

The 9th Asian Symposium on Advanced Materials (ASAM-9) *Program Booklet*

5-8 November 2025
Haeundae Central Hotel
Busan, Republic of Korea

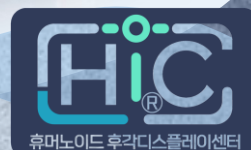


부산대학교
PUSAN NATIONAL UNIVERSITY

PIONEER
부산대학교 국립대학육성사업



생산기술연구소
Research Institute of Industrial Technology



Program

Day 1 – November 5 (Wednesday)

Opening remark : 5F Seminar Room at 12:20 – 12:30 (Prof. Ildoo chung / Chair: Suk-kyun Ahn)

Oral session(Plenary/Keynote/Invited/Oral) : 5F Seminar Room & 2F Blue Hall at 12:30 – 18:00

Welcome Mixer : 3F Grand Hall at 18:00 – 20:00

* Coffee break 13:50 – 14:10/16:10 – 16:30

Day 2 – November 6 (Thursday)

Oral session(Plenary/Keynote/Invited/Oral) : 5F Seminar Room & 2F Blue Hall at 9:00 – 18:00

* Lunch : 3F Grand Hall at 12:00 – 13:00

* Coffee break 10:40 – 11:00/**14:10 – 14:30 (with group photo)**/15:40 – 16:00

Day 3 – November 7 (Friday)

Oral session(Plenary/Keynote/Invited/Oral) : 5F Seminar Room & 2F Blue Hall at 9:00 – 11:25

Poster session : 3F Grand Hall at 12:30 – 14:00

Excursion : Tour Course - Departure from Haeundae Central Hotel (November 7 at 14:00) → Haedong Younggungsa Temple, Jukseong Catholic Church and Cheongsapo Daritdol Skywalk (14:00 – 17:00) → Back to the Conference venue

* The time back to the conference venue may be subjected to the traffic jams, if any, around the time(rush-hour of the Friday afternoon)

Banquet & Closing : 3F Grand Hall at 18:00 – 21:00

* Lunch: 3F Grand Hall at 11:25 – 12:30

* Coffee break 10:10 – 10:30

Day 4 – November 8 (Saturday)

Special Symposium in Honor of Prof. C. -S. Ha (in Korean) : 3F Grand Hall at 8:30 – 10:00

Oral session (Invited/Oral): 3F Grand Hall at 10:00 – 11:35

* Lunch (Prof. Ha's Group only) 11:35 – 13:00

*A half-day special symposium to honor the scientific contributions of Professor Chang-Sik Ha, a pioneer in polymer science is scheduled to be held in Korean on Saturday, November 8, 2025.

Professor Ha's former students, postdoctoral researchers, collaborators, and friends will celebrate his scientific contributions to polymer science over the past 40 years, as well as his 70th birthday.

Time Table

Program																																																																																																																																																																																																																															
Time	Nov. 5 (Wed.)			Nov. 6 (Thu.)			Nov. 7 (Fri.)			Nov. 8 (Sat.)																																																																																																																																																																																																																					
8:00 - 9:30			8:00 – 9:00	Registration		8:00 – 9:00	Registration		Place	3F Grand Hall																																																																																																																																																																																																																					
			Place	5F Seminar room		Place	5F Seminar room			8:30 – 10:00	Special Symposium in Honor of Prof. Chang-Sik Ha (in Korean)																																																																																																																																																																																																																				
9:30 - 10:30			9:00 – 9:40	(PL 3) Rigoberto Advincula (USA)		9:00 – 9:40	(PL 5) Sei Kwang Hahn (Korea)		10:00 – 10:20			Registration																																																																																																																																																																																																																			
			9:40 – 10:10	(KL 5) Atsushi Takahara (Japan)		9:40 – 10:10	(KL 11) Jin-Woo Oh (Korea)			10:20 – 10:35	(IL 23) Sung Soo Park (Korea)																																																																																																																																																																																																																				
			10:10 – 10:40	(KL 6) Ken Terao (Japan)		10:10 – 10:30	Coffee break		10:35 – 10:50		(OL 15) Hyun Kyo Kim (Korea)																																																																																																																																																																																																																				
			10:40 – 11:00	Coffee break		10:30 – 10:50	(IL 19) K.S.V Krishna Rao (India)	(IL 21) Shangru Zhai (China)		10:50 – 11:05	(OL 16) Hoon Hwang (Korea)																																																																																																																																																																																																																				
10:30 - 11:30	10:00 – 12:20	Registration	Place	5F Seminar room	2F Blue Hall	10:50 – 11:10	(IL 20) Yang H. Yun (USA)	(IL 22) Yong-Zhu Yan (China)	11:05 – 11:20		(OL 17) Soon Joon Chung (Korea)																																																																																																																																																																																																																				
			11:00 – 11:20	(IL 7) Myung-Han Yoon (Korea)	(IL 10) Chie Kojima (Japan)	11:10 – 11:25	(OL 13) Sivagangi Reddy Nagella (Korea)	(OL 14) Donghee Shin (Korea)		11:20 – 11:35	(OL 18) Byeon Tao Yang (Korea)																																																																																																																																																																																																																				
11:30 - 12:30			11:20 – 11:40	(IL 8) Jinn P. Chu (Taiwan)	(IL 11) Jaeeun Lee (Korea)	Place	3F Grand Hall		11:35 – 13:00		Lunch																																																																																																																																																																																																																				
			11:40 – 12:00	(IL 9) Dowon Ahn (Korea)	(IL 12) Young-Rae Cho (Korea)	11:25 – 12:30	Lunch			12:30 – 14:00	Poster session																																																																																																																																																																																																																				
	12:20 – 12:30	Opening Remark	Place	3F Grand Hall		12:30 – 14:00	Poster session		14:00 – 18:00		Excursion																																																																																																																																																																																																																				
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12:30 - 13:30	12:30 – 13:10	(PL 1) Kohzo Ito (Japan)	Place	5F Seminar room		14:00 – 18:00		Excursion			18:00 – 21:00	Banquet & Closing Ceremony																																																																																																																																																																																																																			
	13:10 – 13:50	(PL 2) Yury Shchipunov (Russia)	13:00 – 13:40	(PL 4) Zhiyong Tang (China)			14:00 – 18:00	Excursion		18:00 – 21:00		Banquet & Closing Ceremony																																																																																																																																																																																																																			
13:30 - 14:30	13:50 – 14:10	Coffee break	13:40 – 14:10	(KL 7) Alexei Khokhlov (Russia)		14:00 – 18:00		Excursion			18:00 – 21:00	Banquet & Closing Ceremony																																																																																																																																																																																																																			
	14:10 – 14:40	(KL 1) Dongyuan Zhao (China)	14:10 – 14:40	Group Photo Coffee break			14:00 – 18:00	Excursion		18:00 – 21:00		Banquet & Closing Ceremony																																																																																																																																																																																																																			
14:30 - 15:30	14:40 – 15:10	(KL 2) Michel Wong Chi Man (France)	14:40 – 15:10	(KL 9) Hyun-jong Paik (Korea)		14:00 – 18:00		Excursion			18:00 – 21:00	Banquet & Closing Ceremony																																																																																																																																																																																																																			
	15:10 – 15:40	(KL 3) Toyoko Imae (Taiwan)	15:10 – 15:40	(KL 10) Youngkyoo Kim (Korea)			14:00 – 18:00	Excursion		18:00 – 21:00		Banquet & Closing Ceremony																																																																																																																																																																																																																			
15:30 - 16:30	15:40 – 16:10	(KL 4) Sang-Young Lee (Korea)	15:40 – 16:00	Coffee break		14:00 – 18:00		Excursion			18:00 – 21:00	Banquet & Closing Ceremony																																																																																																																																																																																																																			
	16:10 – 16:30	Coffee break	Place	5F Seminar room	2F Blue Hall		16:00 – 16:20	(IL 13) Yuji Higaki (Japan)	(IL 16) Kyu Hyun (Korea)	14:00 – 18:00		Excursion																																																																																																																																																																																																																			
16:30 - 17:30	16:30 – 16:50	(IL 1) Takashi Miyata (Japan)	(IL 4) Gözde Kabay (Germany)	16:20 – 16:40	(IL 14) Thai Hoang (Vietnam)	(IL17) Tran Dinh Thang (Vietnam)	16:40 – 17:00	(IL 15) Hongzhi Liu (China)	(IL 18) Jeong Jae (JJ) Wie (Korea)		14:00 – 18:00	Excursion																																																																																																																																																																																																																			
	16:50 – 17:10	(IL 2) Jong S. Park (Korea)	(IL 5) Heejoon Ahn (Korea)	16:40 – 17:00	(IL 15) Hongzhi Liu (China)	(IL 18) Jeong Jae (JJ) Wie (Korea)	17:00 – 17:15	(OL 5) Yuji Shibasaki (Japan)	(OL 9) Shin-ichi Yusa (Japan)	14:00 – 18:00		Excursion																																																																																																																																																																																																																			
17:30 - 18:30	17:10 – 17:30	(IL 3) Ji-Hun Seo (Korea)	(IL 6) Chae Bin Kim (Korea)	17:15 – 17:30	(OL 6) Suraj Kishan Aswale (Korea)	(OL 10) Joonwoo Park (Korea)	17:30-17:45	(OL 7) Su Jeong Heo (Korea)	(OL 11) SeungWoo Jung (Korea)		14:00 – 18:00	Excursion																																																																																																																																																																																																																			
	17:45 – 18:00	(OL 2) Sofia D. Afonnikova (Russia)	(OL 4) Zirui Lv (China)	17:45 – 18:00	(OL 8) Cecilia Adena (Taiwan)	(OL 12) Kyeong-Seok Oh (Korea)	Place	3F Grand Hall		18:00 – 20:00		Welcome Mixer																																																																																																																																																																																																																			
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DAY 1 (Nov. 5, Wed)

5F Seminar Room

(Chair : Ildoo Chung)

(12:30 - 13:10)



Plenary Lecture 1

Kohzo Ito

University of Tokyo, Japan

“Slide-Ring Materials for Circular Economy”

(13:10 - 13:50)



Plenary Lecture 2

Yuri Shchipunov

Russian Academy of Sciences, Russia

“Nano/microfibrillated Cellulose Aerogels. Green Renewable Materials for Advanced Technology and Ecology”

----- *Coffee Break (13:50 – 14:10)* -----

(Chair : Sang-Young Lee)

(14:10 - 14:40)



Keynote Lecture 1

Dongyuan Zhao

Fudan University, China

“Supra-Assembly of Functional Mesoporous Materials for the Energy Applications”

(14:40 - 15:10)



Keynote Lecture 2

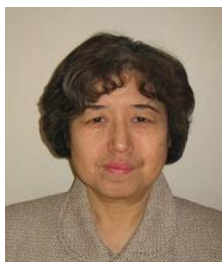
Michel Wong Chi Man

Centre National de la Recherche Scientifique(CNRS), France

“Synthesis of structured silsesquioxanes”

(Chair : Yury Shchipunov)

(15:10 - 15:40)



Keynote Lecture 3

Toyoko Imae

National Taiwan University of Science and Technology, Taiwan

“Size Effect by Atomic Clusters on Chemocatalysis and Photocatalysis”

(15:40 - 16:10)



Keynote Lecture 4

Sang-Young Lee

Yonsei University, Korea

“Redesigning Polymer Electrolytes: Chemistry Beyond PEO”

----- Coffee Break (16:10 – 16:30) -----

5F Seminar Room

(Chair : Dongyuan Zhao)

Invited Lectures

(16:30 - 16:50) **IL-1, Takashi Miyata** (Kansai University, Japan)

Dynamic Polymer Materials: Designing Crosslinks for Advanced Functions

(16:50 - 17:10) **IL-2, Jong S. Park** (Pusan National University, Korea)

Flexible Electrochromic Energy Storage Devices Featuring Viologen Ion Gels

(17:10 - 17:30) **IL-3, Ji-Hun Seo** (Korea University, Korea)

Solid state polymer electrolytes with dynamic mechanical bond for enhanced ionic conductivity

(Chair : Jong S. Park)

Oral Presentations

(17:30 - 17:45) **OL-1, Anjali N. Preman**, Suk-kyun Ahn* (Pusan National University, Korea)

Better together: Integrating adhesion and ion conductivity in composite binders for high-performance silicon anodes

(17:45 - 18:00) **OL-2, Sofia D. Afonnikova** (Boreskov Institute of Catalysis SB RAS, Russia)

Multicomponent alloys as catalysts for the production of carbon nanofibers and metal carbon composites

2F Blue Hall

(Chair : Toyoko Imae)

Invited Lectures

- (16:30 - 16:50) **IL-4, Gözde Kabay** (Karlsruhe Institute of Technology (KIT), Germany)
A Simple Approach for Real-time Hydrogelation Monitoring
- (16:50 - 17:10) **IL-5, Heejoon Ahn** (Hanyang University, Korea)
High-Performance Stretchable Zinc-Ion Micro-Batteries Enabled by PEDOT and Zinc-Ion Co-Intercalated Vanadium Oxide Nanofibers
- (17:10 - 17:30) **IL-6, Chae Bin Kim** (Pusan National University, Korea)
A General Approach to Compatibilizing Mixed Plastics through Dynamic Boronic Ester Bond Formation

(Chair : Heejoon Ahn)

Oral Presentations

- (17:30 - 17:45) **OL-3, Grigory B. Veselov** (Boreskov Institute of Catalysis, Russia)
Preparation of Nickel-containing Carbon Xerogels and Their Properties
- (17:45 - 18:00) **OL-4, Zirui Lv**, Dongyuan Zhao* (Fudan University, China)
Hierarchical Engineering of Single-Crystalline Mesoporous Metal-Organic Frameworks with Hollow Structures

DAY 2 (Nov. 6, Thu)

5F Seminar Room

(Chair : Suk-kyun Ahn)

(9:00 - 9:40)



Plenary Lecture 3

Rigoberto Advincula

University of Tennessee, Knoxville/ORNL, USA

“AI/ML in 3D Printing High Performance Polymer Materials and Synthesis”

(9:40 - 10:10)



Keynote Lecture 5

Atsushi Takahara

Kyushu University, Japan

“Surface and Interfacial Chemistry of Environmental Degradation of Polymers”

(Chair : Rigoberto Advincula)

(10:10 - 10:40)



Keynote Lecture 6

Ken Terao

Osaka University, Japan

“Molecular Conformation and Intermolecular Interactions of Linear, Cyclic, and Branched Polymers in Solution”

----- Coffee Break (10:40 – 11:00) -----

5F Seminar Room

(Chair : Youngkyoo Kim)

Invited Lectures

- (11:00 - 11:20) **IL-7, Myung-Han Yoon** (Gwangju Institute of Science and Technology, Korea)
Self-Supporting Hydrogel Nanofiber Meshes for Directional Neuronal Network Growth
- (11:20 - 11:40) **IL-8, Jinn P. Chu** (National Taiwan University of Science and Technology, Taiwan)
Semiconductor-based Highly-Ordered Nanostructure Arrays: Fabrication and Application
- (11:40 - 12:00) **IL-9, Dowon Ahn** (Pusan National University, Korea)
Visible light 3D printing to access the next generation soft materials

2F Blue Hall

(Chair : Byeong Guk Jeong)

Invited Lectures

- (11:00 - 11:20) **IL-10, Chie Kojima** (Institute of Science Tokyo, Japan)
Relation between hydration and tumor accumulation in biocompatible dendrimers
- (11:20 - 11:40) **IL-11, Jaejun Lee** (Pusan National University, Korea)
Mechanochemical Engineering of Soft and Hybrid Materials Using Laser-Induced Shockwaves
- (11:40 - 12:00) **IL-12, Young-Rae Cho** (Pusan National University, Korea)
Advanced Eco-Friendly Clad Metals: Property Evaluation and Emerging Industrial Applications

----- Lunch (12:00 – 13:00) -----

5F Seminar Room

(Chair : Liu Hongzi)

(13:00 - 13:40)



Plenary Lecture 4

Zhiyong Tang

National Center for Nanoscience and Technology, China

“Application of Metal-Organic Frameworks in Electrocatalytic Oxygen Evolution”

5F Seminar Room

(Chair : Jeong Jae (JJ) Wie)

(13:40 - 14:10)



Keynote Lecture 7

Alexei Khokhlov

Lomonosov Moscow State University, Russia

“Life Cycle of Polymer Materials: Scientific vs Emotional Approach”

----- *Coffee Break & Group Photo (14:10 – 14:40)* -----

(Chair : Zhiyong Tang)

(14:40 - 15:10)



Keynote Lecture 9

Hyun-jong Paik

Pusan National University, Korea

“Chain-End Functionalized Polymers via Radical Polymerization”

(15:10 - 15:40)



Keynote Lecture 10

Youngkyoo Kim

Kyungpook National University, Korea

“Organic Neuromorphic Transistors Based on Water-Processable Polymeric Hysteresis Nanolayers”

----- *Coffee Break (15:40 – 16:00)* -----

5F Seminar Room

(Chair : Myung-Han Yoon)

Invited Lectures

- (16:00 - 16:20) **IL-13, Yuji Higaki** (Oita University, Japan)
Aqueous Microphase Separation Induced by Coacervation of Zwitterionic Polymers
- (16:20 - 16:40) **IL-14, Thai Hoang** (Institute for Tropical Technology, Vietnam)
Novel friendly environmental coatings contain Ag-Zn/zeolite, nano Cu₂O,
and polysiloxane matrix used in seawater
- (16:40 - 17:00) **IL-15, Hongzhi Liu** (Shandong University, China)
Silsesquioxanes-based Functional Materials for Sustainable Development

(Chair : Dowon Ahn)

Oral Presentations

- (17:00 - 17:15) **OL-5, Yuji Shibasaki*** (Iwate University, Japan)
Nano composite of bio-based poly(arbutin) with silver nanoparticle
- (17:15 - 17:30) **OL-6, Suraj Kishan Aswale**, Hyun-jong Paik* (Pusan National University, Korea)
Engineering Polymer Topologies for Tunable Properties
: Insights from Characterization to Application
- (17:30 - 17:45) **OL-7, Su Jeong Heo**, Dong Gi Seong*, (Pusan National University, Korea)
Wax-Enabled Multifunctional Glass Fiber-Reinforced Polymer Composites:
Self-Healing, Self-Lubrication, and Enhanced Mechanical Performance

2F Blue Hall

(Chair : Chie Kojima)

Invited Lectures

- (16:00 - 16:20) **IL-16, Kyu Hyun** (Pusan National University, Korea)
The Extensional Rheological Properties of Biodegradable Blends
: PLA/LDPE and PHA/LCB-PLA Blends
- (16:20 - 16:40) **IL-17, Tran Dinh Thang** (Industrial University of Ho Chi Minh City, Vietnam)
Polycaprolactone/Xanthan Gum/Chrysophanol Biomaterials: Preparation,
Characterization, Drug Release, and Bioactivities
- (16:40 - 17:00) **IL-18, Jeong Jae (JJ) Wie** (Hanyang University, Korea)
Rapid Yet High Amplitude Collective Oscillation of Magnetic Micropillar Arrays

(Chair : Jaejun Lee)

Oral Presentations

- (17:00 - 17:15) **OL-9, Shin-ichi Yusa*** (University of Hyogo, Japan)
Polyion Complex (PIC) Micelles Composed of Random Copolymers
- (17:15 - 17:30) **OL-10, Joonwoo Park, Jaejun Lee*** (Pusan National University, Korea)
Programmable Micropatterns via Photomask Mediated Laser-Induced
Shockwave Spallation
- (17:30 - 17:45) **OL-11, SeungWoo Jung, Dong Gi Seong*** (Pusan National University, Korea)
Transformable Hybrid Fiber-Reinforced Polymer Fabricated Using Multi-Resin
Dispensing
- (17:45 - 18:00) **OL-12, Kyeong-Seok Oh, Sang-Young Lee*** (Yonsei University, Korea)
Conflicting entropy-driven zwitterionic dry polymer electrolytes for scalable
High-energy all-solid-state batteries

DAY 3 (Nov. 7, Fri)

5F Seminar Room

(Chair : Chang-Sik Ha)

(9:00 - 9:40)



Plenary Lecture 5
Sei Kwang Hahn
POSTECH, Korea

“Smart Biomedical Materials and Devices for Theranostic Applications”

(9:40 - 10:10)



Keynote Lecture 11
Jin-Woo Oh
Pusan National University, Korea

“Humanoid Electronic Nose and Tongue Technologies: Neural Network-Based AI Systems for Revolutionary Digital Healthcare”

----- *Coffee Break (10:10 – 10:30)* -----

(Chair : Thai Hoang)

Invited Lectures

- (10:30 - 10:50) **IL-19, K.S.V. Krishna Rao** (Yogi Vemana University, India)
New Opportunities in Sustainable Nano-Polymeric Materials for Treatment of Cancer
- (10:50 - 11:10) **IL-20, Yang H. Yun** (University of Akron, USA)
Nanoparticles Made from the Polymer L-Tyrosine Phosphate and VEGF
Receptor Genes Normalize Hypertension in Pregnancy

Oral Presentations

- (11:10 - 11:25) **OL-13, Sivagangi Reddy Nagella**, Chang-Sik Ha* (Pusan National University, Korea)
Synthesis of Low-Dielectric Poly(ether-imides) Derived
from a Bio-Based Novel Diamine

2F Blue Hall

(Chair : Tran Dinh Thang)

Invited Lectures

- (10:30 - 10:50) **IL-21, Shangru Zhai** (Dalian Polytechnic University, China)
Natural Lignin-based Environmental Functional Materials with Improved Performance
- (10:50 - 11:10) **IL-22, Yong-Zhu Yan** (Hainan University, China)
Preparation and Properties of Electromagnetic Interference Shielding
Polymer Composites with Extreme Environment Resistance

Oral Presentations

- (11:10 - 11:25) **OL-14, Donghee Shin**, Beomjin Jeong* (Pusan National University, Korea)
Sorting-free Carbon Nanotube Channel Synaptic Transistor for Simple and
Facile Fabrication Process

DAY 4 (Nov. 8, Sat)

Special Symposium in Honor of Prof. Chang-Sik Ha (Presented in Korean)

3F Grand Hall

(Chair : Jinho Ryoo)

Invited Lectures

- (10:00 - 10:20) **IL-23, Sung Soo Park** (Dong-Eui University, Korea)
Nanohybrid Materials Based on Polymers and Periodic
Mesoporous Organosilicas

(Chair : Sung Soo Park)

Oral Presentations

- (10:20 - 10:35) **OL-15, Hyun Kyo Kim** (Pusan National University, Korea)
Interfaces in Polymer Composites
- (10:35 - 10:50) **OL-16, Hoon Whang** (Pusan National University, Korea)
Recent Advances in Polymer Film Coating
- (10:50 - 11:05) **OL-17, Soon Joon Chung** (Pusan National University, Korea)
Polymers for Automobile
- (11:05 - 11:20) **OL-18, Byeong Tae Yang** (Pusan National University, Korea)
Polymer Blends and Their Processing
- (11:20 - 11:35) **OL-19, Ki Yol Ahn** (Pusan National University, Korea)
Polyimide Films and Their Hybrids

Poster Presentations

(Nov. 7th, Fri, 12:30-14:00)

3F Grand Hall

PS-01 A Highly-Ordered Close-Packed Metallic Nanotube Array for Surface-Enhanced Raman Scattering (SERS) Applications

Chun-Wei Chang, Ting-Hao Chang, Alfreda Krisna Altama, Jun-Ting Wang, Jinn P. Chu*, National Taiwan University of Science and Technology, Taiwan

PS-02 Octahalogen-substituted Metal Phthalocyanines and Hybrid Materials Based on Them: Structural Features and Sensor Properties

Klyamer Darya*, Kamdina Tatiana, Ivanova Victoriia, Sukhikh Aleksandr, Basova Tamara, Nikolaev Institute of Inorganic Chemistry Siberian Branch of Russian Academy of Sciences, Russia

PS-03 Styrene Butadiene Rubber (SBR) Prepared by Ab initio Emulsion Polymerization Using Macro-RAFT Agent

Dongjun Lee, Seongyoon Kim, Hyun-jong Paik*, Pusan National University, Korea

PS-04 Poisson-like Living Chain Isolation in ATRP-Synthesized Block Copolymers

Eujin Bae, Hyun-jong Paik*, Pusan National University, Korea

PS-05 Compression-Induced Vertical Alignment of Liquid Crystal Elastomers via the Smectic Phase

Hyeonji Seok, Kyeong-wan Kim, Suk-kyun Ahn*, Pusan National University, Korea

PS-06 Liquid Crystal Elastomers with Enhanced Reprocessability via Exchangeable Networks

Yebin Choi, Suk-kyun Ahn*, Pusan National University, Korea

PS-07 Architectural Control and Rheological Properties of Long Chain Hyperbranched Polystyrene Synthesized via Sulfoxide-Functionalized ATRP

Hyerim Kim, Dongwoo Kim, Minchan Kim, Kyu Hyun*, Hyun-jong Paik*, Pusan National University, Korea

PS-08 High-Temperature Creep-Resistant and Reprocessable Epoxy Adhesive Based on Disulfide-Linked Covalent Adaptable Networks

Jaehong Park, Jaehyeok Lee, Chae Bin Kim*, Pusan National University, Korea

PS-09 Light-Driven Tunable Adhesion in Donor-Acceptor Stenhouse Adduct Functionalized Polymer Networks

Minkyong Gwon, Siwoo Kim, Kyungwon Seo, Woojin Noh, Hyosung An, Jaejun Lee*, Pusan National University, Korea

PS-10 One-Pot Free Radical Polymerization: Thermal Activation of a Dual-Functional Initiator for Block Copolymer Synthesis

Seunghyeon Lee, Seoyoung Lee, Minji Kim, Yerin Jang, Heungbae Jeon*, Hyun-jong Paik*, Pusan National University, Korea

PS-11 Stretch-Driven Thermal Conductivity Modulation in Emulsion-Templated Porous Vitrimers

Seungjae Shin, and Chae Bin Kim*, Pusan National University, Korea

PS-12 Coordination Geometry-Controlled Shock Wave Energy Dissipation in Metallosupramolecular PDMS Networks

Seungrae Cho, Hyemi Lee, Sieun Je, Juho Lee, Suwon Ba, Tae Ann Kim, Jaejun Lee*, Pusan National University, Korea

PS-13 Photoinduced Shape-Fixation and Reconfiguration of Soft Microarchitectures in Covalent Adaptable Networks

Yeomyung Yoon, Hojun Moon, Woongbi Cho, Dongwook Lee, Sohdam Jeon, Jeong Jae Wie, Chae Bin Kim*, Pusan National University, Korea

PS-14 Microphase Separation of Phosphocholine-Cholinephosphate Diblock Copolymers in Aqueous Solutions

Yuki Matsui, Yasuhiro Eguchi, Yuji Higaki*, Oita University, Japan

PS-15 Horizontal Lithium Electrodeposition on Atomically Polarized Monolayer Hexagonal Boron Nitride

Cheol Heo, Seung-Hyeok Kim, Sang-Young Lee*, Yonsei University, Korea

PS-16 Glass Fiber Reinforced Plastic Embedded with Silica-Coated Hollow Glass Microspheres for Enhanced Thermal Insulation in Liquid Hydrogen Storage

Dahee Cho, Dayoung Kim, Sumin Heo, Dong Gi Seong*, Pusan National University, Korea

PS-17 Lithium-ion battery with metal oxide-coated polyolefin separators - terpolymer binder approach

Dahyeon Park, Sooyong Lee, Jihyeon Kim, Hwajeong Kim, Youngkyoo Kim*, Kyungpook National University, Korea

PS-18 Exploring Thermoelectric Properties of Hybrid Films Based on Conducting Polymers

Deepu Murukadas, Woongki Lee, Chanbin Park, Hwajeong Kim, Youngkyoo Kim*, Kyungpook National University, Korea

PS-19 Smart photonic contact lens to control the function of smart glasses

Dong Chul Cho, Sang Bea Shin, Sei Kwang Hahn*, POSTECH, Korea

PS-20 Thermally Conductive and Stable Organic PCM Composites Enabled by Segregated Filler Architectures

Donghun Lee, Chae Bin Kim*, Pusan National University, Korea

PS-21 Composition-Controlled Network Formation in Reactive Polyacrylate Binders for High-Performance Silicon Anodes

Gihun Lee, Seungwoo Lee, Hyerin Kang, Suraj Aswale, Suk-kyun Ahn*, Hyun-jong Paik*, Pusan National University, Korea

PS-22 Crystalline and Stable Hierarchical Porous Conjugated Organic Framework as an Ideal Platform for Electrosynthesis

Hongfei Wu, Feng Li*, Dongyuan Zhao*, Fudan University, China

PS-23 Comprehensive Investigation of Anti-solvent Free Processed CsPbI₂Br Perovskite Thin Films

Ji Hee Song, Siyeon Seo, Hyo Jung Kim*, Pusan National University, Korea

PS-24 Transparent PEDOT:PSS/MXene Thin-Film Heater with Enhanced Conductivity and Joule Heating Efficiency via Trifluoroacetic Acid Treatment

Jihwan Ju, Beomjin Jeong*, Pusan National University, Korea

PS-25 Stretchable MXene/Silver Nanowire (MXAg) Electrodes for Biophotonic Applications of Stretchable Light-Emitting Diodes

Jonghyeong Cho, Kwanghyeon Park, Sei Kwang Hahn*, POSTECH, Korea

PS-26 Silica Nanoparticles with Second-Scale Room Temperature Phosphorescence and in situ Generated Carbonaceous Defects for Theranostic Applications

Kyurim Lee, Sei Kwang Hahn *, POSTECH, Korea

PS-27 Designing Phase-Change Thermal Interface Materials via Pickering Emulsions and Segregated Filler Networks in Covalent Adaptable Networks

Min Jun Lee, Chae Bin Kim*, Pusan National University, Korea

PS-28 Electrostatic Covalent Organic Frameworks as On-Demand Molecular Traps for High-Energy Li Metal Battery Electrodes

Sejung Oh, Kyeong-seok Oh, Sang-Young Lee*, Yonsei University, Korea

PS-29 Restructuring of Aqueous Electrolytes Using a Soft-acidic/Hard-basic Zwitterion for Low-temperature Anode-free Zn batteries

Seokhyeon Ryu, Hong-I Kim, Sang-Young Lee*, Yonsei University, Korea

PS-30 Enhancement of Stretchable Ferroelectric Capacitor through Amine-Functionalized Graphene Oxide Additives

Seongbo Jang, Beomjin Jeong*, Pusan National University, Korea

PS-31 Additive Engineering for Crystallization and Defect Passivation in Perovskite Solar Cells

Seungbu Han, Kukhyun Jo, Hyo Jung Kim*, Pusan National University, Korea

PS-32 Tuning Mechanical and Electrochemical Properties of ROMP-Derived Copolymer Binders for Silicon Anodes

Seungwoo Lee, Suk-kyun Ahn*, Pusan National University, Korea

PS-33 Additive Engineering Strategies for Commercial Perovskite Solar Cells Exhibiting Superior Moisture and Thermal Stability

Siyeon Seo, Hyo Jung Kim*, Pusan National University, Korea

PS-34 Real-Time Observation of Perovskite Film Stability under Continuous Illumination and Bias

Sungmin Jeon, In-Young Lee, Hyo Jung Kim*, Pusan National University, Korea

PS-35 Stepwise Self-Assembly of Multi-segment Mesoporous Silica Nanobamboos for Enhanced Thermal Insulation

Xirui Huang, Tiancong Zhao*, Dongyuan Zhao*, Fudan University, China

PS-36 Dendrite-Free, Confocal Deposition of Lithium Metal on Electroactive Organic Materials

Ye-Seul Chung, Seung-Hyeok Kim, Sang-Young Lee*, Yonsei University, Korea

PS-37 Environmentally Friendly Processing Of Trichloroethylene On Ni-M (M = Mo, W, Pd) Catalysts Into Carbon Nanofibers For Further Application

Potylitsyna A.R.*, Bauman Y.I., Popov A.A., Shubin Y.V., Vedyagin A.A., Mishakov I.V., Boreskov Institute of Catalysis, Russia

PS-38 P-NIPAM-based Hydrogel for Sustainable Separation of Miscible Liquids

Gibum Kwon*, Gahee Im, University of Kansas, USA

PS-39 TiO₂ Nanohelices Decorated with Homogeneous Au-Core Pd-Shell Nanocatalysts for Selective Toluene Gas Detection

Hanseon Bae, Hyeonwoong Hwang, Sei Kwang Hahn*, POSTECH, Korea

PS-40 Impact of Carbonate Content in CO₂-Based Polyols on the Properties of Thermoplastic Polyurethanes

Han-su Lee, Il Kim* and Suk-kyun Ahn*, Pusan National University, Korea

PS-41 Eco-Friendly UV-Curable Acrylic Adhesives with Selective Cleavability Using Lipoic Acid-Derived Crosslinkers

Hyunseok Kim, Rudru Ganga Ratnamma, Ildoo Chung*, Pusan National University, Korea

PS-42 3D Printable Photocurable Dental Composites Based on Catechol-Functionalized Acrylic Polymers

Hyunseok Kim, Chaeyoung Jeon, Ildoo Chung*, Pusan National University, Korea

PS-43 Synthesis of Solution-Processable Borosiloxane Networks as Advanced Flame Retardant Platform

Jieon Kim, Jaejun Lee*, Pusan National University, Korea

PS-44 Recyclable Thermoset Polyurethane Foams with Dynamic β -Amino Ester Networks for Thermal Insulation Applications

Jiyeon Han, and Chae Bin Kim*, Pusan National University, Korea

PS-45 Lubricant-Infused Metallic Glass Nanotube Arrays for Enhanced Slippery and Icephobic Surfaces

Man Yun Hsu, Helmi Son Haji, Ting Hao Chang, Jhen De You, Jinn P. Chu, Pakman Yiu*, National Taiwan University of Science and Technology, Taiwan

PS-46 Non-Fluorinated Long Alkyl Acrylates for Water Repellent

Myeong U Jeong, Ildoo Chung*, Pusan National University, Korea

PS-47 Upcycling Polyolefin Waste into Reprocessable Adhesives via Covalent Adaptable Networks

Naon Choi, Chae Bin Kim*, Pusan National University, Korea

PS-48 Synthesis and Intrinsic Anti-Ultraviolet Performance Regulation of Biobased Polythioethers

Qiubo Wang, SeongkuKim*, Yongjiang Laboratory (Y Lab), China

PS-49 Multifunctional Waterborne Anti-Icing Coatings Using a Polarity-Switchable Maleic anhydride Copolymer

Sehui An, Ji Min Lee, Sanghyuk Wooh, Chae Bin Kim*, Pusan National University, Korea

PS-50 Sustainable TPU Designed from CO₂-Derived Carbonate Polyols with Tunable Functionality

Soyun Park, Anjali Nagapadi Preman, Il Kim, Suk-kyun Ahn*, Pusan National University, Korea

PS-51 Water-Coatable Acrylonitrile-Maleic Anhydride Copolymers for Eco-friendly Carbon Fiber Precursors and Flame-Retardant Coatings

Wonjun Lee, Chae Bin Kim*, Pusan National University, Korea

PS-52 Two-Component Binder System of Water Glass and Starch for Iron Ore Pelletization

Aniket B. Gole, Cho Hayoon, Won-Ki Lee*, Pukyong National University, Korea

PS-53 Comparative Study of Drug Encapsulation and Release Kinetics in MOF-808 and ZIF-8

Anastasiia Iazikova, Aleksandr Tomilov, Artem Poryvaev, Matvey Fedin*, International Tomographic Center, Russia

PS-54 Sensing of Bio-Hazardous Species Using Organic Transistor Platforms

Bongmo Kim, Chulyeon Lee, Hwajeong Kim, Youngkyoo Kim*, Kyungpook National University, Korea

PS-55 3D Printed PDRN/GelMA Bioink for Muscle Tissue Engineering

Elif Beyza Demiray, Moon Sung Kang, Iruthaya Pandi Selestina Raja, Hee Jeong Jang, Dongwoo Gi, Dong-Wook Han*, Pusan National University, Korea

PS-56 Wound Management with Zinc Ion-Releasing Gelatin-Based Bioadhesives

Elif Beyza Demiray, Sung Eun Kim, Hee Jeong Jang, Kyung Min Park, Dong-Wook Han*, Pusan National University, Korea

PS-57 Synthesis and Characterization of L-Tyrosine Polyester (LPE) for Drug Delivery Vehicle

Seoyoung Han, Jiun Choi, Ildoo Chung*, Pusan National University, Korea

PS-58 3D Printable PEKK-based Dental Resins Incorporating Multifunctional Groups with Improved Mechanical Properties

Jeongmin Lee, Sujin Kim, Ildoo Chung*, Pusan National University, Korea

PS-59 Poly(ether ketone ketone)-Based Hybrid Resins for Dental 3D Printing

Jeongmin Lee, Sujin Kim, Ildoo Chung*, Pusan National University, Korea

PS-60 Synthesis and Characterization of Biocompatible and Biodegradable L-Lysine Polyurethane (LPU) Nanoparticles for Use in Drug Delivery

Jiun Choi, Soojeong Choi, Ildoo Chung*, Pusan National University, Korea

PS-61 Fabrication and Characterization of Crosslinked Hyaluronic Acid Incorporating Polymerizable Polyrotaxane

Jiun Choi, Rudru Ganga Ratnamma, Ildoo Chung*, Pusan National University, Korea

PS-62 Fabrication of edible sodium alginate-zein based membranes with aligned patterns for cultured meat applications

Kummara Madhusudana Rao, Sung Soo Han*, Yeungnam University, Korea

PS-63 Organic Transistor Sensors for Ultrasensitive Detection of Reactive Oxygen Species

Minjae Kim, Chulyeon Lee, Hwajeong Kim, Youngkyoo Kim*, Kyungpook National University, Korea

PS-64 Synthesis of Acrylic Pressure Sensitive Adhesives Using Supramolecular Movable Cross-linkers with Improved Adhesion Properties

Rudru Ganga Ratnamma, Ildoo Chung*, Pusan National University, Korea

PS-65 Synthesis and Characterization of Slide-ring Polyurethane based on Poly(propylene glycol)-methyl- β -cyclodextrin Polyrotaxane

Rudru Ganga Ratnamma, Jihyun Lee, Ildoo Chung*, Pusan National University, Korea

PS-66 Development of High-Performance Photocurable Resin for Dental Applications using Methacrylate-Modified Poly(phenyl sulfone)

Soojung Lee, Jeongmin Lee, Ildoo Chung*, Pusan National University, Korea

PS-67 Microfluidic Sweat Patch Integrated Smartwatch for Non-Invasive Photonic Continuous Glucose Monitoring

Sunah Cheong, Sei Kwang Hahn*, POSTECH, Korea

PS-68 Polydopamine-Coated hBN Segregated Networks for Flame Retardancy and Mechanical and Thermal Properties Reinforcement in CAN Composites

Hyun Ju Kim, Chae Bin Kim*, Pusan National University, Korea

PS-69 Development of a Water-Cooled Heat Dissipation Plate for Electric Vehicle Batteries Using a Polymer Heterojunction Film

Kwang Sun Ahn, Jiun Choi, Ildoo Chung*, Pusan National University, Korea

PS-70 Charge-Trapping Control in Organic Field-Effect Transistors for Memory and Neuromorphic Applications

Jihyun Kim, Taehoon Kim, Chulyeon Lee, Hwajeong Kim, Youngkyoo Kim*, Kyungpook National University, Korea

PS-71 Programming Mechanochromism in Spiropyran-Incorporated Liquid Crystal Elastomers via Direct-Ink-Writing

Kyeong-wan Kim, Tae Ann Kim, Suk-kyun Ahn*, Pusan National University, Korea

PS-72 Programmable Shape-Morphing Textiles from Liquid Crystal Elastomers

In-sun Jeong, Jin-Hyeong Lee, Suk-kyun Ahn*, Pusan National University, Korea

PS-73 Cross-linked hybrid polyimide films for low dielectric applications

Sivangani Reddy Nagella, Chang-Sik Ha*, Pusan National University, Korea

PS-74 Organic Neuromorphic Transistors Based on Thermally Crosslinked Water-Soluble Polymers

Seungmok Lee, Hwajeong Kim, Youngkyoo Kim*, Kyungpook National University, Korea

PS-75 Covalent Organic Framework based on Multi-Acceptor Planar Structure for Efficient Photocatalytic Production of H₂O₂

Di Liu, Zhiwei Zhao, Yang Wang*, Fudan University, China

PS-76 PI-based CFRPs Fabricated by a Novel CNTF-assisted Joule Heating Process for Multifunctional Aerospace Applications

Song Hee Kim, Mi Ju Jeong, Dayoung Kim, Dong Gi Seong*, Pusan National University, Korea

PS-77 Infrared-Sensing Organic Phototransistors with Novel Gate Sensing Layers

Yeonwoo Jeon, Chulyeon Lee, Hwajeong Kim, Youngkyoo Kim*, Kyungpook National University, Korea

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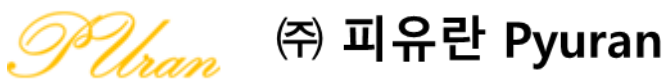
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(Laboratory of electroactive 4D morphing & color - changing technology)



(주) 대명기계 DAE MYUNG MACHINERY

ASAM History

1 st	Vladivostok	Russia	2007
2 nd	Shanghai	China	2009
3 rd	Fukuoka	Japan	2011
4 th	Taipei	Taiwan	2013
5 th	Busan	Korea	2015
6 th	Hanoi	Vietnam	2017
7 th	Beijing	China	2019
8 th	Novosibirsk	Russia	2023
9 th	Busan	Korea	2025



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