

**Poster Session (Final Version: Sep 09, 2024)**

**Thursday, September 18, 2024**

~12:00 Display the posters

13:00-13:25 Poster Presentation I. (odd number: P1-01, 03, 05, ...)

13:25-13:50 Poster Presentation II. (even number: P1-02, 04, 06, ...)

~18:00 Remove the posters

P1-01 Spherulite morphology of spherulites of polylactic acid stereocomplex.

*Go Matsuba (Yamagata University)*

P1-02 Polymer Crystallization Control by Pseudo-Polyrotaxane Nanosheets.

*Cong Liu (National Institute for Materials Science)*

P1-03 Crystal Structure of Atactic and Isotactic  $\alpha$ ,  $\alpha$ -disubstituted poly-3-hydroxybutyrate: A Chemically Recyclable Poly(hydroxyalkanoate) with Tacticity-Independent Crystallinity.

*Miriam Scoti (Università di Napoli Federico II)*

P1-04 Crystallization behavior in side sealing process for plastic bag production

*Kogen Horikawa (Kochi Prefectural Industrial Technology Center)*

**P1-05** Monte-Carlo simulation of crystal structures of isotactic polypropylene.

*Takumi Takabe (Yamaguchi University)*

P1-06 Effect of Crystalline Orientation on Photodegradation and Fragmentation of Isotactic Polypropylene.

*Yingjun An (Kyushu University)*

**P1-07** Morphology and Crystallization Behavior of the Segmented Polyether Ester Block Copolymer PCCD/PTHF.

*Mouna Hamid (KU Leuven)*

P1-08 Influence of Water Pressure on Structure Decomposition of Polycaprolactone Thin Films in Seawater Immersion Treatments.

*Sono Sasaki (Kyoto Institute of Technology)*

P1-09 Effect of Initial Crystallization Time on Low Temperature  $\beta\alpha$  Growth Transition of Isotactic Polypropylene During Stepwise Crystallization.

*Ziyuan Zhou (Zhengzhou University)*

P1-10 Helical Arrangements within the  $\alpha$ -Form Crystal of Isotactic Polypropylene.

*Kouji Yamada (Toyobo Co., Ltd.)*

**P1-11** Effects of branched molecule addition on the crystallization and high-order structure of Poly(L-lactic acid).

*Norihiko Sakaguchi (The University of Shiga Prefecture)*

**P1-12** Spherulite size and fracture behavior of poly(oxymethylene) containing branched molecules.

*Shun Sugawa (The University of Shiga Prefecture)*

**P1-13** Effect of humidity on crystallization morphology of polyethylene oxide in ultrathin films.

*Hailong Zou (Zhengzhou University).*

P1-14 Nanoscale mechanisms of strain-induced crystallization of isoprene rubbers revealed by electron diffraction mapping.

*Tomohiro Miyata (Tohoku University)*

**P1-15** Influence of Tearing Rate on Hieratical Structure Change of Poly(butylene succinate) / Poly(butylene succinate-co-butylene adipate) Blend Films during Tearing.

*Keito Shimakawa (Kyoto Institute of Technology)*

**P1-16** Effect of dewetting on isothermal crystallization kinetics from the melt of marine-degradable linear polyesters in thin films.

*Ryu Miyajima (Kyoto Institute of Technology)*

**P1-17** Wall Slip Behaviors of Crystallized Polypropylene and its Blends during Oscillatory Shear.

*Xinyang Zhao (Shanghai Jiao Tong University)*

**P1-18** Effect of shear rate on flow-induced crystallization of high-density polyethylene evaluated by rheo-Raman spectroscopy.

*Naoki Uenishi (The University of Shiga Prefecture)*

**P1-19** The size of the critical nucleus of polymer crystals does not depend on supersaturation.

*Yang Liu (Tsinghua university)*

P1-20 The Isothermal Melting Kinetics of Ultrahigh Molecular Weight Polyethylene Crystals.

*Binghua Wang (Zhengzhou University)*

P1-21 Probing into the Selective Nucleation Mechanism of Poly (methyl methacrylate) Modified Cellulose Nanocrystals in Enantiomeric Poly(lactic acid)s.

*Jianming Zhang (Qingdao University of Science and Technology)*

**P1-22** Solidification Temperature and Crystallization Behavior of Short Fiber-Reinforced Polypropylene by Flash Differential Scanning Calorimetry.

*Qing Jiang (Yamagata University)*

P1-23 Effect of carbon fiber-MWCNT multiscale reinforcement on the Structure and Physical properties of the PEEK composite.

*Takumi Okihara (Okayama University)*

**P1-24** The Effect of Long Alkyl Side Chains on the Response Temperature and Speed of Shape Memory Gels.

*Daiki Hinata (Yamagata University)*

P1-25 Preparation of Poly(lactic acid) Microspheres with Controllable content of Stereocomplex Crystals Based on Microfluidics.

*Junfeng Liu (Institute of Zhejiang University – Quzhou)*

P1-26 Temperature-Dependent Triple Crystal Polymorphism and Crystal Structure-Property Relationship of Poly(hexamethylene terephthalate).

*Ying Zheng (Institute of Zhejiang University – Quzhou)*

**P1-27** Investigation on the Crystallization and Mechanical Properties of Polyvinyl Alcohol Nanocomposite with Cellulose Nanofiber.

*Farjana Prova (Hiroshima University)*

P1-28 Molecular Design of Efficient Polymeric Nucleating Agent.

*Xuwei Wei (Tsinghua University)*

P1-29 Avoiding kinetic trapping in self-assembly of DNA-functionalized gold nanoparticles by using enthalpy-mediated strategy.

*Yunhan Zhang (University of Science and Technology of China)*

**P1-30** Molecular simulation for the effect of interchain interaction on polymer crystallization upon step-wise cooling from the melts.

*Chidapha Kusinram (Suranaree University of Technology)*

P1-31 Effect of chain conformation on nucleation of polymer crystallization.

*Hiroshi Yokota (Kyoto University)*

P1-32 3D Morphologies of Semicrystalline Polymers Revealed by Optical Tomography

*Goran Ungar (Xi'an Jiatong University)*

**P1-33** Structural analysis of crystal lattice in the blend of syndiotactic polystyrene and modified polyphenylene ether.

*Satoshi Kusano (Yamagata University)*

**P1-34** Effect of Cellulose Nanofiber on the Crystal Structure of Poly (vinylidene fluoride)/Organoclay Composites

*Masato Hoshi (Yamagata University).*

#### **Thursday, September 19, 2024**

~12:00 Display the posters

13:00-13:25 Poster Presentation III. (odd number: P2-01, 03, 05, ...)

13:25-13:50 Poster Presentation IV. (even number: P2-02, 04, 06, ...)

~18:00 Remove the posters

P2-01 Secondary crystallization of low isotacticity polypropylene.

*Yoshitomo Furushima (Toray Research Center, Inc.)*

P2-02 In-situ Monitoring and Tuning Multilayer Stacking of Polymer Lamellar Crystals in Solution with Aggregation-Induced Emission.

*Jun Xu (Tsinghua University)*

P2-03 Brill Transition and Crystallization Morphology Evolution of Polyamide 1012 and Its copolymers.  
*Xia Dong (Beijing National Laboratory for Molecular Science)*

P2-04 Origin of melt memory in polymers with weak intermolecular interactions.  
*Leire Sangroniz (University of the Basque Country)*

P2-05 Continuous fabrication of supertoughened poly(lactic acid) filaments and investigation on the toughening mechanism.  
*Shanshan Xu (Zhengzhou University)*

**P2-06** Backbone Conformation of Hypo-crystal Poly(methyl methacrylate) Crystallized by Rapid Thermal Quenching Method with Entropy Diluents.  
*Van Thanh Vu (Hanyang University)*

P2-07 Discovering new crystallization modes in random copolymers.  
*Ricardo Perez (University of the Basque Country)*

P2-08 Crystallization and Degradation Behavior of Poly (4-Hydroxybutyrate)/ Sorbitol and Its Application in Bone Regeneration.  
*Zhijia Gan (Beijing University of Chemical Technology)*

P2-09 Reactive Blending of PGA and Flexible Polyesters Using Environmentally Friendly and Cost-Effective Biodegradable Chain Extenders.  
*Ni Jiang (Beijing University of Chemical Technology)*

**P2-10** Deformation Behaviors of High-Density Polyethylene Analyzed by Nanodiffraction Imaging.  
*Shusuke Kanomi (Tohoku University)*

P2-11 Evaluation of Staining Effect on the Morphology and Crystal Structure of Polyethylene Crystals.  
*Kai Chen (Tohoku University)*

**P2-12** Vibration-damping properties of conventional polymers blended with main-chain liquid crystalline polymers.  
*Keigo Sawada (The University of Shiga Prefecture)*

**P2-13** Molecular dynamics simulation of the nucleosome structural change process.  
*Takumi Hagiwara (Kyushu University)*

P2-14 In situ real-time AFM of chain movements at the topmost surface of polymer films.  
*Jiro Kumaki (Yamagata University)*

P2-15 "Printing" on Polymer Single Crystals.  
*Tianyu Wu (China University of Petroleum (Beijing))*

P2-16 Application of fast scanning calorimetry for investigation of polymer melting and crystallization during additive manufacturing.

*Evgeny Zhuravlev (University of Rostock)*

P2-17 Study on Ultrahigh Strength and Toughness of Polylactide with Small Amount of Elastomer via Controlling Crystal Morphology by Pressure-induced Flow Processing.

*Wanyu Wang (University of Science and Technology of China)*

**P2-18** Analysis of failure in high-density polyethylene doped with aggregation-induced emission dye.

*Yusuke Momoi (Kanazawa University)*

**P2-19** Crystallization of a double crystallizable PBT/PEG multi-block copolymer at high supercooling studied via fast scanning calorimetry and synchrotron X-ray scattering.

*Ilya Mongilyov (KU Leuven)*

P2-20 Non-Isothermal Crystallization Kinetics of Polypropylene.

*Shuhei Yasuda (Mazda Motor Corporation)*

P2-21 Self-nucleation Induced Non-linear Growth of Polymer Spherulites.

*Yaguang Lu (Zhengzhou University)*

**P2-22** Evaluation of Crystallinity and Gas Barrier Properties of P(MMA-co-SA) Gels.

*Koh Yoshida (Yamagata University)*

**P2-23** Development of A Polymer Gel with High Adhesion to Polytetrafluoroethylene.

*Toshiya Yamasaki (Yamagata University)*

P2-24 Crystal Structure and Microstructure Effects on Gas Transport Behavior of Poly(ether-b-amide) Multiblock Copolymers.

*Sinan Feng (Kyushu University)*

P2-25 Investigating the Impact of Carbonyl Group Incorporation on High-Density Polyethylene Semicrystalline Properties.

*Mohd Afiq Bin Anuar (Martin-Luther-Universität Halle-Wittenberg)*

P2-26 Beta-alpha recrystallization mechanism of isotactic polypropylene.

*Dong Lyu (Changchun Institute of Applied Chemistry, CAS)*

**P2-27** Semicrystalline morphology, intra-crystalline diffusion and mechanical modulus of selected aliphatic polyesters.

*Qiang Yu (Martin-Luther-University Halle-Wittenberg)*

**P2-28** Structural Interpretation of Strain-Hardening Behavior of Semi-Crystalline Polymer Solids

*Sanshiro Kimura (The University of Shiga Prefecture)*

P2-29 Nanoporous polymers fabricated via solvent-induced crystallization of poly(ether sulfone)

*Sadaki Samitsu (National Institute for Materials Science)*

**P2-30** Molecular Dynamics Simulations of Polymer crystallization: the Role of Chain Entanglement.

*Fan Peng (University of Science and Technology of China)*

**P2-31** Monte Carlo simulation of polymer crystallization with the effect of entanglement.

*Jinxu Yan (Nanjing University)*

**P2-32** Controlled phase separation of amphiphilic-type random copolymers with long-branched crystalline side chains.

*Kaito Yui (Yamagata University)*

P2-33 Structural analysis of two species modified ramie using synchrotron radiation.

*Mitsuhiro Hirata (Yamagata Research Institute of Technology)*

P2-34 Multiscale Visco-Elasto-Plasticity Modeling Considering Spherulite Structure of Crystalline Polymers.

*Yoshiteru Aoyagi (Tohoku University)*

**P2-35** Entropy-Driven Preordering Assists Nucleation in Polyethylene.

*Renkuan Cao (University of Science and Technology of China)*

**Bold&Underline: Candidates of Student's Award**