

9th International Conference on

MATERIAL SCIENCE AND ENGINEERING

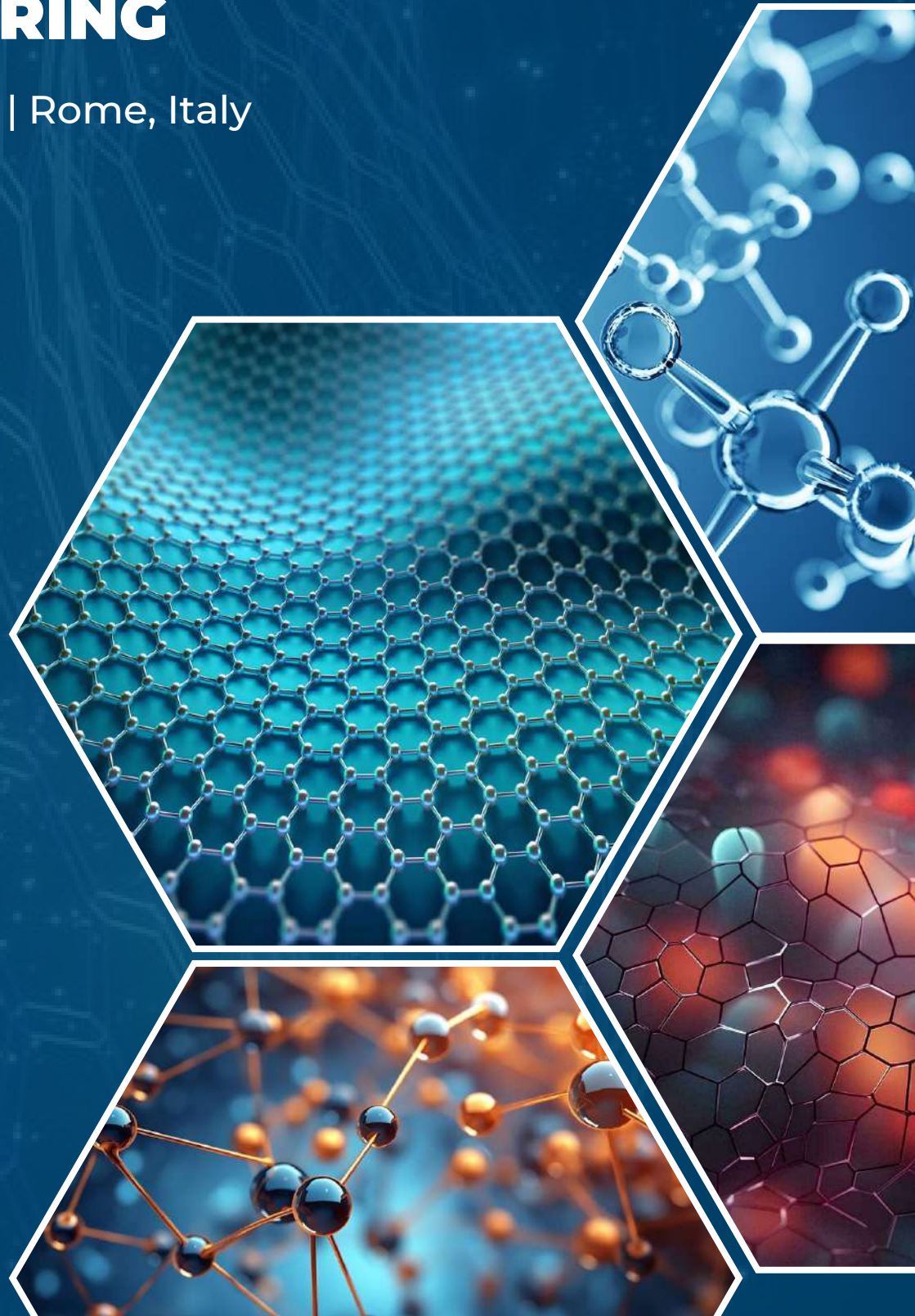
April 11-12, 2024 | Rome, Italy

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Scientific Program

9th International Conference on **Material Science and Engineering**

Day-1 : April 11, 2024

Meeting Hall: Parioli 1

08:00 - 08:45 Registrations

08:45 - 09:00 Introduction

Keynote Presentations

09:00 - 09:40 Materials Developed for High Energy Physics Research and their new Life as Medical Physics Instruments

Benedetto Di Ruzza, University of Foggia, Italy

9:40 - 10:20 When does Gravity actually Influence the Macroscopic Contact Angle in Partial Wetting Problems

Marc Medale, Aix-Marseille University, France

10:20 - 11:00 Evolution of the Ballistic Protection Systems

Marcin H. Struszczyk, Institute of Security Technologies "MORATEX", Poland

Network & Refreshments @ Bar 11:00 - 11:30

Oral Presentations

Session Chair **Marcin H. Struszczyk**, Institute of Security Technologies "MORATEX", Poland

Session Chair **Benedetto Di Ruzza**, University of Foggia, Italy

Sessions:

Material Science and Engineering | Nano Technology and Bio-Nano Technology | Energy Materials and Sustainable | Environmental and Green Materials | Nano Materials | Mechanical, Civil and Architectural Engineering | Plastics and Recycling Materials | Surface Science and Engineering

11:30 - 11:55 The Influence of The use of ABS Plastic and Basalt Powder in Standard Mortars

Ryszard Dachowski, Kielce University of Technology, Poland

11:55 - 12:20 Development of Innovative Materials Based on Natural Polysaccharides and Nanocellulose for the Packaging Sector

Ylenia Ruberto, University of Parma, Italy

12:20 - 12:45 Lathyrus Brachypterus-Mediated Facile Green Synthesis of Magnetic Nanoparticles / Nanocomposite and Investigation of their Adsorption Capacity for Anion Removal from Aqueous Solution

Muradiye Şahin, Kırşehir Ahi Evran University, Turkey

Group Photo @ 12:45 - 13:00

Lunch @ Seguimi 13:00 - 14:00

14:00 - 14:25 Application of a Geochemical Modeling Code to Analyze the Phase Composition of Silicate Bricks Modified with Glass Sand

Anna Stepień, Kielce University of Technology, Poland

14:25 - 14:50 On the Fatigue of Ship-Structures Under Wave Loads

Federico Frisone, University of Messina, Italy

14:50 - 15:15 Structural Stress of Titanium Welded Joints

Pasqualino Corigliano, University of Messina, Italy

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15:15 - 15:40 Synthesis of Magnetic Nanoparticles/Nanocomposite from *Lathyrus Brachypterus* Extract and Photocatalytic Hydrogen Production from Water

Muradiye Şahin, Kirşehir Ahi Evran University, Turkey

15:40 - 16:05 Analytical Expressions of Non-Markovian Qualities of Biomaterials

Orchidea Maria Lecian, Sapienza University, Italy

Network & Refreshments @ Bar 16:05 - 16:30

Keynote Presentation

16:30 - 17:10 Disposal of Rejected brine Utilizing Innovative Technologies such as Plunging Liquid Jet Reactor

Bader Shafaqa Al-Anzi, Kuwait University, Kuwait

Day 1 Concludes followed by Award Ceremony

9th International Conference on **Material Science and Engineering**

Day-2 : April 12, 2024

Meeting Hall: Parioli 1

Keynote Presentations

10:00 - 10:40 Fabrication of Ultrafine-Grained Bulk Ti-Alloy Sheets and Rods and its Industrial Application

Chong Soo Lee, Pohang University of Science and Technology, Republic of Korea

10:40 - 11:20 Tribology: Conceptualization and Applications

Ronaldo Cámara Cozza, CEETEPS – State Center of Technological Education “Paula Souza” Faculty of Technology – Department of Mechanical Manufacturing – Campus, Brazil

Network & Refreshments @ Bar 11:20 - 11:55

11:55 - 12:35 Simultaneous Heavy Metal Wastewater Treatment and Nanoparticle Synthesis using Dead Biomass of Microalgae

Tau Chuan Ling, University Malaya, Malaysia

Oral Presentations

Session Chair **Marcin H. Struszczyk**, Institute of Security Technologies “MORATEX”, Poland

Session Chair **Ronaldo Cámara Cozza**, CEETEPS, Brazil

Sessions:

Material Science and Engineering | Tribology and Surface Engineering | Environmental and Green Materials | Plastics and Recycling Materials | Mechanical, Civil and Architectural Engineering | Environmental and Green Materials | Biomaterials and Tissues Engineering | Nano Materials | Biopolymers and Bioplastics

12:35 - 13:00 Recycling of Multi-Component, Multi-Layer Waste by the use of ‘Green’ Solvents

George Theodosopoulos, TWI Ltd, United Kingdom

Lunch @ Seguimi 13:00 - 14:00

14:00 - 14:25 Synergistic Electronic and Facets Engineering in Novel Double Perovskite Oxide -Based Photocatalysts for Spatial Charge Separation for Overall Water Splitting and CO₂ Reduction

Khakemin Khan, Trento University, Italy

14:25 - 14:50 Physiochemical Characterization of Glycyrrhiza Mediated Bioengineered Palladium Nanoparticles (PdNPs), their Antiproliferative and other Biomedical Applications

Najlaa Saad Oudah AlRadadi, Taibah University, Saudi Arabia

14:50 - 15:15 Physiochemical Characterization of Glycyrrhiza Mediated Bioengineered Palladium Nanoparticles (PdNPs), their Antiproliferative and other Biomedical Applications

Ahmed H. Ragab, King Khalid University, Saudi Arabia

15:15 - 15:40 The Importance of Color-Dye Injection and Cord Insertions' Sites Studies in Monochorionic Twin Placentas

Elisa Bevilacqua, Fondazione Policlinico Agostino Gemelli IRCCS, Italy

Video Presentation

15:40 - 16:05 Conjugated Coupling for Two Penrose Tiles Pair and Their Elementary Unit Cell, for Translation Tiles

Kung Chung Yuan, National Chung Hsing University, Taiwan

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Network & Refreshments @ Bar 16:05 - 16:30

Poster Presentations

MSPP-01	Polyesters of Azelaic Acid and Selected Short-Chain Dihydroxy Alcohols for the Preparation of Cell Scaffolds Aleksandra Bandzerewicz , Warsaw University of Technology, Poland
MSPP-02	DNA and G4 PAMAM Dendrimers as a Basis for Reduction of Silver Ions Irine Khutsishvili , Ivane Javakhishvili Tbilisi State University, Georgia
MSPP-03	Synthesis and Characterization of Platinum Nanoparticles on Reducible Metal Oxide Supports for Catalytic Applications and Hydrogen Sensing Marijan Gotic , Laboratory for Molecular Physics and Synthesis of New Materials, Division of Materials Physics, Ruđer Bošković Institute, Croatia
MSPP-04	Preliminary Research of Michael Addition of Cysteine as a Solution for Osteoporosis Patients Magdalena Mietus , Warsaw University of Technology, Poland
MSPP-05	Optically Active Nanostructured Thin Films of Cellulose Nanocrystals Rachel Yerushalmi - Rozen , Ben-Gurion University of the Negev, Israel
MSPP-06	Photoconductive Response of a Field-Effect Transistor Through the Traps Effect Bilal Bouzidi , Hight School d'Agriculture Saharien Adrar(ESASA), Algeria

Keynote Presentations

17.15 - 17.55	Physico Chemical and Mechanical Characterization of PVC Waste and Sand Composite for its Valorization for Roofing C Diange Collins Misodi , Paul Herbert Higher Institute of Professional Studies Kumba
17.55 - 18.35	Physico Chemical and Mechanical Characterization of PVC Waste and Sand Composite for its Valorization for Roofing Mbelle Samuel Bisong , University of Buea, Cameroon

Day 2 Concludes followed by Vote of Thanks & Awards Ceremony

Virtual Program

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Virtual Presentations

April 11-12, 2024 | Virtual Program (BST)

10:45 - 11:00 Introduction

Keynote Presentation

11:00 - 11:30 Development of Energy Efficient Alkali-Activated Bricks using Waste Foundry Sand
Rahul Ralegaonkar, VNIT, India

Oral Presentations

11:30 - 11:50 Underwater Swimming Robot based on Piezoelectric Ceramics
Qingping Wang, Hubei University of Education, China

11:50 - 12:10 Burning Tobacco Cigarettes with Ca Polymer Filters Harms Smokers and the Environment - Toxic Deposits and Respirable Microfibers
Peter Eyerer, HomeFraunhofer Institute for Chemical Technology (ICT), Germany

12:10 - 12:30 Use of Nanoscale Materials in Sensor Devices
Ruslan, Yuriy Fedkovych Chernivtsi National University, Ukraine

12:30 - 12:50 Role of Polymer-BSA Interactions on the Formation Biofilms on Biomaterials
Suparna, University of Exeter, United Kingdom

Lunch (12:50 - 13:15)

13:15 - 13:35 Strength and Stiffness Properties of Softwood after Long-Term Use in Variable Service Conditions
Lilita Ozola, Latvia University of Life Sciences and Technologies, Latvia

13:35 - 13:55 Comparative Study Tire Recycling Products Obtained by Different Technologies
Arkady Cherepanov, Russian Technological University - MIREA, Russia

13:55 - 14:15 Post-COVID-19 Functional Status: Relation to Age, Smoking, Hospitalization, and Previous Comorbidities
Abdelrahman Ezzat, Aswan University, Egypt

14:15 - 14:35 Acarbose-Encapsulated Guar Gum Nanoformulation: A Promising Strategy for Type 2 Diabetes Management
Sourbh Suren Garg, Lovely Professional University, India

14:35 - 14:55 Sound Energy Harvester using Polyvinylidene Fluoride
Kailash Chandra Shivaji Paturi, University of North Texas, USA

14:55 - 15:15 Analysis of Physical and Mechanical Properties in Lime-Sand Materials Modified with Glass Sand with an Amorphous Structure
Magdalena Balonis, University of California, USA

15:15 - 15:35 Chemical Composition-Based Machine Learning Model to Predict Defect Formation in Additive Manufacturing
Ankit Roy, Pacific Northwest National Lab, USA

Day-1 Concludes

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Day-2: April 12, 2024

Keynote Presentation

10:00 - 10:30 Evaluation of Developed Alkali- Activated Concrete for Energy-Efficient Building Material
Rahul Ralegaonkar, VNIT, India

Oral Presentations

10:30 - 10:50 Vibration of Arches Elastically Restrained at Both Ends and Reinforced by Elastic Support Points
Ahmed Babahammou, Hassan II university of Casablanca, Morocco

10:50 - 11:10 The Uncertainty of Reusable Building Components/Materials
Christian Jonathan, Politecnico di Milano, Italy

11:10 - 11:30 First Report on Pichia Kudriavzevii Lactic Acid Production from Orange Peel Waste (OPW)
Neha Thakur, Lovely Professional University, India

11:30 - 11:50 Comparison of Mechanical Properties of Additively Manufactured Chopped Carbon Fiber Reinforced Nylon Specimens with Variation In Process Parameters
Niranjan S. Deshmukh, Defence Institute of Advanced Technology, India

11:50 - 12:10 Compare Study of Ag and K Nanoparticles with Sea Weed Extract (Sagarika) in Seed Priming
Indira Rathore, IFFCO, India

12:10 - 12:30 Fabrication and Characterization of Hydroxyapatite and Chitosan from Bio-Resources
Aasma, NED University of Engineering and Technology, Pakistan

12:30 - 12:50 Formulation and Evaluation of Novel Additive-Free Spray-Dried Triamcinolone Acetonide Microspheres for Pulmonary Delivery: A Pharmacokinetic Study
Sawsan A Zaitone, Suez Canal University, Egypt

12:50 - 13:10 Energy Harvesting Through Diverse Nanowires
Bestley Joe S, Kings Engineering College, India

13:10 - 13:30 Improving The Fatigue Design of Mechanical Systems such as Refrigerator
Seongwoo Woo, Ethiopian Technical University, Ethiopia

Day-2 Concludes followed by Vote of Thanks