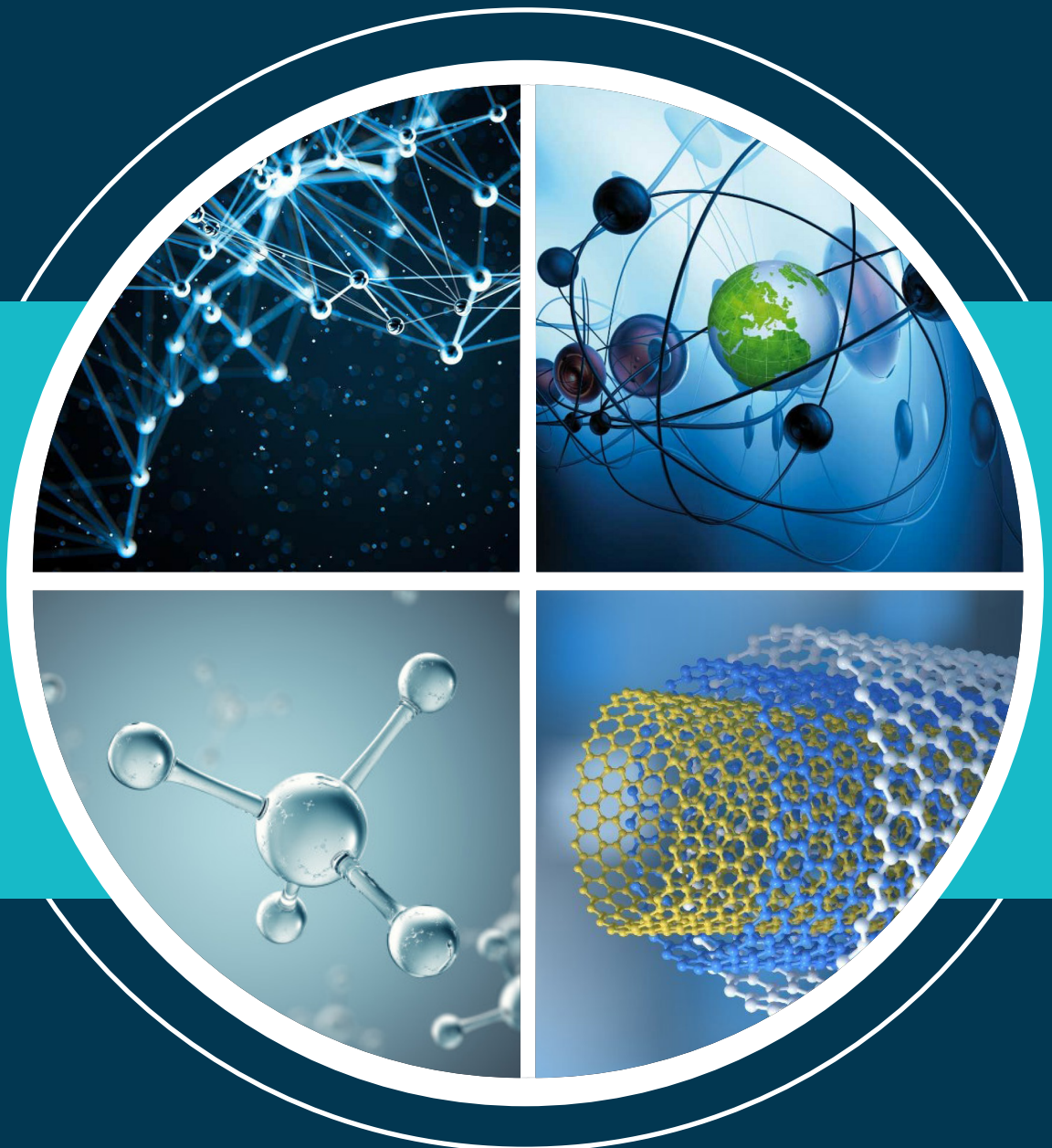


2nd World Congress on  
**Materials Science Research  
and Nanotechnology**

April 19-20, 2024 | Tokyo, Japan

Venue: ANA Crowne Plaza, Narita



*materialsscience@averconferences.com*  
*<https://materialsscience.averconferences.com/>*

April 19, 2024

Day 1

### Meeting Hall

09:00 - 09:30 Registrations

09:30 - 10:00 Opening Ceremony

### Keynote Forum

10:00 - 10:30 **Title: Interactions at the nano-bio interfaces: applications and future challenges**  
Dr. Claudia Corbo, University of Milan Bicocca, Italy

10:30 - 10:50 **Title: Investigations of Luminescence in Dy<sup>3+</sup> doped Barium and Phosphate Glasses**  
Dr. Priya Murugasen, Saveetha Engineering College, India

### Group Photo

Networking & Refreshment Break 10:50 - 11:10

### Plenary Sessions

11:15 - 11:35 **Title: In vitro immunotoxicity assessment of culture-derived extracellular vesicles in human monocytes**

Dr. Sylwia Meczynska-Wielgosz, Medical University of Warsaw, Poland

11:35 - 11:55 **Title: A Numerical Thermo-Chemo-Flow Analysis of Thermoset Resin Impregnation in LCM Processes**

Dr. Hatim Alotaibi, Institute of Earth and Space Science, Saudi Arabia

11:55 - 12:15 **Title: Innovative Breakthrough in the Design of Extended Depth of Focus Intraocular Lens: Paving the Way for a New Paradigm in Ophthalmic Advancements**

Mrs. Zhang Yu, Aier Eye Hospital, China

12:15 - 12:35 **Title: Toxicity of iron oxide nanoparticles in lung cancer cells**

Dr. Katarzyna Sikorska, Medical University of Warsaw, Poland

12:35 - 12:55 **Title: Catalytic Study of Cuprous Oxide Nanoparticles Embedded in Biofunctionalized MIL-100(Fe) with Cryptolepis buchanani Roem & Schult Extract**

Ms. Chantamalinee Chantarangkul, Functional Materials and Nanotechnology Centre of Excellence, Walailak University, Thailand

Lunch Break @ 13:00 - 14:00

### Plenary Sessions

14:00 - 14:20 **Title: Highly efficient ultrasound-driven Cu-MOF/ZnWO<sub>4</sub> heterostructure: An efficient visible-light catalyst with robust stability for complete degradation of tetracycline**

Mr. Jenson Samraj Jeyaprakash, SRM Institute of Science and Technology, India

14:20 - 14:50 **Title: Decoration of Pt/Pd bimetallic nanoparticles on Ru-implanted WS<sub>2</sub> nanosheets for acetone sensing studies**

Dr. Jae-Hun Kim, Inha University, Republic of Korea

14:50 - 15:15 **Title: Exploring the potential of Novel Two-Dimensional Materials for application as high energy density anode material in Rechargeable Metal ion batteries**

Dr. Abdul Majid, Department of Physics, University of Gujrat, Pakistan

15:15 - 15:40 **Title: The potential of polymer pencil-lead graphite for clinical electron beam dosimetry**

Dr. Khoulood Saed Almogren, Princess Nourah Bint Abdulrahman University, Saudi Arabia

15:40 - 16:00 **Title: The effects of forced and voluntary exercises on anxiety, social and cognitive behaviours in female rats with post-traumatic stress disorder**

Dr. Laura Viviana Cuervo Garces, Faculty of Engineering, Bogota, Colombia

16:00 - 16:25 **Title: Flow-based amperometric sensor for dexamethasone detection using iron-based metal organic frameworks/graphene oxide composites material modified pencil graphite electrode**

Ms. Chanida Jakkrawhad, Functional Materials and Nanotechnology Center of Excellence, Walailak University, Thailand

16:25 - 16:45 **Title: Designed 2D Protein Arrays**

Dr. Shane Gonen, University of California Irvine, USA

Networking & Refreshment Break 16:45-17:00

### Awards & Closing Ceremony