

3<sup>rd</sup> 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**

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## **DAY-1**

**24<sup>th</sup> 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
<b>Keynote Presentations</b>		
09:15 - 09:45	<b>Dr Laure Le Corroller</b> <i>Dr. &amp; Master Sha Tao Academy, Canada</i>	<b>Tao Calligraphy Field as a Powerful Integrative Medicine Technology</b>
09:45 - 10:15	<b>Prof. Micheline Bejjani</b> <i>American University in Dubai, UAE</i>	<b>Sustainable bioplastics and nanogenerators</b>
10:15 - 10:45	<b>Prof. Maria Vittoria Diamanti</b> <i>Politecnico di Milano, Italy</i>	<b>Anodic TiO<sub>2</sub> membranes for Water Purification in Solar Evaporators</b>
<b>Refreshment &amp; Coffee - 10:45 - 11:05</b>		
<b>Keynote Presentation</b>		
11:05 - 11:35	<b>Prof. Xuanhui Qu</b> <i>University of Science and Technology Beijing, China</i>	<b>High-performance Friction Materials for Brake of High-speed Railway Trains</b>
<b>Oral Presentations</b>		
11:35 - 12:00	<b>Prof. Mostafa Mehrabi</b> <i>University of Detroit Mercy, USA</i>	<b>A Systematic Approach to Parametric Study of Powder Metallurgy By Design of Experiment</b>
12:00 - 12:25	<b>Dr. Maryam Sadat Kiai</b> <i>Istanbul Technical University, Turkey</i>	<b>Mos<sub>2</sub>@cos<sub>2</sub>@gc as a Novel Separator with Stable Cyclability for Practical Li-s Batteries</b>
12:25 - 12:50	<b>Prof. Leonid Chernyak</b> <i>University of Central Florida, USA</i>	<b>Impact of radiation and electron injection on minority carrier transport in n- and p-type Gallium Oxide</b>
12:50 - 13:15	<b>Prof. Peng Zhang</b> <i>University of Science and Technology Beijing, China</i>	<b>The structure control of precipitates in heat-resistance steel and its mechanical properties</b>
<b>Memorable Group Photo &amp; Tempting Buffet lunch - 13:15 - 14:00</b>		
<b>Oral Presentations Cont...</b>		
14:00 - 14:25	<b>Prof. MariaPia Pedferri</b> <i>Politecnico di Milano, Italy</i>	<b>Surfactant-stabilized TiO<sub>2</sub> Sol-gels: Aging Stability and Photocatalytic Performance</b>

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

### Refreshment & Coffee - 15:40 - 16:00

### Group Presentations...

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

### Oral Presentations Cont...

16:40 - 17:05	<b>Prof. Asma Obaid</b> <i>Jazan University, KSA</i>	<b>Colorimetric Sensors for Recognition of Chiral Drugs Using Gold Nanoparticles</b>
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**\*\*\* End of Day 1 \*\*\***

# **SCIENTIFIC AGENDA**

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## **DAY-2**

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

## Oral Presentations

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

## Keynote Presentation

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

## Oral Presentations

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

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

## Oral Presentations Cont...

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

**Refreshment & Coffee - 15:30 - 15:50**

**Poster Presentation**

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



The background features a light blue color scheme with a large, faint DNA double helix structure. In the foreground, there are several molecular models: a grid of small circles in the top left, a ball-and-stick model of a branched chain on the left, and a large ball-and-stick model of a hexagonal lattice structure in the center and bottom. The text is centered and uses a clean, sans-serif font.

# **SCIENTIFIC AGENDA**

## **DAY-3**

**26<sup>th</sup> April 2025**

**Via Zoom Platform**

# Day 3

08:50 - 09:00 Introduction & Opening Ceremony

Time	Name & Affiliation	Title
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## Keynote Presentations

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

11:30 - 11:50 (Eye Relaxation Break & Breakout Rooms - Greenwich Mean Time)

## Oral Presentations

11:50 - 12:15	<b>Prof. Brij Bhushan Tewari</b> <i>University of Guyana, Guyana</i>	<b>Implication of Metal Complexes in Biology and Medicine: The System Aluminum (III) / Chromium (III) / Iron (III) – Homoserine</b>
12:15 - 12:40	<b>Mr. Janne Heilala</b> <i>University of Turku, Finland</i>	<b>Nanoscale XR Integration Breakthroughs for the Next Generation Metaverse</b>
12:40 - 13:05	<b>Dr. Meltem Yanilmaz</b> <i>Istanbul Technical University, Turkiye</i>	<b>Synthesis of solid electrolytes for rechargeable batteries</b>
13:05 - 13:30	<b>Dr. Marco Anni</b> <i>University of Salento, Italy</i>	<b>Environmental Effects on the Amplified Spontaneous Emission of Lead Halide Perovskites Nanocrystals Films and Possible Applications to Optical Gas Sensors</b>
13:30 - 13:55	<b>Dr. Vladislav Bogdanov</b> <i>National Transport University, Ukraine</i>	<b>About plane problem of non-stationary interaction of hard body in bases with welded joint in elastic-plastic formulation</b>

13:55 - 14:15 (Eye Relaxation Break & Breakout Rooms - Greenwich Mean Time)

Oral Presentations Cont...

14:15 - 14:40	<b>Prof. Osman Adiguzel</b> <i>Firat University, Turkey</i>	<b>Shape Memory Phenomena and Crystallographic Aspects of Reversibility in Shape Memory Alloys</b>
14:40 - 15:05	<b>Fernando Gallardo</b> <i>Morgan Meteor Mineral Group, Chile</i>	<b>Environmentally Eco-friendly Biological Processes for Nanoparticles Copper (Silver, Gold, Nanoparticle with Deionized -water)</b>
15:05 - 15:30	<b>Dr. Meltem Yanilmaz</b> <i>Istanbul Technical University, Turkiye</i>	<b>Synthesis of nanostructured carbons for rechargeable batteries</b>
15:30 - 15:55	<b>Benigno Rodriguez Diaz</b> <i>University of the Republic, Uruguay</i>	<b>A New Generation of Antennas for Climate Change Mitigation</b>
15:55 - 16:25	<b>Zeynep BİLGİN</b> <i>Eskisehir Technical University, Turkey</i>	<b>Metal-Organic Framework Based Adsorbent for CO<sub>2</sub> Removal from Syngas</b>
16:25 - 16:50	<b>Prof. Mostafa Mehrabi</b> <i>University of Detroit Mercy, USA</i>	<b>A Systematic Approach to Parametric Study of Powder Metallurgy By Design of Experiment</b>

16:50 - 17:10 (Eye Relaxation Break & Breakout Rooms - Greenwich Mean Time)

Poster Presentation

	<b>Prof. Yaohua Zhu</b> <i>The Hong Kong Polytechnic University, Hong Kong</i>	<b>A research road map approaching thin films of semiconductors ( Electropulsing induced phase transformations in alloys and thin films of TCO and TE semiconductors )</b>
17:10 - 17:40	<b>Dr. Rechache Mustapha</b> <i>University of Sciences and Technologies Houari Boumediene</i>	<b>Elaboration of a Composite Material Applied to the Elimination of Micropollutants</b>
	<b>Prof. Xianfang YUE</b> <i>Hang Seng University of Hong Kong</i>	<b>Future Challenges: Enabling Next-generation Systems Through Smart, Nanostructured, and Multifunctional Innovations</b>

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