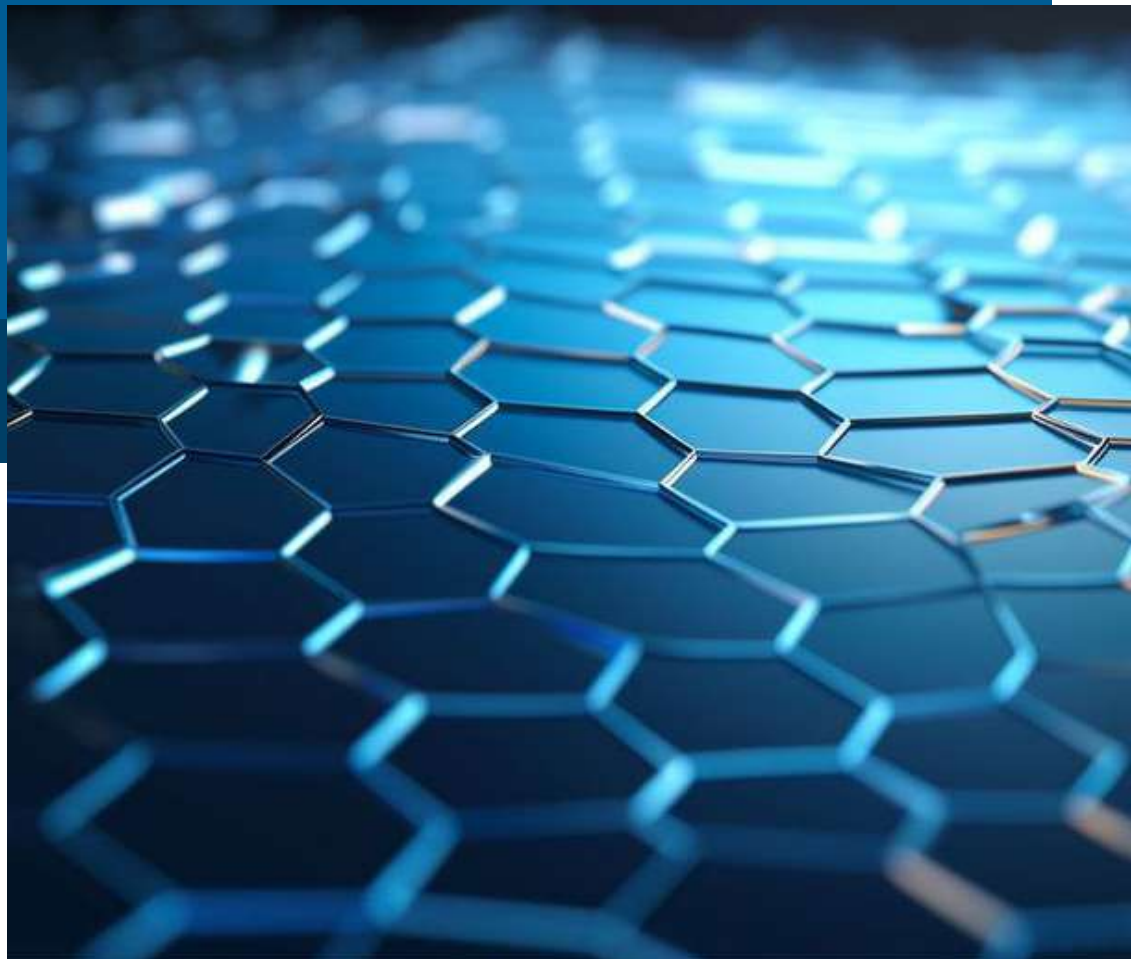


11th International Conference on
**MATERIALS SCIENCE
AND ENGINEERING**

November 20-21, 2024 | Dubai, UAE



Scientific Program

11th International Conference on

Materials Science and Engineering

Day-01 November 20, 2024

Meeting Hall: La Rosa Meeting Room

08:00 - 08:45 Registrations

08:45 - 09:00 Opening Ceremony and Introduction

Keynote Presentations

09:00 - 09:40 **Tribology: Conceptualization of Micro-Abrasive Wear**
Ronaldo Câmara Cozza, CEETEPS – State Center of Technological Education “Paula Souza”, Brazil

09:40 - 10:20 **Integrated Microbolometer for Remote Human Vital Signs Detection**
Janez Trontelj, University of Ljubljana, Slovenia

10:20 - 11:00 **Scientific Research Institute of Semiconductor Physics and Microelectronics at the Forefront of Semiconductor Research in Uzbekistan**
Utamuradova Sharifa Bekmuradovna, Director Research Institute of Semiconductor Physics and Microelectronics, Uzbekistan

Networking & Refreshments 11:00 - 11:20 @ La Rosa Foyer

11:20 - 12:00 **Structure and Properties of Transparent Conducting Layers of Metal Oxide and Sensors Based on Them**
Muzafarova Sultanpasha Anvarovna, Laboratory of the Research Institute of Semiconductor Physics and Microelectronics, Uzbekistan

Oral Presentations

Session Chair: **Ronaldo Câmara Cozza, CEETEPS – State Center of Technological Education “Paula Souza”, Brazil**

Session Chair: **Vít Černý, Brno University of Technology, Czech Republic**

Session Chair: **Mavlyanov Abdulaziz Shavkatovich, Laboratory Research Institute of Semiconductor Physics and Microelectronics, Uzbekistan**

Sessions: Material Science | Nano Technology and Bio-Nano technology | Electronic, Optical and Magnetic Materials | Composite, Coating and Ceramic Materials | 3D Printing and Addictive Manufacturing | Tribology and Surface Engineering | Engineering

12:00 - 12:25 **Nanofluid-Enhanced Heat Transfer in Multi-Stage Flash Desalination using Hematite Nanoparticles**
Nasser Ibrahim Zouli, Jazan University, Saudi Arabia

12:25 - 12:50 **Research on Deformation Behavior of Fresh Three-Dimensional Printing Mortar Based on FE Simulation**
Kazutaka Shirai, Hokkaido University, Japan

Group Photo: 12:50 - 13:00

Lunch: 13:00 - 14:00 @ La Mode Restaurant

14:00 - 14:25 **Why Sustainability & Circularity on Materials is Critical – Industry Perspective**
Pallavi Iyer, Schneider Electric, India

14:25 - 14:50 **Surface Study of Orthodontic Nano-hybrid Composites Material**
Abdulsalam Al-Hazza, Kuwait Institute for Scientific Research, Kuwait

11th International Conference on

Materials Science and Engineering

14:50 - 15:15	Nanophotonic, MoS ₂ Nanostructures Potential Applications as Light Emitting Diodes (LEDs) Areeba Siddiqui, United Arab Emirates University, Al Ain, UAE
15:15 - 15:40	Sulfur- Manganese-Silicon Cell and XRD Analysis of Si <Mn> Mavlyanov Abdulaziz Shavkatovich, Laboratory Research Institute of Semiconductor Physics and Microelectronics, Uzbekistan
15:40 - 16:05	A Study on Poly Styrene-Divinyl Benzene Encapsulated Cu-Ni Bimetallic Nano-Materials for Removal of Lead, Copper and Nickel from Waste Water & it's Anti-Bacterial Efficiency Emily Varghese, United Arab Emirates University, Al Ain, UAE

Networking & Refreshments: 16:05 - 16:30 @ La Rosa Foyer

Poster Presentations

Poster Judge	Ronaldo Câmara Cozza, CEETEPS – State Center of Technological Education “Paula Souza”, Brazil
PPT - 001	Development of a New Energy-Intensive Composition Vanadium Electrolyte and Investigation Reversible Charge Transfer Mechanisms for use High-Efficiency Energy Storage Devices Elmira Aimbetova and Indira Aimbetova, Akhmet Yassawi University, Kazakhstan
PPT - 002	Study of the Influence of Hydration on the Percolation Threshold of Electrically Conductive Silicate Composites Vít Cerný, Brno University of Technology, Czech Republic
PPT - 003	The Impact of various Portland-Composite Cements on the Properties of Autoclaved Aerated Concrete Lenka Mészárosóvá, Brno University of Technology, Czech Republic
PPT - 004	Innovative Utilization of Unconventional Raw Materials in the Production of Autoclaved Aerated Concrete Jindřich Meličar, Brno University of Technology, Czech Republic
PPT - 005	Property Improvements of 3D-Printed Products Aliaksandr Ilyushchanka, State Scientific Institution “O.V. Roman Powder Metallurgy Institute”, Belarus
PPT - 006	Biodegradable Implant Materials Based on Zinc-Doped Magnesium Powder Vadzim Savich, State Scientific Institution “O.V. Roman Powder Metallurgy Institute”, Belarus

Day-1 Concludes followed by Award Certifications

11th International Conference on

Materials Science and Engineering

Day 2 - November 21, 2024

Meeting Hall: La Rosa Meeting Room

Keynote Presentations

09:40 - 10:20 Low-Resistance Membrane vs High-Resistance Membrane Performance Utilizing Electrodialysis–Evaporator Hybrid System in Treating Reject Brine from Kuwait Desalination Plants

Bader Shafaqa Al-Anzi, Kuwait University, Kuwait

Networking & Refreshments: 10:20 - 10:40 @ La Rosa Foyer

10:40 - 11:20 From Trash to Treasure: Banana Peel derived-Carbon Quantum Dots for Sensing of Cr (VI) and Ascorbic Acid

Aayushi, Virginia Tech India Center for Advanced Research and Innovation, India

11:20 - 12:00 Influence of Rear-Earth Elements on Generation Characteristics of Silicon MOS - Structures

Daliev Khozhakbar Sultanovich, Director "MPEI" National Research University, Uzbekistan

Oral Presentations

Session Chair **Ronaldo Câmara Cozza, CEETEPS – State Center of Technological Education “Paula Souza”, Brazil**

Session Chair **Bader Shafaqa Al-Anzi, Kuwait University, Kuwait**

Sessions:

Material Science | Nano Technology and Bio-Nano technology | Electronic, Optical and Magnetic Materials | Composite, Coating and Ceramic Materials | 3D Printing and Additive Manufacturing | Tribology and Surface Engineering | Engineering

12:00 - 12:25 Photosensitive Au - nCdS - nSi - pCdTe - Au Heterostructure on Silicon Substrate

Muzafarova Sultanpasha Anvarovna, Laboratory of the Research Institute of Semiconductor Physics and Microelectronics, Uzbekistan

12:25 - 12:50 Integrated Microbolometer for THz Sensors

Andrej Švigelj, University of Ljubljana, Slovenia

Lunch: 12.50 - 14:00 @ La Mode Restaurant

14:00 - 14:25 Application of Bayesian Networks for Optimization in Problems of Materials Science and Engineering

Assel Abdildayeva, Al-Farabi Kazakh National University, Kazakhstan

14:25 - 14:50 Surface Functionalized Ceramic Membrane using Super Hydrophilic Coating to Enhance of Oil in Water Separation

Yousef Alqahs Alanezi, College of Technological Studies at PAAET, Kuwait

14:50 - 15:15 Post-Covid-19 Functional Status: Relation to Age, Smoking, Hospitalization, and Previous Comorbidities

Abdelrahman Mohamed Ezzat Kotb Hassan Mohamed, Assiut University, Egypt

11th International Conference on

Materials Science and Engineering

15:15 - 15:40 Development of a System for Monitoring the Properties of Materials using IoT Devices
Ali Duisen, Almaty Polytechnic College, Kazakhstan

15:40 - 16:05 Application of Bayesian Networks for Optimization in Problems of Materials Science and Engineering
Akhmetova Ardak, Al-Farabi Kazakh National University, Kazakhstan

Networking & Refreshments: 16:05 - 16:30 @ La Rosa Foyer

Video Presentations

VP-01 Connect to the Structural Origin of the Change in Ductility of Zr-Based Metallic Glasses Using 4-dimensional Scanning Transmission Electron Microscopy
Soohyun Im, SUNY Buffalo, USA

VP-02 Less is More: The Impact of Minimally Invasive Posterior Restorations
Yosra Gassara, University of Monastir, Tunisia

VP-03 Innovations in Sensors: Detecting Heavy Metal Ions in Water and the Emergence of IoT Technologies for Water Resources Management
Monika, CSIR-Central Scientific Instruments Organisation(CSIO), India

VP-04 Pioneering Cadmium Analysis: Pt-Citrate/Au Electrodes Offer Exceptional Sensitivity
Babankumar, CSIR-Central Scientific Instruments Organisation(CSIO), India

Day-2 Concludes followed by Award Certifications and Vote of Thanks

Bookmark The Dates

13th International Conference on

Materials Science and Engineering

October 27-28, 2025 | Singapore City, Singapore



Contact Us:

Phone: +1-718-543-9362

Whatsapp: +1-864-275-0927

E-Mail: materialsscience@conferencesecretary.com