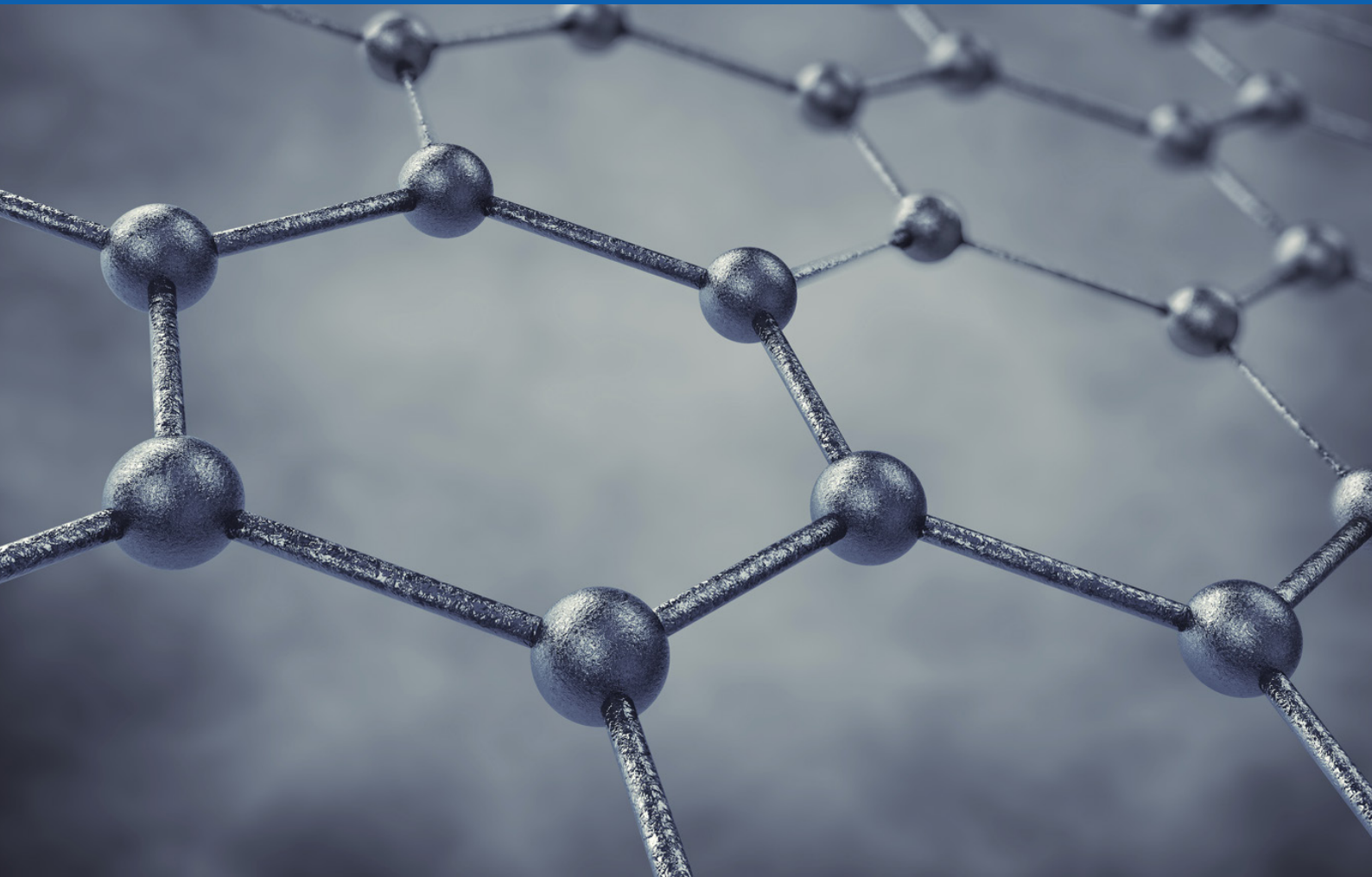


# Scientific Program

4<sup>th</sup> Global Congress & Expo on  
**Materials Science and Nanoscience**

October 15-16, 2018 in Amsterdam, Netherlands



## **Scientific Federation**

1-8-506/2/B, Begumpet, Hyderabad-500016, India  
T: +91-40-6668 7799 | E: [contact@scientificfederation.com](mailto:contact@scientificfederation.com)  
<http://scientificfederation.com>

## Day 1 October 15, 2018

### Meeting Place 2

08:00-09:00 Registrations

09:00-09:10 Introduction

09:10-09:30 Opening Ceremony

**Sessions** Plenary Forum | Keynote Forum | Invite Talks

**Session and Conference Chair** Vladimir P. Torchilin, Northeastern University, USA

**Session Co-Chair** Helmut Cölfen, Universität Konstanz, Germany  
**Plenary Forum**

**09:30-10:20 Title: Smart Combination Nanopreparations: Bringing Drugs Inside Cells and to Individual Organelles to Treat Multidrug Resistant Cancer**

Torchilin Vladimir, Northeastern University, USA

**10:20-11:10 Title: Mesostructured Organic-Inorganic Hybrid Materials**

Helmut Cölfen, Universität Konstanz, Germany

**Networking & Refreshments Break 11:10-11:25 @ Foyer**

**Keynote Forum**

**11:25-12:05 Title: Precise Crystal Structure Analysis and Structure-Based Design of Ceramic Materials**

Masatomo Yashima, Tokyo Institute of Technology, Japan

**12:05-12:45 Title: Eco-friendly Solar Power and Energy Storage System using Composite Materials System**

Hee-Je Kim, Pusan National University, South Korea

**12:45-12:55 Panel Discussion**

**12:55-13:00**

**Group Photo**

**Lunch Break @ Restaurant the Gallery 13:00-14:00**

**14:00-14:40 Title: Core-Shell Nanoparticles for Plasmonics and Catalysis**

Wolfgang E. ERNST, Graz University of Technology, Austria

**14:40-15:20 A Functional Enzyme Mimics for Oxidative Halogenation Reactions to Combat Biofilm Formation**

Wolfgang Tremel, Institut für Anorganische Chemie und Analytische Chemie, Johannes Gutenberg Universität, Germany

**Invited Talks**

**15:20-15:50 Title: Low-loss Fused Silica Waveguides for High-power Photonic Devices**

Gil Atar, Soreq NRC, Israel

**15:50-16:20 Title: Photonics in Organic Crystal Microcavities with Strong Light-matter Coupling**

Kenichi Yamashita, Kyoto Institute of Technology, Japan

**Networking & Refreshments Break 16:20-16:35 @ Foyer**

**Young Researchers Forum**

**Session Chair** Hee-Je Kim, Pusan National University, South Korea

**16:35-16:55 Title: Advanced Electrode Material and Flexible Pouch-type Hybrid Super-capacitor for Future Electric Transport System and Medical Devices**

Chebrolu Venkata Thulasi Varma, Pusan National University, South Korea

**16:55-17:15 Title: Facile Two-step Preparation of Zn-Ni-S Nanowire Composite as an Innovative Electrode Material for Supercapacitor Application**

In-Ho Cho, Pusan National University, South Korea

**17:15-17:35 Title: Construction of Novel Nanocomposite  $\text{MnO}_2@ \text{CoNiO}_2$  Snail Shell-like Structures Grown on Nickel Foam for High Performance Electrochemical Supercapacitors**

Tarugu Anitha, Pusan National University, South Korea

**17:35-17:55 Title:  $\text{NiMoO}_4@ \text{NiWO}_4$  Honeycombs as A High Performance Electrode Material for Supercapacitor Applications**

Araveeti Eswar Reddy, Pusan National University, South Korea

**17:55-18:15 Title: Spectral Feature of Series and parallel Combinations of Supercapacitors**

Bak Jin-Soo, Pusan National University, South Korea

**Day 2 October 16, 2018****Meeting Place 2****Keynote Forum**

**09:30-10:10** **Title: Introduction of Graphene Nanofibers into the Perovskite Layer of Perovskite Solar Cells**  
Wallace Woon-Fong LEUNG, Hong Kong Polytechnic University, Hong Kong

**Invited Talks**

**Sessions** Advances in Nano Materials Science | Nanomaterials and Nanocomposites | Biomaterials and Tissue Engineering

**Session Chair** Yit-Tsong Chen, National Taiwan University, Taiwan

**Session Co-chair** Zoltán Osváth, Hungarian Academy of Sciences, Hungary

**10:10-10:40** **Title: Two-Dimensional Nanomaterials-Based Functional Devices for Optoelectronic, Energy Conversion, and Biosensing Applications**

Yit-Tsong Chen, National Taiwan University, Taiwan

**10:40-11:10** **Title: Characterization of Graphene-gold Nanoparticle Hybrid Materials by Scanning Probe Methods**

Zoltán Osváth, Hungarian Academy of Sciences, Hungary

**Networking & Refreshments Break 11:10-11:25 @ Foyer**

**11:25-11:55** **Title: MoS<sub>2</sub> Nano-slabs for Slurry Phase Hydrocracking of Vacuum Residue**

Yong-Kul Lee, Dankook University, Korea

**11:55-12:25** **Title: Multipurpose Molecular Spintronic Device**

Xiangnan Sun, National Center for Nanoscience and Technology, China

**12:25-12:55** **Title: The Nature of Fluorophilic Association in Fluorocarbon Functionalized Polymers**

Thio E. Hogen-Esch, University of Southern California, USA

**Lunch Break @ Restaurant the Gallery 12:55-14:00**

**14:00-14:30** **Title: Functional Polycaprolactone for Delivery of Anticancer Drugs and Histone Deacetylase Inhibitors**

Mihaela C. Stefan, University of Texas at Dallas, USA

**14:30-15:00** **Title: Mechanical Properties and Biological Response of Ultra High Molecular Weight Polyethylene Reinforced with Alumina Toughened Zirconia Nanopowder**

Maria Giulia Faga, Italian National Research Council, Italy

**15:00-15:30** **Title: Magnesium and Strontium Containing Bioactive Borosilicate Glasses and Scaffolds for Bone Tissue Engineering**

Jonathan Massera, Tampere University of Technology, Finland

**Sessions** Materials Chemistry and Sustainable Chemistry | Surface Science and Engineering | Nanomedicine and Materials for Drug Delivery Applications | Materials and devices for gas separation and purification | Materials Science & Engineering | Advances in Instrumentation Technology

**Session Chair** Xingjian (Chris) Xue, University of South Carolina, USA

**15:30-16:00** **Title: Material Science and Environment Friendly Products: the Case of Silver Nanoparticles**

Emel Topuz, Istanbul Technical University, Turkey

**Networking & Refreshments Break 16:00-16:15 @ Foyer**

**16:15-16:45** **Title: Investigation on Microstructural Characteristics, Surface Properties and Mechanical Strength of Wire Arc Sprayed Zn-Al Coatings**

Fardad Azarmi, North Dakota State University, USA

**16:45-17:15** **Title: Endosomal Escape and Delivery of CRISPR/Cas9 Genome Editing Machinery Enabled by Nanoscale Zeolitic Imidazolate Framework**

Shahad Alsaiani, King Abdullah University of Science and Technology, Saudi Arabia

**17:15-17:45** **Title: Fabrication and Characterization of an Asymmetrical Hollow Fiber Membrane for Air Separation and Oxygen Production**

Xingjian Xue, University of South Carolina, USA

**17:45-18:15** **Title: Atomic-resolution Electron Microscopy for Aluminum Alloys as High-performance Industry Materials**

Jianghua Chen, Hunan University, China

**18:15-18:45** **Title: Nanostructural State in Metals Under the Influence of the High-current Electronic Beam of a Nanosecond Duration**

A.V. Kuznetsov, Machine building plant "Armalit", Saint Petersburg, Russia

## Poster Presentations

- P-001**      **Title: Designing Thermoresponsive Polycaprolactone for Biomedical Applications**  
Erika L. Calubaquib, University of Texas at Dallas , USA
- P-002**      **Title: Effect of Heat Treatment on the Superelastic Strain of FeNiCoAlTaB**  
Monika Czerny, Institute of Metallurgy and Materials Science, Polish Academy of Sciences, Poland
- P-003**      **Title: Room-Temperature Magnetoresistance Observed in Phase-Engineered Type-II Weyl Semimetal  $\text{Mo}_x\text{W}_{1-x}\text{Te}_2$  Thin Films**  
Roshan Jesus Mathew, Academia Sinica, Taiwan
- P-004**      **Title: Liquid Metal Alloys: a Study of Physicochemical Properties of Liquid GaSn Eutectic Alloys with Zn Additions**  
Alexandra Dobosz, Institute of Metallurgy and Materials Science PAS , Poland
- P-005**      **Title: E-beam co-deposition of  $\text{Al}_{0.3}\text{CrFeMnNiZr}_{0.2}$  High Entropy Alloy Thin Film**  
Mihai Tudor Olaru, National Institute of Research and Development for Nonferrous and Rare Metals, Romania
- P-006**      **Title: Structural Particularities of Low Density High Entropy Alloys**  
Dumitru Mitrica, National Institute of Research and Development for Nonferrous and Rare Metals, Romania
- P-007**      **Title: Substrate Orientation Effects on the Manotribology of CVD-Graphene**  
Yoshin Jo, Korea University of Technology , South Korea
- P-008**      **Title: Study of Nanoscopic Friction and Wear Behavior of 4 Metallic Glasses**  
Hui Eun Ko, Korea University of Technology and Education, Republic of Korea

## Bookmark Your Dates

5<sup>th</sup> Global Congress & Expo on

# Materials Science and Engineering

June 10-12, 2019 | Osaka, Japan

[www.scientificfederation.com/gcemse-2019/](http://www.scientificfederation.com/gcemse-2019/)

6<sup>th</sup> Global Congress & Expo on

# Materials Science and Nanoscience

October 07-09, 2019 | Dubai, UAE

[www.scientificfederation.com/materials-science-2019/](http://www.scientificfederation.com/materials-science-2019/)