UNITED Scientific Group
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POLYMERS-2023
San Francisco, CA (Hybrid)

2nd International Conference on

Polymer Science and Engineering

Oct 30-Nov 03, 2023 | San Francisco, CA | Hybrid

DoubleTree by Hilton
San Francisco Airport
835 Airport Blvd,
Burlingame, CA

Timezone:
GMT -7 Pacific Time (San Francisco, CA)

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Program Last Updated on: August 24, 2023

Last minute changes due to functional, private, or organizational needs can be necessary. The event organizer accepts no liability for any additional costs caused by a change of program. Program is subject to change.

Scientific Sessions

Polymer Technology
Polymer engineering and processing
Polymer Composites
Polymer Materials
Polymer Chemistry
Polymer Science
Polymer Physics
Polymer Plastics
Functional Polymers
Polymer Rheology
Food Science in Polymers
Nano & Biopolymers
Natural & Synthetic Polymers
Optoelectronic Polymers

Supramolecular Polymers
Polymer 3D Printing
Smart & Functional Polymers
Peptides, Fibers & Colloids
Polymers In Medicine & Biochemistry
Synthesis & Characterization Advances & Applications
Polymer Emulsions, Surfaces & Interfaces
Polymer Waste & Recycling
Advances in Polymer Synthesis
Polymers and the environment
Polymerization Kinetics
Modeling & Optimization of Polymer Reactors

Virtual Program

Day-1 (October 30,2023)

Keynote Presentations | 30 Minutes

	Nanocomposites of Conjugated Polymers with Cellulosic Nanomaterials, Graphenic Frameworks and Inorganic Nanotube Arrays: challenges and Opportunities Karthik Shankar, University of Alberta, Canada
	General Entropy Approach Towards Ultratough Sustainable Plastics Chaobin He, National University of Singapore, Singapore

Oral Presentations | 20 Minutes

Insights Into Hydrogen Bonding of Polydisperse Polyethylene Glycol from Molecular Dynamics Simulations Markus Hoffmann, SUNY Brockport, Brockport, NY
Insights Into Hydrogen Bonding of Polydisperse Polyethylene Glycol from Molecular Dynamics Simulations Junjuda Unruangsri, Chulalongkorn University, Thailand
The Epoxy/Thiol-Ene Photopolymerization: a new curing Method for Epoxy Resins Ricardo Acosta Ortiz, Applied Chemistry Research Center, Mexico
Metabolic pathways involved in the biopolymer / polyhydroxyalkanoates production by Pseudomonas sp. LFM046 Juliana Cardinali Rezende, Federal University of ABC, Brazil
Polyurethane Elastomers Toughened by Amphiphilic ABA Tri-Block Copolymers as the Soft Segments Yanbin Fan, Dow, China
Valorization of Biomass from Insect Investigated for Commodities Plastic Degradation by a Circular Economy Approach Patrizia Cinelli, University of Pisa, Italy
Two-Dimensional Propagation of Thermal Waves Surrounding Dendrites based on a Finite Difference Method Severine A.E. Boyer, MINES Paris PSL CEMEF CNRS, France
3D Printing Strategies to Control Biochemical Heterogeneity within 3D Scaffolds for Tissue Interface Engineering Murat Guvendiren, New Jersey Institute of Technology, Newark, NJ
Photoresins for the Suitable Development of Carbon Monoliths By 3D Printing Jose Luis Diaz de Tuesta, Universidad Rey Juan Carlos, Spain
Polymeric Hydrogels for Wearable Biosensors Wen Zhong, University of Manitoba, Canada
An Epoxy Silicon Hybrid Coating as a Solution to Lower Ice Adhesion Strength on Metallic Structures Akre Simone Anne Adja, University Of Quebec At Chicoutimi, Canada

Machine Learning and Guided Nanostructures of Organic Electronics and Ionics Jihua Chen, Oak Ridge National Laboratory, Oak Ridge, TN
Improved Flocculation Efficiency of Cationic Polymers via Self-Assembling Laura Romero-Zeron, University of New Brunswick, Canada
Molecular Dynamics Study of Polyamidoamine Oligomers Containing B-cyclodextrins as Drug Carriers for Cancer Therapy Giuseppina Raffaini, Politecnico di Milano, Italy
Amphiphilic Copolymers Containing Polystyrene and Polyglycidol Blocks with Various Architecture: Synthesis, Shape of Unimers, Aggregation Properties and Application for Enzymes and Enzyme Substrates Encapsulation Stanislaw Slomkowski, Centre of Molecular and Macromolecular Studies, Poland
Structural Investigation of Human Hair Cristiano L. P. Oliveira, University of Sao Paulo, Brazil
Production of Polyhydroxyalkanoates (PHBV) from Whey and Preparation of Drug-loaded Nanoparticles Maria C. Veiga, University of A Coruna, Spain
Functional Biomaterials for Applications in Environmental Remediation Priyanka Sharma, Western Michigan University, Kalamazoo, MI
Calixarene Based Nanocomposite Membranes for Water Reuse and Organic Solvent Nanofiltration Tai-Shung Chung, National Taiwan University of Science and Technology, Singapore
Oil And Char Derived from Waste Tires (Polymer Rubber) Pyrolysis as a New Potential Base for New Eco-binder and Antioxidant Agent for Road Pavements Paolino caputo, University of Calabria, Italy
Development of Potential Nanocomposite Copolymer Desiccant Films for Moisture Adsorption-desorption Process Norazilawati Muhamad Sarih, Universiti Malaya, Malaysia
Alkyl Vinyl Imidazolium Polymers as Fuel-Binders for Photo-Curable Energetic Propellants Yoav Eichen, Technion - Israel Institute of Technology, Israel
Nanosize Azodye Layers for Liquid Crystal Photoaligning and Photopatterning Vladimir Chigrinov, The Hong Kong University of Science and Technology, Hong Kong

Day-2 (October 31,2023)

Characterization of Composite Filament for Additive Manufacturing of Flexible Structures Sabit Adanur, Auburn University, Auburn, AL
Multiple Light Scattering as a Preliminary Tool for Bio-Film Formulation Catia Giovanna Lopresto, University of Calabria, Italy
Biodegradable Films: An Alternative for Synthetic Pollution Claudia Andrea Romero Bastida, Instituto Politecnico Nacional, Mexico

Crystallographic Texture Evolution in Ultra High Molecular Weight Polyethylene During Uniaxial Tension Sahitya Movva, Georgia Tech/Intel Corporation, Atlanta, GA
Alumina Based Reinforcements for Acrylate Matrix Composite for Dentistry Marija Vuksanovic, University of Belgrade, Yugoslavia
The use of Silane Coupling Agents to Anchor Imidazoles to Titanium Dioxide and their Effects on Several Polymer Matrices When Used as a Filler. Javier Vallejo Montesinos, Universidad de Guanajuato, Mexico
Multi-Scale Investigation of Morphological, Physical and Tensile Properties of Flax Single Fiber, Yarn and Unidirectional Fabric Souher Aldroubi, Technical University of Braunschweig and Fraunhofer WKI, Germany
High-Performance Composites Derived from Bio Sources and Carbon based Reinforcements Ram K. Gupta, Pittsburg State University, Pittsburg, KS
Do Functionally Graded Cores of Polymeric Layers Improve Impact Resistance? Romesh C Batra, Virginia Polytechnic Institute and State University, Blacksburg, VA
Interplay of Matrix Stiffness and Stress Relaxation in Directing Mesenchymal Stem Cells Osteogenic Differentiation Marie Christine Durrieu, University of Bordeaux, France
Donor-acceptor Polymer Nanoparticles for Mitigating Bacterial Infections Nicole Levi, Wake Forest University School of Medicine, Winston-Salem, NC
Characteristics of Hybrid Bioactive Coatings on the Plasma Activated Polyetheretherketone Agnieszka Ewa Wiacek, Maria Curie-Sklodowska University, Poland
A 3D Hydrogel Droplet Array for Quantifying Proteins from Minimal Amount of Cells Huiyan Li, University of Guelph, Canada
Non-covalent protein polymers are involved in inheritance, disease and Memory Yury O. Chernoff, Georgia Institute of Technology, Atlanta, GA
Bacterial Membrane-Disrupting Mechanism due to Antimicrobial LL-37 Peptide Action Malgorzata Jurak, Maria Curie-Skłodowska University, Poland
Design of Phase Separating Peptide and Peptide-based Regulation of Phase Separation of Drug-Target Disordered Proteins Kiyoto Kamagata, Tohoku University, Japan
Materials for Chiral Polymer Photonics: Design, Development, and Modulation Strategies for Chiroptical Properties Jojo P. Joseph, State University of New York at Buffalo, Buffalo, NY
Donor-Acceptor Polymer Nanoparticles for Mitigating Bacterial Infections Navaranjan Namasivayam, Universiti Teknologi Brunei, Brunei Darussalam
Artificial Biomembrane Models Using Giant Vesicles of Amphiphilic Diblock Copolymers Eri Yoshida, Toyohashi University of Technology, Japan

Poster Presentations | 5-7 Minutes

The Use of Pectin as a Biomedical Application Biopolymer Luísa Rodrigues Molina Dona, Federal University of Sao Paulo, Brazil
Sustained Administration of Chitosan-tripolyphosphate-DNA Nanoparticles Expressing Fish Codon-optimized Caenorhabditis Elegans FAT-1 Increase Omega3 Fatty Acid Production in the Liver of Gilthead Seabream (Sparus Aurata) Yuanbing Wu, Universitat de Barcelona, Spain

Titles to be Announced

Ana Beatriz Morales Cepeda, Tecnologico Nacional de Mexico, Mexico
Dmitri Kilin, North Dakota State University, Fargo, ND
Takehisda Hanawa, Tokyo University of Science, Japan
Marcela Urzua, Universidad de Chile, Chile
Robert Guidoin, Laval University, Canada

-----End of Virtual Program-------

In-person program

Day-3 (November 01,2023)

Plenary Presentations | 40 Minutes

	Polymeric Biomaterials for Biomolecule Delivery and Tissue Regeneration Peter X Ma, University of Michigan, Ann Arbor, MI
	Conjugated Polymers and Carbon Macromolecules for Clean Energy and Environmental Remediation Liming Dai, University of New South Wales, Australia

Keynote Presentations | 30 Minutes

	Surface and Thin Film Characteristics of Polymer Melts from All-Atom Molecular Dynamics Simulations Do Y Yoon, Stanford University, Stanford, CA
	Hygrothermal and Combined Stress Effects on Composites – Unravelling the Mysteries Vistasp M Karbhari, University of Texas at Arlington, Arlington, TX
	Title to be Announced. Alamgir Karim, University of Houston, Houston, TX
	Research Progress and Industrialization in Polymer Materials of SINOPEC Changjiang Wu, SINOPEC Beijing Research Institute of Chemical Industry, China
	Polycarbolong Chemistry : Main-Chain Metals-Containing Conjugated Polymers Xia Haiping, Southern University of Science and Technology, China
	Joining Strength of Carbon Fiber Reinforce Polymer and Metals Ninshu Ma, Osaka University, Japan
	Zeolite-based Nitric Oxide Delivery Platforms for Treatment of wound Infections by Drug-Resistant Bacteria Pradip Mascharak, University of California, Los Angeles, CA

Oral Presentations | 20 Minutes

Construction of Dielectric Constant Prediction Models and Design of Monomers for Polymer Materials using Machine Learning Yuya Shiraki, Meiji University, Japan
Embedded Carbon Nanotubes in the Hydroscopic Hydrogel for the Environmental Water Harvesting Nasrollah Hamidi, South Carolina State University, Orangeburg, SC

Modeling the Time-Dependent Pvt Behavior of Amorphous Thermoplastics using the Interrelation of Shear and Bulk Retardation Spectra Felix Baumgartne, University of Stuttgart/ Institute of Plastics Engineering, Germany
A Novel Method for the Initial Expansion and Deformation Behavior Analysis Within the Bead Foam Extrusion Process Tobias Schaible, University of Stuttgart/ Institute of Plastics Engineering, Germany
Numerical Simulation of Particle-Laden Flow in Single-screw Extruders by Means of CFD-DEM Considering Melting of Thermoplastics Alptekin Celik, University of Stuttgart/ Institute of Plastics Engineering, Germany
Investigation of the Material and Processing Influences on the Weld Seam Quality of a Combined Thermoforming and Welding Process Dominik Muller, University of Stuttgart/ Institute of Plastics Engineering, Germany
Increasing Polymer Concentration in the Precursor Solutions Systematically Improves the Phase Purity of the Crystalline Oxide Particles in Electrosprayed Films Amit Ranjan, Rajiv Gandhi Institute of Petroleum Technology, India
Application of Systems Dynamic Simulations in The Preparation and Characterization of Novel Functionalized Casein Microparticles and Casein Microgels Ronald Gebhardt, RWTH-Aachen University, Germany
Modification of nonlinear viscoelastic properties for biomass-based plastics Masayuki Yamaguchi, Japan Advanced Institute of Science and Technology, Japan
Rapid Polymerization of Thin Film Thermosetting Polymers Using Pulsed Light Kurt A. Schroder, PulseForge, Inc., Coupland,TX
Microcellular Foaming Technology SungWoon Cha, Yonsei University, South Korea

Day-4 (November 02,2023)

Metal-Like Lustrous Materials Using Oligo(3-Alkoxythiophene) Dyes Satoru Tsukada, Chiba University, Japan
Toughening of Poly (Ionic Liquid)-Based Ion Gels by Adding Nanomaterials Takaichi Watanabe, Okayama University, Japan
Wetting Behaviour of Poly (Ethylene Oxide)-Grafted Silica Surfaces in the Presence of Free Homopolymers M Natalia DS Cordeiro, University of Porto, Portugal
Design of Soft Materials: where Theory, Simulations and Experiments Meet Andrey Dobrynin, University of North Carolina, Chapel Hill, NC
Graphene Oxide Nanocomposite Membranes as High Performance Separators for Lithium-Air Battery Shingjiang Jessie Lue, Chang Gung University, Taiwan

Graphene Oxide Reinforced Vinyl Ester Polymer Matrix Composites Andre Y Lee, Michigan State University, East Lansing, MI
High Energy-Density Energy Storage Capacitor in Multi-Layer Polymer and 2D Nanofiller Composites Nihar R Pradhan, Jackson State University, Jackson, MS
Biodegradable Electrospun Scaffold of PLA/PBS Reinforced with Cellulose Nano Fibril for Tissue Engineering Hamad Al-Turaif, King Abdulaziz University, Saudi Arabia
Advancing Understanding of Composite Polymer Electrolytes with LLZO Nanofibers Sanja Tepavcevic, Argonne National Laboratory, Lemont, IL
Exfoliated PLA-Clay Bio-based Nanocomposites Achieved by Candy-Floss Spinning with Melt Extrusion Rathanawan Magaraphan, Chulalongkorn University, Thailand
Sustainable Block Copolymers and Renewable/Reusable Thermoplastic Elastomers Ishrat M Khan, Clark Atlanta University, Atlanta, GA
Advances in Nanocomposite Power Scavenging Technologies David Carroll, Wake Forest University, Winston-Salem, NC
High Capacity Polypyrrole Membrane as Energy Storage Material Ze Zhang, Laval University, Canada
Polyazole Based Polymer Materials Development for Challenging Application Husnul Maab, University of Buner, Pakistan
Rheological Property Recovery and Stability of Recycled Polymers H. Henning Winter, University of Massachusetts Amherst, Amherst, MA
Functional modification of macromolecular systems For nano-generators Unnikrishnan Gopalakrishna Panicker, National Institute of Technology, India
Adhesive Bonded Joints in the Automotive and Transportation Industry: Experimental and Numerical Aspects Pierre Jousset, Eastern Switzerland University of Applied Science, Switzerland
Characterization of Microstructures and its Impact on Properties of Branched Poly (Glycerol Sebacate) Jinal Pothupitiya, Secant Group, Quakertown,PA
Critical Crosslinking as a Tool for Innovative Polymer Properties Frank Katzenberg, TU Dortmund, Germany
Molecular Design and Understanding of Multifunctional Hydrogels from Fundamentals to Diverse Applications Jie Zheng, The University of Akron, Akron, OH
Towards Biomimetic Polymers for Protein Recognition Ian A Nicholls, Linnaeus University, Sweden
Thermoplastic Elastomers with Inherent Antimicrobial Properties for Reduction in the Spread of Harmful Microbes Kacie Wells, North Carolina State University, Raleigh, NC

Birefringence Control of Photoalignable Liquid Crystalline Polymers and Application to Polarization Optical Devices Nobuhiro Kawatsuki, University of Hyogo, Japan
Developing polypropylene for extrusion-based 3D printing Hans-Werner Schmidt, University of Bayreuth, Germany

Day-5 (November 03,2023)

Utilization of Corn Stover-Derived Nanocellulose as Oil-in-water Emulsion Stabilizer Lingling Liu, Iowa State University, Ames, IA
Structural And Bioinformatic Studies of the Cellulose Synthase Cesa5 of Physcomitrium Patens and Its Product – in-Vitro Synthesized Cellulose Microfibrils Tracy Nixon, The Pennsylvania State University, State College, PA
Engineering Nonconventional Lignin to Improve Biomass Saccharification Chang-Jun Liu, Brookhaven National Laboratory, Upton, NY
Extraction and Characterization of Cellulose Nanocrocrystals from Corn Husk Wastes and its Application in Film Preparation Sergio Mayta Paucara, Universidad Nacional de Ingenieria, Peru
Effect Of NMP on the Holographic Data Storage of a Photosensitive Polymer Junchao Jin, Fujian Normal University, China
Novel Chain Extenders for Polyester Mohamed A. Abdelwahab, Michigan State University, East Lansing, MI
Recent Progress on the Revolutionary Mechanical Recycle and Environmentally Friendly Molding based on Physical Degradation / Physical Regeneration Theory Shigeru Yao, Fukuoka University, Japan
Molecularly Imprinted Polymers as Recognition Elements in Acoustic,Electrochemical or Optical Sensors to Detect Pesticides or Drugs in Water Maria Teresa Seabra dos Reis Gomes, Uuniversity of Aveiro, Portugal
Fabrication and Characterization of Hydrogen Peroxide and Thymol Loaded PVA/PVP Hydrogel Coatings as a Novel Anti-Mold Surface for Hay Protection Eyal Malka, Bar-Ilan university, Israel
Multivalent-type Compounds Remarkably Enhance the Biological Activities Koji Matsuoka, Saitama University, Japan
3D Printing of Bone Scaffolds Based on Starch and Active Hydroxyapatite Bianca Chieregato Maniglia, University of Sao Paulo, Brazil
Immunoactive polysaccharides of natural origin - complex mechanisms of immunomodulatory activity Jadwiga Turlo, Medical University of Warsaw, Poland

Poster Presentations

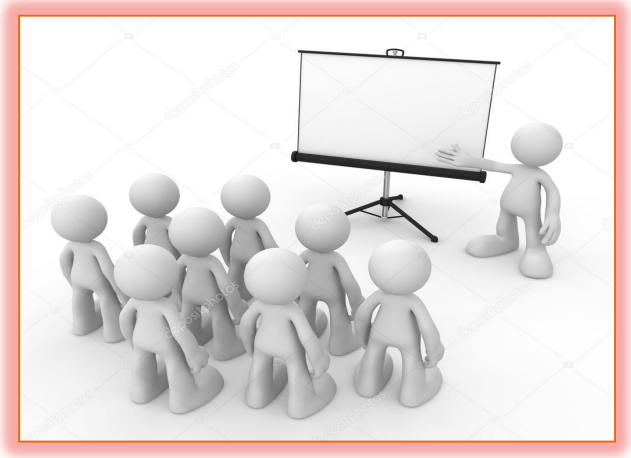
In-situ Change of Polymer Glass Transition Temperature according to Gas Saturation by Temperature in High Pressure Vessel Kwan Hoon Kim, Yonsei University, South Korea
Tunable Heating Rate Sensitive Triple Shape Memory Polymer Robert David Ludwig Jerusalem, TU Dortmund, Germany
Development of Biomedical Polymer Using Microcellular Foaming Process and Bacterial Cellulose Jin Hong, Yonsei University, South Korea
Potential Food Packaging Antibacterial Contact Surfaces: PLA Dopped by Copper Double Salts Olga Martin, Universidad Carlos III de Madrid, Spain
Spray Deposited Functional Polymer Nanocomposites Mingqing Wang, University College London, United Kingdom
Preparation of Polymeric Membranes of P(VDF-Trfe) Containing A Tio2-Rgonanocomposite for the Photocatalytic Degradation of Organic Contaminants in Water, Under Solar Light Eduarda B. H. Santos, University of Aveiro, Portugal
Improvement of Material Properties upon Tailoring the Morphology of Crosslinked Polyethylene Michail Maricanov, TU Dortmund, Germany

Titles to be Announced

Wei Yu Wei, Texafire Canada branch of Kingfa Science & Technology, Canada
Hiromasa Kaneko, Meiji University, Japan
Rinta kawagoe, Meiji University, Japan
Xiaodi Tan, Fujian Normal University, China
Shinji Takeoka, Waseda University, Japan
Yong Ba, California State University, Los Angeles, CA
David Bigio, University of Maryland, College Park, MD
Iris Erramuspe, Auburn University, Auburn, AL
Armand Soldera, Universite de Sherbrooke, Canada
Anindya Deb, Indian Institute of Science Bangalore, India
Shiyan Chen, Southern University of Science and Technology, China
Althagafy Khalid, Umm AlQura University, Saudi Arabia
Han ruiqi, Japan Advanced Institute of Science and Technology, Japan

Ricciotti Laura, University of Campania Luigi Vanvitelli, Italy
Yingrui Shang, Oak Ridge National Laboratory, Oak Ridge, TN
Jason C Dudek, Ferrero, Chicago, IL
Jawza Sharhan Alnawmasi, Qassim University, Saudi Arabia
Seung Seob Lee, KAIST, South Korea
Yuepeng Zhang, Argonne National Laboratory, Lemont, IL
Unnikrishnan Gopalakrishna Panicker, National Institute of Technology, India
Amit Haldar, University of Limerick, Ireland
Guangda Shi, TekniPlex, Perrysburg, OH
Kate Lassman, Exponent, Menlo Park,CA

Other Information



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