

**MATERIALS
2027**

10TH EDITION OF

INTERNATIONAL CONFERENCE ON
**MATERIALS SCIENCE
AND ENGINEERING**

HYBRID EVENT
18-20
MARCH 2027

COME AND JOIN US IN:
**SINGAPORE
OR VIRTUALLY**

CONFERENCE
TOPICS

Nanotechnology and Nanomaterials

Advanced Materials: Innovations and Applications

Optical and Electronic Materials

Biomaterials and Healthcare

Computational Materials Science

Energy Materials and Storage Technologies

Environmental and Sustainable Materials

Emerging Smart and Functional Materials

Polymers and Soft Materials

Composite and Hybrid Materials

Quantum Materials

Metals, Metallurgy, and Mining

Mechanics and Characterization

Materials for Agriculture

TENTATIVE PROGRAM

Theme:

Innovations in Materials Science and Engineering for Future Technologies

Keynote Speakers



Harry Ruda

University of Toronto, Canada



Paulo Cesar De Moraes

Catholic University of Brasilia, Brazil



Nasimuddin

Institute for Infocomm Research, A-STAR,
Singapore



Vasily Lutsyk

Institute of Physical Materials Science (SB
RAS), Russian Federation



Evgeny Grigoryev

Merzhanov Institute of Structural
Macrokinetics and Materials Science
Russian Academy of Sciences, Russian
Federation



S V Ranganayakulu

Guru Nanak Institutions, India



M G H Zaidi

G B Pant University of Agriculture &
Technology, India



Manjunatha Channegowda

Visvesvaraya Technological University, India

TENTATIVE PROGRAM

KEYNOTE PRESENTATIONS

Title: A proposal of chemical sensor based on polycrystalline Cu₂O nanofilm

Paulo Cesar De Moraes, Catholic University of Brasilia, Brazil

Title: Digital twins of Li₂La(Pr)₂K₂ | Cl & Ag-Cu-Ni(Pb) phase diagrams

Vasily Lutsyk, Institute of Physical Materials Science (SB RAS), Russian Federation

Title: Ferrofluid mediated synthesis of nanomagnetic polymer materials in supercritical fluids

Mohd Ghulam Haider Zaidi, G.B. Pant University of Agriculture & Technology, India

Title: Interpretable AI-enabled electrochemical biosensors: Dendritic Fe₂O₃/graphene nanocomposites for next-generation clinical diagnostics

Manjunatha Channegowda, RV College of Engineering, India

ORAL PRESENTATIONS

Title: A validated machine-learning interatomic potential framework for understanding reactive hematite-water interfaces toward next-generation functional materials

Mary T Ajide, University College Dublin, Ireland

Title: Molecularly woven materials for water isotopologue separation

Ding Xiao, Zhejiang University, China

Title: Nature-inspired photonic transition metal energy systems for enhancing solar energy conversion and enduring sustainable energy storage efficiency

Bijendra Singh, Central University of Gujarat, India

Title 01: Non-Newtonian rheology on curved circular squeeze films using the Rabinowitsch fluid model

Title 02: Thermodynamic analysis of a combined modified Kalina-GT-MHR cycle with porous medium effects

Rakesh Manilal Harjivandas Patel, Department of Mathematics Government Science College, India

Title: Gold nanodendrites enriched with gold nanoclusters on carbon-fiber as flexible acetaminophen sensor for clinical diagnostics

Hefayathullah Mohamed, SRM Institute of Science and Technology, India

Title: Design and fabrication of an artificial vascular graft that mimics the anisotropic mechanical properties of native vessels

Targol Tafakhori, Shiraz University, Iran

Oral presentation slots are available

TENTATIVE PROGRAM

POSTER PRESENTATIONS

Title: Plant-mediated synthesis of silver nanoparticles and zinc oxide nanoparticles and application of AgNPs for the development of antimicrobial biopolymer films in food packaging

Garva Anup Karmarkar, Vishwakarma Institute of Technology, India

Title: The effect of chemical composition of steels working under impact loads and high temperatures on their structural characteristics and mechanical properties

A. I. Trotsan, Institute for Problems of Material Sciences NAS of Ukraine (IPMS), Ukraine

Poster presentation slots are available
