

PROGRAM

6th International Conference on **ADVANCED POLYMER SCIENCE AND ENGINEERING**



October 28-30, 2025 | Tenerife, Canary Islands



GF VICTORIA

Fernando Lopez Arvelo Street 1, 38660

Costa Adeje, Santa Cruz de Tenerife

Publishing Partner



**Lifescience
Global**

PROGRAM OUTLINE

Day-1 (In-Person)	October 28, 2025
09:00	Registrations and Badge Pickup
09:30	Opening Remarks to "Advances in Polymer Science & Engineering"
09:40	Keynote session-1
10:40	Coffee Break
11:00	Session-1 on Biomedical and Smart Polymers
12:20	Session-2 on Polymer Composites, Nanotechnology, and Functional Devices
13:00	Group Photo & Lunch Break
14:00	Continue Session-2
16:10	Social & Networking Dinner

Day-2 (In-Person)	October 29, 2025
09:10	Keynote session-2
10:30	Coffee Break
12:10	Session-3 on Energy, Environment, and Sustainability
13:10	Lunch Break
14:00	Continue Session-3
14:40	Session-4 on Advanced Polymer Materials and Technologies
16:00	Poster Presentations & Drinks

Day-3 (Virtual)	October 30, 2025 UTC +0 (WET Time Zone)
11:00	AV Check & Introduction
11:30	Keynote Presentation
12:10	Featured Presentations
14:10	E-Poster Presentations
14:40	Closing Remarks

Zoom Link

<https://us06web.zoom.us/j/88268861024?pwd=glMkZu6kRPHES6HGZCU4IARvx3vJe.1>

Meeting ID: 882 6886 1024

Passcode: 765650

08:30 Registrations and Badge Pickup

09:10 Opening Remarks to "Advances in Polymer Science & Engineering"

Keynote Presentations

Chair: **Stewart P. Lewis**, Pyramid Polymers LLC, United States

09:20 **Improving PVDF Piezoelectricity by Various Means**

Abdellah Ajji, CREPEC, Polytechnique Montreal, Canada

10:00 **Modified Traditional Initiator Systems With Unrivaled Arrhenius-MW Behavior. Greener and More Sustainable Cationic Polymerizations**

Stewart P. Lewis, Pyramid Polymers LLC, United States

10:40 Coffee Break

@Go Fun Terrace

Featured Presentations

Biomedical and Smart Polymers

Chair: **Abdellah Ajji**, CREPEC, Polytechnique Montreal, Canada

11:00 **Interaction of Human Cells With Bacterial Nanocellulose**

Lubica Stankova, Institute of Physiology of the Czech Academy of Sciences, Czech Republic

11:20 **From Skin to Bone: Engineering Biomimetic In Vitro Models Using Polymeric Materials**

Martina Doubkova, Institute of Physiology of the Czech Academy of Sciences, Czech Republic

11:40 **Hydrogel Formulation for Sustained Release of Biomimetic Nanoparticles**

Oshrat Regev Yehishalom, Technion-Israel Institute of Technology, Israel

12:00 **3D Printing of Pea Protein - κ -Carrageenan Nanoparticles for Edible Pickering Emulsions**

Galia Hendel, Technion- Israel Institute of Technology, Israel

Polymer Composites, Nanotechnology, and Functional Devices

Chair: **Jun Onoe**, Nagoya University, Japan

12:20 **Exploiting Self-Assembly of Block Copolymers to Control the Positioning of Lead Halide Perovskite Nanocrystals onto Conductive Supports**

Anna Malafronte, University of Naples Federico II, Italy

12:40 **Tuning Lamellar Nanostructure Alignment in Crystalline Block Copolymers**

Rocco Di Girolamo, University of Naples Federico II, Italy

13:00 Group Photo & Lunch Break

@Chaboco Buffet Restaurant

14:00 **Influence of Material Characterization Methods on Liquid Silicone Rubber Injection Moulding Simulations**

Maurício Azevedo, Polymer Competence Center Leoben GmbH, Austria

- 14:20 **Direct Mixed-mode Partitioning Using DIC and J-Integral in Beam-like Specimens**
Alojz Ivankovic, University College Dublin, Ireland
- 14:40 **Structural Numerical Simulation in Plastic Pallets**
Ines Gomes, PIEP - Innovation in Polymer Engineering, Portugal
- 15:00 **Numerical Analysis of Fatigue in Plastic Parts**
Vicente Barroso, PIEP - Innovation in Polymer Engineering, Portugal
- 15:20 **Numerical Analysis of an Injection-Molded Composite Bicycle Frame: Influence of Fiber Orientation on Static Pedaling Loads**
Catarina Rebelo, PIEP - Innovation in Polymer Engineering, Portugal

16:10 Social & Networking Dinner (*Ticket Required)

DAY 2

In-Person

WEDNESDAY, OCTOBER 29, 2025

Room: Victoria

Zoom Link

<https://us06web.zoom.us/j/88268861024?pwd=glMkZu6kRPHEs6HGZCU4IARvx3vJe.1>

Meeting ID: 882 6886 1024

Passcode: 765650

Keynote Presentations

Chair: **Stewart P. Lewis**, Pyramid Polymers LLC, United States

- 09:10 **Chitosan-Derived Smart Nanocarbons for High-Value Applications**
Juan Matos Lale, Universidad Autonoma de Chile, Chile
- 09:50 **Advanced Simulation of Injection Molding: Material Characterization and Main Phenomena Involved**
Roberto Pantani, University of Salerno, Italy
- 10:30 **Coffee Break** @Go Fun Terrace
- 10:50 **Polymer Engineering for Biomedical Applications - Material development for Implants [Virtual]**
Ines Kuehnert, Leibniz-Institut für Polymerforschung Dresden e. V., Germany
- 11:30 **Advances in Smart Polymers and Derivatives for a Sustainable Future**
Alberto García-Peñas, Universidad Carlos III de Madrid, Spain

Featured Presentations

Energy, Environment, and Sustainability

Chair: **Alberto García-Peñas**, Universidad Carlos III de Madrid, Spain

- 12:10 **UV-Assisted Synthesis of Gel Polymer Electrolytes for Sustainable Li-Ion Battery Design**
Ana Luisa BARRERA ALMEIDA, University of Lille (UMET), France
- 12:30 **Small Biogas Plants made of Textile Materials**
Hofmann Josef, University of Applied Sciences Landshut, Germany

12:50 **Biomimetic Reaction of Cellulose Nanofibrils via Amino Acids: A Morphological and Structural Study**
Daniel José da Silva, Palacky University, Czech Republic

13:10 **Lunch** @Chaboco Buffet Restaurant

14:00 **Upscaling High Glycolic Acid Polyesters: A Study into the Synthesis, Recycling and (Bio) Degradation of Polylactic-Co-Glycolic Acid (PLGA)**
Angus McLuskie, University of Amsterdam, Netherlands

14:20 **From Waste to Vehicles: Ageing and Durability of Post-Industrial and Post-Consumer Recycled Polypropylene**
Valentina Brunella, University of Turin, Italy

Advanced Polymer Materials and Technologies

Chair: **Juan Matos Lale**, Universidad Autonoma de Chile, Chile

14:40 **Programmable Wrinkle Morphologies on PDMS Films via Plasma-Induced Surface Oxidation**
Sushree Ritu Ritanjali, Indian Institute of Technology Kharagpur, India

15:00 **Science and Applications of One-dimensional Uneven-Structured C₆₀ Polymer**
Jun Onoe, Nagoya University, Japan

15:20 **Developing Sustainable Plant-Based High Water Repellent Coatings Using Hydrophobic Pine and Palm Pollen**
Brenda Resendiz Diaz, Queen Mary University of London, United Kingdom

15:40 **Synthesis of Fully-Biobased Composites from Isosorbide Monomethacrylates Reinforced with Flax by Resin Transfer Molding (RTM)**
Sara Barriga Valdez, University of Lille, France

16:00 - 17:00 **Poster Presentations & Drinks** @Go Fun Terrace

PC-01 **Study of Homogeneous and Heterogeneous Catalysts Based on Zinc (II) Complexes for the Synthesis of PLA via Ring-Opening Polymerization**
Dario Gonzalez, Pontifical Catholic University of Valparaíso, Chile

PC-02 **Cellulose-Derived Nanoporous Carbons for the UV-Driven Photocatalytic Remediation of Toluene Pollution**
Juan Matos Lale, Autonomous University of Chile, Chile

PC-03 **XAFS Analysis of Polymer-Supported Osmium Oxide Catalyst**
Tomoko Yoshida, Nagoya University, Japan

PC-04 **Engineering Green Rubber Composites: Utilization of Devulcanized Rubber Crumb and Lignin**
Michaela Dzuganova, Slovak University of Technology in Bratislava, Slovak Republic

PC-05 **Synthesis and Physical Characterization of Covalently Linked Thieno[2,3-b]thiophene-Fullerene Dimers**
Abdulrahman M. Alazemi, Kuwait University, Kuwait

PC-06 **Investigating Metal Complexes of Poly(Tartaric Acid) and Poly(Hydroxymandelic Acid) as Thermal Interface Materials**
Natalia Terenti, National Institute for Research and Development of Isotopic and Molecular Technologies, Romania



- PC-07 **Synthesis and Characterization of a New Ionic Poly(IMIDE) With Potential Application as a Membrane for Gas Separation**
María Victoria, Pontifical Catholic University of Chile, Chile
- PC-08 **Design BioCP-Doped Films Based on Chia Seed Mucilage**
Sabina Weronika Jaros, University of Wrocław, Poland
- PC-09 **Technologies for Obtaining Biocomposites With Improved Durability Against Environmental Factors**
Natalia Kubiak, Adam Mickiewicz University, Poland
- PC-10 **Sustainable PLA Composites Reinforced With Agricultural Waste for FDM 3D Printing**
Magdalena Kustosz, Adam Mickiewicz University, Poland
- PC-11 **Breaking the Limits of PLA Toughness: The Role of Dual-Functional Organosilicon Additives in Structure-Property Optimization**
Julia Glowacka, Adam Mickiewicz University, Poland
- PC-12 **Liquid for Fused Deposition Modeling Technology - New Possibilities in Composite Manufacturing**
Roksana Konieczna, Adam Mickiewicz University, Poland
- PC-13 **Pilot Study on the Application of L-FDM Technology for Printing Controlled-Release Tablets Containing Active Pharmaceutical Ingredients**
Ewa Gabriel, Adam Mickiewicz University, Poland
- PC-14 **Thermal Characterization of FFKM: A DOE-Based Optimization of DSC and TG Parameters**
Caio Rosemberg Fonseca do Nascimento, National Institute of Technology, Brazil
- PC-15 **Residual Tensions in Multilayers for Clear Aligners With Tunable Thermomechanical Properties**
José Ignacio, IMDEA Materials, Spain
- PC-16 **Hydrophobic/Hydrophilic Bifunctional Cryogel for the SPE-LC-MS Analysis of PFAS in Water**
Gabriel Cabral da Fonseca, BCMaterials, Spain
- PC-17 **In Vitro Biological Behavior of Self-Assembled Nanoparticles With Perfluorinated Core: Crosstalk Between Surface Charge and Fluorophilicity**
Leana Vratović, Institute of Macromolecular Chemistry, Czech Republic

Best Poster Presentations



Zoom Link

<https://us06web.zoom.us/j/88268861024?pwd=glMkZu6kRPHES6HGZCU4lARvx3VJe.1>

Meeting ID: 882 6886 1024

Passcode: 765650

11:00 AV Check & Introduction

Keynote Presentation

11:30 **Environmental 100% Biobased Poly(Trimethylene Furanoate (PTF) Modified With Sebacic Acid and Suberic Acid**

Valentina Siracusa, University of Catania, Italy

Featured Presentations

Chair: Valentina Siracusa, University of Catania, Italy

12:10 **Nanogels for Pulmonary Drug Delivery**

Nikolaos Politakos, National Hellenic Research Foundation, Greece

12:30 **Optimizing Pore Environment in a Cationic Polymetric Nanotrap for Highly Efficient Remediation of Short-Chain Per- and Polyfluoroalkyl Substances from Water**

Bin Wang, Soochow University, China

12:50 **Designing and Synthesis Routs for Conductive Ionomers for Durable Anion Exchange Membrane-Based Water Electrolyzers and Fuel Cells**

Mehdihasan Shekh, Shenzhen Wenshi Hydrogen Energy Technology Co. Ltd, China

13:10 **From Limonene to Functional Polymers: Monomer Design and Miniemulsion Polymerization for Targeted Sorption of Caffeine and Rhodamine B**

Thaina Araruna da Rocha, University of Brasilia, Brazil

13:30 **Experimental Design Applied to the Bulk Ring-opening Polymerization of ϵ -Caprolactone Using the Ionic Liquid Catalyst [C4C1Im][In₂Cl₇]**

Giovanna Otero, University of Brasilia, Brazil

13:50 **Numerical Analysis of Seal Seam Geometry and Its Impact on Opening Forces in Flexible Packaging**

Marc Götz, Fraunhofer Institute for Process Engineering and Packaging IVV, Germany

E-Poster Presentations

14:10 **Sustainable Polypropylene Light-Weight Skateboards**

Andreas Charalambous, Capsule Skateboards Ltd, Cyprus

14:20 **Photopolymerization of Acrylated and Methacrylated Soyabean Oil**

Laura Ciciliano, University of Brasilia, Brazil

14:30 **The Effect of the Frequency of the Ultrasonic Field on the Swelling Kinetics of PMAA Xerogel and PMAA-LTA Zeolite Composite Xerogel**

Jelena Jovanovic, Institute of General and Physical Chemistry, Serbia

Closing Remarks



FUTURE MATERIALS ASIA 2026

Accelerating Next-Generation Materials Research & Development

April 8-10, 2026 | Phuket, Thailand & Online



Novotel Phuket Resort

282 Phrabarammee Road, Patong, Kathu,
83150 Phuket, Thailand

Visit Website



Abstract Submission Deadline: November 25, 2025

SPEAKERS



Irene Beyerlein

Distinguished Professor, University of California at Santa Barbara, USA



Hyung-Ho Park

Director, Aerogel Materials Research Center (ERC), Founder & CEO, Aerogel Plus, Insulation Technology (APIT), Republic of Korea



Patricia Horcajada

Head of the Advanced Porous Materials Unit, IMDEA Energy, Spain



Li-Jun Wan

Professor, Institute of Chemistry, Chinese Academy of Sciences, China



Martina Stenzel

Professor, The University of New South Wales, Australia



Shangjr (Felix) Gwo

Distinguished Chair Professor, Department of Physics, National Tsing-Hua University, Hsinchu, Taiwan



Sang Sub Kim

Professor, Inha University, Republic of Korea



Hyunhyub Ko

Professor, Ulsan National Institute of Science and Technology (UNIST), Republic of Korea



Michael Chan

Professor & Center Director, The Chinese University of Hong Kong, Hong Kong



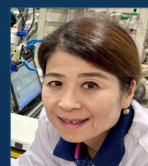
Jinsung Park

Professor, Sungkyunkwan University, Republic of Korea



Jayaramulu Kolleboyina

Associate Professor, IIT Jammu, India



Marianne M. Lee

Research Fellow, The Chinese University of Hong Kong, Hong Kong

Administrative Office

Yuktan Technologies Pte Ltd

20 Cecil Street, #05-03, Plus

Singapore 049705

Phone: +65 9189 1271