

# Program at a glance

Time	December 10	December 11	December 12	December 13	December 14
8:40					
9:00					
9:10		Registration	PL3 (Groppo)	PL4 (Nozaki)	PL5 (W.H. Sun)
9:20					
9:30					
9:40					
9:50		Opening (Nomura)	KL5 (Taniike)	KL7 (Chen)	KL9 (B.Y. Lee)
10:00					
10:10					
10:20		Special Talk (Terano)	KL6 (Shiono)	IL18 (Z. Jian)	IL37 (Tada)
10:30				Break	Break
10:40			Break	IL19 (Boonyarach)	IL38 (G. Fan)
10:50		PL1 (Hou)		IL20 (S. Liu)	
11:00			IL5 (Conley)	CP9,10 (Y. Gao; Y. Ma)	IL39 (Tiyapiboonchaiya)
11:10					IL40 (Sakata)
11:20			IL6 (Antinuucci)	IL22 (Somsook)	
11:30		PL2 (Tang)		IL23 (Okumura)	IL41 (W. Zhao)
11:40			IL7 (Kono)		
11:50				CP11,12 (H. Mu; M. Li)	
12:00				Lunch (12:00-13:30)	Nomura
12:30					Closing (Nomura, W.H. Sun)
13:00		Lunch (12:00-14:00)	Poster (Lunch, 12:00-14:00)	IL24 (Ricci)	
13:30				IL25 (Kongparakul)	
13:40				IL26 (W. Zhang)	IL27 (Takeshita)
13:50				IL28 (Mahmood)	IL29 (Bando)
14:00				IL30 (Luo)	IL31 (Kikkawa)
14:10		KL1 (Busico)	IL8 (S.J. Jeon)	IL32 (Hayano)	IL33 (Nakatani)
14:20					
14:30					
14:40		KL2 (Kempe)	IL9 (Isaki)		
14:50			IL10 (Dai)		
15:00			Break		
15:10		KL3 (Macchioni)		C13,14 (B. Wang, Jantawan)	CP15,16 (P. Liu, Y. Yang)
15:20			IL11 (Z. Ye)		
15:30	Registration @ Todajji Hall 14:00-17:00	Break	IL13 (Takeuchi)	CP1,2 (W. Li; S. Tang)	
15:40					CP17 (Chatchaipalboon)
15:50			IL14 (Z. Cai)	Break	
16:00		KL4 (Cui)			
16:10			IL15 (H. Liu)	CP3,4 (Y. Jin; Khoshsefat)	
16:20		IL1 (B.G. Li)			
16:30			IL16 (Tanaka)		
16:40		IL2 (Champouret)			
16:50			CP5,6 (H. Wang; L. Huang)	IL35 (Solans-Monfort)	
17:00		IL3 (Y. Wu)			
17:10			CP7,8 (H. Fan; J. Sun)		
17:20		IL4 (B. Liu)			
17:30	17:30- Welcome Reception				
		18:30- Invited Speakers' Dinner, IAB Meeting			
				18:00- Banquet (Nara National Museum)	

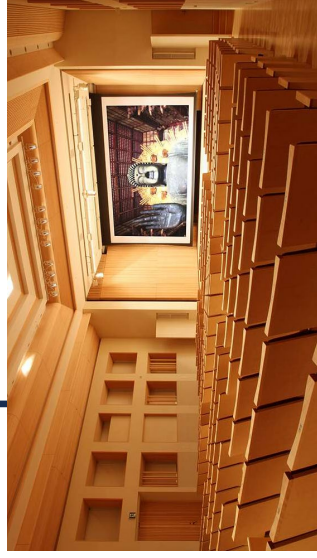
## Time Table APO2023 (Nara)

**1F**

**B1F**

Screen

**Kinsho Hall**  
金鐘ホール



Kinsho Hall is located left side in the museum

Entrance



To Lecture Hall,  
Meeting Room (B1F)



**Main Entrance**



**Meeting Room**

Staff Room

Registration Desk  
For break and discussion  
(Drink corner)

To Kinsho Hall (1F)



**Lecture Hall**

For Lecture,  
Poster Session



# APO2023

Program Asian Polyolefin Workshop 2023  
December 10-14, Todai-Ji, Nara, Japan

December 11 (Monday) *Kinsho Hall*

Time

- 10:00 Prof. Kotohiro Nomura (Tokyo Metropolitan University, Japan)  
Opening Remarks
- 10:15 Prof. Minoru Terano (JAIST, Japan)  
Special Opening Talks “Creation of Future Polyolefin”
- 10:40 PL1 Prof. Zhaomin Hou (Riken, Japan)  
Synthesis of self-healing polyolefins by catalyst-controlled microstructure regulation
- 11:20 PL2 Prof. Yong Tang (Shanghai Institute of Organic Chemistry (SIOC), CAS, China)  
Synergistic olefin polymerizations catalysis with multinuclear Ni complexes
- Lunch Break (12:00–14:00)
- 14:00 KL1 Prof. Vincenzo Busico (University of Naples Federico II, Naples, Italy)  
Speeding up polyolefin characterizations: An integrated HTE/ML approach
- 14:30 KL2 Prof. Rhett Kempe (University Bayreuth, Germany)  
Controlling ethylene insertions
- 15:00 KL 3 Prof. Alceo Macchioni (University of Perugia, Italy)  
Levels of complexity affecting the reactivity of molecular olefin-polymerization catalysts
- 15:40 KL4 Prof. Dongmei Cui (Changchun Institute of Applied Chemistry, CAS, China)  
Synthesis of new plastics and elastomers: Catalysts, structures, and properties
- 16:10 IL1 Prof. Bo-Geng Li (Zhejiang University, China)  
Solution alternating copolymerization of olefins and carbon monoxide for efficient synthesis of high molecular weight polyketone
- 16:30 IL2 Dr. Yohan Champouret (University of Lille, France)  
Iminopyridine-based iron complexes for controlled isoprene polymerization applications
- 16:50 IL3 Yixian Wu (Beijing University of Chemical Technology, China)  
Synthesis of high-performance ethylene-propylene elastomer by half-titanocene catalytic system
- 17:10 IL4 Boping Liu (South China Agricultural University, China)  
Single-reactor multi-modal polyethylene (SRMMPE) based on Bi- and Tri-metallic catalyst technologies

December 12 (Tuesday)

Time *Kinsho Hall*

- 9:00 PL3 Prof. Elena Groppo (University of Torino, Italy)  
The contribution of *operando* optical spectroscopies to olefin polymerization catalysis
- 9:40 KL5 Prof. Toshiaki Taniike (JAIST, Japan)  
Data-driven approach applied to heterogeneous Ziegler-Natta catalysts
- 10:10 KL6 Prof. Takeshi Shiono (Hiroshima University, Japan)  
Novel tailor-made cycloolefin copolymers obtained using *ansa*-fluorenylamidodimethyl-titanium-based catalysts
- 11:00 IL5 Prof. Matthew P. Conley (University of California, Riverside, USA)  
Polyolefin plastics: Building them up and breaking them down
- 11:20 IL6 Dr. Giuseppe Antinucci (University of Naples Federico II, Naples, Italy)  
Ziegler-Natta precatalyst activation and surface reactivity: A cautionary tale
- 11:40 IL7 Dr. Hiroyuki Kono (Toho Titanium Co., Ltd., Japan)  
Effects of Toho's external donors on propylene polymerization performance of Ziegler-Natta Catalyst

Poster Session (12:00–14:00)

- 14:00 IL8 Dr. Sang-Jin Jeon (LG Chem, Korea)  
Sustainable polyolefins development toward a better future
- 14:20 IL9 Dr. Takeharu Isaki (Mitsui Chemicals, Inc., Japan)  
Viscosity homogenization treatment of waste plastic recycling with inline rheometer
- 14:40 IL10 Dr. Naoko Dai (ADEKA Corporation, Japan)  
Role of polymer additives for polyolefin circular economy

*Kinsho Hall (parallel sessions)*

- 15:10 IL11 Prof. Zhibin Ye (Concordia University, Montreal, Canada)  
Hyperbranched polyethylene ionomers by catalytic synthesis for modification of 2D nanomaterials as cathodes for rechargeable batteries
- 15:30 IL13 Prof. Daisuke Takeuchi (Hiroshima University, Japan)  
Syntheses of polyolefin-based block copolymers via Pd-catalyzed olefin polymerization
- 15:50 IL14 Prof. Zhengguo Cai (Donghua University, Shanghai, China)  
Heterogeneous late-transition-metal catalyzed olefin polymerizations
- 16:10 IL15 Prof. Heng Liu (Qingdao University of Science & Technology, China)  
Axial anagostic bond in  $\alpha$ -diimine nickel catalysts: How such a weak interaction will significantly influence ethylene polymerizations
- 16:30 IL16 Dr. Ryo Tanaka (Hiroshima University, Japan)  
Application of boronic acid-functionalized polyolefins synthesized by direct copolymerization

16:50 CP5 Prof. Haobing Wang (South China University of Technology, China)  
Self-healing polyolefin elastomers by rare-earth-catalyzed olefin (co)polymerization

17:05 CP6 Dr. Lin Huang (Riken, Japan)  
Sequence-regulated terpolymerization of ethylene, anisylpropylene, and pyrenylethenylstyrene by scandium catalyst makes tough and fluorescent self-healing elastomers

*Lecture Hall (parallel sessions)*

15:10 IL12 Dr. Toru Wada (JAIST, Japan)  
Analysis on the disordered nanostructures of catalyst materials for olefin polymerization by X-ray total scattering

15:30 CP1 Prof. Wei Li (Zhejiang University, China)  
Regulating Ziegler-Natta catalyst performance through unbalanced migration of donors

15:45 CP2 Dr. Shuxuan Tang (SINOPEC (Beijing) Research Institute of Chemical Industry Co., Ltd., China)

Dioldibenzoates as electron donors of Ziegler-Natta polypropylene catalysts:  
Developments, experiments, theoretical calculations and applications

16:00 CP3 Dr. Yulong Jin (South China Agricultural University, China)  
Conjugated diolefins and olefins polymerization with copper-based catalysts

16:15 CP4 Dr. Mostafa Khoshsefat (JAIST, Japan)  
Manifold impacts of internal donors on the formation and features of magnesium ethoxide-based Ziegler-Natta catalysts

16:30 IL17 Dr. Jianjun Yi (Wisdom Pool Research Institute G.K., Japan; PetroChina)  
Wisdom Pool Research Institute G.K.(WPRI)

16:50 CP7 Prof. Hong Fan (Zhejiang University, China)  
Preparation of organosilicon-functionalized polyolefin and its effect in ethylene-propylene-diene monomer/silicon rubber blends

17:05 CP8(P10) Dr. Jingyuan Sun (Zhejiang University, China)  
Effects of inert hydrocarbon on the chain structures of polyethylene and the stability of polymerization reactor

December 13 (Wednesday)

Time *Kinsho Hall*

- 9:00 PL4 Prof. Kyoko Nozaki (The University of Tokyo, Japan)  
Polyolefins with toughness and beyond
- 9:40 KL7 Prof. Changle Chen (University of Science and Technology of China, China)  
High-value Transformation and Upcycling of Polyolefins
- 10:10 IL18 Prof. Zhongbao Jian (Changchun Institute of Applied Chemistry, CAS, China)  
Upgrading and degrading of polyolefins

*Kinsho Hall (parallel sessions)*

- 10:40 IL19 Prof. Boonyarach Kitiyanan (Chulalongkorn University, Thailand)  
CaO – Catalyzed alcoholysis of polyethylene terephthalate (PET) for chemical depolymerization
- 11:00 IL21 Dr. Hiroki Miura (Tokyo Metropolitan University, Japan)  
Silylation of stable C–O bonds by supported gold catalysts and the application for depolymerization of polyesters
- 11:20 IL22 Prof. Ekasith Somsook (Mahidol University, Thailand)  
DFT Studies of Model Structures for the Glycolysis of Polyesters and Polyamides
- 11:40 IL23 Dr. Hiroshi Okumura (Risho Kogyo Co., Ltd., Japan)  
Development of cellulose nanofiber molding and applications
- Lunch Break (12:00–13:30)
- 13:30 IL24 Prof. Giovanni Ricci (SCITEC, Milano, Italy)  
Conjugated diolefins and olefins polymerization with copper-based catalysts
- 13:50 IL26 Prof. Wenjuan Zhang (Beijing Institute of Fashion Technology, China)  
Synthesis and characterization of metal complexes containing polydentate ligands and their catalytic ring-opening polymerization of cyclic esters
- 14:10 IL28 Dr. Qaiser Mahmood (Chemistry and Chemical Engineering Guangdong Laboratory, China)  
Synthesis of polyethylene thermoplastic elastomers (PTE) using  $\alpha$ -diimine nickel catalysts
- 14:30 IL30 Dr. Yi Luo (PetroChina Petrochemical Research Institute, China)  
Data-driven QSPRs for ethylene polymerization and copolymerization with polar monomer by late transition metal complexes
- 14:50 IL32 Dr. Shigetaka Hayano (Zeon Corporation, Japan)  
Industrialization and commercialization of stereoregular polynorbornenes
- 15:10 CP13 Prof. Baoli Wang (Changchun Institute of Applied Chemistry, CAS, China)  
Copolymerization of ethylene and olefins catalyzed by novel rare earth complexes

- 15:25 CP14 Ms. Ketsanee Jantawan (Tokyo Metropolitan University, Japan)  
Synthesis of new titanium complexes containing imidazolin-2-iminato ligands for efficient synthesis of cyclic olefin copolymers
- 15:40 CP17 Ms. Kanchana Chatchaipaboon (Tokyo Metropolitan University, Japan)  
(Arylimido)niobium(V)-alkylidenes for olefin metathesis polymerization catalysts

*Lecture Hall (parallel sessions)*

- 10:40 IL20 Prof. Shaofeng Liu (Qingdao University of Science and Technology, China)  
Highly active olefin polymerization catalysts with great control on molecular weight and distribution
- 11:00 CP9 Prof. Yanshan Gao (SIOC, CAS, Shanghai, China)  
Development and applications of efficient olefin coordinative chain transfer polymerization reactions
- 11:15 CP10 Dr. Yanping Ma (Institute of Chemistry, CAS, China)  
Design of asymmetric mononuclear and binuclear nickel complexes for highly branched polyethylenes
- 11:30 CP11 Dr. Hongliang Mu (Changchun Institute of Applied Chemistry, CAS, China)  
Facile construction of nickel catalysts for ethylene (co)polymerization
- 11:45 CP12 Dr. Mingyuan Li (Donghua University, Shanghai, China)  
Imidazolin/imidazolidin-2-imine and organophosphorus ligated late-transition-metal complexes for olefin (co)polymerizations catalysis

Lunch Break (12:00–13:30)

- 13:30 IL25 Dr. Suwadee Kongparakul (Thammasat University, Thailand)  
Renewable methyl ester sulfonated biosurfactant from epoxidized palm oil using titanium silicate as a catalyst
- 13:50 IL27 Dr. Hiroki Takeshita (The University of Shiga Prefecture, Japan)  
Structural insights into crystallization of novel aliphatic bio-based polyesters with varying diol components
- 14:10 IL29 Dr. Akinori Bando (Sumitomo Chemical Co., Ltd., Japan)  
Three-dimensional structural analysis of polyolefin films using angle-resolved X-ray scattering
- 14:30 IL31 Dr. Soichi Kikkawa (Tokyo Metropolitan University, Japan)  
Elucidation of catalytic active species by using *in situ* solution XAFS
- 14:50 IL33 Prof. Naoki Nakatani (Tokyo Metropolitan University, Japan)  
Theoretical studies of the catalytic alkene polymerizations based on the XAS-hybrid analyses using TDDFT method

- 15:20 CP15 Prof. Pingwei Liu (Zhejiang University, China)  
Design and preparation of high-performance polyolefin thermoplastic elastomers
- 15:35 CP16 Dr. Yang Yang (South China Agricultural University, China)  
Terpolymerization of ethylene and two different methoxyaryl substituted propylenes by scandium catalyst makes tough and fast self-healing elastomers
- 15:50 IL34 Prof. Shu Zhang (Beijing University of Chemical Technology, China)  
Ethylene-propylene copolymerization catalyzed by vanadium complexes containing NHC ligands

*Kinsho Hall*

- 16:10 KL8 Dr. Victor F. Quiroga Norambuena (ARLANXEO Netherlands B.V.)  
Keltan ACE technology and sustainability
- 16:40 IL35 Prof. Xavier Solans-Monfort (Universitat Autònoma de Barcelona, Spain)  
Mechanistic studies on the catalytic activity of first row transition metal complexes for olefin metathesis
- 17:00 IL36 Prof. Wen-Jun Wang (Zhejiang University, China)  
Development of high performance polyolefin elastomers

# *APO2023*



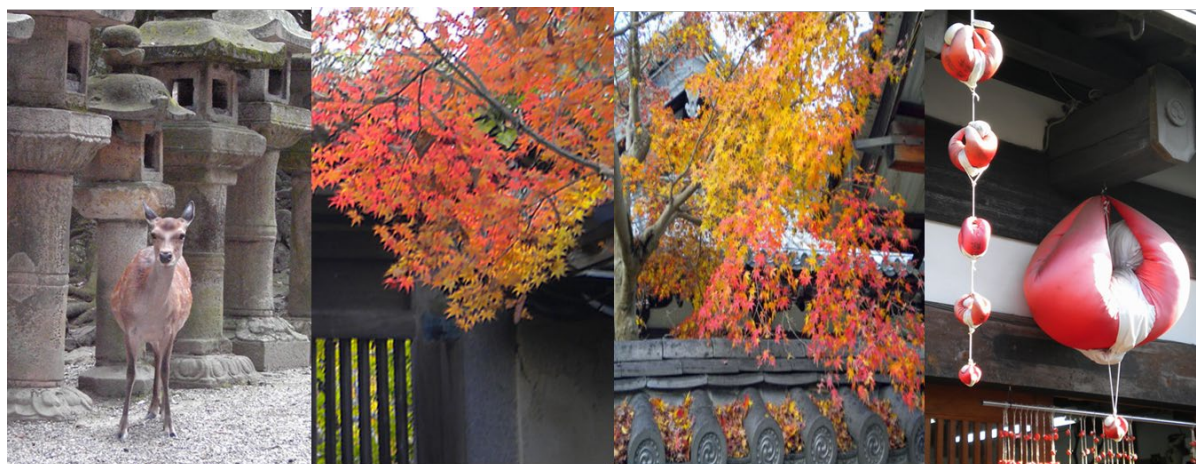


December 14 (Thursday) *Kinsho Hall*

- 9:00 PL5 Prof. Wen-Hua Sun (Institute of Chemistry, CAS, China)  
Late transition metal precatalysts in ethylene reactivity: From concepts into commercialization
- 9:40 KL9 Prof. Bun Yeoul Lee (Ajou University, Korea)  
MAO-free Catalytic system for ethylene tetramerization: from flask to industrial process
- 10:10 IL37 Dr. Tomoyuki Tada (Polyplastics, Co., Ltd, Japan)  
Synthesis and properties of cyclic olefin copolymers by nonbridged half-titanocene catalysts
- 10:40 IL38 Dr. Guoqiang Fan (Sinopec (Beijing) Research Institute of Chemical Industry Co. Ltd., China)  
New bridged metallocene catalysts for polyolefin elastomer
- 11:00 IL39 Dr. Piyanwan Tiypiboonchaiya (SCG Chemicals Public Co. Ltd., Thailand)  
Easy processable UHMWPE for eco-friendly processing
- 11:20 IL40 Dr. Kazuya Sakata (Japan Polychem Corporation, Japan)  
Polyolefin industry, Direction of future technology
- 11:40 IL41 Dr. Weizhen Zhao (Institute of Process Engineering, CAS, China)  
Preparation and application of multicolor, low-voltage-driven, high-contrast polymer-based electrochromic materials
- 12:00 Prof. Kotohiro Nomura (Tokyo Metropolitan University, Japan)  
Recent results in nobridged half-titanocene catalyzed olefin polymerization

Closing Remarks by Prof. Wen-Hua Sun and Prof. Kotohiro Nomura

## *APO2023*



Poster Presentation, Asian Polyolefin Workshop 2023  
December 12, 12:00-14:00

P1 João Marcos da Silveira (JAIST, Japan)

DFT and machine learning combined to study internal donor-induced reconstruction of the heterogeneous Ziegler-Natta catalyst's structure

P2 F.D. Cannavacciuolo (University of Naples Federico II, Naples, Italy)

A combined HTE and ML strategy to unravel the effect of the donors in ZN catalysts

P3 Gentoku Takasao (KAUST, Saudi Arabia)

A Workflow for Screening the Catalyst Space Using Minimal Experimental Data: Scaling up with DFT and Machine Learning

P4 K. Seenivasan (JAIST, Japan)

Spectroscopic Investigation on pretreatment of Ziegler-Natta catalysts for propylene polymerization

P5 Xuantian Long (South China Agricultural University, China)

Chain Structure Comparison of Ethylene/1-Hexene Copolymers Resins Fractionated by TREF+SSA and TREF+HT-GPC Methods

P6 Tao Guo (Zhejiang University, China)

“Replication phenomenon” induced by a uniform distribution of effective active species in  $MgCl_2$ -based Ziegler-Natta catalysts

P7 Phongnarin Chumsaeng (Chulalongkorn University, PTT Global Chemical, Thailand)

Highly Active Ziegler-Natta Catalyst System for Steady Ethylene Conversion

P8 Saman Damavandi (Regal Petrochemical Company, Iran)

Industrial approach for homogeneous Suspension of Ziegler Natta catalyst used in propylene polymerization

P9 Saman Damavandi (Regal Petrochemical Company, Iran)

Ziegler Natta catalyst carrier morphology improvement for gas phase propylene polymerization

P10 Jingyuan Sun (Zhejiang University, China)

Effects of Inert Hydrocarbon on the Chain Structures of Polyethylene and the Stability of Polymerization Reactor

P11 Hang Tao (South China Agricultural University, China)

Effect of Alkyl-aluminum Cocatalyst on Ti-Mg based Ziegler-Natta Catalyst for Ethylene Homopolymerization and Ethylene/1-hexene Copolymerization

P12 Yu Du (South China Agricultural University, China)

The Effects of Silica Particle Size on the Bimetallic Catalyst Cr/V/Silica for Ethylene Polymerization

P13 Chen Li (South China Agricultural University, China)

Well-dispersed CrO<sub>x</sub>/VO<sub>x</sub>/TiO<sub>2</sub>-SiO<sub>2</sub> Made by Solvent-free Process for Ethylene Polymerization

P14 Shiyang Wang (South China Agricultural University, China)

Developing CrO<sub>x</sub>/VO<sub>x</sub>/Ind<sub>2</sub>ZrCl<sub>2</sub>/Silica/TiBA Tri-metallic Catalysts for the Controllable Synthesis of High-performance UHMWPE/HDPE In-reactor Blends

P15 Junhui Liu (Donghua University, China)

Semi dull and mildly photocatalytic degradable UHMWPE by insitu ethylene polymerization using TiO<sub>2</sub>-supported anilinonaphthoquinone nickel catalyst

P16 Lulu Song (Donghua University, China)

Highly Selective Heterogeneous Ni@PCN-700 Catalyst for Ethylene Dimerization

P17 Jun Hyeong Park (Ajou University, Korea)

Preparation of Extremely Active Ethylene Tetramerization Catalyst [<sup>i</sup>PrN(PAr<sub>2</sub>)<sub>2</sub>-CrCl<sub>2</sub>]<sup>+</sup>[B(C<sub>6</sub>F<sub>5</sub>)<sub>4</sub>]<sup>-</sup> (Ar = -C<sub>6</sub>H<sub>4</sub>-*p*-SiR<sub>3</sub>)

P18 Jiahao Gao (Tokyo Metropolitan University, Japan)

Synthesis of New Phenoxide-Modified Half-Titanicenes for Olefin Polymerization)

P19 Benedetta Palucci (CNR-SCITEC, Italy)

Isopropyl-N-Aryl-Substituted Iminopyridine Iron Complex-Based Catalyst for the Polymerization of 1,3-Dienes: Influence of the Monomer Structure on the Regio-selectivity

P20 Yangke Xiao (Zhejiang University, China)

Recyclable High-Performance polyolefin Elastomer based on Dynamic Cross-linking

P21 JuYong Park (Ajou University, Korea)

CuCN-Catalyzed Coupling Reactions of Grignard Reagents with Organic Halides for Large-Scale Synthesis of *p*-(CH<sub>2</sub>=CH)C<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>Cl and *p*-ClC<sub>6</sub>H<sub>4</sub>SiR<sub>3</sub>

P22 Yuta Yanagi (Hiroshima University, Japan)

Synthesis and Application of Polypropylene Random Copolymer Possessing C=C Bonds in Main Chain

P23 Simona Losio (CNR-SCITEC, Italy)

Amorphous Polypropylene by Half-Titanocene Catalysts with Improved Elastomeric Properties

P24 Tianhao Nan (Changchun Institute of Applied Chemistry, CAS, China)

Synthesis of Polyethylene with In-Chain C=C Bond through Rare Earth Metal Complexes and Its Post Functionalization

P25 Yuze Kang (Tianjin University, China)

Polypropylene-Based Block Copolymers via Coordinative Chain Transfer Polymerization

P26 Minghao Sun (Zhejiang University, China)

Tailoring comb-branched polyolefin thermoplastic elastomers via tandem catalysis system

P27 Hyunjin Kim (Ajou University, Korea)

Diorganozinc Compounds With Styrene Moieties for Polystyrene-Poly(ethylene-co-1-hexene)-Polystyrene Triblock Copolymers Production

P28 Kan Liu (Zhejiang University, China)

Kinetics of Tandem Solution Polymerization of Customized Comb-Branched Polyolefin Thermoplastic Elastomer: with Machine Learning

P29 Muhammad Asadullah Khan (University of Science and Technology of China)

Synthesis and characterization of High Molecular Weight Polyethylene Wax Using Iminopyridine Ni(II) Complexes and their applications in ethylene (co) polymerization

P30 Song Zou (Institute of Chemistry, CAS, China)

Through Remote Polysubstituted 5,6,7,8-tetrahydrocycloheptapyridine Nickel Catalysts for Ethylene Polymerization

P31 Chao Li (Anhui University, China)

Controllable Preparation of Branched Polyolefins with Various Microstructural Units via Chain-walking Ethylene and Pentene Polymerizations

P32 Quanchao Wang (Institute of Chemistry, CAS, China)

Thermally robust  $\alpha$ -Diimine Nickel Complexes with Axial Constrained Space for Ethylene Polymerizations

P33 Yizhou Wang (Institute of Chemistry, CAS, China)

Long Range Para-phenyl Effect in Unsymmetrically Fused Bis(imino)pyridine Cobalt or Iron Ethylene Polymerization Catalysts

P34 Ao Chen (University of Science and Technology of China, China)

Promoting Ethylene (co)Polymerization in Aliphatic Hydrocarbon Solvents Using *tert*-Butyl Substituted Nickel Catalysts

P35 Quan Wang (University of Science and Technology of China, China)

A general cocatalyst strategy for performance enhancement in nickel catalyzed ethylene (co)polymerization

P36 Qiyuan Wang (Changchun Institute of Applied Chemistry, CAS, China)

Synthesis of multiblock ethylene-styrene copolymers using binuclear scandium catalyst

P37 Haoran Zhang (RIKEN, Japan)

Synthesis of Tough and Autonomous Self-Healing Elastomers by Scandium-Catalyzed Terpolymerization of Ethylene, Dimethylaminophenylpropylene, and Styrenes

P38 Youshu Jiang (Tokyo Metropolitan University, Japan)

Syndiospecific Polymerization of Trialkylsilylstyrene and the Ethylene Copolymerization by Half-Titanocene Catalysts

P39 Teruto Kojima (Tokyo Metropolitan University, Japan)

Ethylene Copolymerization with  $\alpha$ -Methylstyrene by Nonbridged Half-Titanocene Catalysts

P40 Shunsuke Onodera (Polyplastics, Co., Ltd, Japan)

Trialkylaluminum/Borate-Mediated Ethylene Homopolymerization and Ethylene-Norbornene Copolymerization without Transition-Metal Catalysts

P41 Taichi Usabayashi (Hiroshima University, Japan)

Solvent Effects in Ethylene/Norbornene Copolymerization with ansa-Fluorenylamidodimethyltitanium Complex

P42 Hailong Cheng (Hiroshima University, Japan)

Effects of Solvent on Norbornene/ $\alpha$ -olefin Copolymerization with [*t*-BuNSiMe<sub>2</sub>Flu]TiMe<sub>2</sub>-MMAO Catalyst System

P43 Yu Miyagi (Polyplastics, Co., Ltd, Japan)

Properties of Gradient Copolymers Composed of Norbornene/Higher  $\alpha$ -Olefin Comonomers Using *ansa*-Fluorenylamidodimethyltitanium /  $[\text{Ph}_3\text{C}][\text{B}(\text{C}_6\text{F}_5)_4]$

P44 Haobo Yuan (Hiroshima University, Japan)

Influence of Microstructures to the Physical Properties of Tailor-made Norbornene/1-dodecene Block-gradient Copolymers

P45 Shuqi Dong (Changchun Institute of Applied Chemistry, CAS, China)

CGC scandium catalyzed copolymerization of ethylene with heterobicyclic olefins

P46 Dong Huang (Tianjin University, China)

Development of Ultra-high Molecular Weight(UHMW) Cyclic Olefin Copolymer (COC) Containing Excellent All-round Performance via Highly Effective Copolymerization

P47 Chunji Wu (Changchun Institute of Applied Chemistry, CAS, China)

Ternary copolymerization of ethylene, conjugated diene and cycloolefin catalyzed by rare earth complexes

P48 Kangkang Li (Changchun Institute of Applied Chemistry, CAS, China)

Switchable Polyolefins from Polar Functionalization to Degradability

P49 Sirichok Paosopa (Tokyo Metropolitan University, Japan)

Synthesis of Four Coordinate (Imido)niobium(V) Complexes Containing Phenoxide Ligands and Some Reaction Chemistry

P50 Xiaopan Xue (Beijing Institute of Fashion Technology, China)

Synthesis and Characterization of Tridentate Zinc Complexes with Pending Phosphorus Group and Their Catalytic Ring-opening Polymerization of Lactides

P51 Pei Li (Anhui University, China)

Steric and electronic effects in cationic pyridine carboxamidate nickel mediated ethylene polymerization and copolymerization with methyl 10-undecenoate

P52 Menghe Xu (University of Science and Technology of China, China)

Efficient Synthesis of Polar Functionalized Polyolefins with High Biomass Content

P53 Hui Tian (Changchun Institute of Applied Chemistry, CAS, China)

A Strategy for Upcycling Polyethylene and Polystyrene Wastes with Ethylene/(Phenyl Functionalized  $\alpha$ -Olefins) Multi-block Compatibilizer

P54 Seiji Higashi (Osaka Research Institute of Industrial Science and Technology, Japan)  
High Molecular Weight Recyclable Biobased Aliphatic Polyesters that Exhibit Promising Tensile Properties Beyond Polyethylene, Polypropylene

P55 Aki Nishiyama (The University of Shiga Prefecture, Japan)  
Effects of Diol Structure on the Crystallization of Novel Bio-based Polyesters

P56 Gaku Miyamoto (Tokyo Metropolitan University, Japan)  
Synthesis and Characterization of Biobased Polymers with Long-chain Fatty Acids and Oligopeptides as Component Unit

P57 Wenhao He (Changchun Institute of Applied Chemistry, CAS, China)  
From CO<sub>2</sub> to heat-resistant polymer: step-growth polymerization by Piers' Borane