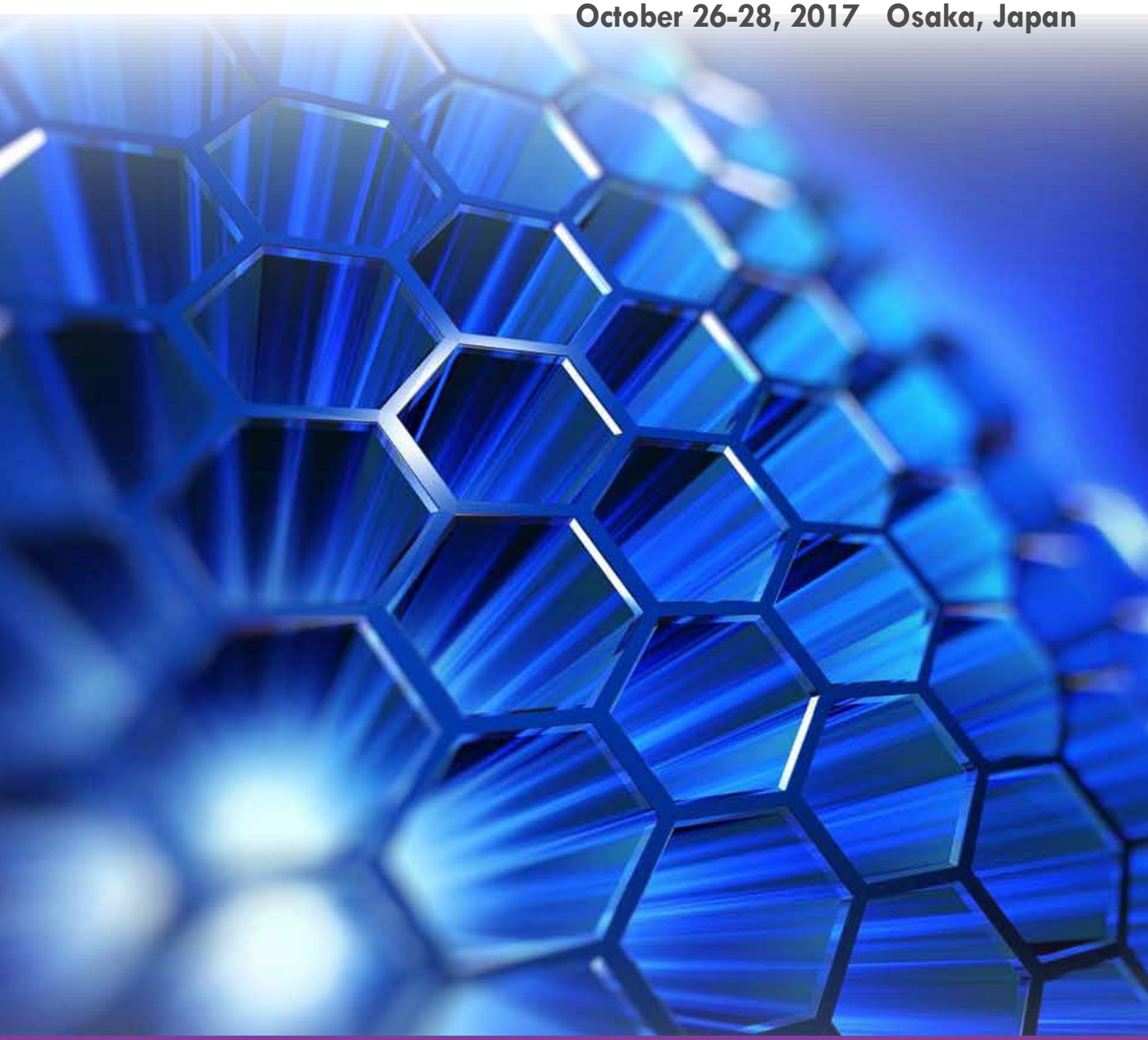
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# Scientific Program

## 13th International Conference and Exhibition on

# Advanced Materials and Nanotechnology

**October 26-28, 2017 Osaka, Japan**




**Hosting Organization: Conference Series LLC**

One Commerce Center-1201, Orange St. #600, Wilmington, Zip-19899, Delaware, USA

Ph: +1-702-508-5200, Fax: +1-650-618-1417, Toll free: +1-800-216-6499

Email: adavancedmaterials@materialsconferences.com, adavancedmaterials@materialsconferences.org

## Day 1 October 26, 2017

**08:00-08:30** Registrations

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**Hall**

**08:45-09:05** Opening Ceremony

### Keynote Forum

**09:05-09:10** Introduction

**09:10-09:35** Title: Polymer-derived ceramics for space applications

**S Packirisamy,** Vikaram Sarabhai Space Centre, India

**09:35-10:00** Title: Engineered functional nano materials

**K M Liew,** City University of Hong Kong, China

Sessions:
Advanced Materials and Functional Devices | Engineering Materials

Session Introduction

**Session Chair: TBA**
**Session Co-Chair: TBA**

**10:00-10:20** Title: Accelerating the exploration of Li/Na-ion battery materials via enlarged crystal structure databases

**Kai-Ming Ho,** Iowa State University, USA

**10:20-10:40** Title: PbS nanoparticles/single-wall carbon nanotubes nanohybrid materials synthesis by means of the pulsed laser deposition approach and their integration into photoactive devices

**My Ali El Khakani,** Université du Québec, Canada

**Group Photo**

Networking & Refreshments Break 10:40-11:00

**11:00-11:20** Title: Development and synthesis of polycarbonate-polyester copolymer with heat resistance

**Jungup Park,** Chemicals R&D Center, Repubi of Korea

**11:20-11:40** Title: Towards minimizing the consumption of heavy rare earths in the processing of Nd-Fe-B permanent magnets by electrophoretic deposition

**Marko Soderžnik,** Jožef Stefan Institute, Slovenia

**11:40-12:00** Title: EXTRUDED BRIQUETTE (BREX) – New charge component for modern metallurgy

**Aitber Bizhanov,** Metal and Coal Extrusion-RUSSIA, Russian Federation

**12:00-12:20** Title: Ultrathin multifunctional composite coatings

**Väino Sammelselg,** University of Tartu, Estonia

**12:20-12:40** Title: Tensile creep behavior and microstructural analysis of a die-cast Mg-4Al-4RE alloy modified by Ca-substitution of half RE

**Jian MENG,** Chinese Academy of Sciences, China

**12:40-13:00** Title: Effects of loading frequency on cyclic deformation and fatigue behavior of metastable austenitic stainless steels

**Davi Pessoa,** Technische Universität Dresden, Germany

Lunch Break 13:00-13:40

Session: Composite Materials

Session Introduction

**Session Chair: TBA**

**13:40-14:00** Title: Fabrication and applications of carbon nanomaterials filled multi-functional nanocomposites

**Soon Hyung Hong,** Korea Advanced Institute of Science and Technology, Republic of Korea

**14:00-14:20** Title: Fabrication and characteristics of carbon nanotube based field-responsive composite materials

**Hyoung Jin Choi,** Inha University, Republic of Korea

**14:20-14:40** Title: Engineering of 2D and 3D nanostructured hybrid composites for enhanced mechanical properties

**Bongjun Yeom,** Myonji University, Republic of Korea

**14:40-15:00** Title: studies on the synthesis of silica powder from rice husk ash as reinforcement filler in rubber tire tread part: Replacement of commercial precipitated silica

**Addis Lemessa Jembere,** Bahir Dar institute of Technology, Ethiopia

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|---|---|
| **15:00-15:20** | **Title: Landfill leachate treatment using activated carbon obtained from coffee waste. Rodrigo Pobletea, Ernesto Cortesa, Yolanda Lunab**<br>**Rodrigo Poblete,** Universidad Católica del Norte, Chile |
| **15:20-15:40** | **Title: Multiphysics property aging as a disorder process in heterogeneous functional materials**<br>**Kenneth Reifsnider,** University of Texas Arlington, USA |

Networking and Refreshments Break 15:40-16:00

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|---|---|
| **16:00-16:20** | **Title: New advances in MOFs photonics and applications**<br>**Abderrazzak Douhal,** Universidad de Castilla-La Mancha, Spain |
| **16:20-16:40** | **Title: Interfacial segregation and embrittlement of elements of groups 14 and 15 in ferritic iron and steels**<br>**Pavel LEJČEK,** Institute of Physics, ASCR, Prague, Czech Republic |
| **16:40-17:00** | **Title: Investigation of doping of CdSe QDs in organic semiconductor for solar cell applications**<br>**Ganesh Bhand,** Savitribai Phule Pune Univeristy, India |
| **17:00-17:20** | **Title: Role of pendant nitrile group on the liquid crystalline behavior of poly(2-cyano-p-phenylene terephthalamide) solutions in N,N-dimethyl acetamide/lithium chloride**<br>**DaeEon Jung,** Hanyang University, Republic of Korea |

**Panel Discussion**

**Day 2 October 27, 2017**

**HALL**

## Keynote Forum

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| **09:00-09:25** | **Keynote speech slot available** |
| **09:25-09:50** | **Keynote speech slot available** |

Sessions:
Properties of Nano Materials | Carbon Nanostructures and Graphene | Nano Structures | Nano Materials | Nanotechnology-Basics to Applications

Session Introduction

**Session Chair: TBA**

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| **09:50-10:10** | **Title: Layer-by-Layer self-assembly nanoparticles designed for resveratrol delivery**<br>**Antonio Ribeiro,** Universidade de Coimbra, Portugal |
| **10:10-10:30** | **Title: The link between microstructure and friction in metals**<br>**Michael Chandross,** Sandia National Laboratories, USA |

Networking and Refreshments Break 10:30-10:50

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| **10:50-11:10** | **Title: Optimizing the properties of TiO2 nanomaterials used as UV-blockers in sunscreen to maximise the efficiency and safety of the final product**<br>**Jerome Labille,** Aix-Marseille Université, France |
| **11:10-11:30** | **Title: Low temperature sintering silver nanoparticle for pressure-less die attachment**<br>**Shamik Ghosal,** MacDermid Performance Solutions, India |
| **11:30-11:50** | **Title: Lanthanide luminescence in nanocrystals and layered semiconductor nanosheets for biomedical and nanophotonic applications**<br>**Jianhua Hao,** The Hong Kong Polytechnic University, Hong Kong |
| **11:50-12:10** | **Title: 9-3- Single strand helicoidal nanofibers of photo-active polyoxazolines**<br>**Vincent Lapinte,** ICGM-IAM Université Montpellier, France |
| **12:10-12:30** | **Title: Rapid, simple detection of Oseltamivir-resistant influenza A Virus (H275Y mutation) using gold nanoparticles-based colorimetric probe capable of specific recognition to the H275Y NA mutation**<br>**Eun-Kyung Lim,** Hazards Monitoring BioNano Research Center, Republic of Korea |

Lunch Break 12:30-13:30

**Young Researchers Forum**

**Session Chair: TBA**

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| **13:30-13:45** | **Title: Fiber network modified with graphene for foldable and wearable electronics**<br>**Pietro Cataldi,** Italian Institute of Technology, Italy |
| **13:45-14:00** | **Title: Sintering of ceramic materials using Refused Derived Fuel (RDF): A non-isothermal kinetic model**<br>**Rababe Sani,** Université de Toulouse, France |

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| **14:00-14:15** | **Title: Improvement of CuO nanostructure fabrication using electrochemical migration**<br>**Shintaro Fukaya**, Tohoku University, Japan |
| **14:15-14:30** | **Title: Effect of O2 or H2 gas addition to Ar gas on surface modification of fluoropolymer using atmospheric pressure plasma- Application for highly adhesive Ag wiring pattern on plasma-treated fluoropolymer**<br>**Yoshinori Kodama**, Osaka University, Japan |
| **14:30-14:45** | **Title: Effects of brazing temperature on the joining properties of GDC-LSM/metal joint for oxygen transport membranes**<br>**MyungDong Kim**, Yeungnam University, Republic of Korea |
| **14:45-15:00** | **Title: Fabrication and ion-irradiation response of SiCf/SiC with different sintering additives for nuclear reactor applications**<br>**Pipit Fitriani**, Yeungnam University, Republic of Korea |
| **15:00-15:15** | **Title: Joining of SiCf/SiC using preceramic polymers**<br>**Dong Hyuk Jeong**, Yeungnam University, Republic of Korea |
| **15:15-15:30** | **Title: Visible-light nanoscale photoconductivity of grain boundaries in self-supported ZnO platelets**<br>**Nastaran Faraji**, School of Materials Science and Engineering, UNSW Australia, Australia |
| **15:35-15:55** | **Title: Geometries, electronic properties and stability of molybdenum and tungsten nitrides low-index surfaces**<br>**Zainab Jaf**, Murdoch University, Australia |
| | Networking and Refreshments Break 15:20-15:35 |
| **15:35-15:50** | **Title: TBA**<br>**Marta Perez-Lloret**, Italy |
| **15:50-16:05** | **Title:Ensuring the Absence of Thermal Stresses in Inhomogeneous Bodies of Simple Shape using Thermal Field and Material Characteristics**<br>**Bohdan Kalynyak**, National Academy of Sciences of Ukraine, Ukraine |
| **16:05-16:20** | **Title: TBA**<br>**Wen-Yuan Zeng**, Taiwan |
| **16:20-16:35** | **Title: Electrical investigations of PbTiO3 ceramics with Pb/Ti contents fabricated through solid state sintering reaction method**<br>**Nasira Sareecha**, The Islamia University of Bahawalpur, Pakistan |
| **16:35-16:50** | **Title: TBA**<br>**Min-Hui Chou**, Taiwan |
| | **Poster Presentations 16:00-17:30** |
| **Poster Judge: TBA** | |
| **AMS01** | **Title: Corrosion and wear behavior of harmonic structured SUS304L austenitic stainless steel**<br>**Prabhat Kumar Rai**, Indian Institute of Technology, India |
| **AMS02** | **Title: A self-corrugated surface of Graphene oxide to enhance sensitivity and responsibility for various graphene oxide applications**<br>**Seungdu Kim**, Korea Aerospace University, Republic of Korea |
| **AMS03** | **Title: Polymer-derived nitrogen-doped carbon nanocage as an enhanced oxygen electrode in Li-O2 battery**<br>**Heejun Kweon**, Yonsei University, Republic of Korea |
| **AMS04** | **Title: Oxidative catalytic activity from the cysteinly bolaamphiphile assembly with hemin cofactor**<br>**CHAEMYEONG LEE**, Yonsei University, Republic of Korea |
| **AMS05** | **Title: Mechanism of copper oxide nanostructured particles synthesized using silk fibroin template**<br>**jong wook kim**, Seoul National University, Republic of Korea |
| **AMS06** | **Title: Effect of Nd doping on the structural, magnetic and magnetocaloric properties of double perovskite Sr2-xNdxFeMoO6**<br>**SoEun Jeon**, Changwon National University, Republic of Korea |
| **AMS07** | **Title: Collagen-hyaluronan in colloidal silver**<br>**Andrea Kargerova**, Brno University of Technology Purkynova, Czech Republic |
| **AMS08** | **Title: Perpendicular orientation of lamella-forming block copolymer thin film by controlling interfacial interaction with substrate**<br>**Jisoo Ha**, Yonsei University, Republic of Korea |
| **AMS09** | **Title: Orientation controlled gyroid structure thin films by substrate interactions in solvent vapor annealing**<br>**Yeongsik Kim**, Yonsei University, Republic of Korea |

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| **AMS10** | **Title: Geometries, electronic properties and stability of molybdenum and tungsten nitrides low-index surfaces**<br>**Zainab Jaf**, Murdoch University, Australia |
| **AMS11** | **Title: Polymeric mixed micelles as an efficient strategy for Meloxicam oral administration**<br>**Francisco Veiga**, University of Coimbra, Portugal |
| **AMS12** | **Title: Modeling of nanoparticle surface charge for targeting glioblastoma**<br>**Joao Sousa**, Faculdade de Farmácia da Universidade, Portugal |
| **AMS13** | **Title: The relationship between work climate and nurse educators' use of information technology**<br>**Gonen Ayala**, Ruppin Academic Center, Israel |
| **AMS14** | **Title: One-dimensional poly(L-lysine)-block-poly(L-threonine) assemblies as anticancer agents**<br>**Chao-Liang Wu**, National Cheng Kung University Medical, Taiwan |
| **AMS15** | **Title: Oligopeptide-based polymers targeting human antigen R (HuR) for the treatment of psoriasis**<br>**Ai-Li Shiau**, National Cheng Kung University, Taiwan |
| **AMS16** | **Title: Molecular dynamics study of graphene moebius bands: Equilibrium shapes and energies**<br>**Yoichi Takato**, Okinawa Institute of Science and Technology Graduate University, Japan |

**Panel Discussion**

## Day 3 October 28, 2017

**HALL**

Sessions:
Optical Materials and Plasmonics | Energy and Harvesting Materials | Optical Materials and Plasmonics

Session Introduction

**Session Chair: TBA**

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| **09:30-09:50** | **Title: Electrically driven plasmon nanosource, application to a plasmonic lens**<br>**Gerald Dujardin**, Université Paris-Sud, France |
| **09:50-10:10** | **Title: Smart Materials for energy harvesting and thermal management- Adaptive control and self-driven devices for heat transfer**<br>**yuyan Jiang**, Chinese Academy of Sciences, China |
| **10:10-10:30** | **Title: Nonlinear optical properties of the WS2 and its pulsed laser applications**<br>**Yuen Hong Tsang**, The Hong Kong Polytechnic University, Hong Kong |
| **10:30-10:50** | **Title: Lanthanide luminescence in nanocrystals and layered semiconductor nanosheets for biomedical and nanophotonic applications**<br>**Jianhua Hao**, The Hong Kong Polytechnic University, Hong Kong |

Networking and Refreshments Break 10:30-10:50

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| **10:50-11:10** | **Title: (A2+B3) Approach Hyperbranched Polyester based Polyurethane-Urea (HBPU-Urea) and Polyurethane-Urea -Sulfur (HBPU-Urea-Sulfur) hybrid coating films: Brief Study of Hydrogen bonding interaction, morphology and mechanical properties**<br>**Kishore Jena**, Khalifa University of Science And Technology, UAE |
| **11:10-11:30** | **Title: In-situ synthesis of vertical standing nanosized NiO encapsulated in graphene as electrodes for high-performance supercapacitors**<br>**Jinghuang Lin**, Harbin Institute of Technology, China |
| **11:30-11:50** | **Title: Rare earth-doped Y3Al5O12 (YAG) nanosphosphors: Synthesis and applications in energy savings devices and nanomedicine**<br>**Gustavo A HIRATA**, National Autonomous University of Mexico, Mexico |
| **11:50-12:10** | **Title: Complex characterization of ZK60 alloy processed by ECAP**<br>**Florina-Diana Dumitru**, Romania |
| **12:10:12:30** | **Title: Performant cement based materials reinforced with nano-SiO2**<br>**Mihaela-Andreea**, Romania |
| **12:30-12:50** | **Title: Purification of waste waters contaminated with heavy metals using filters made of advanced silica based materials**<br>**Andreea-Georgiana**, Romania |

Lunch Break 12:50-13:40

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| **13:40-14:00** | **Speaker slot available** |
| **14:00-14:20** | **Speaker slot available** |
| **14:40-15:00** | **Speaker slot available** |

**15:00-15:20** Speaker slot available

**15:20-15:40** Speaker slot available

**Awards & Closing Ceremony**

Networking and Refreshments Break 15:40-16:00

**Panel Discussion**

**Please note that this is a tentative program**

**Timings in this program October subject to change**

For Speaker opportunities and related queries contact us at :

**adavancedmaterials@materialsconferences.com**

