



10th Global Virtual Summit on Materials Science & Engineering August 01-02, 2026

Scientific Program

Materials Science 2026

Online Meeting

| Time Zone: GMT+1 (London, UK)

Day 01 | August 01, 2026 | Time: 09:30 AM

09:30-09:35

Opening Ceremony

Keynote Session

09:35-10:00

Title: Processing- and Geometry-Controlled Magnetization Reversal in Ferromagnet/Nonmagnet Bilayers Probed by Nonlinear Magnetoresistance and Anomalous Nernst Effect.

Yuxin Si, National University of Singapore, Singapore

10:00-10:25

Title: Geotechnical challenges associated with mining in black pelite formations.

Rachida Chatibi, Department of Earth Sciences, Faculty of Sciences, Ibnou Zohr University, Morocco

10:25-10:50

Title: Rare earth doped fluorophosphate glasses for tunable visible and near infrared photonic emission.

Bożena Burtan-Gwizdała, Department of Physics, Cracow University of Technology, Poland

10:50-11:15

Title: Strain-Engineered Electronic, Structural, and Optical Properties of FeS₂ Monolayer: A First-Principles Study for Strain Sensor Photovoltaic Applications in Flexible Electronics.

Muhammad Naeem Tabassam, College of Physics and Optoelectronic Engineering, Shenzhen University, China

11:15-11:40

Title: Strain-Engineered Electronic, Structural, and Optical Properties of FeS₂ Monolayer: A First-Principles Study for Strain Sensor Photovoltaic Applications in Flexible Electronics.

Naveed Ahmad, College of Physics and Optoelectronic Engineering, Shenzhen University, China

11:40-12:05

Title: NIR Spectroscopy for Non-Destructive Prediction of Greenhouse Gas Emissions and Global Warming Potential by Biomass Combustion.

	Prakash Gyawali , King Mongkut's Institute of Technology Ladkrabang, Thailand
12:05-12:30	Title: Label-Free Electrochemical Detection of K-562 Leukemia Cells Using TiO2-Modified Graphite Nanostructured Electrode.
	Martha Esperanza Sevilla Abarca, Faculty of Systems, Electronics and Industrial Engineering, Technical University of Ambato, Ecuador
12:30-12:55	Title: Cassava (Manihot esculenta) Hydrocolloids as a Partial Egg Substitute in Sponge Cakes: Rheological, Physicochemical, and Sensory Evaluation.
	Anabela Rodriguez-Mulett, Research Group of Complex Fluid Engineering and Food Rheology, Universidad de Cartagena, Colombia
12:55-13:20	Title: Development and characterization of Octopus maya collagen gels and films: Mechanical enhancement through polysaccharide incorporation.
	Manuel Octavio Ramírez Sucre, Sede Sureste, Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, Mexico
13:20-13:45	Title: Novel Manganese-Based Nanocomposites for UV-Driven Photocatalytic Degradation of the Pesticide Imidacloprid.
	Muqddssa Rashid, Department of Chemistry, University of Wah, Pakistan
Plenary Speaker Session	
Sessions	Materials Science and Engineering Nanomaterials and Nanotechnology Advanced Energy Materials Applications in Material Science Engineering
Session Chairperson	Manuel Octavio Ramírez Sucre, Sede Sureste, Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, Mexico
	Rim Neffati, Al-Baha University, Saudi Arabia
13:45-14:10	Title: Effect of GaAs capping layer on GaSb quantum dots for intermediate-band solar cells design.
	Rim Neffati, Al-Baha University, Saudi Arabia
14:10-14:35	Title: From rice husk waste to carbon electrodes for sustainable energy storage applications.
	Rubia Young Sun Zampiva, Sapienza University of Rome, Italy
14:35-15:00	Title: Effect of Operator Experience on the Predictability of Rotational and Vertical Tooth Movements in Clear Aligner Therapy: A Retrospective Observational Study
	Ambra Sedran, Dental School of the University of Torino, Italy
15:00-15:25	Title: Biocompatible Hydrogels from Polysaccharides and Their Derivatives for Advanced Local Treatments

	Gaia Zucca, University of Pavia, Italy
15:25-15:50	Title: Advanced Bismuth-Derived Catalysts for Microplastic Degradation in Environmental Waters.
	Agata Egea-Corbacho, University of Cadiz, Spain
15:50-16:15	Title: Evaluating the Impact of Fog on Free Space Optical Communication Links in Mbeya and Morogoro, Tanzania”.
	Catherine Protas Tarimo, The Nelson Mandela African Institution of Science and Technology, Tanzania
16:15-16:40	Title: Hydride Perovskite Materials for Advanced Hydrogen Storage: A First-Principles Approach.
	Maryam AYAD, Mohammed V University in Rabat, Morocco
16:40-17:05	Title: Innovative Applications of Sugarcane Bagasse in the Global Sugarcane Industry
	Sylvere Ndikumana , Hassan II University of Casablanca, Morocco
17:05-17:30	Title: Logistics Performance Assessment in the Ceramic Industry: Applying Pareto Diagram and FMEA to Improve Operational Processes.
	Carla Monique dos Santos Cavalcanti, Centro Universitário Facol, Brazil
17:30-17:55	Title: Evolution of Electrical Energy in Brazil
	Frederico Fabio Mauad, University of São Paulo, Brazil
17:55-18:20	Title:Harnessing an Invasive Seaweed: Mechanical Reinforcement of Simonkolleite Coatings Using Brown Algae as a Sustainable Filler.
	Edith Luévano Hipólito, SECIHTI – Universidad Autónoma de Nuevo León / Laboratorio de Ecomateriales y Energía,México
18:20-18:45	Title: Synthesis of Model Functional Polyurethanes and their Interactions with Metal Ions: Implications Regarding Pad-Metal Ion Interactions in CMP.
	Harini Bhuvaneswari Gunasekarana, Clarkson University, United States
Day 02 August 02, 2026 Time: 09:30 AM	
09:30-09:35	Opening Ceremony
Keynote Session	
09:30-09:55	Title: Critical Evaluation and Optimization of Aggregate Proportions, Air-Entraining Admixture, and Latex Dosage in Polymer-Modified Belitic Calcium Sulfoaluminate (BCSA) Concrete for Bridge Deck Overlays.

	Daniel D. Akerele, University of Washington, USA
09:55-10:20	Title: Fixed-Bed Adsorption of Gallium and Indium from EoL CIGS Leachates on Extractant-Mesoporous Carbon: Integrated Experimental Simulation Approach
	Alejandra Vázquez Adán, Complutense University of Madrid, Spain.
10:20-10:45	Title: Repurposing Nirmatrelvir for Hepatocellular Carcinoma: A Computational Approach to Unlock Epigenetic Therapeutics
	Usama Ilahi, Center for Biotechnology and Microbiology, University of Swat, Pakistan.
10:45-11:10	Title: Carbonated Oxygenated Apatites: Design, Scale-Up, and Dynamic Operation of the Synthesis Reactor for Biomedical Applications.
	Soumia Belouafa, Laboratory of Biology and Health, University Hassan II of Casablanca, Morocco.
11:10-11:35	Title: Multicomponent High-Entropy Cantor Alloys
	Brian Cantor, University of Oxford Brunel Centre for Advanced Solidification Technology, Brunel University
11:35-12:00	Title: Polymer melting studied by in-situ SAXS/WAXS
	Haojie Yu, Zhengzhou University, China
12:00-12:25	Title: Recent Advances and Challenges in Metal Halide Perovskite Quantum Dot-Embedded Hydrogels for Biomedical Application
	Junyi Yu, Jilin University, Changchun, China
Plenary Speaker Session	
Sessions	Materials Science and Engineering Nanomaterials and Nanotechnology Advanced Energy Materials Applications in Material Science Engineering
Session Chairperson	Teresa Gerace, University of Calabria, Via P. Bucci, Italy
12:50-13:15	Title: Enhancing Performance of Titanium-Based Laminates under High Dynamic Impact
	Sergey Prikhodko, University of California Los Angeles, Los Angeles, USA
13:15-13:40	Title: Improving the Fatigue Design of Mechanical Systems such as Refrigerator
	Seongwoo Woo, Ethiopian Technical University, Ethiopia
13:40-14:05	Title: Recent advancements and future trends in bilayer graphene quantum dots for valley – based quantum computing

	Moses Kayanda Kiteto , Moi University, department of Chemical and Process Engineering, Eldoret, Kenya
Poster Presentation	
P001	Title:Symbolic 4-Plithogenic Rings and 5-Plithogenic Rings
	Ahmed Hatip, University, Gaziantep, Turkey
P002	Title: BRAIN-CONTROLLED ROBOTIC ARM
	Fatma Abdelhedi, University, Jeddah, Saudi Arabia
P002	Title: Mechanical Performance of Recycled Slate Waste Fiber Composites Based on Unsaturated Polyester Resinsart Food Packaging Systems
	Rocío Ruiz-Bustos , University Rabanales, Córdoba, Spain
End Of Session	
Closing Ceremoney	
Researcher Meetings 20-22 Wenlock Road, London, N1 7GU, United Kingdom E-Mail: materialsinfo@researchermeetings.com	