

TENTATIVE PROGRAM

th International Conference on

ADVANCED POLYMER SCIENCE AND ENGINEERING

- October 28-30, 2025 | Tenerife, Canary Islands
- GF Gran Costa Adeje Hotel Santa Cruz de Tenerife, Spain

Keynote Presentations

Improving Pvdf Piezoelectricity by Various Means

Abdellah Ajji, CREPEC, Polytechnique Montreal, Canada

From Waste to Opportunities: The WPC, understanding the Properties through the Structure

Pablo Raimonda, Universidad de la Republica, Uruguay

Modified Traditional Initiator Systems with Unrivaled Arrhenius-MW Behavior. Greener and More Sustainable Cationic Polymerizations

Stewart P. Lewis, Pyramid Polymers LLC, United States

Chitosan-derived Smart Nanocarbons for High-value Applications

Juan Matos Lale, Universidad Autonoma de Chile, Chile

Advanced Simulation of Injection Molding: Material Characterization and Main Phenomena Involved Roberto Pantani, University of Salerno, Italy

Environmental 100% Biobased Poly(Trimethylene Furanoate (PTF) Modified with Sebacic Acid and Suberic Acid Valentina Siracusa, University of Catania, Italy

Polymer Engineering for Biomedical Applications - Material development for implants **Ines Kuehnert**, Leibniz-Institut für Polymerforschung Dresden e. V., Germany

Oral Presentations

Structural Numerical Simulation in Plastic Pallets Ines Gomes, PIEP, Portugal

Numerical Analysis of Fatigue in Plastic Parts

Vicente Barroso, PIEP, Portugal

Fatigue Behavior of Injection Molded Polymer Matrix Composites at Different Temperatures: A Case Study of a Bicycle Frame

Catarina Rebelo, PIEP, Portugal

Influence of Material Characterization Methods on Liquid Silicone Rubber Injection Moulding Simulations **Maurício Azevedo**, Polymer Competence Center Leoben GmbH, Austria

Science and Applications of One-dimensional Uneven-structured C60 Polymer **Jun Onoe**, Nagoya Universiy, Japan

UV-Assisted Synthesis of Gel Polymer Electrolytes for Sustainable Li-Ion Battery Design Ana Luisa BARRERA ALMEIDA, Universite de Lille (UMET), France

Small Biogas Plants made of Textile Materials

Hofmann Josef, University of Applied Sciences Landshut, Germany

Upscaling High Glycolic Acid Polyesters: A Study into the Synthesis, Recycling and (Bio)degradation of Polylactic-co-glycolic

Angus McLuskie, University of Amsterdam, Netherlands

High Performance Recycled CFRP Composites Based on Reused Carbon Fabrics through Sustainable Mild Solvolysis Route

Wael Ballout, UCLouvain/IMCN/BSMA, Belgium

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

Tuning Lamellar Nanostructure Alignment in Crystalline Block Copolymers

Rocco Di Girolamo, University of Naples Federico II, Italy

Nanogels for Pulmonary Drug Delivery

Nikolaos Politakos, National Hellenic Research Foundation, Greece

Optimizing Pore Environment in a Cationic Polymetric Nanotrap for Highly Efficient Remediation of Short-Chain Perand Polyfluoroalkyl

Bin Wang, Soochow University, China

Designing and Synthesis Routs for Conductive Ionomers for Durable Anion Exchange Membrane-based Water Electrolyzers

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

Preparation of Original Hydrophobic, and Surface-Functionalized Microparticles via Suspension Polymerization Kishen Haumeer, IMP Laboratory/Claude Bernard Lyon1 university, France

Interaction of Human Cells with Bacterial Nanocellulose

Lubica Stankova, Institute of Physiology, ASCR, Czech Republic

From Skin to Bone: Engineering Biomimetic in Vitro Models using Polymeric Materials

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

Hydrogel formulation for sustained release of biomimetic nanoparticles

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

3D printing of Pea Protein – κ-Carrageenan nanoparticles for Edible Pickering Emulsions Galia Hendel, Technion- Israel Institute of Technology, Israel

Direct Mixed-mode Partitioning using DIC and J-integral in Beam-like Specimens

Alojz Ivankovic, University College Dublin, Ireland

Synthesis of fully-biobased composites from isosorbide monomethacrylates reinforced with flax by Resin Transfer Molding (RTM)

Sara Barriga Valdez, Université de Lille, France

From Waste to Vehicles: Ageing and Durability of Post-Industrial and Post- Consumer Recycled Polypropylene Valentina Brunella, Università di Torino, Italy

Poster Presentations

Study of Homogeneous and Heterogeneous Catalysts Based on Zinc (II) Complexes for the Synthesis of PLA via Ring-Opening Polymerization

Dario Gonzalez, Pontificia Universidad Catolica de Valparaiso, Chile

Cellulose-derived Nanoporous Carbons for the UV-driven Photocatalytic Remediation of Tluene Pollution **Juan Matos Lale**, Universidad Autonoma de Chile, Chile

XAFS Analysis of Polymer-supported Osmium Oxide Catalyst **Tomoko Yoshida**, Nagoya University, Japan

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

Synthesis and Physical Characterization of Covalently Linked thieno[2,3-b]thiophene-fullerene Dimers Abdulrahman M. Alazemi, Kuwait University, Kuwait

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, Yugoslavia

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

Sustainable Polypropylene Light-Weight Skateboards

Andreas Charalambous, Capsule Skateboards Ltd, Cyprus

Synthesis and Characterization of a New Ionic Poly(IMIDE) With Potential Application As a Membrane for Gas Separation

María Victoria, Pontificia Universidad Católica de Chile, Chile

Design BioCP-doped films based on chia seed mucilage

Sabina Weronika Jaros, Uniwersytet Wrocławski, Poland

Technologies for obtaining biocomposites with improved durability against environmental factors

Natalia Kubiak, Adam Mickiewicz University, Poland

Sustainable PLA Composites Reinforced with Agricultural Waste for FDM 3D Printing

Magdalena Kustosz, Adam Mickiewicz University, Poland

Breaking the Limits of PLA Toughness: The Role of Dual-Functional Organosilicon Additives in Structure-Property

Julia Glowacka, Adam Mickiewicz University, Poland

Liquid for Fused Deposition Modeling Lechnology - new possibilities in composite manufacturing

Roksana Konieczna, Adam Mickiewicz University, Poland

Pilot Study on the Application of L-FDM Technology for Printing Controlled-Release Tablets Containing Active Pharmaceutical Ingredients

Ewa Gabriel, Adam Mickiewicz University, Poland

Thermal Characterization of FFKM: A DOE-Based Optimization of DSC and TG Parameters Caio Rosemberg Fonseca do Nascimento, Instituto Nacional de Tecnologia, Brazil

Residual tensions in multilayers for clear aligners with tunable thermomechanical properties **José Ignacio**, IMDEA materials, Spain

Hydrophobic/hydrophilic Bifunctional Cryogel for the SPE-LC-MS Analysis of PFAS in Water Gabriel Cabral da Fonseca, BCMaterials, Spain

Yet to be confirmed

Oral Presentations

Synthesis and Ring Opening Metathesis Polymerisation of O-Dialkoxy Paracyclophanedienes **Yurachat Janpatompong**, The University of Manchester, United Kingdom

Protic Ionic Liquid-based Polymer Electrolyte Membrane for Enhanced Proton Conduction Jay Narayan Mishra, IIT (BHU) Varanasi, India

Electrically Conductive Silver-Polyaniline Core-Shell Nanoparticle Composite Membranes for Enhanced Water Filtration

Zulfiqar Ahmad Rehan, Sultan Qaboos University Muscat Oman, Oman

Role of Magnetic NiFe $_2$ O $_4$ and Conductive rGO in Tailoring the Dielectric and EMI Shielding Properties of TPU Nanocomposite Films

Yadav Avadhesh Anantram, IIT Delhi, India

Understanding Long-Term User Engagement in Surplus Food Rescue Platforms: The Role of Psychological and Behavioral Factors

Muhammad Khan, Institute of Business and Leadership Studies, Pakistan

Sustainable Approach Towards Extraction and Preparation of Micro-fibrillated Cellulose Based Composite Biofilm from Aegle Marmelos

Prince Kumar Sonu, Central University of Haryana, India

Developing Sustainable Plant-Based High Water Repellent Coatings Using Hydrophobic Pine and Palm Pollen

Brenda Resendiz Diaz, Queen Mary University of London, United Kingdom

Influence of Dispersion Routes on the Multifunctional Properties of LLDPE/CNF Nanocomposites Vaibhav Jain, IIT Delhi, India

Fabrication of Plasmonic Gold Semi-Shell-Embedded Polyion Complex Vesicles (PICsomes) via RAFT Polymerization for

Deepak Bains, Institute of Nano Science and Technology (INST), India

Poroelastic Evolution of Agarose Hydrogels During Drying

Maryama Hammi, university Mohammed v, Morocco

Effect of Porosity Changes on the Flexural Behavior of FG-CNT Composite Beams Supported by Winkler, Pasternak, Abdelillah Benahmed, University of Blida, Algeria

Multifunctional rGO-based Coatings: Mechanical Strength, Thermal Resistance, and Durability of Anti-icing Rajat Kumar, Thapar Institute of Engineering and Technology, India

Evaluation of Overprotection in ICCP-Coated Steel Structures: Microscopic Evidence of Precipitation Effects **Mona Maadani**, Marine Institute of Memorial University of Newfoundland, Canada

Automated Swelling and Degradation Testing for Hydrogels: Advancing Precision and Reproducibility in Polymer Sinan Golhan, GelTech Labs, United States

Fabrication of Smart Microgels for Intelligent Drug Delivery

Mohammad F. Bayan, Philadelphia University, Jordan

Dual-Action Electrospun Nanofibrous Membrane: Efficient Bacterial Removal and Real-Time Electrochemical Biosensing

Manish Kumar, Shri viswakarma skill university, India

Development and Characterisation of Wet-Spun Alginate–Moringa and Cellulose–Moringa Composites for Potential Water Purification

Abimbola Oluwatayo Orisawayi, Cranfield University, United Kingdom

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

Diagnostic Accuracy of Polymerase Chain Reaction Against Giemsa Staining on Tissue Biopsy for Cutaneous Leishmaniasis

Aleena Khalid, Islamabad Medical & Dental College (IMDC), Pakistan

Virtual Presentations

OEGMA Based Copolymers: Tuning Amphiphilicity and Thermoresponsive Behavior

Zacharoula latridi, University of Patras, Greece

Insights into Selective Behavior of NiFe2O4/Graphene Oxide@Polyaniline Nanocomposite as a Novel Adsorbent **Azam Jabbari**, Damghan university, Iran

Influencia da Velocidade de Correntes de Ar Sobre a Porosidade Em Juntas Soldadas Pelo Processo MIG/MAG **Emiliam Bezerra da Silva**, Universidade Federal De Campina Grande, Brazil

Poster Presentations

Tribological Behavior of Epoxy-Nanofilled Composites Casing Coating under Dry Conditions in Oil Well Casing Applications

Ahmad Bawagnih, King Fahd University of Petroleum and Minerals, Saudi Arabia

Self-assembled Bioactive Protein/HA/CUR-based Amyloidogenic Nanohydrogel Dressing for Rapid Infected Diabetic Wound Healing via Enhanced Angiogenesis and Anti-inflammation

Saurabh Kumar Srivastava, IIT(BHU), India

Pegylated Graphene Oxide For 4'-Fluorouridine Delivery: An Ab Initio Approach to Antiviral Therapy **Oluwasegun Adekoya**, Tshwane University of Technology, South Africa

Exploring Ferrite-Cobalt Composites for Enhanced Supercapacitor Performance

Yeni Sanchez, Venezuelan Institute of Scientific Research, Venezuela

Comparative Analysis of Classic Network vs. Nanogel Junction Network in Konjac Glucomannan/Kappa

Or Peleg Evron, Technion-Israel Institute of Technology, Israel

Enhancing the Photocatalytic Efficiency of g-C3N4 by Sonochemical Dispersion of CdSe Quantum Dots for Degradation of Industrial

Nagy N. Mohammed, Saxony Egypt University for Applied Science and Technology, Egypt

Gadolinium–Alginate Hydrogel Composites for Sensitive and Rapid Electrochemical Detection of Microplastics Abrar Hussain, University of Science and Technology (UST), South Korea

Sustainable fabrication of a combination of alginate and Moringa oleifera composites via electrospinning **Abimbola Oluwatayo Orisawayi**, Cranfield University, United Kingdom

* Tentative Program is Subjected to Change*

We wish to see you at **Polymer Connect-2025**



Website: https://polymersconference.yuktan.com/ **Email:** committee@polymersconference.com

Organising Partner GED Biomedical Innovations ABPer Albin Hanssons vag 41

Malmo- 20512, Sweden

Phone: +46 40 666 53 35

Administrative Office
Yuktan Technologies Pte Ltd
20 Cecil Street, #05-03, Plus
Singapore 049705

Phone: +65 9189 1271