

PROGRAM

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

 **October 28-29, 2025 | Tenerife, Canary Islands**
 **October 30, 2025 | Online**

 **GF VICTORIA**
Fernando Lopez Arvelo Street 1, 38660
Costa Adeje, Santa Cruz de Tenerife

Publishing Partner



PROGRAM OUTLINE

Day-1 (In-Person)	October 28, 2025	Meeting Room: Victoria
08:30	Registrations and Badge Pickup	
09:10	Opening Remarks to "Advances in Polymer Science & Engineering"	
09:20	Keynote session-1	
10:40	Coffee Break	@Go Fun Terrace
11:00	Session-1 on Smart Polymers for Biomedical	
12:20	Session-2 on Design & Simulation of Polymeric Materials	
13:00	Group Photo & Lunch Break	@Chaboco Buffet Restaurant
14:00	Continue Session-2	
16:10	Social & Networking Dinner	

Day-2 (In-Person)	October 29, 2025	Meeting Room: Victoria
09:10	Keynote session-2	
10:30	Coffee Break	@Go Fun Terrace
12:10	Session-3 on Polymer Engineering for Energy, Environment, and Sustainability	
13:10	Lunch Break	@Chaboco Buffet Restaurant
14:00	Continue Session-3	
14:40	Session-4 on Surface Engineering, Mechanics & Sustainability in Polymer System	
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=gIMkzZu6kRPHES6HGZCU4IARvx3vJe1>

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

Smart Polymers for Biomedical

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

Design & Simulation of Polymeric Materials

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

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Meeting ID: 882 6886 1024

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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

Polymer Engineering for 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

Surface Engineering, Mechanics & Sustainability in Polymer System

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

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Meeting ID: 882 6886 1024

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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 Polymeriztion of ε -Caprolactone Using the Ionic Liquid Catalyst $[C_4C_1Im][In_2Cl_7]$

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



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Abstract Submission Deadline: November 25, 2025

SPEAKERS



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Distinguished Professor, University of California at Santa Barbara, USA



Hyung-Ho Park

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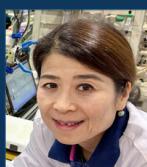
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