Kotaro SATOH, Masami KAMIGAITO
- 2Pf010 Polymerization behavior in the atom transfer radical polymerization using PME macromonomers in the presence of metal oxide nanoparticles  
Shunsuke HISAMOTO, Kaoru ADACHI, Yasuhisa TSUKAHARA
- 2Pe011 Sequence-Controlled Vinyl Polymers via Iterative Double Monomer Radical Addition: Control of Dormant Species for Alternating Propagation  
Kana Nishimori, Makoto Ouchi, Mitsuo Sawamoto
- 2Pf012 Vinyl group selective radical copolymerization of diene adduct of N-(4-vinylphenyl) maleimide  
Takayuki Okuma, Tokio Hagiwara
- 2Pe013 Copolymerizations of N - substituted itaconimide having azo group and properties of its polymer  
Fuminori Ino, Tokio Hagiwara
- 2Pf014 Radical Polymerization of Amino Acid-Based Chiral Oxazolidinone

Miki NIWA, Hajime NORISADA, Hitoshi TANAKA

2Pe015 Chemoselective radical polymerization of N-allylmethacrylamide in the presence of Li salts.

Yuta Ogasa, Tadashi Segata, Miyuki Oshimura, Tomohiro Hirano, Koichi Ute

2Pf016 Reversible Addition-Fragmentation Chain Transfer Polymerization of Hydroxy-Functional Vinyl Ethers

Shinji Sugihara, Yuki Kawamoto, Yasushi Maeda

(C402)

## **B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES**

2Pe017 Hydrophilic treatment of various plastic surfaces by dip-coating an amphiphilic polymer with a fluorinated surfactant

Shigeru Kitahata, Shunsuke Yamamoto, Ayane Shimomura, Kaya Tokuda, Takashi Nishino, Tatsuo Maruyama

2Pf018 Spectroscopic study on antistatic properties of polymer - ionic liquid composite films

Toshiyuki Yokofujita, Yasunari Sakai, Takashi Iwahashi, wataru Kagayama, Yuta Saito, Yukio Ouchi

2Pe019 The structure analysis of dynamic polymer brush using amphiphilic block copolymers

Kazuma Inoue, manabu Inutsuka, Norifumi Yamada, Kohzo Ito, Hideaki Yokoyama

2Pf020 Crystalline morphology of poly( $\epsilon$ -caprolactone) grafted on silicon substrate

Toshiyuki Kataoka, Daiki Kosuge, Takayuki Ikehara

2Pe021 Structural Analysis of a Semiconductor Thin Film of Porphyrin Derivatives Using Visible MAIRS

Miyako Hada, Nobutaka Shioya, Takafumi Shimoaka, Kazuo Eda, Takeshi Hasegawa

2Pf022 Effect of fabrication conditions on monolayers structure of peptide-grafted colloidal silica

Yoshitsugu Hirokawa, Satoshi Tanimoto, Shohei Ida, Yumi Nakano

2Pe023 Annealing effect on the diameter distribution of the polymer micelles having a crystalline core

Daiki Yamashita, Shohei Ida, Yoshitsugu Hirokawa, Satoshi Tanimoto

2Pf024 Potentiometric Behavior in Interpolymer Complex Formation between Poly(N-Isopropylacrylamide) Microgel and Poly(Acrylic Acid)

Kazuyoshi Ogawa

2Pe025 Fabrication of Hierarchical Wrinkle Structure and Application for Mechanical Fluidic Control

Toru Kimura, Yoshiro Imura, Takeshi Kawai, Hiroshi Endo

2Pf026 Factors affecting structural polymorphism of liquid crystalline phase formed in giant aggregates of phospholipid molecules

Takuto Hayama, Takashi Kuroiwa, Sosaku Ichikawa, Akihiko Kanazawa

2Pe027 Formation behavior of W/O/W multiple emulsions by means of microchannel emulsification using polymeric emulsifiers

Akihiko Suzuki, Kaname Horikoshi, Takashi Kuroiwa, Sousaku Ichikawa, Akihiko Kanazawa

2Pf028 Factors affecting the microstructure and dispersion properties of fine particles prepared by the complexation of chitosan and long-chain fatty acids

Yuto Kawauchi, Takashi Kuroiwa, Sosaku Ichikawa, Akihiko Kanazawa

2Pe029 Controlled adsorption-desorption based on the pH responsivity of cross-linked chitosan gel microparticles and their application as a separation material

Kaori Saito, Takashi Kuroiwa, Akihiko Kanazawa

2Pf030 Encapsulation of biopolymers into gelatin microspheres coated with polysaccharides

and their stimuli-responsive release properties  
Takahiro Fujii, Maho Katayama, Takashi Kuroiwa, Akihiko Kanazawa

(C403)

### **B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES**

- 2Pe035 Electrochemical exfoliation of graphite intercalation compound with polymeric dispersant  
Yasunaga Tanno, Haruya Okimoto, Masahito Sano
- 2Pf036 Analysis of the graphene etching reactions with kinetics of crystal growth  
Yuto Watanabe, Masahito Sano
- 2Pe037 Non-uniform Solvent Distribution of Mixed Solvents Gels near Solid Surfaces  
Kazuma Honma, Masahito Sano
- 2Pf038 Fabrication and Microphase Separation of Thin Films of Triblock Copolymers by Spreading Their Solutions on Water Surface  
Ayana Yamakawa, Satoshi Irie, Takashi Sasaki, Tsuguto Imaeda, Ryoki Okunaga, Michio Urushisaki, Toshikazu Sakaguchi, Tamotsu Hashimoto
- 2Pe039 Evaluation of deteriorated polymer surfaces by Scanning Probe Microscopy (SPM)  
Yoshimichi Namai, Chieko Hino
- 2Pf040 Electrochemical doping evaluation of poly(3-hexylthiophene) films with different crystallinity by spectroelectrochemical assay.  
Kenta Ito, Atsushi Aoki
- 2Pe041 Adsorption behavior of hydrogel particles which is consisted of amphiphilic molecules  
Koji Horigome, Yuki Sakurai, Daichi Aoki, Daisuke Suzuki
- 2Pf042 Synthesis of hydrogel particles by assembly of the star polymers in the W/O emulsion  
Takahisa Shibamoto, Takuma Kureha, Takaaki Sato, Takamasa Sakai, Daisuke Suzuki
- 2Pe045 Oriented crystallization behaviors during uniaxial and biaxial melt-drawings for metallocene-catalyzed ultra-high molecular weight polyethylene  
Chihiro Narita, Masahiko Ueno, Hiroki Uehara, Takeshi Yamanobe, Yasutake Wakabayashi, Kei Inatomi, Shigehiko Abe
- 2Pf046 Structure and physical properties of polymer/cyclodextrin composite  
Yoshihisa Takada, Hiroki Uehara, Takeshi Yamanobe, Keiko Takahashi
- 2Pe047 Enzyme Degradation of Difference in Crystal Structure of Poly(butylene succinate) by using Raman Spectroscopy  
Ayaka Tsutsui, Harumi Sato
- 2Pf048 Variation of crystallization rate in porous poly(L-lactic acid) in liquids  
Syugo Katano, Syazwan Muhammad, Futoshi Matsuda, Takasi Sasaki, Satoshi Irie
- 2Pe049 Temperature Dependent of Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) Studied by Low Frequency Raman and Terahertz Spectroscopy  
Dian Marlina, Koh Yoshida, Hiromichi Hoshina, Harumi Sato, Yukihiro Ozaki
- 2Pf050 The crystallization behavior of poly(3-hydroxybutyrate)(PHB) during solvent casting process  
Mengfan Wang, Shigeaki Morita, Harumi Sato, Yukihiro Ozaki
- 2Pe051 Analysis of spherulitic growth rate in miscible block copolymer  
Daiki Ito, Yasuharu Imai, Toshiyuki Kataoka, Takayuki Ikehara
- 2Pf052 Effect of spherulites growth rate given by the block between bonds in crystallization / crystallization block copolymers  
shoichi Inagi, Toshiyuki Kataoka, Takayuki Ikehara

(C404)

### **B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES**

- 2Pe053 Crystallization of Polyesters Composed of 2,5-Furandicarboxylic Acid and Aliphatic Linear Diols  
Dai Aoki, Hironori Marubayashi, Syuichi Nojima
- 2Pf054 Structure of Polymer Spherulites Grown from Cavities  
Masato Hashimoto, Tomoko Mizuguchi, Susumu Fujiwara
- 2Pe055 Effects of Chain-ends on Crystallization of Polymer Chains Confined in Nanodomains.  
Koshun Kawazu, Shintaro Nakagawa, Shuichi Nojima, Takashi Isizone, Daiki Arai, Kazuo Yamaguchi, Seiichi Nakahama
- 2Pf056 Spherulitic growth in ultra-thin films of isotactic polystyrene and interfacial effects  
Masaaki Nakagiri, Akinori Sato, Satoshi Irie, Takashi Sasaki
- 2Pe057 Crystallization and melting of isotactic polypropylene: ultra-fast DSC  
Akihiko Toda, Taiki Ando, Ken Taguchi, Koji Nozaki, Masanori Maruyama, Yoko Mizutani, Katsuharu Tagashira, Tatsuya Fukushima, Hironori Kaji, Misuzu Konishi
- 2Pf058 Co-crystallization of Syndiotactic Polystyrene with Pyridine Salt Complex  
Yui Kuboyama, Takumi Sano, Hideyuki Itagaki
- 2Pe059 Fine-tunable color of stereoregular substituted polyacetylene with polymerization solvent  
Yasuteru Mawatari, Takahiro Sasaki, Masayoshi Tabata
- 2Pf060 Introduction of conductive polymers into syndiotactic polystyrene films by way of polymerization of co-crystallized guest molecules  
Toshihiko Okabe, Takumi Sano, Hideyuki Itagaki
- 2Pe061 The Degradation of Polyethyleneglycol (PEG) by using Raman Spectroscopy and Terahertz Spectroscopy  
Kazutaka Sekiya, Hiromichi Hoshina, Harumi Sato
- 2Pf062 Preparation of poly(p-phenylene terephthalamide) single crystal by using crystallization from dilute solution  
Yutaro Hara, Tetuya Uchida
- 2Pe063 Crystallization behavior of double crystalline block copolymers containing the crystalline block having crystal polymorphism  
Rei Hijikawa, Ryosuke Ishii, Hironori Marubayashi, Shuichi Nojima
- 2Pf064 Effects of Nanocylinder Size on the Crystallization of Block Chains Confined in Nanocylinders  
Ryota Kato, Hironori Marubayashi, Shuichi Nojima
- 2Pe065 Analysis of the Phase Separation Structure of Mixture of Thermoplastic Elastomers  
Atsushi Takayanagi, Yuki Nakama, Maeda Futoshi, Ryoji Oda, Sadaharu Hashimoto, Takashi Honda
- 2Pf066 Crystal growth of propylene-ethylene random copolymer in thin films  
Akinori Fujikawa, Ken Taguchi, Akihiko Toda, Koji Yamada, Toru Imai
- (C405)

### C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

- 2Pe071 Syntheses and properties of step- $\pi$ -conjugated polymers and their application for photoenergy conversion systems (88) Synthesis and photochemical behavior of macromolecular wire with a donor-acceptor at terminal  
Daichi Ohshima, Hiroyuki Aota
- 2Pf072 Syntheses of step- $\pi$ -conjugated polymers and their application for photoenergy conversion systems (89) Synthesis of A,B-block type polymer having different polarities and estimation of electronic transfer rates  
Rie Nakabayashi, Hiroyuki Aota
- 2Pe073 Syntheses of step- $\pi$ -conjugated polymers and their application for photoenergy



- conversion systems(90) Synthesis and photochemical behaviour of A,B-block type amphiphilic polymers  
Kohei Watanabe,Hiroyuki Aota
- 2Pf074 Synthesis of step- $\pi$ -conjugated polymer and their application for photoenergy conversion systems (91) Synthesis of A,B-block type amphiphilic polymer and possibility of electron transfer between polymers through  $\pi$ -electron cloud.  
Shosuke Nakano,kohei Watanabe,Hiroyuki Aota
- 2Pe075 Syntheses of step- $\pi$ -conjugated polymers and their application for photoenergy conversion systems (92) Photoinduced energy transfer in molecular wire system by A,B-block type polymer having different energy levels.  
Yuichi Ishikawa,Kouken Kaku,Hiroyuki Aota
- 2Pf076 Syntheses of step- $\pi$ -conjugated polymers and their application for photoenergy conversion systems (93) Synthesis of A,B-block type polymers having different energy levels and electron transfer behavior  
Kouken Kaku,Hiroyuki Aota
- 2Pe077 Syntheses of step- $\pi$ -conjugated polymers and their application for photoenergy conversion systems(94)Synthesis and properties of A,B-block type amphiphilic polymers with one way direction electron transfer.  
Tsuyoshi KOBAYASHI,Hiroyuki AOTA
- 2Pf078 Humidity and breath responsive multi-layered photonic gel film  
Takenori Goda,Tatsuro Furuta,Makoto Kume,Hisamitsu Kameshima
- 2Pe079 Photochemical reaction and refractive index change of polystyrenes with aromatic heterocycles in the side chains  
Ryo Maeda,Yosihito Isida,Mitsuru Ueda,Shinji Ando,Atsushi Kameyama
- 2Pf080 Preparation of Novel Functional Photoresponsive Polymers, Poly(N-vinylamide) Derivatives with Aromatic Compounds.  
Ryo KAWATANI,Kai KAN,Hiroharu AJIRO,Mitsuru AKASHI
- 2Pe081 Optical properties evaluation of a single crystal of organic semiconductor TPCOs  
Hidenobu Iwakiri,Takeshi Yamao,shu Hotta
- 2Pf082 Surface Wettability Controllable Polyimides Bearing t-Boc Units by UV Light Irradiation.  
Ryosuke Shiki,Yusuke Tsuda
- 2Pe083 Surface Wettability Controllable Polyimides Bearing o-Nitrobenzyl Groups by UV Light Irradiation  
Yusuke Tsuda,Daichi Sakata
- (C406)

### C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

- 2Pf086 The Application Of Polyolefin Sulfone Possessing Photo-base Generator To Photo-dismantlable Adhesives.  
Madoka Mori,Takeo Sasaki
- 2Pe087 Change in Adhesion Properties of Poly(olefin sulfone)s Possessing Photo-Reactive Cross linking Moiety by Photodegradation  
Ryosuke Komori,Takeo Sasaki
- 2Pf088 Influence of the properties of matrix polymer on the hologram forming in azobenzene derivative dispersed polymer.  
Sasa Kobayashi,Takeo Sasaki
- 2Pe089 Synthesis and evaluation as a resist of novel calixarene including branched aromatic hydroxyl group unit  
Shohei Hashima,Kazuhiro Yamabuki,Kenjiro Onimura,Seichiro Takabayashi,Sadaaki Kuroiwa,Noriyuki Mitani
- 2Pf090 Photoinduced molecular reorientation behavior of polymer network dye-doped liquid

crystal film

Erika Katayama,Jing Wang,Atsushi Shishido

2Pe091 Dry etching durability of UV cured resin films with different consumptions of reactive groups

Shinya SATO,Shiho KUROYANAGI,Shunya ITO,Masaru NAKAGAWA

2Pf092 Structure of hydrophobized DNA / chiral Eu(III) complex and enhancement of its red circularly polarized luminescence

Kazuki Nakamura,Natsumi Itamoto,Wataru Watanabe,Hiroyuki Tsumatori,Norihisa Kobayashi

#### **D. BIOPOLYMERS AND BIORELATED POLYMERS**

2Pe093 Removal of anionic dyes in aqueous solution by flocculation with cellulose ampholytes

Hiroyuki Kono,Ryo Kusumoto,Kenta Kitagawa

2Pf094 Characterization, molecular dynamics, and encapsulation ability of cyclodextrin polymers crosslinked by polyethylene glycol

Hiroyuki Kono,Taichi Nakamura

2Pe095 Synthesis of Amphoteric Block Polysaccharide by Phosphorylase-catalyzed Enzymatic Polymerization

Yusei Takata,Kazuya Yamamoto,Jun-ichi Kadokawa

2Pf096 Synthesis of polyamine compounds by the reaction of polyfunctional acrylate compounds with diaminotrehalose

Takashi Watanabe,Shinya Yano,Naozumi Teramoto,Toshiaki Shimazaki,Mitsuhiro Shibata

2Pe097 Synthesis of saccharide-conjugated block copolymer via RAFT miniemulsion polymerization

Yoshiaki Kosaka,Daichi Togashi,Moriya Kikuchi,Atsushi Narumi,Seigou Kawaguchi

2Pf098 Synthetic study on glycoclustered supramolecules

Kohei Shimizu,Kosuke Tanahashi,Hiroshi Tamura,Tetsuya Furuike

2Pe099 Glycosylation of methacrylate copolymers having different monomer sequences

Hideyuki Uozumi,Fumiya Senba,Miyuki Oshimura,Tomohiro Hirano,Koichi Ute

2Pf100 Chemo-enzymatic synthesis of branched saccharide bearing polypeptide hybrids and their biofunction

Akina Yamada,Tomoki Nishimura,Shinichi Sawada,Yoshihiro Sasaki,Kazunari Akiyoshi

(C407)

#### **D. BIOPOLYMERS AND BIORELATED POLYMERS**

2Pe101 physical properties of the composite based on functionalized pullulan

Tomoya Watanabe,Takumi Okihara,Kenya Matsuo

2Pf102 Observation by atomic force microscopy association-dissociation process in chondroitin-6-sulfate extracted from jellyfish

Tatsuki Kobayashi,Kiminori Ushida,Takunori Ueda,Toshiyuki Azuma

2Pe103 Synthesis of hydrophobized hyaluronan-calcium phosphate hybrid particles

Setsuko Yamane,Kota Takashima,Masaki Morishima,Shin-ichi Sawada,Yoshihiro Sasaki,Kazunari Akiyoshi,Kiyoshi Ohnuma

2Pf104 Preparation of uniformly labelled phosphorylated pullulan and its NMR study

Shun Watanabe,Takumi Okihara

2Pe105 Development of strontium adsorbent by alginate fibers

Sahori Omote,Fumiyoshi Kasahara,Hisashi Yamaguchi,Takehisa Omura,Tetsuya Furuike,Hiroshi Tamura

- 2Pf106 Complex formation between phosphorylated pullulan and drugs and its sustained release behavior  
Takumi Okihara, Shingo Yoshizane, Kenya Matsuo
- 2Pe107 The wettability characterization of aqueous solutions of mucin extracted from jellyfish dropped on contact lenses  
Ayaka Oohata, Gai Kawamura, Asuka Murakami, Kiminori Ushida, Yuichi Hori, Takunori Ueda
- 2Pf108 Structure of collagen/cellulose nanofiber composite and their application for medical material  
Daisuke Goto, Hongo Hongo, Takashi Nishino
- 2Pe109 Synthesis of glycopolymer containing cell-penetrating peptide and the RNA transcription  
Kei Katagiri, Akinori Takasu
- 2Pf110 Synthesis, photocrosslinking, and cell compatibility of hydroxypropyl cellulose cinnamate  
Takumi Iwase, Shinya Yano, Naozumi Teramoto, Toshiaki Shimasaki, Mitsuhiro Shibata
- 2Pe111 Cell compatibility of a photocrosslinked trehalose derivative carrying liquid crystal mesogens  
Shinya Yano, Naozumi Teramoto, Toshiaki Shimasaki, Mitsuhiro Shibata

(C401)

**Thu. Sep 17**

Presentation Time

<a = 10:20~11:00>

<b = 11:00~11:40>

## **B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES**

- 3Pa001 Morphology Change of the Polyion Complex Micelle by Changing the Copolymer Mixing Ratio in Aqueous Solution  
Rintaro Takahashi, Takahiro Sato, Ken Terao, Shin-ichi Yusa
- 3Pb002 Effect of boundary diffuseness on the solute distribution in micelle  
Tomoko Mizuguchi, Ryosuke Ishizuka, Nobuyuki Matubayasi
- 3Pa003 UCST behavior in the coil-globule transition of polyelectrolytes in aqueous organic solvent mixtures  
Satoru Takani, Mitsuru Satoh
- 3Pb004 Solvated Structure of Thermo-responsive Polymer Chain in Ionic Liquid  
Kazu Hirosawa, Kenta Fujii, Takeshi Ueki, Yuzo Kitazawa, Masayoshi Watanabe, Mitsuhiro Shibayama
- 3Pa005 Dependence of stereo-regularity on the hysteresis for the thermo-responsiveness of PNIPAm in water.  
Kento Hamamura, Yukiteru Katsumoto
- 3Pb006 Study on solubility and diffusivity of ethylene in poly(methyl methacrylate-ethyl acrylate)  
Yoshiyuki Sato, Tomohiro Ara, Hiroshi Inomata, Ryoichi Yamamoto, Shigeru Haeno, Masayoshi Johmen
- 3Pa007 Effects of the temperature difference and the molecular weight for the behavior of Soret effect of PNIPAM solution  
Mayu Yamamoto, Toshiki Fukai, Rio Kita, Naoki Shinyashiki, Shin Yagihara, Fumihiko Tanaka
- 3Pb008 Influence of Acetylation Degree on Solution Properties of Dextran Studied by Light Scattering Method  
Isala Dueramae, Masaru Yoneyama, Naoki Shinyashiki, Shin Yagihara, Rio Kita
- 3Pa009 Thermal diffusion of poly(N-isopropylacrylamide) in various solvents: aprotic polar

solvent, alcohol and water

Koshiro Nakayama, Rio Kita, Naoki Shinyashiki, Shin Yagihara

3Pb010 Temperature, molecular weight and solvent dependence of Ludwig-Soret effect in aqueous solution of saccharides

Kazuya Eguchi, Rio Kita, Naoki Shinyashiki, Shin Yagihara

3Pa011 Temperature- and pressure-responsiveness of aqueous solutions of copolymers of N-substituted acrylamide and N,N-di substituted acrylamide

Narumi Katakawa, Yasushi Maeda, Shinji Sugihara

3Pb014 Analysis of PEFC catalyst layer by TEM tomography

Akihiro Masuda, Naoto Kaneko

3Pa015 Characterization of Poly(methyl methacrylate-co-benzyl methacrylate) by Gradient Elution Liquid Chromatography

Toshiki Okubo, Miyuki Oshimura, Tomohiro Hirano, Hikaru Momose, Koichi Ute

3Pb016 Elucidation of structure-performance relationship for hindered phenol stabilizers using high-throughput chemiluminescence imaging

Nakayama Koyuru, Naoki ARATANI, Toshiaki TANIIKE

(C402)

## **B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES**

3Pa017 Analysis of the structure of slide-ring gels under uniaxial deformation

Takafumi Asakura, Koichi Mayumi, Kazuaki Kato, Hideaki Yokoyama, Kohzo Ito

3Pb018 Synthesis of Slide Ring Material by Diels-Alder Cross-Linking Reaction

Kohsuke Minato, Kazuaki Kato, Koichi Mayumi, Hideaki Yokoyama, Kohzo Ito

3Pa019 Hydrogelation triggered by in-situ synthesis of peptide-based supramolecular gelators

Yuki Nishida, Akiko Tanaka, Tatsu Maruyama

3Pb020 Highly conductive ionic-liquid gels prepared with orthogonal double networks of a low-molecular-weight gelator and cross-linked polymer

Toshikazu Kataoka, Yumi Ishioka, Hideto Minami, Minoru Mizuhata, Tatsu Maruyama

3Pa021 The counter-ion condensation behavior of polyelectrolyte gels as studied by microelectrode technique (MET)

Honglei GUO, Takayuki KUROKAWA, Masakazu TAKAHATA, Yoshinori KATSUYAMA, Feng LUO, Jamil AHMED, Tasuku NAKAJIMA, Takayuki NONOYAMA, JianPing GONG

3Pb022 Dynamic mechanical behaviors of polyion complex hydrogels from biopolymers

Ran Shi, Taolin Sun, Feng Luo, Tasuku Nakajima, Takayuki Kurokawa, Jianping Gong

3Pa023 Precise Control of Gel Structures and Properties with Dangling End Defect

Aokai Zhang, Tasuku Nakajima, Takayuki Kurokawa, Takayuki Nonoyama, JianPing Gong

3Pb024 Characteristics of Antibacterial Poly(vinyl alcohol) Hydrogel Films

Satomi Omachi, Risei Wada, Hidenobu Shimizu, Masaru Okabe

3Pa025 Development and characterization of nanocomposite poly(vinyl alcohol) hydrogel (PVA-H) as an artificial cartilage material

Wataru Terai, Yuko Hoshijima, Kazuma Goto, Koji Matsuura, Kazuaki Matsumura

3Pb026 Regeneration of chitin using conventional organic solvents and its functional gel membrane

Yuri Iguchi, Tomokazu Iyoda, Keiji Nagai

3Pa027 Formation process of curdlan hydrogels monitored by using a fluorescent probe technique

Daiki Ito, Sayaka Enokida, Hideyuki Itagaki

3Pb028 Formation of a network structure able to produce swallowing movement in gelatin aqueous solution monitored by fluorescent probe method

Takumi Sano, Daiki Ito, Asami Endo, Hideyuki Itagaki

3Pa029 One-dimensional swelling hydrogels from cyanobacterial-polysaccharide: Sacran  
Kittima Amornwachirabodee, Maiko Okajima, Tatsuo Kaneko

3Pb030 Kinetic studies of uniaxially-swelling polysaccharide hydrogels toward novel  
anisotropic soft materials  
Gargi Joshi, Kosuke Okeyoshi, Maiko Okajima, Tatsuo Kaneko

(C403)

## **B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES**

3Pb036 Study of the GPC calibration curves with different molecular weight of the poly (N-  
isopropylacrylamide )  
Takayuki Meguro, Hiroya Kishi, Naoki Shinyashiki, Shin Yagihara, Rio Kita

3Pa037 Characterization of chemical composition heterogeneity of Poly(styrene-co-acrylate)  
RAFT copolymers  
Tadatomo Kawai, Kouki Sudo, Ryo Sato, Yuzo Itoh

3Pb038 Characterization of push-pull type alternating copolymers (I) - Evaluation of torsion-  
Keita Goto, Masahiro Fhujita, Yuko Takeoka, Masahiro Rikukawa

3Pa039 Effect of the temperature on the Ludwig-Soret effect of water-soluble polymers  
Natsumi Uchida, Kousaku Maeda, Rio Kita, Naoki Shinyashiki, Shin Yagihara, Noboru  
Sasagawa, So Nakagawa

3Pb040 Control of translocation speed of molecule in nanopore toward higher resolution of  
single molecular branch analysis  
Makoto Takemasa, Masahiro Fujita, Mizuo Maeda

3Pa041 Adsorption property of fiber/polymeric materials 18. Adsorption of organic  
compounds to various polypeptides.  
Aya Inada, Hitoshi Kanazawa

3Pb042 Molecular characterization of mucin derived from Drosera Capensis  
Yuhei Otani, Yuji Jinbo

3Pa047 Development of Oriented Conjugated Polymer Films by Electrochemical  
Polymerization in Oriented Liquid Crystals  
Hiroki Hayashi, Hitoshi Hayashi, Hiromasa Goto

3Pb048 Spiral Orientation of the Cholesteric Gel Swollen with Chiral Solvents  
Haruki Tokumoto, Kenji Urayama

3Pa049 Mesomorphic properties of extended conjugated mesogens based on tetrasubstituted  
bithiophene with phenyleneethynylene dimers  
Tetsuo Yatabe, Yuji Kawanishi

3Pb050 Liquid crystal structures formed by polymethylenes with phenyl benzoate groups on  
side chain  
Yosuke Aizawa, Noboru Koshimizu, Masatohi Tokita, Koichi Sakajiri, Kazuhiro  
Shikinaka, Kiyotaka Shigehara

3Pa051 Study on high thermal conductivity mechanism of Biphenyl benzoate twin-mesogen  
epoxy polymer  
Takuto Suzuki, Tadatomo Kawai, Yuzo Itoh

3Pb052 Carrier transport properties of a composite of liquid crystalline semiconductor and  
P3HT  
Kouki Kawano, Shinzo Nawamoto, Hiroya Nishikawa, Hirosato Monobe, Yo Shimizu

(C404)

## **C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS**

- 3Pa053 PLLA nanofiber 3DS prepared by carbon dioxide laser supersonic multi-drawing  
Maika Yamaji,Akihiro Suzuki
- 3Pb054 Thinner PET nanofiber was prepared by a carbon dioxide laser supersonic drawing 2  
Junya Suzuki,Akihiro Suzuki,Taku Itibayashi,Shigehisa Nakazawa
- 3Pa055 Preparation of silicone-modified polyurethane nanofibers by electrospinning  
Rino Okamoto,Toshihisa Tanaka,Hatsuhiko Hattori,Masaki Tanaka,Yoshitaka Koshiro,Hiromasa Sato,Shouta Iino
- 3Pb056 Nanofiber creation from gamma-CD inclusion complexes by electrospinning  
Ken Kikuta,Hiroaki Yoshida,Toshiyuki Kida
- 3Pa057 Preparation of Polymer Films Incorporated with Metallic Nanomaterials  
Yuto Kawabata,Hideyuki Nakanishi,Tomohisa Norisuye,Qui Tran-cong Miyata
- 3Pb058 Inter-electrode stretched and immobilized functional DNA nanowires containing fluorescent metal complex and conductive polymer  
Taiki Kunikyo,Kazuki Nakamura,Norihisa Kobayashi
- 3Pa059 Crystal Structure and Optoelectronic Properties of Highly Doped Cu-TCNQ Complex Nanocrystals  
Reo Hirose,Tsunenobu Onodera,Hitoshi Kasai,Hidetoshi Oikawa
- 3Pb060 Formation of Nanowires from Triphenylamine Derivatives by Single-Particle Triggered Linear Polymerization  
Akifumi Horio,Tsuneaki Sakurai,Shu Seki
- 3Pa061 Size-dependence of Nonlinear Optical Response of PolyDCHD Nanocrystals  
Haruki Maki,Tsunenobu Onodera,Rodrigo Sato,Yoshihiko Takeda,Hitoshi Kasai,Hidetoshi Oikawa
- 3Pb062 Photon Upconversion Systems based on Molecular Self-Assembly in Water  
Hironori Kouno,Nobuhiro Yanai,Nobuo Kimizuka
- 3Pa063 Morphology control of carbazole dendrimer assemblies and Whispering Gallery Mode photoemission  
Sae Nakajima,Soh Kushuda,Ken Albrecht,Dao Thang,Satoshi Ishii,Tadaaki Nagao,Kimihisa Yamamoto,Yohei Yamamoto
- 3Pb064 Photoinduced Mass Transport on Amorphous Thin Films of Photochromic Naphthacenequinone Dendrimers  
Shuhei Kai,Tomomi Ueshima,Naohiro Kawano,Takahiro Takeshima,Koji Mukai,Shusaku Nagano,Takahiro Seki,Masaya Moriyama
- 3Pa065 Development of Self-Assembled Nanofibers Having Nitronyl Nitroxide Moieties  
Daisuke Yamaguchi,Hiroki Eimura,Takeshi Sakamoto,Masafumi Yoshio,Takashi Kato
- 3Pb066 Change in swelling ratio of slide-ring gels with quaternized ammonium group contents  
Yamato Takamizawa,Jun Araki
- 3Pa067 Selective protection and deprotection of primary hydroxyl groups in polyrotaxanes  
Kanako Yamada,Jun Araki
- 3Pb068 Preparation of a polyrotaxane containing monosubstituted cyclodextrins  
Chihiro Ohtsubo,Jun Araki

(C405)

### **C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS**

- 3Pb070 Low-CTE and Low-water Absorption Poly(ester imide)s (46). Effect of Sulfur-containing Comonomer on Non-flammability  
Masatoshi HASEGAWA,Maiko KOMIYA,Junichi ISHII
- 3Pa071 Low-modulus Polyazomethines (6)  
Junichi ISHII,Mitsuya KOSUGI,Masatoshi HASEGAWA
- 3Pb072 Low-modulus Polyimides(6).Improvement of Adhesion Strength with Copper Foil

Mayumi SAEKI, Junichi ISHII, Masatoshi HASEGAWA

- 3Pa073 Control of Z-direction Thermal Expansion in Polyimide Films (4). Effect of Thermally Crosslinkable Monomers.  
Ryoko TOKUNAGA, Junichi ISHII, Masatoshi HASEGAWA
- 3Pb074 Development of polymer with high heat-resistant and wear resistance  
Masatoshi Ando
- 3Pa075 Polyurethane-imide elastomer using aromatic diamine  
tomohiro Ueda, Shin-ichi Inoue
- 3Pb076 Thermal and mechanical properties of aromatic polyimides derived from various asymmetric aromatic diamines having pendant phenyl group  
Shinji Ichikura, Takashi Sawaguchi, Masahiko Miyauchi, Yuichi Ishida, Rikio Yokota
- 3Pa079 Emission Characteristics of White Light-Emitting Electrochemical Cells Using an External Color-Converter based on Ag Nanoclusters  
Daisuke TAKIZAWA, Hiroyuki NISHIDE, Yoshinori NISHIKITANI, Soichi UCHIDA, Yue LU, Suzushi NISHIMURA
- 3Pb080 Preparation of light-emitting electrochemical cell using ionic iridium complex  
Takayuki Kubo, Atsushi Aoki
- 3Pa081 Synthesis of fluorescent polymers containing thianthrene structure  
Kazuya Matsumoto, Akira Ushio, Mitsutoshi Jikei
- 3Pb082 A series of fluorine-substituted phenylpyridine-based electron transporters for low driving voltage blue phosphorescent OLEDs  
Takahiro Kamata, Hisahiro Sasabe, Yuichiro Watanabe, Daisuke Yokoyama, Hiroshi Katagiri, Yong-Jin Pu, Junji Kido
- 3Pa083 Syntheses and Luminescence Properties of N-Substituted Poly(4-alkoxy-2,7-carbazole)s  
Shinnosuke Okabe, Kosuke Shibasaki, Masashi Kijima
- 3Pb084 Reflection-Emission Dual-mode Display based on electrochemical reaction of MEH-PPV and PEDOT/PSS  
Shota Tsuneyasu, Lu Jin, Kazuki Nakamura, Norihisa Kobayashi

(C406)

### **C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS**

- 3Pa085 Gas transport properties of polybenzoxazole membrane prepared by low-temperature cyclization method  
Tomoyuki Suzuki
- 3Pb086 Effect of time dependent structure change of laccquer membrane to gas permeability  
Kenta Watanabe, Ryohei Ido, Akira Kusakabe, Takayuki Honda, Kazukiyo Nagai
- 3Pa087 Oxygen barrier property of diacetylene-containing polymer membrane derived from ferulic acid in gas and liquid phase  
Shun Kato, Daichi Watabe, Shohei Itami, Miho Kobayashi, Takayuki Honda, Kazukiyo Nagai
- 3Pb088 Desolved carbon dioxide permeability of irradiated Poly(1-trimethylsilyl-1-propyne) membrane in the presence of third component  
Taichi Motoo, Shoko Kuga, Yusuke Ishiba, Kazukiyo Nagai
- 3Pa089 Development of hydrogen permselective membranes by radiation-induced graft polymerization into porous films.  
Shin Hasegawa, Shinya Azami, Shin-ichi Sawada, Satoshi Hino, Shigehito Isobe, Naoyuki Hashimoto, Yasunari Maekawa
- 3Pb090 Synthesis and properties of polymethacrylates having an imidazolium group in the side chain  
Masayuki Watanabe, Tatsuma Oda, Kosuke Taira, Shinichi Koguchi, Yosuke Okamura, Yu Nagase
- 3Pa091 Development of Oxygen-sensing Paint Based on Domain-selective Permeation through Phase Segregated Nanostructure in Diblock Copolymer Film

Tasuku Izutani,Junya Takehisa,Sadayuki Asaoka

- 3Pb092 Water vapor transport property of polyimide membrane containing cage type POSS  
Akihiro Yoshida,Masato Ichikawa,Shota Ando,Kazukiyo Nagai
- 3Pa093 Effect of chemical structure on water vapor solubility in fluorine-containing polyimide membranes  
Naoto Yonemaru,Hitoshi Sugiyama,Seiya Tanaka,Akihiro Yoshida,Kazukiyo Nagai
- 3Pb094 Water vapor barrier property of surface modified polyimide membrane by VUV irradiation  
Haruka Yamaji,Takahiro Suizu,Tetsuro Yoshioka,Kazukiyo Nagai
- 3Pa095 Gas separation properties of VUV irradiated polyimide membranes  
Takahiro Suizu,Haruka Yamaji,Tetsuro Yoshioka,Kazukiyo Nagai
- 3Pb096 Synthesis and physical properties of ABA-type triblock copolymers derived from polyimide with HEMA  
Yohei Sasago,Ryunosuke Shiota,Naomi Taniguchi,Akihiro Yoshida,Syota Ando,Kazukiyo Nagai
- 3Pa097 Permeability of ethanol solution through VUV irradiated PTMSP membranes  
Kentaro Saito,Ryo Iida,Kazukiyo Nagai
- 3Pb098 Reverse Osmosis Membranes Prepared by Plasma-Enhanced Chemical Vapor Deposition Method  
Sadaki SAMITSU,Yoshihisa FUJII,Izumi ICHINOSE

(C407)

### **C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS**

- 3Pa101 Control of Formose Reaction Using Boronic Acid Residues  
Toru Imai,Akihito Hashidzume,Takahiro Sato
- 3Pb102 Synthesis of Novel Cage-type Cyclodextrins and their Inclusion Complex Formation Behavior with Various Guests  
Shogo ITO,Chizuru KOGAME,Toshiyuki KIDA,Mitsuru AKASHI
- 3Pa103 A hydrophobic dye-encapsulated micelle as a fluorescent probe for Hg<sup>2+</sup>  
Misato Nakao,Shingo Hadano,Shigeru Watanabe
- 3Pb104 Remote Stereocontrol of Axial Chirality by Chiral Information Transfer along Dynamic Helical Peptide Chains  
Akio URUSHIMA,Naoki OUSAKA,Eiji YASHIMA
- 3Pa105 Development of Immobilized-Type Chiral Packing Materials Consisting of Poly(biphenylacetylene) Derivatives Bearing Ester Groups  
Tomoyuki Ikai,Ryoma Ishidate,Katsuhiko Maeda,Shigeyoshi Kanoh,Eiji Yashima
- 3Pb106 Synthesis of Cellulose Derivatives Bearing Terthiophene Pendants and Their Application to Chiral Fluorescent Sensors  
Daisuke Suzuki,Yutaka Kojima,Tomoyuki Ikai,Katsuhiko Maeda,Shigeyoshi Kanoh
- 3Pa107 Synthesis of Helical Poly(diphenylacetylene) Derivatives Bearing Optically Active Pendants and Their Application to Chiral Stationary Phases for HPLC  
Kosei UEMATSU,Katsuhiko MAEDA,Tomoyuki IKAI,Shigeyoshi KANOH
- 3Pb108 Molecularly imprinted polymers selective for a biomarker protein capable of fluorescence-based signal transduction activity  
Ryo Horikawa,Azusa Oshita,Hirobumi Synayama,Yukiya Kitayama,Toshifumi Takeuchi
- 3Pa109 Catalytic Reaction with AuNPs/Diblock Ionomers (II)  
Haruka Furukawa,Masahiro Fujita,Yuko Takeoka,Masahiro Rikukawa

(C401)

Presentation Time

<c = 13:20~14:00>

<d = 14:00~14:40>



## B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES

- 3Pc001 Dissipative Particle Dynamics Simulation for Self-Assembly of Bolaamphiphilic Molecules  
Yu Takahashi, Hiroki Ikebe, Susumu Fujiwara, Tomoko Mizuguchi, Masato Hashimoto
- 3Pd002 Shear Banding in an F-actin Solution  
Yoshinori Takikawa, Itsuki Kunita, Katsuhiko Sato, Yoshimi Tanaka, Hiroshi Orihara, Toshiyuki Nakagaki
- 3Pc003 Preparation of Polyacrylic Dispersants and Dispersion Stability of Magnetic Iron Oxide Powder in Their Aqueous Solutions  
Takumi Kanno, Michinori Karikomi, Takao Kimura
- 3Pd004 Molecular Dynamics Simulation on Hydration Structure of Thermoresponsive Polymers  
Kohei Kamada, Susumu Fujiwara, Masato Hashimoto, Tomoko Mizuguchi, Takashi Aoki, Yoshinori Tamai
- 3Pc005 Shear thickening and fiber structure of ternary mixtures of water/organic solvent/salt  
Hiroki Nakamura, Koichiro Sadakane, Naoki Tsuduki, Yoshinori Takikawa, Koji Fukao
- 3Pd006 Evolution Behaviors of Zeta Potential of Amphiphilic Polymers in Aqueous System  
Seiji Higuchi, Mitsuru Satoh
- 3Pc007 Rheological Behavior of Micelles Formed by Various Gemini Surfactants in Aqueous Solutions  
Ken Morishima, Seiya Sugawara, Tomokazu Yoshimura, Mitsuhiko Shibayama
- 3Pd008 Rheological Behavior of Nanofibrillated Fiber Suspensions  
kosuke ueda, kenji urayama, takahiko makise, toru noguchi, shigeki inukai
- 3Pc009 Diffusion behavior of solid particles in polymer solutions and gels  
Nobuyuki Watanabe, Xiang Li, Kengo Nishi, Takamasa Sakai, Yuichi Tei, Mitsuhiko Shibayama
- 3Pd010 Co-nonsolvency of PNIPAM [poly(N-isopropylacrylamide)] in a mixed solvent analyzed by measuring the cloud point curve  
Toshiki Fukai, Rio Kita, Naoki Shinyashiki, Shin Yagihara, Fumihiko Tanaka
- 3Pc011 Rheology of concentrated polystyrene brush grafted on nanoparticles  
Suzune Ito, Naoto Iwata, Masatoshi Tokita, Osamu Sato, Kohji Ohno
- 3Pc013 Dynamics of a droplet on Leidenfrost phenomena  
Akio Nishimura, Zenji Yatabe, Masahiko Shoji, Chihiro Hashimoto, Masao Takayanagi, Hideharu Ushiki

(C402)

## B. POLYMER PHYSICS: STRUCTURE AND PROPERTIES

- 3Pc017 Analysis of the extraordinary phase transition for polyaspartates exhibiting the helix-sense inversion by using of racemic mixtures  
Yuuki Suzuki, Hidemine Furuya, Akihiro Abe
- 3Pd018 Structure and Mechanical Properties of Collagen  
Shogo Konoike, Chizuru Hongo, Takashi Nishino
- 3Pc019 Fabrication and mechanical properties of porous block copolymers  
Takashi Ohta, Toshiharu Sanada, Kohzo Ito, Hideaki Yokoyama
- 3Pd020 Synthesis and dynamics of polyrotaxane glass with different ring size  
Akihiro Ohara, Tomoki Mizusawa, Koichi Mayumi, Kazuaki Kato, Hideaki Yokoyama, Kohzo Ito
- 3Pd022 Improvement of mechanical properties of PVDF/PC gels by thermal annealing  
Keiji Hamamoto, Noboru Osaka
- 3Pc023 Effects of Cross-Linked Domains on Finite Deformation Behavior of Elastomers Revealed by Various Types of Deformation  
Hiroki Koike, Kenji Urayama

- 3Pd024 Network structure and mechanical properties of semi-IPN gels composed of disulfide crosslinked network and linear PEG  
Kazumasa Moriyama, Naofumi Naga, Hidemitsu Furukawa
- 3Pc025 Glass transition of dried Tetra-PEG having homogeneous network structure part II  
Naoki Ueda, Soichi Tatsumi, Takamasa Sakai, Haruhiko Yao, Yasuo Saruyama
- 3Pd026 Swelling-Solubilization Behavior of PVB Organogel Prepared by Using Tetracarboxylic Dianhydride as the Crosslinker  
Masahiro Mizukoshi, Michinori Karikomi, Takao Kimura
- 3Pc027 Fabrication of tough hydrogels using thermoresponsive polymers  
Yasutaka Ono, Hiroaki Yoshida
- 3Pd028 Preparation of photo-responsive supramolecular actuator showing the slide motion of [c2]daisy chain  
Yuki Sawa, Kazuhisa Iwaso, Yoshinori Takashima, Akira Harada
- 3Pc029 Development of thermoresponsive gel actuator by cocrosslinking method  
Hidekazu Kawabata, Shohei Ida, Satoshi Tanimoto, Yoshitsugu Hirokawa
- 3Pd030 Effect of prepolymer structure on the thermoresponsive properties of triblock polymer-crosslinked gels  
Hironobu Kitanaka, Shohei Ida, Satoshi Tanimoto, Yoshitsugu Hirokawa
- 3Pc031 Catalytic activity of gold nanoparticle in polymer gels  
Koki Atsumi, Shohei Ida, Satoshi Tanimoto, Yoshitsugu Hirokawa
- 3Pd032 Production of hybrid nanoparticles of alginate and PNIPAM by W/O miniemulsion  
Takahiro Kato, Yuuka Fukui, Keiji Fujimoto
- 3Pc033 Influence of Changes in the Internal Microscopic Structure of a Stimuli-responsive Hydrogel Particles on Molecular separation behavior  
Takuma Kureha, Takaaki Sato, Daisuke Suzuki
- 3Pd034 Synthesis of hierarchical composite hydrogel particles  
Takumi Watanabe, Chiaki Kobayashi, Daisuke Suzuki

(C403)

### C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS

- 3Pc035 Noise-driven electronic device using polymer transistors  
Yoshiharu Suzuki, Teruo Kanki, Hidekazu Tanaka, Naoki Asakawa
- 3Pd036 Flexible and Transparent Piezoelectric Polymer Devices  
Takeo Mochizuki, Takuya Omi, Hidenori Okuzaki
- 3Pc037 Preparation of novel gel electrolyte using Polysaccharide Derivatives with Polymerizable Function Group  
Masahiro Kanai, Kazuma Okura, Syuiti Ishimoto, Toru Hoshi, Toshiki Hagiwara, Takao Aoyagi, Takashi Sawaguchi
- 3Pd038 Preparation of carbon monolith from porous polyacrylonitrile and its application for electrical double-layer capacitors  
Kenta Chashiro, Ayumi Dobashi, Takahiro Matsuta, Takahiro Hasegawa, Jun Maruyama, Satoshi Iwasaki, Susumu Kuwabata, Hiroshi Uyama
- 3Pc039 Simulation of nanofiber formation mechanism of the derivatives of polythiophenes  
Taiki Ito, Takeshi Shimomura, Toshiaki Miura
- 3Pd040 Transistor Characteristics of Nanofiber Composite Film  
Morito Yagi, Takeshi Shimomura
- 3Pc041 thermoelectric property of polythiophene derivatives  
Hikari Narita, Junma Wakui, Takeshi Shimomura
- 3Pd042 Charge Transport in Radical Polymer Layer for Rectification Effect and Switching Behavior  
Keita Kakitani, Hiroshi Tokue, Kenichi Oyaizu, Hiroyuki Nishide
- 3Pc043 Biosensors with electropolymerized polyaniline derivatives  
Takashi KUWAHARA, Tashifumi ICHIMURA, Mizuki KONDO, Masato SHIMOMURA

3Pd044 Control of sulfo group introduction rate to PEO with allyl groups in the side chain and their physical properties and creating a lithium-ion battery for a solid electrolyte membrane  
Yusuke Ichiki, Hiroki Hattori, Daichi Asai, Satoshi Yamamoto, Keiji Yamashita

(C404)

### **C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS**

3Pc053 Production of nanostructures of biopolymers with a particle atto-reactor  
Yukinari Nakamura, Yuuka Fukui, Keiji Fujimoto

3Pd054 Light-sensitive Liposomes Constructed by Azobenzene-containing Amphiphilic Phosphates  
SU Ma, Kiyoshi Kanie, Tomonari Ogata, Sunnam Kim, Atsushi Muramatsu, Seiji Kurihara

3Pc055 Design of a Brain-permeable Peptide Nanofiber with Ability to Suppress Abnormal Protein Aggregation  
Takuya Uemura, Yukako Kobayashi, Tomonori Waku, Michiaki Okuda, Hachiro Sugimoto, Naoki Tanaka

3Pd056 Effects of a subtle change in the junction motif of biodegradable block copolymers on the nanostructure.  
Masashi Oji, Koudai Matsuzaki, Syunsuke Sato, Masaru Tanaka, Kazuki Fukushima

3Pc057 Synthesis of peptide block polymers and their nanoparticles  
Kiyoshiro Narimatsu, Tomoyuki Koga, Nobuyuki Higashi

3Pd058 Osmotic swelling behavior of a layered titanate in various amine solutions  
Tatsumasa HOSHIDE, Arnaud PEREZ, Fengxia GENG, Renzhi MA, Nobuyoshi MIYAMOTO, Yusuke YAMAUCHI, Kenjiro FUJIMOTO, Takayoshi SASAKI

3Pc059 Photoinduced hydrophilic conversion properties of heteronanostructured films of titania nanosheets and reduced graphene oxide  
Kei Kamanaka, Nobuyuki Sakai, Asami Funatsu, Takayoshi Sasaki

3Pd060 Preparation of a nanofiber mat by electro-spinning technique and its application to an actuator  
Hanako Asai, Takeshi Kawai, Naoki Shimada, Koji Nakane

3Pc061 Preparation of high thermal stable and high thermal conductive rigid polymer nanofiber and its application to composite  
Haruka Dodo, Masashi Furukawa, Tetsuya Uchida

3Pd062 Static Electricity-Responsive Molecular Assembly  
Hirokuni Jintoku, Hirotaka Ihara, Hideyuki Kihara

(C405)

### **C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS**

3Pc069 Synthesis and crosslinking of SPPSUs for PEMFCs  
Yaojian Zhang, Lee-Jin Ghil, Kenji Miyatake, Je-Deok Kim

3Pd070 Development of PAN Binder for Lithium Ion Battery  
Ayako Shimonaka, Haruki Okada, Fumiko Fujie, Akikazu Matsumoto, Ken-ichi Ishigaki, Tooru Tokimitsu

3Pc071 Analysis of ion-conductive behavior for concentrated polycarbonate-based electrolytes  
Joh Motomatsu, Hidekazu Kodama, Takeo Furukawa, Nobuyuki Akai, Yoichi Tominaga

3Pd072 Ion-conductive properties of ethylene oxide/ethylene carbonate copolymers  
TAKASHI MORIOKA, KOJI NAKANO, YOICHI TOMINAGA

3Pc073 Measurement of Ionic Conductivity and Mechanical Strength of Slide-ring Gel Swollen with Lithium-ion Electrolyte  
Naoki Sugihara, Koichi Mayumi, Yoichi Tominaga, Takeshi Shimomura, Kohzo Ito

3Pd074 Correlation between solvation structure of ions and electrochemical properties of

poly(ethylene carbonate)-based electrolytes  
Kento Kimura, Yoichi Tominaga

- 3Pc075 Fabrication of Organic Photovoltaics Based on BP4T  
Tomoki Taniguchi, Takeshi Yamao, Shu Hotta
- 3Pd076 Perylene Bisimide-Based Acceptor Materials : Synthesis, Characterization and Organic Photovoltaics Application  
Yuhei Takeuchi, Kazuhiro Nakabayashi, Hideharu Mori
- 3Pc077 Influence on Lithium Ion Conductive Nanofiber Structures for Lithium Ion Conductivity and Secondary Battery Performances  
Tsukasa Watanabe, Manabu Tanaka, Yasumasa Mochizuki, Futoshi Matsumoto, Hiroyoshi Kawakami
- 3Pd078 Properties of Solid Polymer Electrolyte using Polymers with Sulfonyl Group  
Naoto Okasho, Takahiro Uno, Masataka Kubo, Takahito Itoh
- 3Pc079 Properties of Organic Cathode Materials using Various Quinoid Compounds  
Naoya Kurimoto, Takahiro Uno, Masataka Kubo, Takahito Itoh, Ryo Omoda, Yuichi Aihara

(C406)

### **C. FUNCTIONAL POLYMERS AND POLYMER FUNCTIONS**

- 3Pd086 SAXS Analysis of Non-Crosslinked Perfluoro-Electrolyte Based on Nafion  
Akihiro Shinohara, Masashi Harada, Takuro Matsunaga, Naoki Hasegawa
- 3Pc087 Study of cathode pattern for semitransparent organic thin film solar cells  
Yuki Matsumoto, Atsushi Aoki, Takayuki Abe
- 3Pd088 Controlled synthesis of hydrophilic - hydrophobic diblock copolymers using two types of chain-growth polymerization methods (I) - Study of bifunctional initiator -  
Yuki Hoshikawa, Kenichi Ogu, Masahiro Fujita, Yuko Takeoka, Masahiro Rikukawa
- 3Pc089 Synthesis and evaluation of graft-type hydrocarbon polymer electrolytes (III) - Effect of Graft Length -  
Ryo Ide, Masahiro Fujita, Yuko Takeoka, Masahiro rikukawa
- 3Pd090 Direct laser-writing micro-supercapacitors from graphene oxide films  
Jinguang Cai, Akira Watanabe
- 3Pc091 Synthesis of phenol derivative organogel and charge-discharge behavior as anode for lithium ion battery  
Miki Tosaki, Qijiu Deng, Jingze Li, Tomokazu Iyoda, Keiji Nagai
- 3Pd092 Dye-sensitized Solar Cell Fabricated with Nitroxide Radicals as a Counter Electrode and a Redox Mediator  
Risano Nakajima, Kenichi Oyaizu, Hiroyuki Nishide
- 3Pc093 Cooperative Switching of Polyviologen Redox State and Ion Conduction for Electrochromic Devices  
Takaaki Yamasaki, Kan Sato, Kenichi Oyaizu, Hiroyuki Nishide
- 3Pd094 Synthesis and Properties of an organic Anode-active Material Rechargeable in an Aqueous NaCl Electrolyte  
Ryu Katagiri, Kenichi Oyaizu, Hiroyuki Nishide
- 3Pc095 Electrolytic Hydrogenation of Fluorenone-substituted Polyacrylamide Gel and Hydrogen Evolution from the Gel  
Ayaka Iwawaki, Ryo Kato, Kenichi Oyaizu, Hiroyuki Nishide
- 3Pd096 Change in oxygen reduction potential for the chemical hardness of metals contained in the metal phthalocyanine derivatives  
Takuya Yuzawa, Satoshi Yamazaki, Nobukatsu Nemoto, Iduru Kobayashi, Masaji Akimoto, Kazuto Umezu