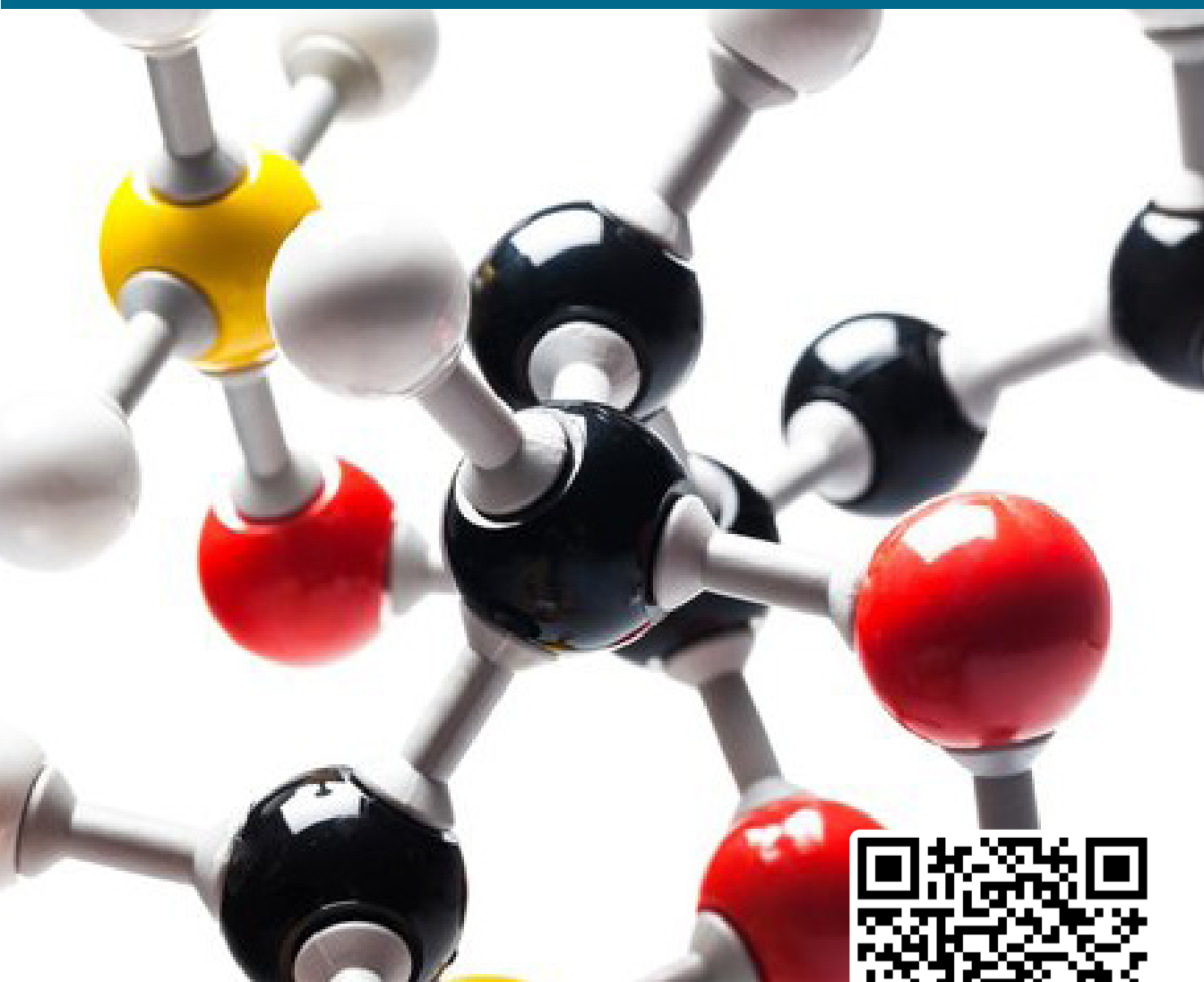


The Scientistt

Exploring Science · Promoting Innovation

Final Program



PolyScience2023

September 18-20, 2023 | Lisbon, Portugal



DAY-1, 18-September-2023 | Monday

Meeting Hall @ Meeting Room

Conference Chair: Prof. Richard Spontak, North Carolina State University, USA

Conference Co-chair: Prof. Elena Stefanova, Instituto Superior Técnico, Portugal

09:00-09:15 | On Spot Registrations

09:15-09:30 | Opening Ceremony by Conference Chair and Co-chair

09:30-10:10

Title: Water-Activated Carbon Capture: From Nanostructured to Hybrid-Integrated Membranes

Richard Spontak, North Carolina State University, USA

P

10:10-10:45

Title: A Versatile Plasma Machine for Synthesis-by-design of Graphene and Hybrids at a Gram-scale

Elena Stefanova Tatarova, Instituto Superior Técnico, Portugal

KN

10:45-11:20

Title: Structure and Properties of Nanoparticle Reinforced Elastomeric Melt-blown Nonwovens and Composites

Gajanan S. Bhat, University of Georgia, USA

KN

11:20-11:35 | Coffee Break @Foyer

Session on: Green Transition

Session Chair Prof. Geoffrey Mitchell

11:35-12:50

Title: The Green Transition

Author: Geoffrey Mitchell, Polytechnic of Leiria, Portugal

P

Co-author: **Anabela P. Massano**, Polytechnic of Leiria, Portugal

I

12:50-13:00 | Panel Discussion

13:00-13:15 | Group Photo

13:15-14:00 | Lunch Break @Restaurant

14:00-14:35	<p>Title: Organic and other Cure Strategies for More Sustainable Silicone Elastomers</p> <p>Michael A Brook, McMaster University, Canada</p>	KN
14:35-15:10	<p>Title: Modelling Self-Healing Polymers for Electrodes of Next Generation Li Ion Batteries</p> <p>Rita Magri, University of Modena and Reggio Emilia, Italy</p>	KN
15:10-15:45	<p>Title: Films of Post-Consumer LDPE Waste with Improved Barrier and Biocidal Properties</p> <p>Maciej Studzinski, Łukasiewicz Research Network - Industrial Chemistry Institute, Poland</p>	KN

15:45-16:00 | Coffee Break @Foyer

Business Development Session

16:00-17:15 **HIROYA ISHIDA**, Sekisui Chemical Co.,Ltd, Japan

Invited Talks

Biopolymers and Bio plastics, Polymer Materials, Polymer Science and Technology & Recycling and Waste Management of Bio-polymers

Session Chair: Agnieszka Szadkowska, Łukasiewicz Research Network - Industrial Chemistry Institute, Poland

Session Co-chair: Ebru Dengiz Özcan, Istanbul Technical University, Turkey

17:15-17:40	<p>Title: Thermoplastic Starch-Based Nanocomposites</p> <p>Agnieszka Szadkowska, Łukasiewicz Research Network - Industrial Chemistry Institute, Poland</p>	I
17:40-18:05	<p>Title: Investigation of the Effect of Polymer based Novel Grinding Aids and Comparison with Conventional Products on Cement Grinding Efficiency and its Properties</p> <p>Ebru Dengiz Özcan, Istanbul Technical University, Turkey</p>	I
18:05-18:30	<p>Title: Development of High-Performance Kinetic Hydrate Inhibitor Polymers</p> <p>Malcolm A Kelland, University of Stavanger, Norway</p>	I

Session on: Maintaining the Role of Polymers in Buildings

09:00-09:30

Title: Heat Transfer Through Wet Polymeric Foams
 Session Chair: **Mark Bomberg**, Clarkson University, USA

KN

09:30-10:00

Title: Use of a Phase Change Material with Reflective Airspace to Conserve Energy
David W. Yarbrough, Tennessee Technological University, USA

KN

10:00-10:30

Title: Hygrothermal Performance of Cool and Black Roofs with Polymer-Based Thermal Insulations
Hamed H. Saber, Royal Commission of Jubail and Yanbu, Saudi Arabia

KN

10:30-11:00

Title: Thermal Resistance Characteristics of Closed-Cell Polymeric Foam Insulation in Canadian Climatic Conditions
Phalguni Mukhopadhyaya, University of Victoria, Canada

KN

11:00-11:15 | Coffee Break @Foyer

11:15-11:50

Title: Microorganism Resistant Polyolefins
Regina Jeziorska, Lukasiewicz Research Network - Industrial Chemistry Institute, Poland

KN

11:50-12:25

Mark Bomberg, Clarkson University, USA

KN

12:25-13:00

Title: Possible Ways for Chemical Recycling of Cyanate Ester, Epoxy and Polyurethane Composites, Properties and Application of Recyclates
Liudmyla Gryshchuk, Leibniz Institute for Composite Materials, GmbH, Germany

KN

13:00-13:15 | Group Photo

13:15-14:00 | Lunch Break @Restaurant

14:00-14:35

Title: Specific Heat and Thermal Conductivity of $UCu_{4+x}Al_{8-x}$ Compounds
Farzana Nasreen, Colgate University, USA

I

Invited Talks

Composite Materials & Technology for Defense, Polymer Membranes for Environments and Energy, Metal Matrix Composites and Advanced Composite Materials and Technologies

Session Chair: Morgane Guerchoux, Franco-German Research Institute of Saint-Lo is (ISL), France

Session Co-chair: Ana Clara Marques, University of Lisbon, Portugal

14:35-15:00

Title: Development of Bulk Copolymers for Optical Limitation: Polyvinylcarbazole (PVK) and Acrylate Oligomer Doped with Sulfasalazine Dye

Morgane Guerchoux, Franco-German Research Institute of Saint-Louis (ISL), France

15:00-15:25

Title: Approach to Mitigate Biofouling using Sulphonated Polymer Nanocomposite Membranes in Microbial Fuel Cell Application

Sangeetha Dharmalingam, Anna University, India

15:25-15:50

Title: Development of Nitrogen-doped Graphene/MOF Nanocomposites towards Adsorptive Removal of Cr(VI) from the Wastewater of the Herbert Bickley Treatment Works

Tshireletso Madumo, University of Johannesburg, South Africa

15:50-16:15

Title: Improved Organically Treated Nanoclay-Polyurethane Nanocomposite

Mona Ahmed, Egyptian Petroleum Research Institute (EPRI), Egypt

16:15-16:30 Coffee Break @Foyer

Advanced Synthetic Polymers and Catalytic Materials, Organic and Inorganic Composites, Polymer Synthesis and Polymerization

16:30-16:55

Title: Enlightenment of Porous Microspheres Generation and Their Use as Supports for Solar-Light Driven Photocatalysts

Ana Clara Marques, University of Lisbon, Portugal

16:55-17:20

Title: Microwave Plasma Synthesis of Nanomaterials and Applications

Edgar Felizardo, Institute of Plasma and Nuclear Fusion, Portugal

17:20-17:45

Title: High-Performance Perovskite Light-Emitting Diodes via Synergetic Interface Engineering

Jianxin Tang, Soochow University, China

17:45-18:10

Title: Mechanism of Radical (Homo) Polymerization of Multivinyl Monomers: Applicability of Flory-Stockmayer Theory

Jing Lyu, University College Dublin, Ireland

18:10-18:40

Title: Single-Chain Knot/Cyclized Polymers from Controlled Multivinyl Monomer Polymerisation and Their Biomedical Applications

Wenxin Wang, University College Dublin, Ireland

Poster Presentations @18:40-19:10

P-001

Title: Influence of the Selected Nonionic Surfactants on the Physicochemical and Antioxidative Properties of Polymeric Films Based on Polylactide with an Addition of Quercetin

Ewa Olewnik-Kruszkowska, Nicolaus Copernicus University in Torun, Poland

P-002

Title: Boron-methacrylate Containing Santa Barbara Amorphous-15 Polymer Composite

Ibrahim Ersin Serhatli, Istanbul Technical University, Turkey

P-003

Title: Synthesis of Superconductive TaN thin Films by Reactive DC Sputtering

Amanda Georgina Nieto Sánchez, Cetys Universidad, Mexico

P-004

Title: Heat and Mass Transfer in Porous Media

Ramzi Rzig, BimaTech company, Tunisia

P-005

Title: A New Approach to Study Combination Mixture Organic Solvent Ethylene Carbonate with Lithium-Ion for Alkali-Ion Battery: A Density functional Theory study

Shah Khalid, China University of Petroleum, China

P-006

Title: Curvature Analysis of Equilibrium States in a Quantum Lattice Model for Ferroelectric Crystals

Riza Erdem, Akdeniz University, Turkey

P-007

Title: Electrical Conductivity Behavior of Thermoplastic Starch-Based Composite Filled With Conductive Filler During Cyclic Mechanical Deformation

Hamed Peidayesh, Polymer Institute of the Slovak Academy of Sciences, Slovakia

P-008

Title: Electromagnetic Interference Shielding Performance of Thermoplastic Polyurethane based nanocomposites filled with CoFe₂O₄ nanoparticles alongwith Graphite for X-band Frequency range

Anju, Tomas Bata University in Zlín, Czech Republic

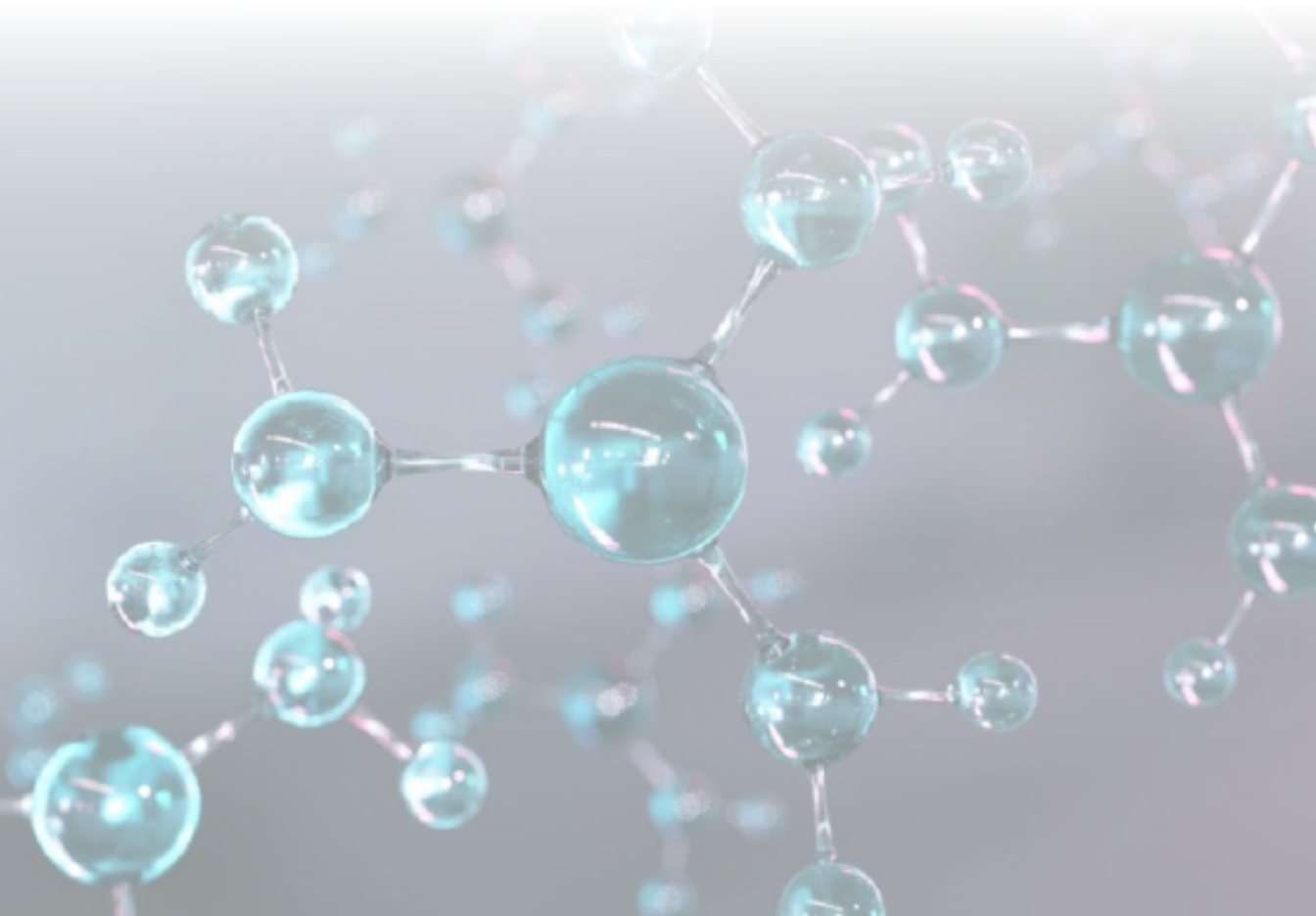
P-009

Pedro Fonte, University of Algarve, Portugal

PolyScience2024 | Venue

Crown Plaza Caparica Lisbon an IHG Hotel

Address: Largo Aldeia Dos Capuchos, 2825-017 Caparica, Portugal



DAY-3, 20-September-2023 | Wednesday (Virtual Talks)

London time zone(GMT+1)

09:00-09:35	<p>Title: Green Energy Storage Empowered by Plasma-Enhanced Hybrid Nano-composites</p> <p>Uroš Cvelbar, Jozef Stefan Institute, Slovenia</p>	VP
09:35-10:05	<p>Title: Environment-Assisted Degradation of Fibre Reinforced Polymer Composites for Advanced Civil Engineering Applications</p> <p>Raman Singh, Monash University, Australia</p>	VP
10:05-10:40	<p>Title: To be Announced</p> <p>TANAKA MASARU, Kyushu University, Japan</p>	VP
10:40-11:15	<p>Title: Polymeric Nanocomposite Membranes Consisting of Calixarenes for Clean Energy, Clean Water and Organic Solvent Recovery</p> <p>Chung Tai Shung Neal, National Taiwan University of Science and Technology, Taiwan</p>	VP
11:15-11:30 Short Break		
11:30-11:55	<p>Title: 4D Printing of Biodegradable and Deformable Medical Devices</p> <p>Cheng Lin, Harbin Institute of Technology (HIT), China</p>	VI
11:55-12:20	<p>Title: CO₂-Based Poly (Propylene Carbonate) Diol and Its Applications</p> <p>Lina Song, Guangdong University of Technology, China</p>	VI
12:20-12:45	<p>Title: Stereolithographic Additive Manufacturing of Ceramic Implants</p> <p>Soshu Kirihaara, Osaka University, Japan</p>	VK
12:45-13:10	<p>Title: A New Approach to Study Combination Mixture Organic Solvent Ethylene Carbonate with Lithium-Ion for Alkali-Ion Battery: A Density functional Theory study</p> <p>Shah Khalid, China University of Petroleum, China</p>	VI
13:10-13:35	<p>Title: Synthesis, Characterization, and Anticancer Activity of Low and High Molecular Weight Chitosan Functionalized Salicylaldehyde Thiosemicarbazones, and their Copper(II) Complexes</p> <p>Paras Nath Yadav, Tribhuvan University, Nepal</p>	VI
13:35-14:10	<p>Title: Engineering at the Nanoscale: A Strategy for Developing High Performance Functional Materials from Biopolymers</p> <p>Sabu Thomas, Mahatma Gandhi University, India</p>	VI

14:10-14:25 | Short Break

14:25-14:50

Title: Nitrogen Effects on Structure and Mechanical Properties of AISI 304 Austenitic Stainless Steel and Chromium Nitride Films
Faisal Alresheedi, Qassim University, Saudi Arabia

VI

14:50-15:15

Title: G-C₃N₄ Nanocomposites and Porous Composite Materials for Catalysis Aiming
Peyman Hanifehnejad, Iran University of Science & Technology (IUST), Iran

VI

15:15-15:40

Title: Production of Nucleated Polypropylene through In-situ Propylene Polymerization
Reza Sheibani, Marun Petrochemical Company, Iran

VI

15:40-16:05

Title: Long-Term Results of Composite Restoration of Worn Teeth
Serhiy Radlinsky, Apollonia Dental Clinic-Studio, Ukraine

VI

16:05-16:20 | Short Break

16:20-16:45

Title: Rational Approach for Engineering Multifunctional Porous Adsorbents Derived Molecular Imprinted Polymers for CO₂ Capture, H₂ uptake and CO₂/H₂ Separation
Nour Attia, National Institute of Standards (NIS), Egypt

VI

16:45-17:10

Title: Delta Tangent Analysis of Polymeric Composites Blended with Ground Tire Rubber
Marc Marín Genescà, Universitat Rovira i Virgili, Spain

VI

17:10-17:35

Title: Cyclic Poly (B-amino ester) s Targeting Enhanced Gene Transfection via Cyclic Stage Control Strategy
Yinghao, University College Dublin, Ireland

VI

17:35-18:00

Title: End the Mechanism Controversy: A Universal Design Strategy named Cu-based Reversible Deactivation Radical Polymerization
Zishan Li, University College Dublin, Ireland

VI

18:00-18:25

Title: The Struggle Between Saving Lives and the Environment: The Role of the Next Generation of Biomaterials
Thomas J Webster, Interstellar Therapeutics, USA

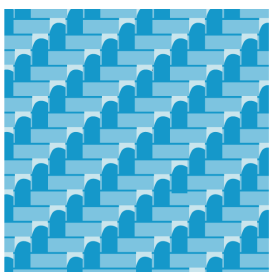
VI

18:25-18:50

Title: Thermal Resistance Characteristics of Closed-Cell Polymeric Foam Insulation in Canadian Climatic Conditions
Phalguni Mukhopadhyaya, University of Victoria, Canada

VK

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