




IN-PERSON CONFERENCE

PROGRAM- AT-A-GLANCE

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1126 59 Ave East, V5X 1Y9, Vancouver BC, Canada

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SCIENTIFIC PROGRAM



Joint Event on

**ADVANCED NANOTECHNOLOGY
AND NANOMATERIALS
&
ADVANCES IN SMART MATERIALS
ENERGY MATERIALS AND STRUCTURES**

October 27, 28 2025 | Prague, Czech Republic

SCIENTIFIC PROGRAM

DAY 01

MONDAY

OCTOBER 27, 2025

08:00-08:30

Registrations

08:30-08:40

Inaugural Ceremony

Moderator

Debendra Kumar Das, *University of Alaska Fairbanks, USA*

Sessions: Nanoscience and Technology | Nanomedicine | Nanomaterials | Materials Science and Engineering | Smart Materials | Composite Materials | 3D Printing | Robotics | Nanosensors | Nano Structures | Nanotechnology Applications | Smart Materials Applications | Wearable Healthcare Devices

Distinguished Speaker Talks

Session Chair

Kevin Kendall, *Hydrogen United, UK*

Session Chair

Giovanna Rassu, *University of Sassari, Italy*

08:40-09:00

Title: Newton's Nanoparticles

Kevin Kendall, *Hydrogen United, UK*

09:00-09:20

Title: Analytical Model Prediction versus Experimental Characterization of Performance of Nanofluids of Different Concentrations in Hydronic Air Coil

Debendra Kumar Das, *University of Alaska Fairbanks, USA*

09:20-09:40

Title: Synergistically Integrated WS₂-MoSe₂ Nanowires Cosputtered over Porous Silicon towards ppb Level NO₂ Detection

Ramesh Chandra, *Indian Institute of Technology Roorkee (IIT Roorkee), India*

09:40-10:00

Title: Assessing the Earthquake Performance of Existing Buildings in New Zealand

Lusa Tuleasca, *UNITEC Institute of Technology - Auckland, New Zealand*

10:00-10:20

Title: Integrating Nanotechnology into Cancer Care across Biological Scales

Brindusa DRAGOI, *Regional Institute of Oncology, Romania*

GROUP PHOTO 10:20-10:30

REFRESHMENT BREAK 10:30-10:50

10:50-11:10	<p>Title: Navigating Artificial Intelligence in Modern Workplaces</p> <p>Anne Rosken, <i>ANED – HSG – PCU, Germany</i></p>
11:10-11:30 (Poster)	<p>Title: Controlling the Structural Defects of Layered Double Hydroxides for Skin Cancer Therapy</p> <p>Catalina-Nicoleta Basoc, <i>Regional Institute of Oncology, Romania</i></p>
11:30-11:50	<p>Title: Functionalized Porous Silica Nanoparticles: Green Synthetic Approaches and Adsorption Applications for Wastewater Remediation</p> <p>Fabiana Tescione, <i>Institute for Polymers, Composites and Biomaterials, CNR, Italy</i></p>
11:50-12:10	<p>Title: New Approaches for the Treatment of Multiple Sclerosis using Biocompatible Nanoparticles</p> <p>Giovanna Rassu, <i>University of Sassari, Italy</i></p>
12:10-12:30	<p>Title: Synthesis, Characterization and Bio-Efficacy of Silver Nanoparticles</p> <p>Pramod Katti, <i>Environmental Management and Policy Research Institute, India</i></p>
12:30-12:50	<p>Title: Prospective Characteristics of Alginate-Based Oil-in-Water Emulsion Liquid Marbles for Controlled Release of Limonene</p> <p>Masanao Imai, <i>Nihon University, Japan</i> Homare Tsugifuji, <i>Nihon University, Japan</i></p>
GROUP PHOTO 12:50-13:00	
LUNCH BREAK 13:00-13:40	
13:40-14:00	<p>Title: Assessment of Novel Boron-Doped Mesoporous Bioactive Glass Nanoparticles Loaded Alginate Hydrogel in Dogs</p> <p>Marwa Samir Naga, <i>Alexandria University, Egypt</i></p>
14:00-14:20	<p>Title: Efficient Antimicrobial Polymer Nanocomposite Coatings for Hospital Walls</p> <p>Richa Tomar, <i>TNB College, Tilka Manjhi Bhagalpur University, India</i></p>
14:20-14:40	<p>Title: Metallic and Non-Metallic Plasmonic Nanostructures for LSPR Sensors</p> <p>Samar Ghopry, <i>Jazan University, Saudi Arabia</i></p>
14:40-15:00 (Poster)	<p>Title: Novel Dendrimer Candidates for siRNA Delivery Systems: Biophysical Properties and Gene Silencing Efficiency</p> <p>Paulina Rycharska, <i>BioMedChem Doctoral School of the University of Lodz and Lodz Institutes of the Polish Academy of Sciences, Poland</i></p>

15:00-15:20	<p>Title: From Nature to Nanotechnology: The Promise of Green Nanoparticles in Cancer Therapy</p> <p>Kanu Priya, <i>Sharda University, India</i></p>
15:20-15:40	<p>Title: Behavior of Hinges in a Building with and without Lateral Load Resisting System Provided at Ends—Pushover Analysis</p> <p>Deepa S, <i>DACG Government Polytechnic, India</i></p>
15:40-16:00	<p>Title: Nanocomposites Based on Hydroxyapatite and Gelatin for Regeneration of Bones</p> <p>Sahar Ibrahim Hamed Mostafa, <i>Mansoura University, Egypt</i></p>
REFRESHMENT BREAK 16:00-16:20	
16:20-16:40	<p>Title: Nanorobots and the Endothelial Glycocalyx: A Novel Approach to Cardiovascular Health</p> <p>Antea Krsek, <i>University of Rijeka, Croatia</i></p>
16:40-17:00	<p>Title: Low Cost Fabrication of Electrically Tunable and Uniform Conducting Paper for Flexible Electronics</p> <p>Gayathri Gangadharan, <i>Sri Sivasubramaniya Nadar College of Engineering, India</i></p>
17:00-17:20	<p>Title: Revolutionizing Water Purification Selection with Neural Network and Double Picture Hierarchy Linguistic Aggregation Operators</p> <p>Yasir Akhtar, <i>Chung Yuan Christian University, Taiwan</i></p>
17:20-17:40	<p>Title: Mechanical Properties of Different Types of Composite Resin used as Clear Aligner Attachments: <i>An in vitro Study</i></p> <p>Rana Rabei Alshammari, <i>University of Ha'il, Saudi Arabia</i></p>
17:40-18:00	<p>Title: Tailoring Optical and Electrical Properties of Nanocrystalline Indium Films on Polycarbonate Substrates <i>via</i> HMDSO Pre-layer: Morphology-Dependent Selective Transmission Effects</p> <p>Jerson Peralta, <i>University of Barcelona, Spain</i></p>
18:00-18:20	<p>Title: Artificial Intelligence in Virtual Physical Rehabilitation: Machine Learning Perspectives and System Design</p> <p>Nanna Dahlem, <i>August-Wilhelm Scheer Institute gGmbH, Germany</i></p>
NETWORKING	
END OF DAY 1	

SCIENTIFIC PROGRAM

DAY 02

TUESDAY

OCTOBER 28, 2025

08:30-08:40

Introduction

Sessions: Nanoscience and Technology | Nanomedicine | Nanomaterials | Materials Science and Engineering | Smart Materials | Composite Materials | 3D Printing | Robotics | Nanosensors | Nano Structures | Nanotechnology Applications | Smart Materials Applications | Wearable Healthcare Devices

Distinguished Speaker Talks

08:40-09:00 Title: 3D-Printed Geopolymers with Visible Porosity: Synthesis and Characterization

Youssef Ettahiri, *University of Picardie Jules Verne, France*

09:00-09:20 Title: Transparency of Graphene to Solid-Solid Van Der Waals Interactions

Chuanli Yu, *Peking University, China*

09:20-09:40 Title: Modelling of PV Systems Employing MATLAB/SIMULINK

Mourad Talbi, *Center of Researches and Technologies of Energy of Borj Cedria, Tunisia*

09:40-10:00 Title: On The Mechanism of Self-Oscillations of Current in Semiconductor Double-Barrier Diodes

Rasulova Gul Dzakhon Kadyrovna, *Lebedev Physical Institute of Russian Academy of Sciences, Russia*

10:00-10:20 Title: Quantum and Nanophotonic Approaches to Advancing Artificial Intelligence

Rohit K Ramakrishnan, *Indian Institute of Science, India*

PANEL DISCUSSION

END OF DAY 2

DAY 2
OCTOBER 28, 2025

Scientific
P r o g r a m

**Exclusively for
Virtual Speakers**

**Virtual Presentations
Conducted through
CISCO Webex**



BOOKMARK YOUR DATES

6th Global Conference on

ADVANCED NANOTECHNOLOGY AND NANOMATERIALS

&

8th Euro-Global Summit on

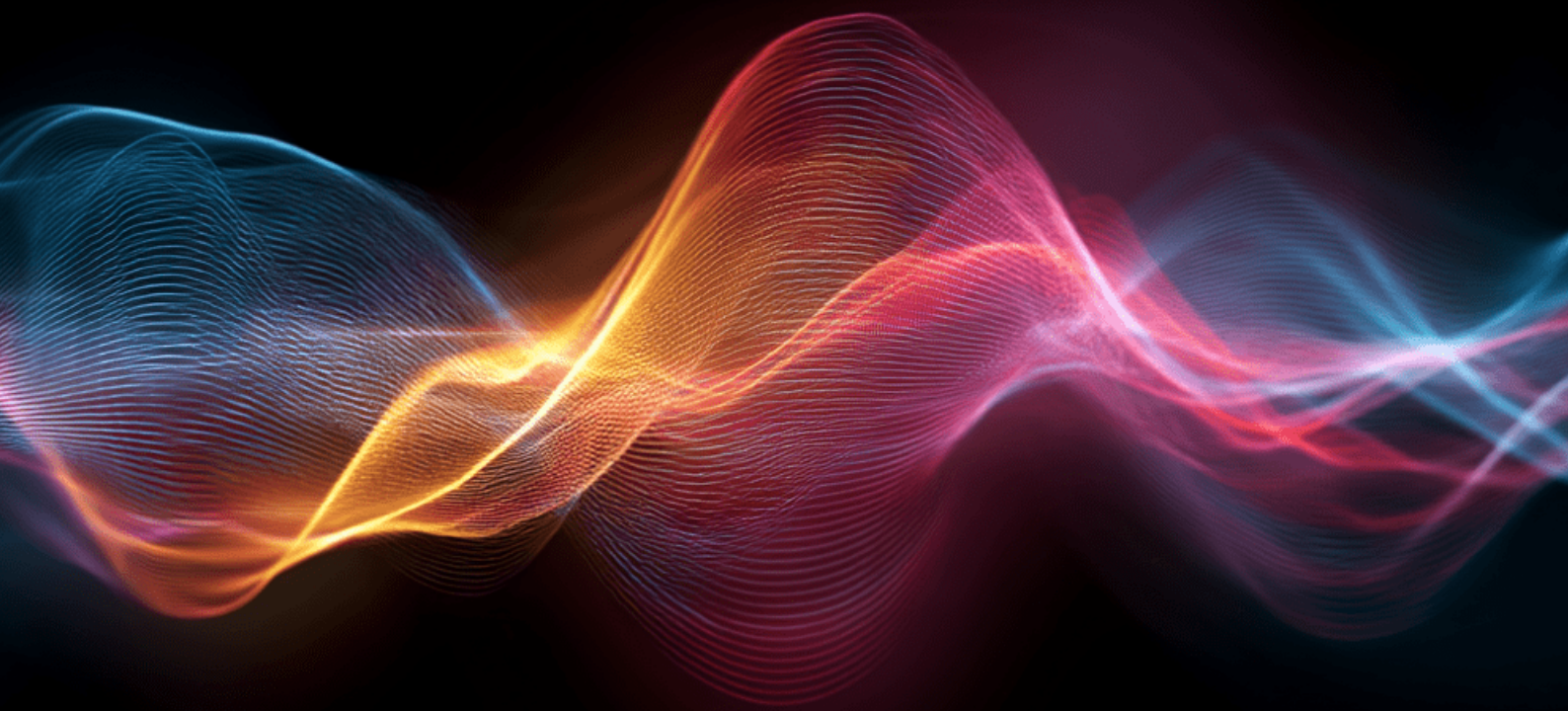
ADVANCES IN SMART MATERIALS ENERGY MATERIALS AND STRUCTURES

OCTOBER 2026 | USA



VIRTUAL CONFERENCE

PROGRAM- AT-A-GLANCE



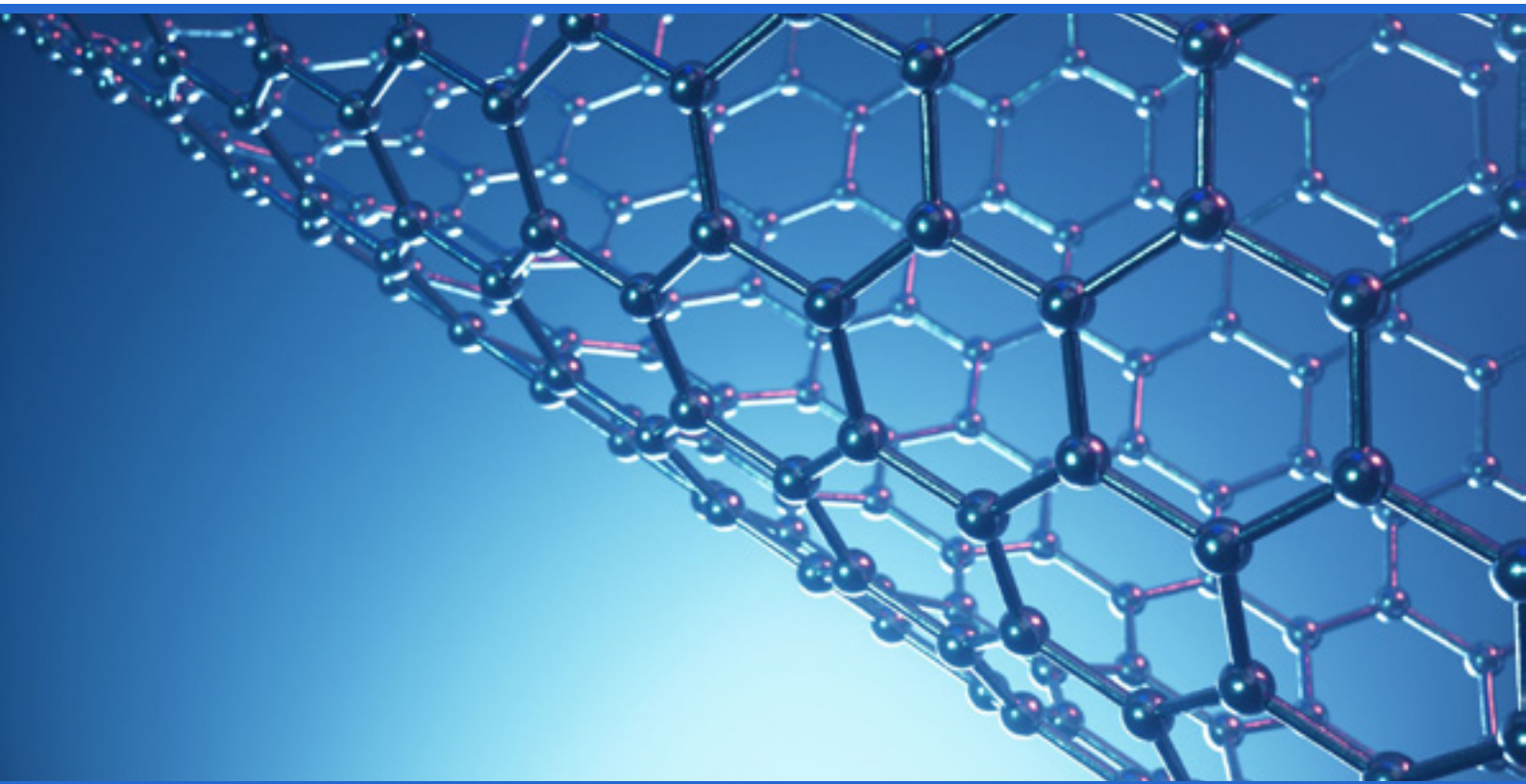
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SCIENTIFIC PROGRAM



Virtual Event

ADVANCED NANOTECHNOLOGY AND NANOMATERIALS & ADVANCES IN SMART MATERIALS ENERGY MATERIALS AND STRUCTURES

October 27-28, 2025

SCIENTIFIC PROGRAM

DAY 01

MONDAY

OCTOBER 27, 2025

GMT - Greenwich Mean Time

07:20-07:30

Inaugural Ceremony

Sessions: Nanoscience and Technology | Nanomedicine | Nanomaterials | Materials Science and Engineering | Smart Materials | Composite Materials | 3D Printing | Robotics | Nanosensors | Nano Structures | Nanotechnology Applications | Smart Materials Applications | Wearable Healthcare Devices

Distinguished Speaker Talks

07:30-07:50

Title: Corten Steel: Conservation, Corrosion and Concerns

Christian Paglia, *Institute of Materials and Construction, Switzerland*

07:50-08:10

Title: Mesoscopically Structured Minerals (Mesocrystals) in Geological Processes. A Review

Irina Kircheva Marinova, *Institute of Mineralogy and Crystallography, Bulgarian Academy of Sciences, Bulgaria*

08:10-08:30

Title: Sulfur-Doped ZnO as Cathode Interlayer for Efficient Inverted Organic Solar Cells

Georgios Manginas, *National Centre for Scientific Research Demokritos, Greece*

08:30-08:50

Title: Secondary Mandibular Reconstruction with Patient Specific 3D Printed Implant

Harsimran Singh, *C.K.Birla Hospital, India*

08:50-09:10

Title: Quantum and Nanophotonic Approaches to Advancing Artificial Intelligence

Rohit K. Ramakrishnan, *Indian Institute of Science, India*

09:10-09:30

Title: Membrane Filtration Technology – Nano Material-Based Waste Water Treatment and Purification

M H Fulekar, *Parul University, India*

09:30-09:50

Title: Female Computer Teachers Training by the (TAWOCK) Model

Remsh Nasser Alqahtani, *King Saud University, Saudi Arabia*

09:50-10:10	<p>Title: Design and Application of Novel Nanocomposites for Water Remediation</p> <p>Chilukoti Srilakshmi, <i>GITAM Deemed to be University, India</i></p>
10:10-10:30	<p>Title: Additional Increase in Built-in Voltage of Nanowire Solar Cells Based on Strongly Asymmetric <i>P-N</i> Heterojunctions</p> <p>Vitalii L. Borblik, <i>V. Lashkaryov Institute of Semiconductor Physics, Ukraine</i></p>
10:30-10:50	<p>Title: Environment-Friendly High-Performance CH₃NH₃SnBr₃-Based Perovskite Solar Cells: A Numerical Study</p> <p>Pankaj Arora, <i>Birla Institute of Technology & Science, India</i></p>
10:50-11:10	<p>Title: Green Synthesis, Characterization of Metallic Nanoparticles and their Multiple Biological Applications</p> <p>Narasimha Golla, <i>Sri Venkateswara University, India</i></p>
REFRESHMENT BREAK 11:10-11:30	
11:30-11:50	<p>Title: Nano Implanted Sensor Grids Utilization in the Detection of Micro Cracks in Structural Elements</p> <p>Aditya Singh, <i>Amrita Vishwa Vidyapeetham, India</i></p>
11:50-12:10	<p>Title: Green Solvent-Based Synthesis of Sm³⁺ -Doped TiO₂ Nanostructures for Solar Energy Conversion</p> <p>Shelan M. Mustafa, <i>Erbil Polytechnic University, Iraq</i></p>
12:10-12:30	<p>Title: Sunlight-Mediated Degradation of Water Contaminants with a Novel Modified Bismuth Molybdate Perovskite Photocatalyst</p> <p>Amruth H D Gowda, <i>GITAM Deemed to be University, India</i></p>
12:30-12:50	<p>Title: Adsorptive Microplastic Removal using Pinus Roxburgii Derived Biochar– a Waste Residue of Himalayan Forests</p> <p>Misbah Bashir, <i>Islamic University of Science & Technology, India</i></p>
12:50-13:10	<p>Title: Detection of Pathogen in Water</p> <p>Faiza Jan Iftikhar, <i>National University of Technology (NUTECH), Pakistan</i></p>
LUNCH BREAK 13:10-13:40	
13:40-14:00	<p>Title: Title: Modelling of PV Systems Employing MATLAB/SIMULINK</p> <p>Mourad Talbi, <i>Center of Researches and Technologies of Energy of Borj Cedria, Tunisia</i></p>

14:00-14:20	<p>Title: The Role of Nanoparticle in Diagnosis and Treatment of Systemic Lupus Erythematosus</p> <p>Somayeh Marouzi, <i>Mashhad University of Medical Sciences, Iran</i></p>
14:20-14:40	<p>Title: Enhanced Fluoride Adsorption by Strontium- Modified Dicalcium Phosphate Dihydrate</p> <p>Tejaswini Mendke, <i>GITAM Deemed to be University, India</i></p>
14:40-15:00	<p>Title: The Sustainability of Beach-Cast Seaweed Biomass for Biorefinery Processes: Calorific Power Heating Studies with Macroalgae</p> <p>Fernando Pinto Coelho, <i>Institute of Biological and Health Sciences of the Federal University of Alagoas, Brazil</i></p>
15:00-15:20	<p>Title: Youth Cultural and Creative Practices in Light of Emerging Artificial Intelligence Usage During COVID-19</p> <p>Joanna Black, <i>University of Manitoba, Canada</i></p>
15:20-15:40	<p>Title: Energy Optimal Speed Profiles for a Differential Drive Mobile Robot with Payload</p> <p>Mauricio Fernando Jaramillo Morales, <i>Universidad Autónoma de Manizales, Colombia</i></p>
15:40-16:00	<p>Title: Influence of Load Misalignment on T-Bolts Failure in Wind Turbine Blades</p> <p>Guillermo Muñoz Hernandez, <i>Centro de Tecnología Avanzada, CIATEQ A.C., México</i></p>
16:00-16:20	<p>Title: An Exploration of the Discontinuous-Continuous Fusion in Yuunohui'tlapoa for Keyboard</p> <p>Julio Estrada, <i>National Autonomous University of Mexico, UNAM, Mexico</i></p>
16:20-16:40	<p>Title: Genostep: Transforming Urban Infrastructure into a Renewable Energy System</p> <p>Jacob Cox, <i>Green Graphene LLC, USA</i></p>

END OF DAY 1

SCIENTIFIC PROGRAM

DAY 02

TUESDAY

OCTOBER 28, 2025

GMT - Greenwich Mean Time

08:20-08:30

Opening Ceremony

Sessions: Nanoscience and Technology | Nanomedicine | Nanomaterials | Materials Science and Engineering | Smart Materials | Composite Materials | 3D Printing | Robotics | Nanosensors | Nano Structures | Nanotechnology Applications | Smart Materials Applications | Wearable Healthcare Devices

Distinguished Speaker Talks

08:30-08:50

Title: Top-Down Reverse Engineering of Gold Nanoparticles in a Silica Aerogel Matrix

István Lázár, *University of Debrecen, Hungary*

08:50-09:10

Title: Luminescent Solar Concentrators Based on Polymer Optical Fibers Doped with Fluorescent Entities

Nekane Guarrotxena, *Spanish National Research Council (CSIC), Spain*

09:10-09:30

Title: Smart Photoalignment Material: Azodye Nanolayers for Liquid Crystal Devices

Vladimir G. Chigrinov, *Hong Kong University of Science and Technology, Hong Kong*

09:30-09:50

Title: Mapping the Link Between Environmental Sustainability and Electric Four – Wheelers: A Bibliometric Study

V. Shunmathy, *Vellore Institute of Technology (VIT), India*

09:50-10:10

Title: Memory Phenomena and Diffusionless Characteristics of Crystallographic Transformations in Shape Memory Alloys

Osman Adiguzel, *Firat University, Turkey*

10:10-10:30

Title: Atmospheric River Detection- A Survey on Deep Learning and Quantum Neural Networks

Sivachitalakshmi. S, *SRM Institute of Science and Technology, India*

10:30-10:50

Title: Reducing Bacterial Adhesion on 304 Stainless Steel Surface by Nd-YAG Laser Irradiation

Sahar Sohrabi, *Iran University of Science and Technology, Iran*

REFRESHMENT BREAK 10:50-11:10

11:10-11:30

Title: Energy-Efficient Approximate Arithmetic Circuit Design for Power Hungry Applications

Joshi Viraj Vilas Alias, *Sinhgad Institute of Technology, Pune University, India*

11:30-11:50

Title: Existence of Solutions for a Class of Dirichlet Problems Involving Fractional (p,q)-Laplacian Operators

Hasna Moujani, *Sultan Moulay Slimane University, Morocco*

11:50-12:10

Title: Incorporating Graphene-Based Nanocomposites Along with Self-Healing Polymers for Civil Infrastructure as Smart Structural Applications

Aditya Singh, *Amrita Vishwa Vidyapeetham, India*

12:10-12:30

Title: Modeling and Forecasting of Solar Power Plant Energy Production via Machine Learning: A Comparative Approach

Lakhdari Lahcen, *Tahri Mohammed Bechar University, Algeria*

12:30-12:50

Title: Utilizing Non-Convex Optimization for SC-OPF Under N-1 Contingency in a IEEE 9-Bus System

Chaitanya, *Indian Institute of Management, India*

12:50-13:10

Title: Antimicrobial Activity of Fe_3O_4 and $\text{Au}@\text{Fe}_3\text{O}_4$ Nanoparticles Against *Salmonella Typhimurium*: In vitro Efficacy and in Silico Validation Through Protein-Aptamer Interactions

Chandrajeet Dhara, *Jaypee Institute of Information Technology, India*

LUNCH BREAK 13:10-13:40

13:40-14:00

Title: Achieving Cost Efficiency in Cloud Data Centers through Model-Free Q-Learning

Razieh Darshi, *Iran University of Science and Technology, Iran*

14:00-14:20

Title: Sustainable Agriculture Systems Transformed: The Role of Drones in Enhancing Precision Safety and Efficiency

Syeda Faiza Nasim, *UIT University, Pakistan*

14:20-14:40

Title: Enhancing Charging Station Power Profiles: A Deep Learning Approach to Predicting Electric Vehicle Charging Demand

Youssef Oukhouya Ali, *University Sidi Mohamed Ben Abdellah, Morocco*

14:40-15:00

Title: Community Engagement in Slum Upgrading and Maintenance:
A Case Study of the Kambi Moto Project in Huruma, Kenya

Susan Kibue, *Jomo Kenyatta University of Agriculture and
Technology (JKUAT), Kenya*

15:00-15:20

Title: Comparative Evaluation of Pretreatment Methods for Valorising
Hemp Hurds as a Lignocellulose Biomass for Bio-Based Products

Ziningi Myeni, *Durban University of Technology, South Africa*

15:20-15:40

Title: A Novel High-Performance Two-Input NOR Logic Gate Based on
OPE Molecular Transistor

Masoumeh Tirgar Fakheri, *Khatam University, Iran*

END OF DAY 2

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&

8th Euro-Global Summit on

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OCTOBER 2026 | USA