

Convention Hall

S1-1 Polymer Synthesis and Characterization I

15:40-17:25

Chair

Ching-Hsuan Lin

National Chung Hsing University, Taiwan

Swaminathan Sivaram

Indian Institute of Science Education and Research, India

15:40-16:05 **[Invited] Aliphatic Polyesters: A Platform for Design of Sustainable Materials**

Swaminathan Sivaram

Indian Institute of Science Education and Research, India

16:05-16:25 **Modified Bio-Based Polyurethane Foam with Rosin via a Green Process**

Chu-Chun Hsieh, Yi-Chun Chen

National Chung-Hsing University, Taiwan

16:25-16:45 **A Facile Strategy to Achieve Fully Bio-Based Epoxy Thermosets from Eugenol**

Chien-Han Chen¹, Shih-Huang Tung¹, Ru-Jong Jeng¹, Mahdi M. Abu-Omar², Ching-Hsuan Lin³

¹National Taiwan University, Taiwan / ²University of California, USA / ³National Chung Hsing University, Taiwan

16:45-17:05 **The Reaction of Activated Esters with Epoxides for Self-Curable, Highly Flexible A₂B₂- and A₃B₃-Type Epoxy Compounds**

Ching-Hsuan Lin¹, Chien-Han Chen¹, Chia-Min Lin¹, Tzong-Yuan Juang², Mahdi M. Abu-Omar³

¹National Chung Hsing University, Taiwan / ²China Medical University, Taiwan / ³University of California, USA

17:05-17:25 **Deep Eutectic Solvents as Green Media for Peptide Synthesis**

Chen-Yu Chien, Sheng-Sheng Yu

National Cheng Kung University, Taiwan

Room 101

S3-1 Functional and Self-Assembled Materials I

15:40-17:30

Chair

Jui-Hsiang Liu

National Cheng Kung University, Taiwan

Takashi Kato

The University of Tokyo, Japan

15:40-16:05 **[Invited] Nanostructured Liquid-Crystalline Materials for Water Treatment and Energy**

Takashi Kato

The University of Tokyo, Japan

16:05-16:30 **[Invited] Protein Assembly Driven by Dual Non-Covalent Interactions**

Guosong Chen

Fudan University, China

16:30-16:50 **Fabrication and Characterization of Photo/Thermal Tunable Liquid Crystalline Polymeric Actuators**

Kai-Ti Chang, Yi-Hua Hung, Chun-Yen Liu, Jui-Hsiang Liu

National Cheng Kung University, Taiwan

16:50-17:10 **Nanonetwork Phenolic and Epoxy Resins for High Energy Dissipation**

Suhail Kizhakkeveetil Siddique¹, Tze-Chung Lin¹, Yung-Hsuan Chang¹, Chang-Chun Lee¹, Cheng-Yu Lin¹, Shou-Yi Chang¹, Ping-Chi Tsai², Yeau-Ren Jeng², Rong Ming Ho¹

¹National Tsing Hua University, Taiwan / ²National Chung Cheng University, Taiwan

17:10-17:30 **Functional Bioinspired Polypeptoids**

Jing Sun, Jirui Wei, Xiaohui Fu, Zhibo Li

Qingdao University of Science and Technology, China

Room 103

S7-1 Polymers for Biomaterials and Medicine I

15:40-17:10

Chair **Kazuhiko Ishihara**
The University of Tokyo, Japan
Ki Dong Park
Ajou University, Korea

15:40-16:05 **[Invited] Biocompatible Poly(Ether-Ether-Ketone) as Implantable Biomaterials**

Kazuhiko Ishihara
The University of Tokyo, Japan

16:05-16:30 **[Invited] Enzyme-Mediated Hydrogel Formation and Surface Modification for Therapeutic Applications**

Ki Dong Park
Ajou University, Korea

16:30-16:50 **Polymeric Nanomaterials for Drug and Nitric Oxide Delivery**

Won Jong Kim
Pohang University of Science and Technology, Korea

16:50-17:10 **Photocrosslinked Polymers Containing Cinnamoyl Groups with Fibroblast Cell-Compatibility**

Shinya Yano, Takumi Iwase, Mitsuhiro Shibata,
Naozumi Teramoto
Chiba Institute of Technology, Japan

Room 201

S2-1 Polymer Structure, Surface and Interface I

15:40-17:10

Chair **Jaseung Koo**
Chungnam National University, Korea
Han-Yu Hsueh
National Chung Hsing University, Taiwan

15:40-16:05 **[Invited] Diffusion Dynamics of Polymer Melts Confined between two Immiscible Polymer-Polymer Interface**

Kyoung-il Jo^{1,2}, Younghoon Oh³, Bong June Sung³,
Tae-Ho Kim⁴, Guangcui Yuan⁵, SushilK.Satija⁵,
Jaseung Koo⁴

¹Korea Atomic Energy Research Institute, Korea /
²Korea University, Korea / ³Sogang University, Korea /
⁴Chungnam National University, Korea / ⁵National
Institute of Standards and Technology, USA

16:05-16:30 **[Invited] Impact of Interfaces on Physical Properties of Polymers**

Keiji Tanaka
Kyushu University, Japan

16:30-16:50 **Polyolefin Comb Block Copolymers and Interfacial Reinforcement**

Andy Haishung Tsou
Daxin Materials, Taiwan

16:50-17:10 **Bioinspired Durable Superhydrophobic Surface from Hierarchically Wrinkled Nanoporous Polymer**

Han-Yu Hsueh, Ting-Lun Chen, Ching-Yu Huang,
Yi-Ting Xie
National Chung Hsing University, Taiwan

Room 202

S5-1 Organic/Inorganic Hybrids and Nanocomposites I

15:40-17:30

Chair

Li-Ting Lee

Feng Chia University, Taiwan

Kenji Takahashi

Kanazawa University, Japan

15:40-16:05 **[Invited] A New Cellulose Derivative for Carbon Fiber Reinforced Plastic**

Kenji Takahashi

Kanazawa University, Japan

16:05-16:30 **[Invited] Three-Dimensional Graphene/Polymer Nanocomposites: Multi-Functional Materials of Next Generation**

Jang-Kyo Kim

The Hong Kong University of Science and Technology, Hong Kong

16:30-16:50 **Controlled Size and Shape of Pt-Pd-Carbon Cathode Catalyst with Improved Methanol Tolerance for Fuel Cell**

Cindy Mutiara Septani, Ya Sen Sun

National Central University, Taiwan

16:50-17:10 **Enhanced Near-Infrared Photoresponse of Inverted Perovskite Solar Cells through Rational Engineering of Electron-Transporting Layer**

Chih-I Chen, Chu-Chen Chueh

National Taiwan University, Taiwan

17:10-17:30 **Novel Blends and Composites of Biodegradable Polymer: Investigations on Crystallization and Physical Properties**

Li-Ting Lee

Feng Chia University, Taiwan

Room 203

S4-1 Polymers for Optoelectronics and Energy I

15:40-17:30

Chair

Kung-Hwa Wei

National Chiao Tung University, Taiwan

Alex Jen

City University of Hong Kong, Hong Kong

15:40-16:05 **[Invited] Transformative Impact of Printable Solar Cells for Meeting Next-Generation Energy Demands**

Alex Jen

City University of Hong Kong, Hong Kong

16:05-16:30 **[Invited] Atom-Variied Side-Chain Conjugated Polymers Donors in Non-Fullerene Photovoltaics Efficiencies Compared to Machine Learning Prediction**

Yu-Che Lin, Chung-Hao Chen, Kung-Hwa Wei

National Chiao Tung University, Taiwan

16:30-16:50 **Intrinsically Stretchable Isoindigo-Bithiophene Conjugated Polymers Using Polyacrylateamide Side Chains for Organic Field-Effect Transistors**

Yan-Cheng Lin, Chien-Chung Shih, Yun-Chih Chiang, Chun-Kai Chen, Wen-Chang Chen

National Taiwan University, Taiwan

16:50-17:10 **Star-Shaped Triblock Copolymers Containing Poly(3-hexylthiophene) (P3HT) and Bio-Based Poly(δ -decanolactone) (PDL) for Organic Field-Effect Transistor Applications**

Li-Che Hsu^{1,2}, Saburo Kobayashi², Yun-Chi Chiang¹, Takuya Isono², Takuya Yamamoto², Kenji Tajima², Toshifumi Satoh², Wen-Chang Chen¹

¹National Taiwan University, Taiwan / ²Hokkaido University, Japan

17:10-17:30 **Investigation for Indoor Performance of Organic Photovoltaics Based on Non-fullerene Acceptors Materials**

Yu-Ching Huang, Chia-Feng Li, Zhi-Hao Huang, Po-Hung Liu, Yu-Xuan Huang, Kal-Shan Huang, Yun-Ming Sung

Ming Chi University of Technology, Taiwan

Oral Session

Oct. 29 (Tuesday)

Convention Hall

S1-2 Polymer Synthesis and Characterization II

10:00-11:50

Chair

Akira Hirao

National Taiwan University, Japan

Takashi Ishizone

Tokyo Institute of Technology, Japan

10:00-10:25 [Invited] Anionic Polymerization of 4-Acylstyrene Derivatives

Takashi Ishizone, Raita Goseki

Tokyo Institute of Technology, Japan

10:25-10:50 [Invited] Precise Synthesis of All Structural Possible Tetrablock Quaterpolymers by Methodology Combining Living Anionic Polymerization with Linking Chemistry Using 1:1 Addition Reaction

Akira Hirao

National Taiwan University, Taiwan

10:50-11:10 Multi-Component Reactions in Synthetic Polymer Chemistry; From Fundamental Chemistry to Material Applications

Ryohei Kakuchi

Gunma University, Japan

11:10-11:30 Preparation of High Performance Thermosetting Polymers Possessing Meldrum's Acid (MA) Group via Michael Addition and Diels–Alder Reaction

Chien-Ho Huang, Ying Ling Liu

National Tsing Hua University, Taiwan

11:30-11:50 Graphitic Material Prepared from DA-Related Polymer via Anionic Polymerization

Yi-Fan Huang¹, Weo-Yao Tung², Chung-Fu Cheng², Xiang Li², Yun-Yu Lai², Heng-Yi Lin¹, Cheng Pu², Yu Zhu², Chien-Lung Wang¹

¹National Chiao Tung University, Taiwan / ²University of Akron, USA

S1-3 Polymer Synthesis and Characterization III

13:30-15:20

Chair

Zi-Chen Li

Peking University, China

Chienhsin Wu

National Taiwan University, Taiwan

13:30-13:55 [Invited] Tough and Recyclable Polyesters by Ring-Opening Polymerization of Benzo-Thia-Caprolactones

Zi-Chen Li

Peking University, China

13:55-14:20 [Invited] Synthesis of Biobased Poly(γ -butylactone) and its Copolymers via ROP

Zhibo Li

Qingdao University of Science and Technology, China

14:20-14:40 Highly Efficient Process for Polycarbonate Conversion

Chienhsin Wu¹, Ying-Chi Huang¹, Shenghong A. Dai², Ru-Jong Jeng¹

¹National Taiwan University, Taiwan / ²National Chung Hsing University, Taiwan

14:40-15:00 Fabrication of Mesoporous Garnet-Type Sphere via Gelation-Induced Phase Separation for LIB Applications

Cheng-Yen Chang, Tzu-Sen Su, Tzu-Chien Wei, Rong-Ming Ho

National Tsing-Hua University, Taiwan

15:00-15:20 Stereospecific Radical Polymerization of N,N-Disubstituted Acrylamides and NMR Analysis of Stereoregularity of the Polymers Obtained

Tomohiro Hirano, Miyuki Oshimura, Koichi Ute

Tokushima University, Japan

Oral Session

Oct. 29 (Tuesday)

Room 101

S3-2 Functional and Self-Assembled Materials II

10:00-11:30

Chair

Yeong-Tarng Shieh
National University of Kaohsiung, Taiwan

Fumio Sanda
Kansai University, Japan

10:00-10:25 [Invited] New Functional Materials Based on Sulfur Plastics

Kookheon Char
Seoul National University, Korea

10:25-10:50 [Invited] Aggregation of Novel Polyurethanes Containing Diketopiperazine Moieties in the Main Chain

Fumio Sanda, Noritaka Shimosaraya, Yu Miyagi
Kansai University, Japan

10:50-11:10 CO₂-Switchable Emulsifiers

Yeong-Tarng Shieh¹, Pei-Yu Tai¹, Yao-Chuan Yeh¹,
Fang-Zi Hu¹, Chih-Chia Cheng²

¹National University of Kaohsiung, Taiwan /

²National Taiwan University of Science and Technology, Taiwan

11:10-11:30 Ring-Banded High-Density Polyethylene Spherulites Re-Investigated

Selvaraj Nagarajan, Eamor M. Woo
National Cheng Kung University, Taiwan

S3-3 Functional and Self-Assembled Materials III

13:30-15:20

Chair

Chih-Feng Huang
National Chung Hsing University, Taiwan

Jae-Suk Lee
Gwangju Institute of Science and Technology,
Korea

13:30-13:55 [Invited] Synthesis of Bottlebrush Block Copolymers, Their Self-Assembly and 1D Photonic Crystals

Yong-Guen Yu, Chang-Geun Chae, Ho-Bin Seo,
Myung-Jin Kim, Jae-Suk Lee
Gwangju Institute of Science and Technology, Korea

13:55-14:20 [Invited] Synthesis of Novel Polymers with Incompatible Segments by Living Polymerizations toward the Applications of Nanomaterials

Chih-Feng Huang
National Chung Hsing University, Taiwan

14:20-14:40 Construction, Self-Assembly, and Mass Spectrometry Analysis of Metallo-Supramolecular Copolymers

Yi-Tsu Chan, Tsung-Han Tu
National Taiwan University, Taiwan

14:40-15:00 Effects of Temperature on the Rheology and Self-Assembled Structures of Lecithin/Inorganic Salts Mixtures in Non-Polar Solvent

Hung-Ming Chang, Shih-Huang Tung
National Taiwan University, Taiwan

15:00-15:20 Smart Chemical Design of High-Performance Thermosets Based on Ortho-Benzoxazine Chemistry and Natural Renewable Resources

Kan Zhang, Mengchao Han, Yuqi Liu, Xinye Yu
Jiangsu University, China

Oral Session

Oct. 29 (Tuesday)

Room 103

S7-2 Polymers for Biomaterials and Medicine II

10:00-11:25

Chair

Chih-Kuang Chen

National Sun Yat-sen University, Taiwan

Hsieh-Chih Tsai

National Taiwan University of Science and Technology, Taiwan

10:00-10:25 [Invited] Functional HPMA-Based Copolymers for Anticancer Drug Delivery

Qingsong Yu, Zhihua Gan

Beijing University of Chemical Technology, China

10:25-10:45 Preparation of Polylactide-Based Nanoformulations for Cancer Therapy Applications

Chih-Kuang Chen¹, Zheng-Ian Lin¹, You-Ting Li²

¹National Sun Yat-sen University, Taiwan / ²National Yunlin University of Science and Technology, Taiwan

10:45-11:05 Co-Electrospinning of β -Glucosidase/PVA Functionalized Nanofibers for Natural Sweetener Production

Virly Lin, Reuben Wang

Tunghai University, Taiwan

11:05-11:25 Encapsulated Gadolinium Doped Ferrite in Generation 4.5 Poly(Amidoamine) Dendrimer for Cancer Theranostics Using Alternating Magnetic Field

Tefera Worku Mekonnen¹, Hsieh Chih Tsai¹, Jen Ming Yang^{2,3}

¹National Taiwan University of Science and Technology, Taiwan / ²Chang Gung University, Taiwan / ³Chang Gung Memorial Hospital, Taiwan

S7-3 Polymers for Biomaterials and Medicine III

13:30-15:20

Chair

Yung Chang

Chung Yuan Christian University, Taiwan

Penny Martens

UNSW Sydney, Australia

13:30-13:55 [Invited] Design of Biosynthetic Hydrogels: Balancing the Macroscopic and Biological Properties

Penny Martens

UNSW Sydney, Australia

13:55-14:20 [Invited] Bio-Inspired Polymeric Membranes in Medical Applications

Yung Chang

Chung Yuan Christian University, Taiwan

14:20-14:40 Biomimetic Zwitterionic Copolymers for Antifouling Coating

Shuo Hsi Tang, Yung Chang

Chung Yuan Christian University, Taiwan

14:40-15:00 Polyphosphoesters for Modulation of Bone Cell Behaviors

Yasuhiko Iwasaki, Akihisa Otaka

Kansai University, Japan

15:00-15:20 3D Printing of Functional Polymers for Tissue Engineering Applications

Yi-Cheun Yeh

National Taiwan University, Taiwan

Oral Session

Oct. 29 (Tuesday)

Room 201

S2-2 Polymer Structure, Surface and Interface II

10:00-11:35

Chair

Hiroshi Jinnai

Tohoku University, Japan

Teruaki Hayakawa

Tokyo Institute of Technology, Japan

10:00-10:25 **[Invited] Dynamical Characterization of Organic-Inorganic Interface in a Nano-Composite Using Electron Microscopy**

Hiroshi Jinnai

Tohoku University, Japan

10:25-10:50 **[Invited] Chemically-Tailored Block Copolymers for Domain Orientation and Morphology Control in Thin Films**

Teruaki Hayakawa, Yasunari Yoshimura,
Ryuichi Nakatani, Alvin Chandra, Kevin Wylie,
Seina Yamazaki, Yuta Nabae

Tokyo Institute of Technology, Japan

10:50-11:15 **[Invited] Fabrication of Sub-3nm Feature Size Based on Block Copolymer Self-Assembly**

Jin Kon Kim, Avnish Kumar Mishra, Jonghean Kwak,
Eunseol Kim, Jaeyong Lee

Pohang University of Science and Technology, Korea

11:15-11:35 **Upper Critical Solution Temperature (UCST) Nanogel**

Shin-ichi Yusa¹, Maho Ohshio¹, Kazuhiko Ishihara²,
Atsushi Maruyama³, Naohiko Shimada³

¹University of Hyogo, Japan / ²The University of Tokyo, Japan / ³Tokyo Institute of Technology, Japan

S2-3 Polymer Structure, Surface and Interface III

13:30-15:25

Chair

Hsien-Yeh Chen

National Taiwan University, Taiwan

Seokhoon Ahn

Korea Institute of Science and Technology, Korea

13:30-13:55 **[Invited] Applications of Nanomaterials through Controlling Interface Structures with Polymers**

Seokhoon Ahn

Korea Institute of Science and Technology, Korea

13:55-14:20 **[Invited] Control of the Electron-Transport Layer Interfaces in Phosphorescent Organic Light-Emitting Diodes (Pholeds) by Orthogonal Solvent-Processing**

Taeshik Earmme

Hongik University, Korea

14:20-14:45 **[Invited] The Origin of Memory Effects in the Crystallization of Polyamides: Role of Hydrogen Bonding**

Xinran Liu, Xia Dong, Dujin Wang

Chinese Academy of Science, China

14:45-15:05 **Vapor Deposition to Construct Reactive Polymer Coatings, Devices, and 3D Bulk Materials**

Hsien-Yeh Chen

National Taiwan University, Taiwan

15:05-15:25 **Antifouling Poly(3,4-Ethylenedioxythiophene) Thin Film**

Jih-Guang Wu, Yue Chen, Shyh-Chyang Luo

National Taiwan University, Taiwan

Oral Session

Oct. 29 (Tuesday)

Room 202

S6-1 Polymer Engineering and Processing I

10:00-11:50

Chair

Hiroshi Ito

Yamagata University, Japan

Syang-Peng Rwei

National Taipei University of Technology, Taiwan

10:00-10:25 **[Invited] Novel Fabrication of Tough Polymer Blends Obtained by Special Kneading Processing**

Hiroshi Ito, Akira Ishigami, Shotaro Nishituji, Takashi Kurose

Yamagata University, Japan

10:25-10:50 **[Invited] Synthesis and Characterization of Low Melting Point Bio-Polyamides with Hot Melt Adhesive Properties**

Syang-Peng Rwei

National Taipei University of Technology, Taiwan

10:50-11:10 **Study on the Difference of Viscoelastic Behavior between General and Fiber Reinforced Thermoplastics in Compression Molding System**

Chao-Tsai Huang¹, Po-Yi Lee¹, Ling-Jue Chen¹, Chih-Wei Wang², David Hsu², Rong-Yeu Chang²

¹Tamkang University, Taiwan / ²CoreTech System (Moldex3D) Co., Ltd., Taiwan

11:10-11:30 **Effects of Fabrication Methods on the Strain-Dependent Physical Properties of Eco-Friendly Fluorescent Polyfluorene/Poly(Butylene Succinate) Blends**

Hui-Ching Hsieh¹, Nathan Wu¹, Tsung-Han Chuang¹, Wen-Ya Lee², Jung-Yao Chen³, Wen-Chang Chen¹

¹National Taiwan University, Taiwan / ²National Taipei University of Technology, Taiwan / ³National Chung Cheng University, Taiwan

11:30-11:50 **Study of Carbon Nanofiller-Filled Poly(vinylidene fluoride)/High Density Polyethylene Blend-Based Nanocomposites**

Kartik Behera¹, Fang-Chyou Chiu^{1,2}

¹Chang Gung University, Taiwan / ²Chang Gung Memorial Hospital, Taiwan

S6-2 Polymer Engineering and Processing II

13:30-15:00

Chair

Dong Gi Seong

Pusan National University, Korea

Gan-Ji Zhong

Sichuan University, China

13:30-13:55 **[Invited] Process for Mass Production of Carbon Fiber Reinforced Composites**

Dong Gi Seong

Pusan National University, Korea

13:55-14:20 **[Invited] Formation and Manipulation of Hierarchically Oriented Structure during Polymer Processing**

Gan-Ji Zhong, Jia-Zhuang Xu, Zhong-Ming Li

Sichuan University, China

14:20-14:40 **Numerical Study on Mixing Characteristics of a Co-Rotating Twin Screw Kneading Element**

Chun-Liang Tan, Shiu-Wu Chau

National Taiwan University, Taiwan

14:40-15:00 **Cellulose Nanocrystal/Silver/Alginate (CNC/Ag/Alg) Bionanocomposite Films: Potential Food Packaging Materials with Antimicrobial Properties**

Mithilesh Yadav¹, Fang-Chyou Chiu^{1,2}

¹Chang Gung University, Taiwan / ²Chang Gung Memorial Hospital, Taiwan

S4-2 Polymers for Optoelectronics and Energy II

10:00-11:55

Chair

Wei-Fang Su

National Taiwan University, Taiwan

Itaru Osaka

Hiroshima University, Japan

10:00-10:25 [Invited] Polythiophenes for Solar-Driven Water Splitting

Kouki Oka, Bjorn Winther-Jensen, Hiroyuki Nishide

Waseda University, Japan

10:25-10:50 [Invited] π -Conjugated Polymers Based on Fused Heteroaromatics for High-Performance Organic Photovoltaics

Itaru Osaka

Hiroshima University, Japan

10:50-11:15 [Invited] High Crystalline Isoindigo - Oligothiophene Alternating Copolymer for Solar Cell

Wei-Fang Su

National Taiwan University, Taiwan

11:15-11:35 Near-Infrared Absorbing Acceptor for Realize High-Performance Ternary and Semi-Transparent Colorful Polymer Solar Cells

Chih-Ping Chen¹, Chun-Kai Wang²,
Bing-Huang Jiang², Jong-Hong Lu¹, Ru-Jong Jeng²,
Yu-Wei Lu¹, Ken-Tsung Wong²

¹*Ming Chi University of Technology, Taiwan /*

²*National Taiwan University, Taiwan*

11:35-11:55 Enhanced Photovoltaic Performance Lead-Reduced Perovskite Solar Cells by Polymer Additives

Yin-Hsuan Chang, Yi-Ying Li, Shun-Hsiang Chan,
Ming-Chung Wu

Chang Gung University, Taiwan

S4-3 Polymers for Optoelectronics and Energy III

13:30-15:20

Chair

Kilwon Cho

Pohang University of Science and Technology, Korea

Tzung-Fang Guo

National Cheng Kung University, Taiwan

13:30-13:55 [Invited] Molecular Orientation Dependent Photon Harvesting and Exciton Dissociation in Organic Solar Cells

Kilwon Cho

Pohang University of Science and Technology, Korea

13:55-14:20 [Invited] Single-Component Polymer Solar Cells Derived from a Fully Conjugated Donor-Acceptor Block Copolymer

Dong Hoon Choi, Chang Geun Park, Su Hong Park,
Min Ju Cho

Korea University, Korea

14:20-14:40 Magnetic Field Effect: A Deep Insight into Polymers

Shi-Hong Luo, Nidya Chitranningrum, Surojit Saha,
Tzung-Fang Guo

National Cheng Kung University, Taiwan

14:40-15:00 Side-Chain Engineering of Biaxially-Extended Conjugated Polymers: Revealing the Role of Side-Chain Coplanarity on Polymer's Properties

Po-Chen Lin, Yu-Tai Wong, Chu-Chen Chueh

National Taiwan University, Taiwan

15:00-15:20 Conjugated Covalent Organic Frameworks and Application in Energy Conversion

Hui Liu, Qingyan Pan, Fan Hu, Yingjie Zhao

Qingdao University of Science and Technology, China

Oral Session

Oct. 30 (Wednesday)

Convention Hall

S1-4 Polymer Synthesis and Characterization IV

08:30-10:25

Chair

Changle Chen

University of Science and Technology of China, China

Tsuyoshi Michinobu

Tokyo Institute of Technology, Japan

08:30-08:55 **[Invited] Metal-Free Click Chemistry for the Synthesis of Functional Polymers**

Tsuyoshi Michinobu

Tokyo Institute of Technology, Japan

08:55-09:20 **[Invited] Catalytic Synthesis of Polar Functionalized Polyolefins**

Changle Chen

University of Science and Technology of China, China

09:20-09:40 **Poly(alpha-olefin) Molecular Bottlebrushes**

Andy Haishung Tsou

Daxin Materials, Taiwan

09:40-10:00 **Localized Co-Delivery of Bevacizumab and Doxorubicin by Thermo-Sensitive Hydrogel for Normalization of Tumor Vasculature and to Enhance the Efficacy of Chemotherapy**

Haile Fentahun Darge, Hsieh-Chih Tsai

National Taiwan University of Science and Technology, Taiwan

10:00-10:25 **[Invited] Ultra-High-Molecular-Weight Polymers Produced by the "Immortal" Phosphine-Based "Frustrated Lewis Pair"**

Yun Bai, Qianyi Wang, Wuchao Zhao, Huaiyu Wang, Jianghua He, Yuetao Zhang

Jilin University, China

S1-5 Polymer Synthesis and Characterization V

10:40-12:15

Chair

Chi-How Peng

National Tsing Hua University, Taiwan

Pranee Phinyocheep

Mahidol University, Thailand

10:40-11:05 **[Invited] Block Copolymers of Less Activated Monomer and More Activated Monomer Synthesized by the Hybridization of CMRP and ATRP**

Ya-Wen Tsai, Fu-Sheng Wang, Meng-Qin Xie, Chi-How Peng

National Tsing Hua University, Taiwan

11:05-11:30 **[Invited] Synthesis of Crosslinked Polymeric Ligand Applied for Atom Transfer Radical Polymerization**

Pranee Phinyocheep, Oaranan Jantanit, Jirawat Chatanan, Pennapa Tungjiratthitikan

Mahidol University, Thailand

11:30-11:55 **[Invited] Polymerization of Amino Acids: Challenge and Strategy**

Youhua Tao

Chinese Academy of Sciences, China

11:55-12:15 **Tacticity and Chirality Effects in Molecular Self-Assembly of Polymers**

Yu-Chuan Sung¹, Jung-Tzu Hsu¹, Jing-Yu Lee¹, Rong-Ming Ho², Jing-Cherng Tsai¹

¹National Chung Cheng University, Taiwan /

²National Tsing Hua University, Taiwan

Oral Session

Oct. 30 (Wednesday)

Convention Hall

S1-6 Polymer Synthesis and Characterization VI

13:40-15:25

Chair

Toshikazu Takata

Tokyo Institute of Technology, Japan

Chien-Chieh Hu

National Taiwan University of Science and Technology, Taiwan

13:40-14:05 [Invited] Stimuli-Responsive Polymers Driven by Reversible Polymer Topology Transformation

Toshikazu Takata

Tokyo Institute of Technology, Japan

14:05-14:25 The Effect of Chain Rigidity of Polymeric Precursor on the Small Molecular Transport in the Carbon Molecular Sieve Membrane

Chien-Chieh Hu^{1,2}, Kueir-Rarn Lee², Juin-Yih Lai^{1,2}

¹*National Taiwan University of Science and Technology, Taiwan* / ²*Chung Yuan Christian University, Taiwan*

14:25-14:45 Synthesis and Properties of Biodegradable Semi-IPN Hydrogels Based on Natural Polymers for Agriculture Applications

Warunee Tanan¹, Jate Panichpakdee², Sayant Saengsuwan¹

¹*Ubon Ratchathani University, Thailand* / ²*Thailand Institute of Scientific and Technological Research, Thailand*

14:45-15:05 Preparation and Properties of Glycidyl Methacrylate-Modified Natural Rubber/Starch-Grafted-Acrylamide Based Hydrogels

Sanit Panpinit, Sayant Saengsuwan

Ubon Ratchathani University, Thailand

15:05-15:25 Preparation of Diselenide Linked (mPEG-PLGA)-Se₂ Micelles: For Redox-Responsive and Controlled Release of Doxorubicin in Cancer Cells

Yihewew Simegniew Birhan, Hsieh Chih Tsai

National Taiwan University of Science and Technology, Taiwan

Oral Session

Oct. 30 (Wednesday)

Room 101

S3-4 Functional and Self-Assembled Materials IV

08:30-10:20

Chair

Chih-Chia Cheng

National Taiwan University of Science and Technology, Taiwan

Toshifumi Satoh

Hokkaido University, Japan

08:30-08:55 [Invited] Downsizing Feature of Microphase-Separated Structures via Intramolecular Crosslinking of Block Copolymer

Kodai Watanabe, Takuya Isono, Toshifumi Satoh
Hokkaido University, Japan

08:55-09:20 [Invited] High Performance Polymer Materials: Synthesis, Optoelectric and Solar Energy Applications

Der-Jang Liaw
National Taiwan University of Science and Technology, Taiwan

09:20-09:40 Supramolecular Polymers: from Self-Assembly to Functional Materials

Chih-Chia Cheng
National Taiwan University of Science and Technology, Taiwan

09:40-10:00 Network Structures in Non-Frustrated ABCBA Linear Pentablock Terpolymers

Yun-Tse Lo¹, Chin-Hung Chang¹, Ching-I Huang¹, An-Chang Shi²
¹*National Taiwan University, Taiwan* / ²*McMaster University, Canada*

10:00-10:20 Precise Synthesis of PMAPOSS – Living Stereochemistry Control

Sung-Yu Tsai¹, Satoshi Kuretani², Kei Manabe², Tomoyasu Hirai², Teruaki Hayakawa³, Chien-Lung Wang¹
¹*National Chiao Tung University, Taiwan* / ²*Osaka Institute of Technology, Japan* / ³*Tokyo Institute of Technology, Japan*

S3-5 Functional and Self-Assembled Materials V

10:40-12:10

Chair

Yeo-Wan Chiang

National Sun Yat-sen University, Taiwan

Redouane Borsali

University Grenoble Alpes, France

10:40-11:05 [Invited] Self-Assembly of Carbohydrate Block Copolymers: Nanoparticles and Highly Nanostructured Thin Films

Redouane Borsali
University Grenoble Alpes, France

11:05-11:30 [Invited] Bioinspired Block Copolymer Photonic Crystals

Yeo-Wan Chiang
National Sun Yat-sen University, Taiwan

11:30-11:50 Generating Reactive Functional Groups from Mechanochemically Responsive Polymers

Chia-Chih Chang
National Chiao Tung University, Taiwan

11:50-12:10 Development of Tough PAMPS/P(DMAA-co-AA) Double Network Hydrogel with Mechanochromic Sensitivity by Introducing Rhodamine Moiety

Che-Hao Wu¹, Cheng-Wei Tu², Chih-Feng Huang¹
¹*National Chung Hsing University, Taiwan* / ²*Industrial Technology Research Institute, Taiwan*

Oral Session

Oct. 30 (Wednesday)

Room 101

S3-6 Functional and Self-Assembled Materials VI

13:40-15:05

Chair

Che-Yi Chu

National Chung Hsing University, Taiwan

S. Ramakrishnan

Indian Institute of Science, India

13:40-14:05 **[Invited] Functional Hyperbranched Polymers**

Suresh Kumar Perala, Arun Gayen, S. Ramakrishnan

Indian Institute of Science, India

14:05-14:25 **Adhesive Complex Hydrogels from Tannic Acid and Several Biocompatible Polymers**

Ji Heung Kim

Sungkyunkwan University, Korea

14:25-14:45 **Dispersion Behavior of Magnetic Nanoparticle/Conducting Polymer Nanocomposites**

Che-Yi Chu, Meng-Zhe Chen

National Chung Hsing University, Taiwan

14:45-15:05 **Synthesis of Polymeric Nanoparticles with Reversible Disulfide Bond and Aggregation-Induced Emission Properties via Passerini Reaction**

Li-Chieh Chou, Chih-Feng Huang

National Chung Hsing University, Taiwan

Oral Session

Oct. 30 (Wednesday)

Room 103

S7-4 Polymers for Biomaterials and Medicine IV

08:30-10:20

Chair **Ayse Zehra Aroguz**
Istanbul University-Cerrahpasa, Turkey
Hsiu-Wen Chien
National Kaohsiung University of Science and Technology, Taiwan

08:30-08:55 [Invited] Stimuli-Responsive Biomedical Hydrogels
Yanyu Yang, Yazhong Bu, Xing Wang, Decheng Wu
Chinese Academy of Sciences, China

08:55-09:20 [Invited] Polymeric Scaffolds for Tissue Engineering Applications
Ayse Zehra Aroguz
Istanbul University-Cerrahpasa, Turkey

09:20-09:40 In situ Formation of Silver Nanoparticles-Contained Gelatin-PEG-Dopamine Hydrogel via Enzymatic Crosslinking Reaction for Improved Antibacterial Activity
Ngoc Thi Pham, Jeng-Shiung Jan
National Cheng Kung University, Taiwan

09:40-10:00 Bio-Inspired Polydopamine Coatings Containing with Dual Composite Biocides
Hsiu-Wen Chien, Ting-Hsiang Chiu, Yu-Ling Lee
National Kaohsiung University of Science and Technology, Taiwan

10:00-10:20 Combined Hydroxyl and Amide Functional Group Hydrogel on the Resistance of Plasma Protein Adsorption and Human Platelet Adhesion
Cheng-Chen Yang, Yung Chang
Chung Yuan Christian University, Taiwan

S7-5 Polymers for Biomaterials and Medicine V

10:40-11:50

Chair **Jae Hyung Park**
Sungkyunkwan University, Korea
Rusli Daik
Univesiti Kebangsaan Malaysia, Malaysia

10:40-11:05 [Invited] Stimuli-Responsive Polymer Nanomedicines for Reactive Oxygen Species-Mediated Approach to Treat Cancer
Jae Hyung Park
Sungkyunkwan University, Korea

11:05-11:30 [Invited] Anti-Microbial Behaviour of Polymeric Biocides
Rusli Daik, Norhafizah Ahmad Shayuti, Nur Hazlin Hazrin Chong, Noraziah Mohamad Zin
Universiti Kebangsaan Malaysia, Malaysia

11:30-11:50 Coaxial Electrospinning Fabrication and Characterization of Core-Shell Au@Silicate Nanoplatelets/Poly(Vinyl Alcohol) Nanofibers as High-Efficiency Dynamic SERS Substrates
Yen-Chen Lee, Chun Hsiao, Yu-Sheng Chen, Chih-Wei Chiu
National Taiwan University of Science and Technology, Taiwan

S7-6 Polymers for Biomaterials and Medicine VI

13:40-15:25

Chair **Jane Wang**
National Tsing Hua University, Taiwan
Yury Shchipunov
Russian Academy of Sciences, Russia

13:40-14:05 [Invited] Cellulose Functionalization: New Approaches - Novel Materials
Irina V. Postnova^{1,2}, Oleg N. Khlebnikov¹,
Sergei A. Sarin¹, Yury A. Shchipunov¹
¹*Russian Academy of Sciences, Russia* / ²*Far Eastern Federal University, Russia*

14:05-14:25 The Investigation of the Drug Embedding and Releasing Performance in Glycerol-Based, Biodegradable Polymers Using Gold Nanoparticles
Chia-Teng Chang, Bei-Chen Soo, Yen-Jung Chen,
Yi-Kong Hsieh, Dehui Wan, Jane Wang
National Tsing Hua University, Taiwan

14:25-14:45 Fabrication of HEMA Modified Polyampholyte Hydrogels for 3D Artificial Tissues
Chun-Yu Kao¹, Xiaohua Gong², Jui-Hsiang Liu¹,
Chun-Yen Liu¹
¹*National Cheng Kung University, Taiwan* / ²*UC Berkeley, USA*

14:45-15:05 Ibuprofen Loaded Injectable Hydrogel Grafted to Heparin for Inhibiting Excessive Inflammation and Promoting Wound Healing
Abegaz Tizazu Andrgie, Hsieh-Chih Tsai
National Taiwan University of Science and Technology, Taiwan

15:05-15:25 PHB/PBL-PEG Electrospun Fibrous Membranes for Drug Delivery
Chieh-Yu Lin¹, Toshifumi Satoh², Yi-Ming Sun^{1,3}
¹*Yuan Ze University, Taiwan* / ²*Hokkaido University, Japan* / ³*Chung Yuan University, Taiwan*

Oral Session

Oct. 30 (Wednesday)

Room 201

S1-7 Polymer Synthesis and Characterization VII

08:30-10:15

Chair

Tomoya Higashihara
Yamagata University, Japan

Sheng-Sheng Yu
National Cheng Kung University, Taiwan

08:30-08:55 [Invited] Green Synthesis of Semiconducting Polymers Based on Chain-Growth Condensation Polymerization

Tomoya Higashihara
Yamagata University, Japan

08:55-09:15 Single-Junction Organic Solar Cell Containing Fluorinated Heptacyclic Carbazole-Based Ladder-Type Acceptor Affords over 13% Efficiency with Solution-Processed Cross-Linkable Fullerene as Interfacial Layer

Tsung-Wei Chen, Chain-Shu Hsu
National Chiao Tung University, Taiwan

09:15-09:35 An Engineering Approach to Find the Possible Path to Polypeptides in the Prebiotic World

Sheng-Sheng Yu, Chen-Yu Chien, Chun-Wei Lai
National Cheng Kung University, Taiwan

09:35-09:55 Interlayer Modification Using Self-Assembly Amphiphilic and Eco-Friendly Polymers in Non-Fullerene Based Organic Solar Cells

Yu-An Su, Po-Chen Lin, Chang-En Tsai,
Chu-Chen Chueh
National Taiwan University, Taiwan

09:55-10:15 Hydroxide Exchange Membranes Containing Dense Quaternary Ammonium Cations and Their Application for Fuel Cells

Ping-Yen Chen¹, Jyh-Chien Chen¹, Kuei-Hsien Chen^{2,3}
¹National Taiwan University of Science and Technology, Taiwan / ²National Taiwan University, Taiwan / ³Academia Sinica, Taiwan

S2-4 Polymer Structure, Surface and Interface IV

10:40-12:15

Chair

Wenke Zhang
Jilin University, China

Ya-Sen Sun
National Central University, Taiwan

10:40-11:05 [Invited] Single-Molecule Study on the Force-Induced Melting of Polymer Single Crystals

Wenke Zhang, Wei Feng, Yu Song, Ziwen Ma
Jilin University, China

11:05-11:30 [Invited] Copolymer-Templated Carbon Nanostructures for Molecular Sensing

Ya-Sen Sun, Chien-Fu Lin, Shih-Ting Luo,
Ching-Yuan Su
National Central University, Taiwan

11:30-11:50 Phase Morphology Development in Poly(P-Phenylene Ether) and Polyethylene Blends

Andy Haishung Tsou¹, Jun Wang², Basil D. Favis³
¹Daxin Materials, Taiwan / ²University of Toronto, Canada / ³Ecole Polytechnique de Montreal, Canada

11:50-12:15 [Invited] TBD

Mingjie Liu
Beihang University, China

Oral Session

Oct. 30 (Wednesday)

Room 201

S6-3 Polymer Engineering and Processing III

13:40-14:45

Chair **Chi-Ching Kuo**
*National Taipei University of Technology,
Taiwan*

Chao-Tsai Huang
Tamkang University, Taiwan

13:40-14:05 Multifunctional Electrospun Nanofiber Chemosensor and Light-Emitting Diodes Based on Perovskite-Polymer Nanofiber Membranes

Chi-Ching Kuo, Fang-Cheng Liang, Dai-Hua Jiang
National Taipei University of Technology, Taiwan

14:05-14:25 Surface Transferability of Liquid Silicone Rubber Molded by Injection Molding Process

Koki Hasegawa, Akira Ishigami, Akihiko Nemoto,
Takashi Kurose, Hiroshi Ito
Yamagata University, Japan

14:25-14:45 Study on the Deviation between Numerical Simulation and Experiments and Its Influence in Injection Molding Using Design of Experiments (DOE) Method

Po-Hsuan Chen¹, Rui-Ting Xu¹, Chao-Tsai Huang¹,
Wen-Ren Jong², Rong-Yeu Chang³
¹*Tamkang University, Taiwan* / ²*Chung Yung Christian University, Taiwan* / ³*CoreTech System (Moldex3D) Co., Ltd., Taiwan*

Oral Session

Oct. 30 (Wednesday)

Room 202

S5-2 Organic/Inorganic Hybrids and Nanocomposites II

08:30-10:20

Chair

Xiao Matthew Hu
Nanyang Technological University, Singapore

Feng-Yu Tsai
National Taiwan University, Taiwan

08:30-08:55 **[Invited] Bioinspired Toughening of Ultra-Crosslinked Hybrid Polymer and Geopolymer Network**

Xiao Matthew Hu
Nanyang Technological University, Singapore

08:55-09:15 **Metal Oxide and Polymer Superlattice Films by Atomic and Molecular Layer Deposition**

Bo-Wei Shi, Yi-Yang Wei, Ming-Hung Tseng,
Feng-Yu Tsai
National Taiwan University, Taiwan

09:15-09:35 **Synthesis and Characterization of Star Block Copolymers by the Combinations of ATRP, ROP, and Click Reaction for the Preparations of Epoxy Nanocomposites**

Yi-Fang Wu, Chih-Feng Huang
National Chung Hsing University, Taiwan

09:35-09:55 **Polybenzoxazine Functionalised MWCNT Based Nanocomposite Coatings for Anticorrosion Application**

Susan Zachariah, Ying-Ling Liu
National Tsing Hua University, Taiwan

09:55-10:20 **[Invited] Green Electronics Based on Thermal Sensitive Fluids**

Yapei Wang
Renmin University of China, China

S5-3 Organic/Inorganic Hybrids and Nanocomposites III

10:40-12:30

Chair

Toyoko Imae
National Taiwan University of Science and Technology, Taiwan

Yaozu Liao
Donghua University, China

10:40-11:05 **[Invited] Characteristics of Cellulose Nanofiber-Based Nanocomposites**

Toyoko Imae
National Taiwan University of Science and Technology, Taiwan

11:05-11:30 **[Invited] High Surface Area Conjugated Polymers: Rational Design and Functions**

Yaozu Liao, Zhonghua Cheng, Haige Wang, Jiahuan Li
Donghua University, China

11:30-11:50 **Fabrication of Carbon Nanotubes/Photocurable Resin Nanocomposites with 3D Printing Technology for Capacitive Sensor Application**

Kai-Chun Chuang, Peng-Ha Huang,
Chen-Yang Huang, Chih-Wei Chiu
National Taiwan University of Science and Technology, Taiwan

11:50-12:10 **High Oxygen Sensitivity and Long-Term Stability of PtTFPP/Carbon Black/Polystyrene Composite Films to Optical Oxygen Sensor**

Hsuan-Yu Lin, Kuei-Feng Cheng,
Jimmy Chi-Min Lee, Chih-Wei Chiu
National Taiwan University of Science and Technology, Taiwan

12:10-12:30 **Novel Stretchable Thermochromic Transparent Heaters Designed for Smart Window Defroster Applications by Spray Coating Silver Nanowires**

Loganathan Veeramuthu, Ching-Yi Tsai,
Fang-Cheng Liang, Manikandan Venkatesan,
Chi-Ching Kuo
National Taipei University of Technology, Taiwan

S5-4 Organic/Inorganic Hybrids and Nanocomposites IV

13:40-15:25

Chair **Chang-Mou Wu**
National Taiwan University of Science and Technology, Taiwan

Chu-Chen Chueh
National Taiwan University, Taiwan

13:40-14:05 [Invited] Self-Floating Tungsten Bronze/Recycled Cellulose Triacetate Porous Fiber Membranes for Efficient Light-Driven Interfacial Water

Chang-Mou Wu, Saba Naseem, Tolesa Fita Chala
National Taiwan University of Science and Technology, Taiwan

14:05-14:25 Development of Novel Self-Healable Organic/Inorganic Hybrid Materials via Diels-Alder Click Chemistry

Yi-Huan Lee¹, Yan-Nian Zhuang¹, Hsin-Ta Wang¹,
Wei-Jen Chang², Tun-Fun Way¹, Syang-Peng Rwei¹

¹*National Taipei University of Technology, Taiwan /*
²*Taipei Medical University, Taipei, Taiwan*

14:25-14:45 Exploration of 2D Perovskite and Rational Interface Engineering in Organic-Inorganic Hybrid Perovskite Solar Cells

Chu-Chen Chueh
National Taiwan University, Taiwan

14:45-15:05 Evaluation of Wear Resistance and Engineering Properties of UHMWPE/Graphene Composites Prepared via a Novel Kneading Process

Cheng-Ying Liu, Akira Ishigami, Takashi Kurose,
Hiroshi Ito
Yamagata University, Japan

15:05-15:25 Entanglement Mediated Structure Formation and Dynamics of a Polymer/Nanoparticle Hybrid

Bradley Mansel¹, Chun-Yu Chen², Jhih-Min Lin²,
Yu-Shan Huang², Yu-Chiao Lin³, Hsin-Lung Chen¹

¹*National Tsing Hua University, Taiwan /* ²*National Synchrotron Radiation Research Center, Taiwan /*
³*Industrial Technology Research Institute, Taiwan*

Oral Session

Oct. 30 (Wednesday)

Room 203

S4-4 Polymers for Optoelectronics and Energy IV

08:30-10:20

Chair

Joon Hak Oh

Seoul National University, Korea

Jianguo Mei

Purdue University, USA

08:30-08:55 **[Invited] Flexible FET-Type Sensors Based on Nanoscopically Engineered Organic Semiconducting Materials**

Joon Hak Oh

Seoul National University, Korea

08:55-09:20 **[Invited] High Temperature Organic Semiconductors and Electronics**

Jianguo Mei

Purdue University, USA

09:20-09:40 **Doped Polymer Semiconductors for Synaptic Transistors**

Ting-Feng Yu¹, Hao-Yang Chen¹, Ming-Yu Liao²,
Ting-Ting Chang³, Chu-Chen Chueh², Wen-Ya Lee¹

¹National Taipei University of Technology, Taiwan /

²National Taiwan University, Taiwan / ³National
Chengchi University, Taiwan

09:40-10:00 **From Functional Polymer to Intrinsically Stretchable and Healable Transistor Devices**

Ching-Heng Chuang^{1,2}, Livy Laysandra¹,
Toshifumi Satoh², Yu-Cheng Chiu¹

¹National Taiwan University of Science and
Technology, Taiwan / ²Hokkaido University, Japan

10:00-10:20 **Road to Morphological Control for Organic Semiconductors**

Yu-Ying Lai, Hau-Ren Yang, Chun-Wei Pai,
Hao-Ting Lee, Vi-Hsiang Huang

National Taiwan University, Taiwan

S4-5 Polymers for Optoelectronics and Energy V

10:40-12:25

Chair

Masaki Horie

National Tsing Hua University, Taiwan

Ho-Hsiu Chou

National Tsing Hua University, Taiwan

10:40-11:05 **[Invited] Non-Covalently Fused-Ring Acceptors for High Performance Organic Solar Cells**

Zhishan Bo, Yahui Liu, Xinjun Xu

Beijing Normal University, China

11:05-11:25 **Conjugated Copolymers of Poly(Arylenevinylene)s Synthesized by Ring-Opening Metathesis Polymerization**

Masaki Horie

National Tsing Hua University, Taiwan

11:25-11:45 **Alkaline-Developable Positive-Type Photosensitive Polyimide with High Mechanical Strength and High Resolution Based on Chain Extendable Poly(Amic Acid), Thermally Degradable Cross-Linker and Photoacid Generator**

Yao-Ming Yeh¹, Mitsuru Ueda², Chain-Shu Hsu¹

¹National Chiao Tung University, Taiwan / ²Tokyo
Institute of Technology, Japan

11:45-12:05 **Design and Synthesis of Conjugated Polymers for Nature-Inspired Applications**

Ho-Hsiu Chou

National Tsing Hua University, Taiwan

12:05-12:25 **Porous Membrane of PEG Modified PVB Based Gel Polymer Electrolytes for Lithium Ion Batteries**

Chi-Yang Tsai¹, Kang-Jen Peng¹, Cheng-Fan Wang²,
Ying-Ling Liu¹

¹National Tsing Hua University, Taiwan / ²Chang
Chun Petrochemical Co Ltd (Miaoli Plant), Taiwan

S4-6 Polymers for Optoelectronics and Energy VI

13:40-15:05

Chair

Chi-Yang Chao

National Taiwan University, Taiwan

Chen-Tsyrr Lo

National Sun Yat-sen University, Taiwan

13:40-14:05 [Invited] Single-Ion Conducting Triblock Copolymer for Stable Lithium Electrodeposition

Chi-Yang Chao¹, Kun-Lin Liu¹, Jason Fang²,
Nae-Lih Wu¹

¹National Taiwan University, Taiwan / ²Industrial
Technology Research Institute, Taiwan

14:05-14:25 Design of Ion-Conductive Core-Shell Block-Copolymer Nanoparticles

Chen-Tsyrr Lo¹, Yuta Isawa², Kazuhiro Nakabayashi²,
Hideharu Mori²

¹National Sun Yat-sen University, Taiwan /
²Yamagata University, Japan

14:25-14:45 Effect of Conjugated Rod/Coil Sequence on Morphology and Electronic Properties of Polythiophene Based Stretchable Block Copolymers

Yun-Chi Chiang¹, Saburo Kobayashi², Takuya Isono²,
Chien-Chung Shih¹, Tomoki Shingu²,
Chih-Chien Hung¹, Hui-Ching Hsieh¹,
Shih-Huang Tung¹, Toshifumi Satoh²,
Wen-Chang Chen¹

¹National Taiwan University, Taiwan / ²Hokkaido
University, Japan

14:45-15:05 Engineer Conjugated Polymers with Controlled Backbone Rigidity and Glass Transition Temperature for Deformable Electronics

Xiaodan Gu¹, Song Zhang¹, Luke Galuska¹,
Simon Rondeau-Gagne²

¹The University of Southern Mississippi, USA /
²University of Windsor, Canada