



**Theme:**

Outlining the forefront research in the field of materials science and nanotechnology.

**SCIENTIF**ink

2<sup>nd</sup> Global Conference on  
**Materials Science  
& Engineering**

**MAY 30-31** | **DUBAI**  
**2024** | **UAE**

*Materials World 2024*

<https://materialsscience.scientifink.com/>

# SCIENTIFIC AGENDA

MAY 30-31, 2024

Name	Affiliation	Title
Introduction & Open Ceremony		
Speaker Presentations		
Seongwoo Woo	<i>Ethiopian Technical University, Ethiopia</i>	Improving the Fatigue Design of Mechanical Systems such as Refrigerator
Z Kovziridze	<i>Georgian Technical University Georgia</i>	FAILURE STRESS ENERGY FORMULA
Raul B. Rebak	<i>GE Vernova Research USA</i>	Using Advanced Fuel Materials to Retrofit Current Light Water Reactors
Raman Singh	<i>Monash University, Australia</i>	Innovative Surface Modification for Enabling CVD Graphene Coating on Steels for Remarkable Corrosion Resistance
K. U. Neumann	<i>SRH University of Applied Sciences, Germany</i>	Martensitic Domain Formation in the Ferromagnetic Shape Memory Material Ni <sub>2</sub> MnGa
Osman Adiguzel	<i>Firat University, Turkey</i>	Shape Reversibility and Fundamental Characterization of Shape Memory Alloys
David Sheehan	<i>Khalifa University, Ubu Dhabi, UAE</i>	Nanoparticles as novel nucleation agents in protein crystallization: Success with a panel of unrelated proteins
Refreshment and Coffee Break		
Speaker Presentations Continues...		
Carlos Guerrero-Fajardo	<i>Universidad Nacional de Colombia</i>	sdComparison of performance in obtaining graphene oxide in three particle sizes using the Liquid Phase Exfoliation (LPE) method with high-rank Colombian coal

<b>Pitamber Mahanandia</b>	<i>National Institute of Technology, Rourkela, Odisha, INDIA</i>	<b>Investigation of mobility of graphene based field-effect transistor using ferroelectric gate</b>
<b>UTHAYAKUMAR G S</b>	<i>St. Joseph's Institute of Technology, Chennai, India</i>	<b>Artificial intelligence, IoT, and growing semiconductor technologies</b>
<b>Lev Rapoport</b>	<i>Holon Institute of Technology, Israel</i>	<b>The effect of the microstructure on the Friction and Wear Properties of Some FCC Metals under Lubricated Conditions</b>
<b>Carolina Fonseca de Farias</b>	<i>Federal University of Juiz de Fora, Brazil</i>	<b>The high-performance mortar with incorporation of marble waste and different additives</b>
<b>Urvashi Gunpath</b>	<i>University of Derby, United Kingdom</i>	<b>Laser-based material Science behind Powder Based Additive Manufacturing for Aerospace and Healthcare Industry</b>
<b>Rodolfo Gabriel Figueroa Saavea</b>	<i>Universidad de La Frontera, Chile</i>	<b>A New Tool for Cancer Theragnosis</b>
<b>Karima BELAKROUM</b>	<i>University of El Oued, Algeria</i>	<b>Structural and magnetic properties evolution of <math>Cu_{2x}Cr_{2x}Zr_{2-2x}Se_4</math> for <math>0.500 \leq x \leq 0.650</math></b>
<b>Hansang Cho</b>	<i>Sungkyunkwan University, Republic of Korea</i>	<b>Astrocytic Scar Restricting Glioblastoma Spreading in Glioblastoma-Microglia Assembloid</b>
<b>Khaled Shawakfeh</b>	<i>Jordan University of Science and Technology, Jordan</i>	<b>Encapsulation of Digitonin-Graphene Oxide, Digitonin-Graphene-Iron Oxide Composite into Cyclodextrins</b>
<b>Ilham El-Monier</b>	<i>Cairo University, Egypt</i>	<b>Doxorubicin and RITA loaded pH-responsive Dextran nanoparticles exhibiting inhibitory effects in synergism against cancer cells</b>
<b>Pier Paolo Pompa</b>	<i>Istituto Italiano di Tecnologia, Genova, Italy</i>	<b>Point-of-care colorimetric nanobiosensors: health, safety, food, environment</b>
<b>Bhawana jain</b>	<i>Siddhachalam Laboratory, Raipur (C.G.) INDIA</i>	<b>Antibacterial and photocatalytic degradation via ZnO-<math>\beta</math>-cyclodextrin nanocomposite</b>

## Refreshment and Coffee Break

Umesh Yadava	<i>Deen Dayal Upadhyaya Gorakhpur University, India</i>	<b>Solute Binding Proteins as Smart Biomolecules: Structural and Functional Characterizations</b>
Abdelhak Maghchiche	<i>University Batna 2, Algeria</i>	<b>Nano composite hydrogels for biomedical applications from palm date seeds</b>
Khatib Zada Farhan	<i>King Abdulaziz University, Saudi Arabia</i>	<b>Influence of steel, polypropylene and glass fiber reinforcement on the high temperature resistance of alkali activated composites</b>
Haroldo A Ponte	<i>Federal University of Paraná, Brazil</i>	<b>Surface application of yttrium oxide nanoparticles as a protective method against high temperature oxidation to increase material's lifespan</b>
V A Krylov	<i>Institute of the Chemistry of High Purity Substances of the Russian Academy of Sciences, Russia</i>	<b>Gas chromatographic and gas chromatographic-mass spectrometric analysis of high purity volatile compounds for electronics and fiber optics</b>
George Venedictovich Filatov	<i>Ukrainian State University of Chemical Technology, Ukraine</i>	<b>Ukrainian State University of Chemical Technology, Ukraine</b>
Ang-yang Yu	<i>Harbin Engineering University, China</i>	<b>Numerical simulation of seismic wave field in the two-phase viscoelastic EDA media</b>
Eugenia Pechkova	<i>University of Genova, Italy</i>	<b>Protein Langmuir-Blodgett (LB) nanofilms: characterization and applications</b>
Santanu Ghosh	<i>IIT DELHI, New Delhi-110016, India</i>	<b>Metal-insulator nanocomposite films for Field emission, Magnetic storage and LSPR for electronics and fiber optics</b>
Thomas J Webster	<i>Interstellar Therapeutics, USA</i>	<b>Recent advancements and locks on the development and use of heat storage materials for high temperature applications.</b>

## Refreshment and Coffee Break

<b>Prof. Brij Bhushan Tewari</b>	<i>University of Guyana, Guyana</i>	<b>An Alternate Productive Solution To The Disposal Of Carbon Dust Obtained From Industries</b>
<b>Priya V</b>	<i>Visvesvaraya Institute of Technology, India</i>	<b>An Alternate Productive Solution To The Disposal Of Carbon Dust Obtained From Industries</b>
<b>Vladimir G Plekhanov</b>	<i>Fonoriton Science Lab. Estonia</i>	<b>Isotope-based New Materials</b>
<b>Dr Nuzhat Ahsan</b>	<i>Quant Lase Lab LLC, Abu Dhabi, UAE</i>	<b>Advancements in QCM-Based Biosensors: Integrating Biomaterials and Polymeric Coatings for Enhanced Disease Biomarker Detection</b>
<b>Dr Reshmi Raj</b>	<i>Quant Lase Lab LLC, Abu Dhabi, UAE</i>	<b>Bridging Strength and Sensitivity: Biomaterial Innovation in Abdominal Hernia Repair with Extracellular Matrix Hydrogel Coated Polypropylene Mesh</b>
<b>MIKHAIL BELKIN</b>	<i>Russian Technological University, Moscow</i>	<b>Jamming unauthorized radio channels with ultrafast response time</b>
<b>Refreshment and Coffee Break</b>		
<b>Eugene Stephane Mananga</b>	<i>The City University of New York, USA</i>	<b>NWChemEx Science Challenge Calculations to Investigate the dehydration of 2- propanol reaction</b>
<b>Harrison Corrãa</b>	<i>Universidade Federal do Paraná, Brazil</i>	<b>Nanopolymers - the new frontier for material development</b>
<b>Jun ZOU</b>	<i>The Chinese University of Hong Kong, Hong Kong</i>	<b>Direct sampling methods for nonlinear ill-posed inverse problems</b>
<b>WENBO PENG</b>	<i>Xi'an Jiaotong University, China</i>	<b>Piezo-Phototronic Effect in Multi-Layer Structured Optoelectronic: Bilateral Piezoelectric Charge Modulation</b>
<b>Emmanuel Ifeanyi Ugwu</b>	<i>Nigerian Army University</i>	<b>Synthesis and the study of optical and solid state properties of nickel sulphide doped with aluminum</b>

<b>Nina Ivanova</b>	<i>Insitute of Dermatology and Venereology of Academy of National Medical Science of Ukraine, Ukraine</i>	<b>The Treatment Alzheimer's Disease by the Lipochrom</b>
<b>Stoyan Sarg Sargoytchev</b>	<i>Institute of Space, Matter, and Energy Fields, Bulgaria</i>	<b>Atlas of Atomic Nuclear Structures - a major contribution of the BSM - Supergravitation Unified Theory</b>
<b>Omolola Esther Fayemi</b>	<i>West University, Mafikeng, South Africa</i>	<b>Electrochemical detection of dopamine using green and chemical synthesized CuO/PANI nanocomposite-modified electrode</b>
<b>Benrezkallah Djamil</b>	<i>Djillali Liabes University, Algeria</i>	<b>Molecular dynamics simulations of unfolding of a thermostable protein: Aeropyrum pernix L7Ae</b>
<b>Refreshment and Coffee Break</b>		
<b>Roman Perez</b>	<i>Universitat Internacional de Catalunya, Spain</i>	<b>fabrication of functional blood vessels in vitro for tissue replacement and drug screening</b>
<b>Mami Iwasaki</b>	<i>University of Toyama, Japan</i>	<b>Metal Complexes in Biology and Medicine: The System Cadmium(II) / Iron(II) / Zinc(II) – <math>\alpha</math>- Aminobutenoic Acid</b>
<b>Sharafat Ali</b>	<i>Linnaeus University, Sweden</i>	<b>The Role of Glass Materials in a Sustainable Energy Future</b>
<b>Kenji Uchino</b>	<i>The Penn State Univ., University Park, PA 16802, USA</i>	<b>Misconceptions in Piezoelectric Energy Harvesting System Development</b>
<b>Fakhraddin Pasha Abasov</b>	<i>Azerbaijan State Marine Academy, Azerbaijan</i>	<b>Effect of gamma radiation on the amount of hydrogen in thin films on silicon for solar cells</b>
<b>Gregory M. Odegard</b>	<i>Michigan Technological University, USA</i>	<b>Process Modelling of Composites using a Multiscale Framework</b>
<b>Ranjit Ray</b>	<i>Saint Louis University, Missouri</i>	<b>Hepatitis C Virus Vaccine Candidate Using mRNA-LNP Platform</b>
<b>Refreshment and Coffee Break</b>		



<b>R. Sivarethinamohan</b>	<i>Imperial College London</i>	<b>Graphene industrial application towards decarbonization</b>
<b>Shaolin Hu</b>	<i>Guangdong University of Petrochemical Technology, China</i>	<b>Outlier-tolerant Learning for Statistical Features from Sampled Signals</b>
<b>Philippe Legros</b>	<i>University of Bordeaux, France</i>	<b>CaCO<sub>3</sub> from Oyster Shell for Potential Application in Bone Tissue Engineering</b>
<b>Fouzia Achchaq</b>	<i>University of Bordeaux, France</i>	<b>Carbon nanotubes implementation in lead acid batteries industrial production</b>
<b>Siarhei Zhdanok</b>	<i>ART MONBAT, Bulgaria</i>	<b>Dynamic SEM study and analysis of the paraffin RT60 phase change transitions</b>

**\*\*\*Slots Available\*\*\***

