

3rd Global Conference on

MATERIALS SCIENCE & ENGINEERING



April 24, 25 & 26, 2025

Venue:

**Double Tree By Hilton Al Jadaf,
Dubai, UAE**

Theme:

**Outlining The Forefront
Research In The Field of
Materials Science and
Nanotechnology**

SCIENTIFIC AGENDA

DAY-1

24th April 2025

Double Tree By Hilton Al
Jadaf, Dubai, UAE

Room - Zeina 1

Day 1

08:30 - 09:00 Onsite Registration & Seating Arrangement

09:00 - 09:15 Introduction & Opening Ceremony

Time	Name & Affiliation	Title
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Keynote Presentations

09:15 - 09:45	Dr Laure Le Corroller <i>Dr. & Master Sha Tao Academy, Canada</i>	Tao Calligraphy Field as a Powerful Integrative Medicine Technology
09:45 - 10:15	Prof. Micheline Bejjani <i>American University in Dubai, UAE</i>	Sustainable bioplastics and nanogenerators
10:15 - 10:45	Prof. Maria Vittoria Diamanti <i>Politecnico di Milano, Italy</i>	Anodic TiO₂ membranes for Water Purification in Solar Evaporators

Refreshment & Coffee - 10:45 - 11:05

Keynote Presentation

11:05 - 11:35	Prof. Xuanhui Qu <i>University of Science and Technology Beijing, China</i>	High-performance Friction Materials for Brake of High-speed Railway Trains
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Oral Presentations

11:35 - 12:00	Prof. Mostafa Mehrabi <i>University of Detroit Mercy, USA</i>	A Systematic Approach to Parametric Study of Powder Metallurgy By Design of Experiment
12:00 - 12:25	Dr. Maryam Sadat Kiai <i>Istanbul Technical University, Turkey</i>	Mos₂@cos₂@gc as a Novel Separator with Stable Cyclability for Practical Li-s Batteries
12:25 - 12:50	Dr. Leonid Chernyak <i>University of Central Florida, USA</i>	Impact of radiation and electron injection on minority carrier transport in n- and p-type Gallium Oxide
12:50 - 13:15	Prof. Peng Zhang <i>University of Science and Technology Beijing, China</i>	The structure control of precipitates in heat-resistance steel and its mechanical properties

Memorable Group Photo & Tempting Buffet lunch - 13:15 - 14:00

Oral Presentations Cont...

14:00 - 14:25	Prof. MariaPia Pedferri <i>Politecnico di Milano, Italy</i>	Surfactant-stabilized TiO₂ Sol-gels: Aging Stability and Photocatalytic Performance
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14:25 - 14:50	Prof. Kriveshini Pillay <i>University of Johannesburg, South Africa</i>	Heavy-metal loaded nanocomposites as novel photocatalysts for the degradation of organic pollutants
14:50 - 15:15	Prof. Vladimír Zeleňák <i>P.J. Safarik University, Slovakia</i>	Advanced Nanoporous Silica Platforms for Drug Delivery
15:15 - 15:40	Prof. Dr. Ramesh Kumar Radhakrishna Reddiar <i>Indian Space Research Organisation, and APJ Abdul Kalam Technological University, India</i>	Design and Validation of High Performance Insulation for a Semi Cryogenic system of SSLV

Refreshment & Coffee - 15:40 - 16:00

Group Presentations...

	Prof. Luiza Gabunia <i>Tbilisi State Medical University, Georgia</i>	
	Prof. Nana Gorgaslidze <i>Tbilisi State Medical University, Georgia</i>	
	Prof. Levan Ratiani <i>Tbilisi State Medical University, Georgia</i>	
16:00 - 16:40	Prof. Nino Chumburidze-Areshidze <i>Tbilisi State Medical University, Georgia</i>	Polypharmacy, rational antibiotic therapy, ways for prevention complications of antibiotic-therapy and resistance to antibiotics
	Prof. Giorgi Varazi <i>Tbilisi State Medical University, Georgia</i>	
	Prof. Nino Intskirveli <i>Tbilisi State Medical University, Georgia</i>	

Oral Presentations Cont...

16:40 - 17:05	Prof. Asma Obaid <i>Jazan University, KSA</i>	Colorimetric Sensors for Recognition of Chiral Drugs Using Gold Nanoparticles
17:05 - 17:30	Ms. Laiba Asif <i>National University of Sciences and Technology, Pakistan</i>	Development of composites using Recycled Plastics & Metal Wire Mesh for structural applications – A numerical study

***** End of Day 1 *****

SCIENTIFIC AGENDA

DAY-2

25th April 2025

Double Tree By Hilton Al
Jadaf, Dubai, UAE

Room - Zeina 1

Day 2

09:00 - 09:30 Onsite Registration & Seating Arrangement

Time	Name & Affiliation	Title
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Keynote Presentations

09:30 - 10:00	Prof. Jun Ding <i>National University of Singapore</i>	LiCl@HPEA for Water Harvesting from Atmospheric Humidity
10:00 - 10:30	Prof. Masato SONE <i>Institute of Science Tokyo, Japan</i>	Material Control & Evaluation Methods of Multi-layered Ti/Au Micro-sized Components by Electroplating Toward Ultra High-Sensitive MEMS Accelerometer

Oral Presentations

10:30 - 10:55	Prof. Rajendra B V <i>Manipal Institute of Technology, India</i>	Effect of Irradiation on the Structural, Optical and Electrical Properties Spray Coated Zn_{0.97}Fe_{0.30} Films
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Refreshment & Coffee - 10:55 - 11:15

Keynote Presentation

11:15 - 11:45	Prof. Chaalal Omar <i>Abu Dhabi University, UAE</i>	Green Ammonia a Coming up Clean Energy
11:45 - 12:15	Mr. Julietta V. Rau <i>Institute of the Structure of Matter, Italy</i>	Advanced Functional Materials for Antimicrobial Biomedical Implants

Oral Presentations

12:15 - 12:40	Prof. Win Long Chia <i>Fu Jen Catholic University, Taiwan</i>	A lifetime on synthesis of nitrogen-containing liquid crystals in Taiwan
12:40 - 13:05	Prof. Tongguang Zhai <i>Shandong Jianzhu University, China</i>	Life Prediction of Fatigue Crack Initiation at Pre-fractured Particles in AA2024-T351 Al alloys using a quantitative 3D Microstructure-based Model

Memorable Group Photo & Tempting Buffet lunch - 13:05 - 13:50

Oral Presentations Cont...

13:50 - 14:15	Dr. Rajesha Kumar Alambi <i>Kuwait Institute for Scientific Research, Kuwait</i>	UIO-66 metal-organic framework impregnated thin-film nanocomposite membrane for desalination via pressure-assisted osmosis
14:15 - 14:40	Dr. Arnaud Caron <i>Herbert Gleiter International Institute, China</i>	On the Shear-induced Flow and Transfer of Silicon Oxide at the Interface Between Silicon Crystals
14:40 - 15:05	Dr. Navid Aslfattahi <i>Czech Technical University in Prague, Czech Republic</i>	Improvement of the Performance of Sodium-ion Battery Utilizing a Mos2@cos2@gc Anode Through Dft Calculations
15:05 - 15:30	Prof. Aizhan Rakhmanova <i>Nazarbayev University, Kazakhstan</i>	Nanostructured ZnO based sensor for detection of ammonia

Refreshment & Coffee - 15:30 - 15:50

Poster Presentation

15:50 - 16:10	Prof. Yuanbin Zhang <i>Shandong Jianzhu University, China</i>	The neural network model of weld bead dimensions for arc additive manufacturing
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***** End of Day 2 *****





SCIENTIFIC AGENDA

DAY-3

26th April 2025

Via Zoom Platform

Day 3

08:50 - 09:00 Introduction & Opening Ceremony

Time	Name & Affiliation	Title
Keynote Presentations		
09:00 - 09:30	Prof. Raman Singh <i>Monash University (Melbourne), Australia</i>	Success in Developing CVD Graphene Coating on Mild Steel: A Disruptive Approach to Remarkable/Durable Corrosion Resistance
09:30 - 10:00	Prof. Paulo Cesar Morais <i>Catholic University of Brasilia, Brazil</i>	Modulating Portland-based cement with nanosilica
10:00 - 10:30	Prof. Thomas J. Webster <i>Hebei University of Technology, China</i>	The Impact of Nanomedicine: 30,000 Orthopedic Nano Implants With No Failures and Still Counting
10:30 - 11:00	Prof. Abdullah Riaz <i>University of Rostock, Germany</i>	Fabrication of smart biomaterials for bone tissue engineering

Refreshment & Coffee - 11:00 - 11:20

Oral Presentations

11:20 - 11:45	Prof. Brij Bhushan Tewari <i>University of Guyana, Guyana</i>	Implication of Metal Complexes in Biology and Medicine: The System Aluminum (III) / Chromium (III) / Iron (III) – Homoserine
11:45 - 12:10	Mr. Janne Heilala <i>University of Turku, Finland</i>	Nanoscale XR Integration Breakthroughs for the Next Generation Metaverse
12:10 - 12:35	Dr. Meltem Yanilmaz <i>Istanbul Technical University, Turkiye</i>	Synthesis of solid electrolytes for rechargeable batteries
12:35 - 13:00	Dr. Marco Anni <i>University of Salento, Italy</i>	Environmental Effects on the Amplified Spontaneous Emission of Lead Halide Perovskites Nanocrystals Films and Possible Applications to Optical Gas Sensors
13:00 - 13:25	Dr. Vladislav Bogdanov <i>National Transport University, Ukraine</i>	About plane problem of non-stationary interaction of hard body in bases with welded joint in elastic-plastic formulation

Refreshment & Coffee - 13:25 - 13:45

Oral Presentations Cont...

13:45 - 14:10	Prof. Osman Adiguzel <i>Firat University, Turkey</i>	Shape Memory Phenomena and Crystallographic Aspects of Reversibility in Shape Memory Alloys
14:10 - 14:35	Fernando Gallardo <i>Morgan Meteor Mineral Group, Chile</i>	Environmentally Eco-friendly Biological Processes for Nanoparticles Copper (Silver, Gold, Nanoparticle with Deionized -water)
14:35 - 15:00	Dr. Meltem Yanilmaz <i>Istanbul Technical University, Turkiye</i>	Synthesis of nanostructured carbons for rechargeable batteries
15:00 - 15:25	Benigno Rodriguez Diaz <i>University of the Republic, Uruguay</i>	A New Generation of Antennas for Climate Change Mitigation
15:25 - 15:50	Zeynep BİLGİN <i>Eskisehir Technical University, Turkey</i>	Metal-Organic Framework Based Adsorbent for CO2 Removal from Syngas
15:50 - 16:15	Prof. Natasha Lushetich <i>University of Dundee, UK</i>	Experimental Approaches to Energetic Materials

Refreshment & Coffee - 16:15 - 16:35

Poster Presentation

	Prof. Yaohua Zhu <i>The Hong Kong Polytechnic University, Hong Kong</i>	A Research Road Map Approaching Thin Films of Semiconductors Electropulsing Induced Phase Transformations and Their Practical Applications of Thin Films of Tco and Te Semiconductors
16:35 - 17:05	Dr. Rechache Mustapha <i>University of Sciences and Technologies Houari Boumediene</i>	Elaboration of a Composite Material Applied to the Elimination of Micropollutants
	Prof. Xianfang YUE <i>Hang Seng University of Hong Kong</i>	Future Challenges: Enabling Next-generation Systems Through Smart, Nanostructured, and Multifunctional Innovations

***** End of Day 3 & Conference *****

