

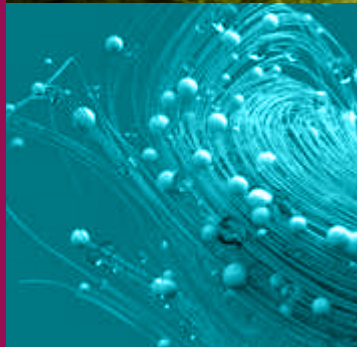
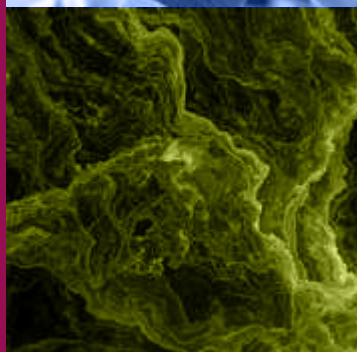


**Mind  
Authors**  
Scientific Conferences

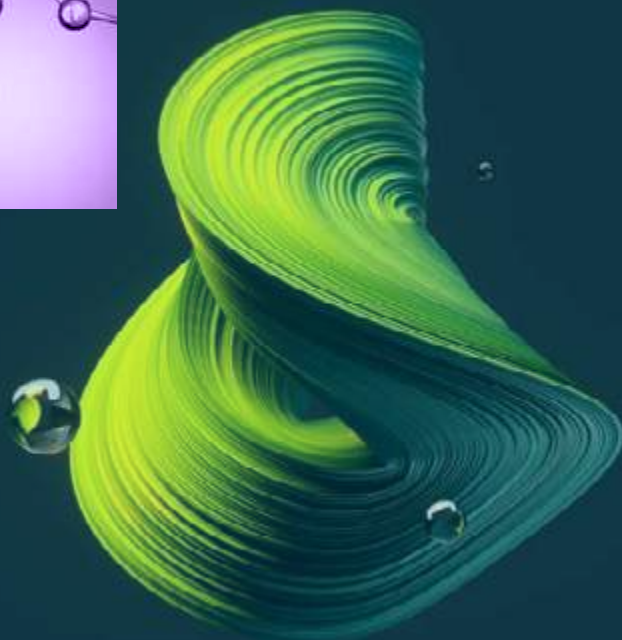
# 3<sup>RD</sup> VIRTUAL CONGRESS ON **MATERIALS SCIENCE & ENGINEERING**

**Theme:** Outlining the  
Importance of Materials  
Science for a Better Future

SEP 27 - OCT 01  
**2021**  
(GMT Timings)



## **AGENDA**



**MATERIALS INFO 2021**

| Presenter's Local Time  | GMT Time Zone | Speaker   | Title   |
|---|---------------|---|---|
| 08:45 - 09:00   | 08:45 - 09:00 | <b>Introduction and Opening Cerimony</b>  |   |
| <b>Keynote Presentations</b> <i>(Greenwich Mean Timings)</i>        |               |   |   |
| 11:00 - 11:30   | 09:00 - 09:30 | <b>Dieter Bimberg,</b><br>CIOMP of CAS<br>Changchun China and<br>TU Berlin, Germany   | <b>Quantum Dots for Quantum Technologies</b>  |
| 11:30 - 12:00   | 09:30 - 10:00 | <b>José Miguel García-Martín,</b><br>Institute of Micro and<br>Nanotechnology-CNM,<br>CSIC, Spain                                       | <b>Applications of nanocolumnar films in medicine, energy and aerospace industry</b>  |
| 11:00 - 11:30   | 10:00 - 10:30 | <b>Brian Cantor,</b><br>University of Oxford, UK  | <b>Multicomponent High-Entropy Cantor alloys</b>  |
| <b>10:30 - 10:40 Breakout Rooms</b> <i>(Greenwich Mean Timings)</i> |               |   |   |
| <b>10:40 - 10:50 Eye Relaxation Break</b> <i>(GMT Time)</i>         |               |   |   |
| <b>Oral Presentations</b> <i>(Greenwich Mean Timings)</i>           |               |   |   |
| 12:50 - 13:10   | 10:50 - 11:10 | <b>Iva Rezic,</b><br>University of Zagreb,<br>Croatia   | <b>Investigation of Silver in Antimicrobial Thin Coatings of Metal Threads</b>  |
| 16:40 - 15:00   | 11:10 - 11:30 | <b>Karabi Biswas</b> (IIT Kharagpur, India) &<br><b>Raoul Rashid Nigmatullin</b> (Kazan National Research Technical University, Russia) | <b>Detection of 3D-branching processes in living systems: the electric impedance measurements in unblown bud flower (Frangipani Plumeria)</b> |
| 13:30 - 13:50   | 11:30 - 11:50 | <b>Klaus-Ulrich Neumann,</b><br>SRH Hochschule Berlin,<br>Germany   | <b>Spiral Wave Generation and their Applications</b>  |

|               |               |  |   |
|---------------|---------------|--|---|
| 13:50 - 14:10 | 11:50 - 12:10 | <b>Romain Lucas,</b><br>University of Limoges,<br>France                               | <b>Fabrication of porous silicon carbide from functionalised kraft pulp paper using the polymer-derived ceramic route</b> |
| 13:10 - 13:30 | 12:10 - 12:30 | <b>Dânia Menezes,</b><br>Centre for<br>Nanotechnology and<br>Smart Materials, Portugal | <b>Decorative and functional properties on automotive polymeric parts</b>   |
| 14:30 - 14:50 | 12:30 - 12:50 | <b>Francesca Romana Lamastra,</b><br>University of Rome "Tor Vergata", Italy           | <b>Cementitious nanocomposites with graphene-based materials: rheology, mechanical properties and multifunctionality</b>  |

### 12:50 - 14:00 Breakout Rooms & Session Break *(Greenwich Mean Timings)*

### Oral Presentation Cont... *(Greenwich Mean Timings)*

|               |               |  |  |
|---------------|---------------|--|--|
| 16:00 - 16:20 | 14:00 - 14:20 | <b>Hubert Rahier,</b><br>Vrije Universiteit Brussel,<br>Belgium          | <b>Non-traditional cements, an overview of possibilities and pitfalls of 'green cements'</b>   |
| 18:20 - 18:40 | 14:20 - 14:40 | <b>Nathir Al-Rawashdeh,</b><br>Higher Colleges of<br>Technology, UAE     | <b>Modification of the Photocatalytic Activity of TiO<sub>2</sub> Nanoparticles by Cyclodextrin functionalized graphene and noble metals for Degradation of Organic Pollutants</b> |
| 16:40 - 17:00 | 14:40 - 15:00 | <b>Valeria De Matteis,</b><br>University of Salento, Italy               | <b>Application of polyphenols@AuNPs and SiO<sub>2</sub>NPs@lauric acid core/shell in hyperthermal treatment on cancer cell models</b>  |
| 17:00 - 17:20 | 15:00 - 15:20 | <b>Maria Francesca Cascione,</b><br>University of Salento, Italy         | <b>Cytotoxic Effects on Morphology and Mechanical Behavior in different cell lines induced by TiO<sub>2</sub>NPs Exposure.</b>   |
| 17:20 - 17:40 | 15:20 - 15:40 | <b>Venkata Subba Rao Jampani,</b><br>Jožef Stefan Institute,<br>Slovenia | <b>Elasticity-driven superstructures of liquid crystal droplets</b>  |
| 10:40 - 11:00 | 15:40 - 16:00 | <b>Bruce Wessels,</b><br>Northwestern University,<br>USA                 | <b>Halide perovskite semiconductors for high resolution gamma ray detection</b>  |

### 16:00 - 16:20 Breakout Rooms & Eye Relaxation Break *(Greenwich Mean Timings)*

## Keynote Presentations *(Greenwich Mean Timings)*

|               |               |  |  |
|---------------|---------------|--|--|
| 12:20 - 12:50 | 16:20 - 16:50 | <b>Sharmila M. Mukhopadhyay</b> ,<br>University of Maine, USA                  | <b>Emerging Materials for Next Generation Manufacturing</b>  |
| 11:50 - 12:20 | 16:50 - 17:20 | <b>Alevtina Smirnova</b> ,<br>South Dakota School of Mines and Technology, USA | <b>Great challenge of energy storage as the major key to environmental sustainability</b>  |
| 13:20 - 13:50 | 17:20 - 17:50 | <b>Thomas J. Webster</b> ,<br>Interstellar Therapeutics USA                    | <b>4D printed biomaterials: Applications for on-demand drug delivery, improved tissue growth, stem cell delivery, and so much more</b> |

**17:50 - 18:10 Breakout Rooms & Eye Relaxation Break *(Greenwich Mean Timings)***

## Oral Presentation Cont... *(Greenwich Mean Timings)*

|               |               |  |  |
|---------------|---------------|--|--|
| 13:10 - 13:30 | 18:10 - 18:30 | <b>Maryam Jahan</b> ,<br>Southern University and A&M College USA | <b>A Graphene Oxide and Copper-Centred Metal Organic Framework Composites as a Tri- Functional Catalyst for HER, OER and ORR</b> |
| 11:30 - 11:50 | 18:30 - 18:50 | <b>Digby D. Macdonald</b> ,<br>University of California, USA     | <b>The Scientific Basis of Our Reactive Metals Based Civilization</b>  |

**\*\*\* End of Day 1 \*\*\***

*Thank You*

| Presenter's Local Time  | GMT Timing    | Speaker  | Title  |
|---|---------------|--|--|
| <b>Keynote Presentations</b> <i>(Greenwich Mean Timings)</i>                                  |               |  |  |
| 15:00 - 15:30   | 06:00 - 06:30 | <b>Hyung-Ho Park,</b><br>Yonsei University, South Korea        | <b>Nanoporous Aerogel Materials</b>  |
| 15:30 - 16:00   | 06:30 - 07:00 | <b>Haejin Hwang,</b><br>Inha University, South Korea           | <b>Fabrication of Spherical Silica Aerogel Powders via Sol-Gel Technique from Water glass</b>                    |
| <b>07:00 - 07:10 Breakout Room &amp; Eye Relaxation Break</b> <i>(Greenwich Mean Timings)</i> |               |  |  |
| <b>Poster Presentations</b> <i>(Greenwich Mean Timings)</i>                                   |               |  |  |
| 16:10 - 16:20   | 07:10 - 07:20 | <b>Haryeong Choi,</b><br>Yonsei University, South Korea        | <b>Synthesis of hybrid aerogel with phenyl/vinyl group and evaluation of physical properties</b>                 |
| 16:20 - 16:30   | 07:20 - 07:30 | <b>Hyun Jin Bae,</b><br>Yonsei University, South Korea         | <b>Cu(I)-impregnated mesoporous metal-organic framework for efficient separation of styrene and ethylbenzene</b> |
| 16:30 - 16:40   | 07:30 - 07:40 | <b>Dong-eun Kim,</b><br>Yonsei University, South Korea         | <b>Comprehensive review on passivation effect of F-doped ZnO deposited by ALD</b>                                |
| 16:40 - 16:50   | 07:40 - 07:50 | <b>Hae-Noo-Ree Jung,</b><br>Yonsei University, South Korea     | <b>Si-O-Ti heterogeneous bonding formation for synthesis of compound aerogel</b>                                 |
| 16:50 - 17:00   | 07:50 - 08:00 | <b>Bezawit Z. Desalegn,</b><br>Hanyang University, South Korea | <b>Synthesis of iron chalcogenide aerogels for efficient oxygen evolution reaction</b>                           |
| 17:00 - 17:10   | 08:00 - 08:10 | <b>Ye Seo Park,</b><br>Inha University, South Korea            | <b>Flame retardant DOPO-VTS additives in the Silica Aerogel</b>  |

|               |               |  |  |
|---------------|---------------|--|--|
| 17:10 - 17:20 | 08:10 - 08:20 | <b>Qi Wang,</b><br>Yonsei University, South Korea    | <b>Dioxybenzene cross-linked hydrophobic silica aerogels with enhanced textural properties</b>                                 |
| 17:20 - 17:30 | 08:20 - 08:30 | <b>Minjae Kim,</b><br>Yonsei University, South Korea | <b>Enhancing the electrical properties of nitrogen doped Al<sub>2</sub>O<sub>3</sub> films through atomic layer deposition</b> |

**08:30 - 08:40 Breakout Rooms & Session Break** (*Greenwich Mean Timings*)

**Poster Presentations Continues..** (*Greenwich Mean Timings*)

|               |               |   |  |
|---------------|---------------|---|--|
| 17:40 - 17:50 | 08:40 - 08:50 | <b>Tae Gyeong Yun,</b><br>Yonsei University, South Korea        | <b>SiO<sub>2</sub> Aerogel for Matrix Complex on MALDI-TOF MS for Quantitative Analysis of Dodecanoyl-L-Carnitine</b>                                    |
| 17:50 - 18:00 | 08:50 - 09:00 | <b>Taehee Kim,</b><br>Yonsei University, South Korea            | <b>Influence of rGO in the photocatalytic activity of SnO<sub>2</sub> aerogel for organic dye degradation</b>  |
| 18:00 - 18:10 | 09:00 - 09:10 | <b>Jihun Lee,</b><br>Yonsei University, South Korea             | <b>Enhancement of thermal insulation performance by doping yttrium oxide opacifier in silica aerogels</b>  |
| 18:10 - 18:20 | 09:10 - 09:20 | <b>Chabungbam Akendra Singh,</b> Yonsei University, South Korea | <b>Study of band gap estimation in Er-doped ZnO prepared by sputtering</b>   |
| 18:20 - 18:30 | 09:20 - 09:30 | <b>Malik Abdul Rehman,</b><br>Yonsei University, South Korea    | <b>Role of optimal interlayer Al<sub>2</sub>O<sub>3</sub> for efficiency enhancement on directly grown graphene silicon Schottky junction solar cell</b> |
| 18:30 - 18:40 | 09:30 - 09:40 | <b>Byeong Seok Kim,</b><br>Inha University, South Korea         | <b>Industrial use of the polymethylsilsesquioxane aerogel by the facile method</b>   |
| 18:40 - 18:50 | 09:40 - 09:50 | <b>Jaemin Lee,</b><br>Inha University, South Korea              | <b>Synthesis and Application of Spherical Silica Aerogel</b>   |
| 18:50 - 19:00 | 09:50 - 10:00 | <b>Yue Wang,</b><br>Yonsei University, South Korea              | <b>The suppression of oxygen vacancy in ALD prepared ZnO thin film using H<sub>2</sub>O<sub>2</sub></b>  |

**10:00 - 10:20 Breakout Rooms & Eye Relaxation Break** (*Greenwich Mean Timings*)

**Oral Presentations** (*Greenwich Mean Timings*)

|               |               |   |   |
|---------------|---------------|---|---|
| 15:50 - 16:10 | 10:20 - 10:40 | <b>Jaspreet Kaur Randhawa</b> ,<br>Indian Institute of<br>Technology Mandi, India   | <b>Magneto-fluorescent carbon coated<br/>superparamagnetic iron oxide<br/>nanoparticles (MFCSNPs) Nano<br/>architectures: A theranostic platform.</b> |
| 16:10 - 16:30 | 10:40 - 11:00 | <b>Rekha Verma</b> ,<br>Indian Institute of<br>Information Technology<br>Allahabad, India                                   | <b>Material exploration for In-chip waste<br/>heat recovery</b>   |
| 13:00 - 13:20 | 11:00 - 11:20 | <b>Anna Lagunas</b> ,<br>CIBER-BBN, Spain   | <b>Substrate Adhesion Effects on the<br/>Dynamics of Mesenchymal Cell<br/>Condensation</b>  |
| 14:20 - 14:40 | 11:20 - 11:40 | <b>Nikolaos Bouropoulos</b> ,<br>Institute of Chemical<br>Engineering and High<br>Temperature Chemical<br>Processes, Greece | <b>Calcium Phosphate Bone Cements</b>   |
| 14:40 - 15:00 | 11:40 - 12:00 | <b>Anatolie Sidorenko</b> ,<br>Institute of Electronic<br>Engineering and<br>Nanotechnologies,<br>Moldova                   | <b>Crossover in superconductor/<br/>ferromagnet/superconductor junctions<br/>with Ni-based ferromagnets</b>   |
| 14:00 - 14:20 | 12:00 - 12:20 | <b>Alexander A. Golubov</b> ,<br>University of Twente,<br>Netherlands   | <b>Novel oscillations of Josephson<br/>current in Nb-BiTeSeNb topological<br/>junctions</b>   |

**12:20 - 13:30 Breakout Rooms & Eye Relaxation Break** (*Greenwich Mean Timings*)

**Oral Presentations Continues...** (*Greenwich Mean Timings*)

|               |               |   |  |
|---------------|---------------|---|--|
| 15:30 - 15:50 | 13:30 - 13:50 | <b>Lorenzo Paleari</b> ,<br>University of Rome "Tor<br>Vergata", Italy  | <b>Structural health monitoring of glass<br/>fiber reinforced laminates through<br/>strain-sensing plies</b>       |
| 15:50 - 16:10 | 13:50 - 14:10 | <b>Gianluca Franceschini</b> ,<br>Fondazione Policlinico<br>Universitario Agostino<br>Gemelli IRCCS Rome, Italy | <b>The role of oxidized regenerate<br/>cellulose to prevent cosmetic defects<br/>in oncoplastic breast surgery</b> |
| 15:10 - 15:30 | 14:10 - 14:30 | <b>Henrique Faneca</b> ,<br>Center for Neuroscience<br>and Cell Biology, Portugal                               | <b>Gene and drug delivery nanosystems<br/>to mediate antitumor strategies</b>                                      |

**\*\*\* End of Day 2 \*\*\***

*Thank You*

| Presenter's Local Time  | GMT Timing    | Speaker   | Title   |
|---|---------------|---|---|
| <b>Keynote Presentations</b> <i>(Greenwich Mean Timings)</i>                                  |               |   |   |
| 14:00 - 14:30   | 06:00 - 06:30 | <b>Jinlian Hu,</b><br>City University of Hong Kong, Hong Kong                               | <b>A Smart Stent by Shape Memory Polymeric Laminates</b>  |
| 15:30 - 16:00   | 06:30 - 07:00 | <b>Yoon-Bong Hahn,</b><br>Jeonbuk National University, South Korea                          | <b>Highly Stable and Efficient Perovskite Solar Cells with Functional Nanocomposites</b>  |
| <b>Oral Presentations</b> <i>(Greenwich Mean Timings)</i>                                     |               |   |   |
| 16:00 - 16:20   | 07:00 - 07:20 | <b>Haruyuki Ishii,</b><br>Yamaguchi University, Japan                                       | <b>Handling of nanoparticle dispersions for novel material designs</b>  |
| 16:20 - 16:40   | 07:20 - 07:40 | <b>Shun Nishimura,</b><br>Japan Advanced Institute of Science and Technology (JAIST), Japan | <b>Machine learning discovered trend of catalysts and catalysis in oxidative coupling of methane</b>                                    |
| 16:40 - 17:00   | 07:40 - 08:00 | <b>Ha-Yoon Nah,</b><br>Yonsei University, South Korea                                       | <b>Research about silylation using different silylating agents for hydrophobic silica aerogel</b>                                       |
| <b>08:00 - 08:20 Breakout Room &amp; Eye Relaxation Break</b> <i>(Greenwich Mean Timings)</i> |               |   |   |
| <b>Poster Presentations</b> <i>(Greenwich Mean Timings)</i>                                   |               |   |   |
| 17:20 - 17:30   | 08:20 - 08:30 | <b>Kyu-Yeon Lee,</b><br>Yonsei University, South Korea                                      | <b>A study on mechanically enhanced organic binder-silica composite aerogels</b>  |
| 17:30 - 17:40   | 08:30 - 08:40 | <b>Sang Joon Lee,</b><br>Yonsei University, South Korea                                     | <b>Design of an open structure based on atomic-level structural configuration for higher Young's modulus</b>                            |
| 17:40 - 17:50   | 08:40 - 08:50 | <b>Wanje Park,</b><br>Yonsei University, South Korea  | <b>Enhancement in ethane/ethylene selectivity via incorporation of highly polarizable functional group into metal-organic framework</b> |



|               |               |  |   |
|---------------|---------------|--|---|
| 17:50 - 18:00 | 08:50 - 09:00 | <b>Jae-ik Hyun,</b><br>Yonsei University, South Korea          | <b>Formation of different types nanoporous composite by dealloying of Ag and Ni containing Al-Cu-Ti amorphous precursor</b> |
| 18:00 - 18:10 | 09:00 - 09:10 | <b>Sunil Moon,</b> Yonsei University, South Korea              | <b>Atomistic study of mechanical properties on colloidal and fibrous structures of silica aerogel</b>                       |
| 18:10 - 18:20 | 09:10 - 09:20 | <b>Younghun Kim,</b><br>Yonsei University, South Korea         | <b>The influence on the acetonitrile for inhibiting the agglomeration of pore structure of waterglass based aerogel</b>     |
| 18:20 - 18:30 | 09:20 - 09:30 | <b>Chan Lee,</b><br>Yonsei University, South Korea             | <b>The study in doping effect of ZnO for p-type semiconductor deposited by ALD</b>  |
| 18:30 - 18:40 | 09:30 - 09:40 | <b>Vishwanath Hiremath,</b><br>Hanyang University, South Korea | <b>1D TiO<sub>2</sub> nanofiber reinforced TiO<sub>2</sub> aerogels for photodegradation of organic pollutants</b>          |
| 18:40 - 18:50 | 09:40 - 09:50 | <b>Yongwoo Kim,</b><br>Yonsei University, South Korea          | <b>Mechanical properties of silica aerogel calculated by finite element analysis</b>  |

**09:50 - 10:20 Breakout Rooms & Session Break** (*Greenwich Mean Timings*)

**Oral Presentations** (*Greenwich Mean Timings*)

|               |               |   |  |
|---------------|---------------|---|--|
| 15:50 - 16:10 | 10:20 - 10:40 | <b>Pooja Sharma,</b><br>Daulat Ram College,<br>University of Delhi, India                         | <b>Analyzing Sustainability of Energy in 3 E Framework: Ecological, Economic and Environmental Perspective.</b>                            |
| 16:10 - 16:30 | 10:40 - 11:00 | <b>Kowsar Majid,</b><br>National Institute of<br>Technology Srinagar, India                       | <b>Thermal and photocatalytic activity of Graphene based metal oxide nanocomposites</b>  |
| 16:30 - 16:50 | 11:00 - 11:20 | <b>Akriti Mishra,</b><br>Indian Institute of science<br>Bangalore, India                          | <b>In situ Thermodynamic Characterization of Nanoparticle-Protein Corona Formation</b>   |
| 16:50 - 17:10 | 11:20 - 11:40 | <b>Mrinal Patel,</b><br>Indian Institute of<br>Technology Delhi, India                            | <b>Nanoscale mechanics of B. mori Silk Fibroin</b>   |
| 14:40 - 15:00 | 11:40 - 12:00 | <b>Elena S. Igant'eva,</b><br>Mendeleev University of<br>Chemical Technology of<br>Russia, Russia | <b>Design of NIR luminescent glass-ceramics with <math>\gamma</math>-(Ga,Al)<sub>2</sub>O<sub>3</sub>:Ni<sup>2+</sup> nanocrystals</b>     |
| 17:00 - 17:20 | 12:00 - 12:20 | <b>Andrey Dmitriev,</b><br>Russian Academy of<br>Science, Russia                                  | <b>Effects of structure and phases shape of calcium and aluminum silicoferrite (SFCA) on the agglomerate metallurgical characteristics</b> |

**\*\*\* End of Day 3 \*\*\***

| Presenter's Local Time  | GMT Timing    | Speaker   | Title  |
|---|---------------|---|--|
| <b>Keynote Presentations</b> <i>(Greenwich Mean Timings)</i>                                  |               |   |  |
| 09:00 - 09:30   | 09:00 - 09:30 | <b>Magnus S. Magnusson</b> ,<br>University of Iceland,<br>Iceland                   | <b>Unique T-string Self-similarity and External Memory from Protein to Human Mass-societies: a bio-mathematical explosion</b>  |
| 11:30 - 12:00   | 09:30 - 10:00 | <b>Francisco Javier Pérez Trujillo</b> ,<br>Complutense University of Madrid, Spain | <b>High Temperature Corrosion in Molten Salts &amp; Molten Salts Technology: Past, Present and Future</b>  |
| 12:00 - 12:30   | 10:00 - 10:30 | <b>Alexandre Maître</b> ,<br>University of Limoges,<br>France                       | <b>A recent insight into the elaboration and working performances of ultra-light ceramics for structural applications</b>  |
| <b>10:30 - 10:50 Breakout Room &amp; Eye Relaxation Break</b> <i>(Greenwich Mean Timings)</i> |               |   |  |
| <b>Poster Presentations</b> <i>(Greenwich Mean Timings)</i>                                   |               |   |  |
| 17:50 - 18:00   | 10:50 - 11:00 | <b>Ammarika Makdee</b> ,<br>Khon Kaen University,<br>Thailand                       | <b>Catalytic activity of ZrxTi1-xO2-supported Ni for CO<sub>2</sub> methanation reaction</b>   |
| 19:00 - 19:10   | 11:00 - 11:10 | <b>Ling Ling Tan</b> ,<br>Universiti Kebangsaan Malaysia, Malaysia                  | <b>Optical Aptasensor based on Metal Salphen Label for Rapid and Facile Determination of Insulin</b>   |
| 16:10 - 16:20   | 11:10 - 11:20 | <b>Chandan Kumar Vishwakarma</b> ,<br>Indian Institute of Technology Delhi, India   | <b>Investigation of electronic and optical properties of rare-earth substituted Na<sub>0.5</sub>Bi<sub>0.5</sub>TiO<sub>3</sub> using first-principles simulations</b> |
| 13:20 - 13:30   | 11:20 - 11:30 | <b>Paolo Pellegrino</b> ,<br>University of Salento, Italy                           | <b>Pulse-Atomic Force Lithography: a novel nanolithography approach for constant and varying-depth nanostructures patterning</b>                                       |

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|---------------|---------------|---|---|
| 14:30 - 14:40 | 11:30 - 11:40 | <b>Oleksandr Kapustynskyi,</b><br>Vilnius Gediminas<br>Technical University,<br>Lithuania | <b>Increasing the Main Parameters of<br/>Metals with the Application of Local<br/>Laser Heating</b>   |
| 15:40 - 15:50 | 11:40 - 11:50 | <b>Zviad. D. Kovziridze,</b><br>Georgian Technical<br>University, Georgia                 | <b>Innovative Technology for Treating<br/>Cancer Diseases</b>   |
| 17:20 - 17:30 | 11:50 - 12:00 | <b>Sushmita Gupta,</b><br>M.J.P.R. University, India                                      | <b>Advancement of Pervoskite Sensitized<br/>Solar Cells as Emerging Renewable<br/>Energy Solution</b> |

### 12:00 - 12:20 Breakout Rooms & Session Break *(Greenwich Mean Timings)*

### Oral Presentations *(Greenwich Mean Timings)*

|               |               |   |   |
|---------------|---------------|---|---|
| 15:20 - 15:40 | 12:20 - 12:40 | <b>Nina Dimitrova Dimcheva,</b><br>University of<br>Plovdiv "Paisii<br>Hilendarski", Bulgaria | <b>Development of novel <math>\text{Co}_3\text{O}_4</math>-g-<math>\text{C}_3\text{N}_4</math><br/>– Nafion™ composite catalyst for<br/>electrochemical reduction of peroxide<br/>compounds</b> |
| 14:40 - 15:00 | 12:40 - 13:00 | <b>Luciana Di Gaspare,</b><br>University of Roma Tre,<br>Italy                                | <b>CVD graphene on Ge system:<br/>structural and electronic properties</b>  |
| 15:00 - 15:20 | 13:00 - 13:20 | <b>Oscar Castillo,</b><br>University of the Basque<br>Country, Spain                          | <b>Ferromagnetic supramolecular metal-<br/>organic frameworks for active capture<br/>and magnetic sensing of emerging<br/>drug pollutants</b>   |

### 13:20 - 14:00 Breakout Rooms & Session Break *(Greenwich Mean Timings)*

### Oral Presentation Cont... *(Greenwich Mean Timings)*

|               |               |  |   |
|---------------|---------------|--|---|
| 16:00 - 16:20 | 14:00 - 14:20 | <b>Ashiqur Rahman,</b><br>Spanish National<br>Research Council (INMA<br>– UNIZAR), Spain | <b>Advances of pulsed laser intervention:<br/>Performing archaeological bones<br/>cleaning and processing of laser-<br/>material interaction in a novel way</b> |
| 16:20 - 16:40 | 14:20 - 14:40 | <b>Boukhalfa Houssein,</b><br>CNRS – University of<br>Burgundy, France                   | <b>Nanostructured Tungsten –<br/>Molybdenum thin films prepared with<br/>Co-sputtering GLAD technique</b>   |
| 16:40 - 17:00 | 14:40 - 15:00 | <b>Philipp Schulze,</b><br>Berlin University<br>of Technology and<br>Economics, Germany  | <b>Machining Post-Processing of<br/>Additively Manufactured Components<br/>(M-PAM)</b>  |

|               |               |  |   |
|---------------|---------------|--|---|
| 17:00 - 17:20 | 15:00 - 15:20 | <b>Huize Wang,</b><br>Max Planck Institute<br>of Colloids and<br>Interfaces, Germany | <b>Towards high-performance flexible<br/>gas sensors by carbon laser-<br/>patterning</b>                |
| 17:20 - 17:40 | 15:20 - 15:40 | <b>Jakub Skoczylas,</b><br>Lublin University of<br>Technology, Poland                | <b>Fracture Toughness Assessment and<br/>Damage Detection of Cured Epoxy<br/>Resins</b>                 |
| 16:40 - 17:00 | 15:40 - 16:00 | <b>Vitor Fernando Crispim<br/>Sousa,</b><br>Polytechnic of Porto,<br>Portugal        | <b>Comparison of machining<br/>performance of TiAlSiN coated tools,<br/>obtained by dcMS and HiPIMS</b> |

**16:00 - 16:20 Breakout Rooms & Session Break** (*Greenwich Mean Timings*)

## **Poster Presentations** (*Greenwich Mean Timings*)

|               |               |   |  |
|---------------|---------------|---|--|
| 13:20 - 13:30 | 16:20 - 16:30 | <b>Karla Jahaira Paz<br/>Corrales,</b><br>University of<br>Brasilia, Brazil | <b>Growth and characterization of zinc<br/>oxide films and their response to<br/>methane</b>   |
| 18:30 - 18:40 | 16:30 - 16:40 | <b>Laura Maria Slavu,</b><br>University of Salento, Italy                   | <b>Loading of Magnetic Nanoparticles<br/>into human Red Blood Cells: Synthesis<br/>and Surface Engineering</b>                           |
| 18:40 - 18:50 | 16:40 - 16:50 | <b>Simona Martano,</b><br>University of Salento, Italy                      | <b>Synthesis of plasmonic nanoparticles<br/>by green chemistry: characterization<br/>and in vitro antitumoral effects<br/>assessment</b> |

**\*\*\* End of Day 4 \*\*\***

*Thank You*

| Presenter's Local Time  | GMT Timing    | Speaker  | Title   |
|---|---------------|--|---|
| <b>Oral Presentations</b> <i>(Greenwich Mean Timings)</i>                               |               |  |   |
| 17:00 - 17:20   | 08:00 - 08:20 | <b>Rushikesh P. Dhavale</b> ,<br>Yonsei University,<br>South Korea   | <b>Facile synthesis of phenyl surface modified hydrophobic silica aerogels by co-precursor method</b>             |
| 17:20 - 17:40   | 08:20 - 08:40 | <b>Er. Abdulrahman Ahmed Sharwani</b> ,<br>Yeungnam University,<br>South Korea                             | <b>Sustainable Fabrication of Ag-TiO<sub>2</sub> Nanocomposites and their Improved Photocatalytic Application</b> |
| 17:40 - 18:00   | 08:40 - 09:00 | <b>Vinayak G. Parale</b> ,<br>Yonsei University,<br>South Korea  | <b>Metal oxide aerogels decorated carbon foam in photocatalysis application</b>                                   |
| 18:00 - 18:20   | 09:00 - 09:20 | <b>Arnaud Caron</b> ,<br>Korea University<br>of Technology and<br>Education, South Korea                   | <b>Measuring thermophysical properties of metallic liquids by AFM</b>   |
| 17:20 - 17:40   | 09:20 - 09:40 | <b>Hansong Xue</b> ,<br>National University of<br>Singapore, Singapore                                     | <b>Elucidating the recombination losses in perovskite-based solar cells</b>                                       |
| 17:40 - 18:00   | 09:40 - 10:00 | <b>Yi-Cheng Chen</b> ,<br>National Kaohsiung<br>University of Science and<br>Technology, Taiwan            | <b>Surface treatment of commercial pure titanium by shot impact treatment</b>                                     |
| <b>10:00 - 10:20 Breakout Rooms &amp; Session Break</b> <i>(Greenwich Mean Timings)</i> |               |  |   |
| <b>Keynote Presentations</b> <i>(Greenwich Mean Timings)</i>                            |               |  |   |
| 12:20 - 12:50   | 10:20 - 10:50 | <b>Ajay Kumar Mishra</b> ,<br>Academy of<br>Nanotechnology and<br>waste water innovations,<br>South Africa | <b>Ecofriendly Materials for Environmental Sustainability</b>   |

|               |               |   |   |
|---------------|---------------|---|---|
| 12:50 - 13:20 | 10:50 - 11:20 | <b>Alain Ponton,</b><br>University of Paris<br>and National Center<br>of Scientific Research,<br>France | <b>Eco-friendly graphene oxide-based hydrogel composites for selective absorption</b> |
|---------------|---------------|---|---|

### 11:20 - 11:30 Breakout Rooms & Session Break *(Greenwich Mean Timings)*

### Oral Presentations Continues.. *(Greenwich Mean Timings)*

|               |               |   |  |
|---------------|---------------|---|--|
| 14:30 - 14:50 | 11:30 - 11:50 | <b>Alexei Nazarov,</b><br>Lashkaryov Institute of<br>Semiconductor Physics<br>NAS of Ukraine, Ukraine | <b>Highly doped ZnO thin films deposited by RF magnetron sputtering of powder target in methane ambient: films and ZnO/Si heterostructures</b> |
| 14:50 - 15:10 | 11:50 - 12:10 | <b>Amir Sa'ar,</b><br>Hebrew University of<br>Jerusalem, Israel                                       | <b>Optical properties of porous silicon: the role of size, porosity and surface termination</b>  |
| 15:10 - 15:30 | 12:10 - 12:30 | <b>Mohammad Ehtisham Khan,</b><br>Jazan University, Saudi<br>Arabia                                   | <b>Graphitic-Carbon Nitride-based Nanostructures for Energy and Environmental Applications: A Sustainable Approach</b>                         |
| 14:30 - 14:50 | 12:30 - 12:50 | <b>David Ruch,</b><br>Luxembourg Institute of<br>Science and Technology,<br>Luxembourg                | <b>Polymer composites Materials Towards Functional interfaces</b>  |

### 12:50 - 14:00 Breakout Rooms & Session Break *(Greenwich Mean Timings)*

### Oral Presentations Continues.. *(Greenwich Mean Timings)*

|               |               |   |   |
|---------------|---------------|---|---|
| 16:00 - 16:20 | 14:00 - 14:20 | <b>Evan Maina Maingi,</b><br>University of Burgos,<br>Spain         | <b>Application of laser technology to cultural heritage stained-glass preservation: the heat incubation challenge</b> |
| 10:20 - 10:40 | 14:20 - 14:40 | <b>Pablo Martin,</b><br>University of Antofagasta,<br>Chile         | <b>Electric Fields Strength near Conical Lightning Conductors</b>   |
| 10:40 - 11:00 | 14:40 - 15:00 | <b>Raymond Compton Jagessar,</b><br>University of<br>Guyana, Guyana | <b>Nanoparticles, in fight against COVID-19</b>   |

|               |               |   |  |
|---------------|---------------|---|--|
| 10:00 - 10:20 | 15:00 - 15:20 | <b>Héctor O. Murrieta Sánchez,</b><br>National Autonomous University of Mexico,<br>Mexico | <b>Studies about optical and magnetic properties of some materials</b>   |
| 17:20 - 17:40 | 15:20 - 15:40 | <b>Erich Sackmann,</b><br>Technical University Munich, Germany                            | <b>Nature as Material designer</b>   |
| 11:40 - 12:00 | 15:40 - 16:00 | <b>Fouad Erchiqui,</b><br>University of Quebec in Abitibi, Canada                         | <b>A criterion on the applicability of the Beer-Lambert law for the analysis of microwave and radiofrequency power dissipation in Wood and Hardboard</b> |

**16:00 - 16:20 Breakout Rooms & Session Break** (*Greenwich Mean Timings*)

**Oral Presentations Continues..** (*Greenwich Mean Timings*)

|               |               |  |   |
|---------------|---------------|--|---|
| 11:20 - 11:40 | 16:20 - 16:40 | <b>Jihua Chen,</b><br>Center for Nanophase Materials Sciences, USA                         | <b>Optimizing Organic and Inorganic Interphases for Optoelectronics, Energy Storage and Beyond</b>                      |
| 09:40 - 10:00 | 16:40 - 17:00 | <b>Tony Green,</b><br>Speaking Green Communications, USA                                   | <b>How improving the sustainability of our materials influences reducing GHG emissions and reversing global warming</b> |
| 22:30 - 22:50 | 17:00 - 17:20 | <b>Sari Panikkassery Sasidharan,</b><br>Cochin University of Science and Technology, India | <b>Plasma modification of Polymers: An effective method of compatibilization for Natural fiber composites</b>           |
|               | 17:20 - 17:40 | <b>*** Slots Available ***</b>   |   |

**\*\*\* End of Conference \*\*\***

*Thank You*