

# *Final Program*

## INTERNATIONAL SUMMIT ON **MATERIALS SCIENCE, LASER OPTICS, NANOTECHNOLOGY**

April 14-15, 2025 | Kaulalumpur, Malaysia



Hosted By:  
**MEETING SERA**  
+447447196094

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

**Day 1 April 14, 2025**

**MainHall: Level 1, Blok B, Institute Of Graduate Studies**

**08:30-09:30 Registrations**

**09:30-10:00 Opening Ceremony**

**Plenary Forum**

**09:30-10:20 Title: Green Coconut Coir Fiber Nanocellulose Composites as Electromagnetic Absorbers and Flexible Wearable Antennas: Potential, Current Developments and Future Perspectives**

Hasliza A Rahim, Universiti Malaysia Perlis, Malaysia

**10:20-11:10 Title: Nano-Electrochemical Method: Current Approaching in Daily Science**

Siddiquee Shafiquzzaman, University Malaysia Sabah, Malaysia

**Networking and Refreshments Break: 11:10-11:30 @ IAS lobby**

**Keynote Forum**

**11:30-12:10 Title: Synthesis and Characterization of Cobalt Catalyst on Carbon Nanotubes Support for Fischer-Tropsch Reaction**

Omid Akbarzadeh, University of Malaya, Malaysia

**12:10-12:50 Title: Implementation and Application of Fiber Laser Operating at 1064 nm**

Shien-Kuei Liaw, National Taiwan University of Science and Technology, Taiwan

**Group Photo 12:50-13:00**

**Lunch Break: 13:00-14:00**

**Sessions: Nanodevices & Nanosensors, Computer Architecture and Graphics, Materials Characterization, Modeling and Theory, Structural Materials, Optics and Lasers in Medicine, Optics for Solar Energy, Optical Engineering, Metamaterials for Optic & Optoelectronic applications, Crystallography**

**Session Chair: Shin-ichi Shamoto, Advanced Science Research Center, Japan**

**Session Co-Chair: Harvin Kaur, Asia pacific university, Malaysia**

**14:00-14:30 Title: Green Catalytic Approach using Solvothermal Pre-treatment of Natural Fibres to extract Cellulose Nano Whiskers using Box Behnken Design, Computational Modelling and Statistical Analysis**

Zaira Zaman Chowdhury, University of Malaya, Malaysia

**14:30-15:00 Title: Electromagnetic Crystal Substrate Terahertz Antenna for High Data Rate Communication Applications**

T. Shanmuganantham, Pondicherry University, India

**15:00-15:30 Title: Interfacial Rheology for Waxy Crude Oil (Water-in-oil) Emulsion: Emulsion Stability Testing**

Harvin Kaur, Asia pacific university, Malaysia

**15:30-16:00 Title: Role of Metallographic Studies in Characterization of Ductile Cast Iron**

Sudipta Sen, National Institute of Technology Rourkela, India

**Networking and Refreshments Break: 16:00-16:30 @ IAS lobby**

**Special Session**

**16:30-17:30 Title: Nanoscaled Structures Bridging from Crystalline, Amorphous to Liquid States**

Shin-ichi Shamoto, Advanced Science Research Center, Japan

**Panel Discussions**

Day 2 April 15, 2025

MainHall : Level 1, Blok C, Institute Of Graduate Studies

Keynote Forum

10:00-10:40 **Title: Synthesis of Graphitic Nano-Porous Carbon using Base Catalytic Approach and their Potential Applications for Water Treatment via Complex Formation: Impact of Ash Content**

Zaira Zaman Chowdhury, University of Malaya, Malaysia

10:40-11:20 **Title: Henna Leaves Biopolymer as a Drag Reducing Agent**

Harvin Kaur, Asia Pacific University, Malaysia

Networking and Refreshments Break: 11:20-11:30 @ IAS lobby

11:30-12:10 **Title: Spheroidal Graphite Iron : Utility as an Engineering Material**

Sudlpta Sen, National Institute of Technology, India

12:10-12:50 **Title: Stretchable Conductive Ink Based on Polysiloxane–Silver Composite and Its Application as a Frequency Reconfigurable Patch Antenna for Wearable Electronics**

Salehin Ibrahim Zulkifli Ahmad, Universiti Sains Malaysia , Malaysia

Group Photo 12:50-13:00

Lunch Break: 13:00-14:00

14:00-14:40 **Title: Diode Pumped Alkali Laser: The Most Promising Candidate to Produce High Laser Power With Excellent Beam Quality**

Boris Zhdanov, US Air Force Academy, USA

**Sessions: Nanotechnology Regulations & Safety/Ceramics, Composite materials/Advances in Nano Materials Science/Bio-Optics: Design and Application/Novel Optical Materials and Applications/ Graphene Materials and Technologies/High temperature materials**

**Session Chair: Harvin Kaur, Asia Pacific University, Malaysia**

14:40-15:10 **Title:Yttrium Iron Garnet under a Strain Field**

Shin-ichi Shamoto, Advanced Science Research Center, Japan

15:10-15:40 **Title: Investigations on Implantable Nano Antennas at THz for Biomedical applications**

S. Ashok Kumar, Jyothishmathi Institute of Technological Sciences, India

15:40-16:10 **Title: Microring Resonator Based Multifarious Material Optical Waveguides and its Application in Sensing and Optical Communications**

Mohammad Mahdi Ariannejad, University kebangsaan, Malaysia

Networking and Refreshments Break: 16:10-16:30 @ IAS lobby

16-30-17-00 **Title: Enhanced photoelectrochemical performance of g-C3N4 photocatalyst**

Mohd Asri Mat Teridi, National University of Malaysia, Malaysia

Panel Discussions | Closing Ceremony



#### VENUE

Auditorium, Institute of Advanced Studies (IAS),  
University of Malaya. Kuala Lumpur, Malaysia