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Scientific Program

13th International Conference and Exhibition on

Advanced Materials and Nanotechnology

October 26-28, 2017 Osaka, Japan



http://advancedmaterials.conferenceseries.com/

Invitation...

Dear Colleagues,

Conference Series is proud to announce the **13th International Conference on Advanced Materials and Nanotechnology**, which is to be held during **October 26-28, 2017** at **Osaka, Japan**.

On this great gathering, Organizing Committee invites participants from all over the globe to take part in this annual conference with the theme "**Exploring the Possibilities in the Field of Advanced Materials and Nanotechnology**". Advanced Materials 2017 aims at sharing new ideas and new technologies amongst the professionals, industrialists and students from research areas of Advanced Materials and Nanotechnology to share their recent innovations and applications and indulge in interactive discussions and technical sessions at the event.

The Conference will also have a space for companies and/or institutions to present their services, products, innovations and research results.

Conference will focus on the following topics during presentations of the three day event, which reflect current education research, developments and innovations internationally and as evidenced in Materials Science and Engineering.

- Advanced Materials and Nano Technology
- Materials Science and Engineering
- Nanotechnology and Polymer science
- Research in Mining and Metallurgy field
- Tissue Science engineering and Biomaterials
- Materials for Green technology and Catalytic materials
- Semiconductors, Fuel Cell and Energy related industries

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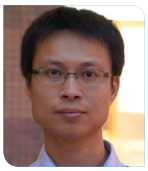
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Taiwan



Claudio Cazorla
School of Materials
Science and Engineering
Australia

Day 1 October 26, 2017

08:00-08:30 Registrations

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Hall

09:00-09:25 Opening Ceremony

Keynote Forum

09:25-09:30 Introduction

09:30-10:00 Title: New advances in MOFs photonics and applications

Abderrazzak Douhal, Universidad de Castilla-La Mancha, Spain

10:00-10:30 Title: Fabrication and applications of carbon nanomaterials filled multi-functional nanocomposites

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

Sessions:
Advanced Materials and Functional Devices | Engineering Materials

Session Introduction

Session Chair: My Ali El Khakani, Université du Québec, Canada
Session Co-Chair: Marko Soderžnik, Jožef Stefan Institute, Slovenia

10:30-10:50 Title: Accelerating theexploration of Li/Na-Ion battery materials via enlarged crystal structure databases

Kai-Ming Ho, Iowa State University, USA

Group Photo

Networking & Refreshments Break 10:50-11:10

11:10-11:30 Title: PbS nanoparticles/single-wall carbon nanotubes nano hybrid materials synthesis by means of the pulsed laser deposition approach and their integration into photoactive devices

My Ali El Khakani, Université du Québec, Canada

11:30-11:50 Title: Development and synthesis of polycarbonate-polyester copolymer with heat resistance

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

11:50-12:10 Title: Low voltage, high QBi1.5MgNb1.5O7 thin film varactors

Libin Gao, University of electronic science and technology of China, China

12:10-12:30 Title: Extruded Briquette (BREX) – New charge component for modern metallurgy

Aitber Bizhanov, Metal and Coal Extrusion-Russia, Russian Federation

12:30-12:50 Title: Ultrathin multifunctional composite coatings

Väino Sammelselg, University of Tartu, Estonia

Lunch Break 12:50-13:40

13:40-14:00 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

14:00-14:20 Title: Effects of loading frequency on cyclic deformation and fatigue behaviour of metastable austenitic stainless steels

Davi Pessoa, Technische Universität Dresden, Germany

14:20-14:40 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

14:40-15:00 Title: Melting, forging and phase transformation of a Mn containing □ stablized □-TiAl

Kui Liu, Chinese Academy of Sciences, China

Session: Composite Materials

Session Introduction

Session Chair: Rodrigo Poblete, Universidad Católica del Norte, Chile

15:00-15:20 Title: Multiphysics property aging as a disorder process in heterogeneous functional materials

Kenneth Reifsnider, University of Texas Arlington, USA

15:20-15:40 Title: Fabrication and characteristics of carbon nanotube based field-responsive composite materials

Hyoung Jin Choi, Inha University, Republic of Korea

Networking and Refreshments Break 15:40-16:00

16:00-16:20	**Title: Engineering of 2D and 3D nanostructured hybrid composites for enhanced mechanical properties** **Bongjun Yeom**, Myonji University, Republic of Korea
16:20-16:40	**Title: Landfill leachate treatment using activated carbon obtained from coffee waste** **Rodrigo Poblete**, Universidad Católica del Norte, Chile
16:40-17:00	**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

Panel Discussion

Day 2 October 27, 2017

HALL

Keynote Forum

09:30-10:00	**Title: Dielectric nano-methods for assessment of composite material integrity & properties** **Kenneth Reifsnider**, University of Texas Arlington, USA
10:00-10:30	**Title: Polymer-derived ceramics for space applications** **S Packirisamy**, Vikaram Sarabhai Space Centre, India

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

Session Introduction

Session Chair: TBA

10:30-10:50	**Title: Layer-by-layer self-assembly nanoparticles designed for resveratrol delivery** **Antonio Ribeiro**, University of Coimbra, Portugal

Networking and Refreshments Break 10:50-11:10

11:10-11:30	**Title: The link between microstructure and friction in metals** **Michael Chandross**, Sandia National Laboratories, USA
11:30-11:50	**Title: Optimizing the properties of Tio2 nanomaterials used as Uv-blockers in sunscreen to maximise the efficiency and safety of the final product** **Jerome Labille**, Aix-Marseille Université, France
11:50-12:10	**Title: Low temperature sintering silver nanoparticle for pressure-less die attachment** **Shamik Ghosal**, MacDermid Performance Solutions, India
12:10-12:30	**Title: 9-3- Single strand helicoidal nanofibers of photo-active polyoxazolines** **Vincent Lapinte**, ICGM-IAM Université Montpellier, France
12:30-12:50	**Title: Effect of copper-core carbon-shell nanoparticles on the growth of cyanobacterium microcystis aeruginosa and its mechanism** **Chao Li**, Xi'an Jiaotong University Suzhou Research Institute, Republic of China

Lunch Break 12:50-13:40

Young Researchers Forum

Session Chair: Shamik Ghosal, MacDermid Performance Solutions, India

13:40-13:55	**Title: Fiber network modified with graphene for foldable and wearable electronics** **Pietro Cataldi**, Italian Institute of Technology, Italy
13:55-14:10	**Title: Sintering of ceramic materials using Refused Derived Fuel (RDF): A non-isothermal kinetic model** **Rababe Sani**, Université de Toulouse, France
14:10-14:25	**Title: Improvement of metallic nanostructure fabrication using electrochemical migration** **Shintaro Fukaya**, Tohoku University, Japan
14:25-14:40	**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** **Yoshinori Kodama**, Osaka University, Japan
14:40-14:55	**Title: Effects of brazing temperature on the joining properties of GDC-LSM/metal joint for oxygen transport membranes** **Myung-Dong Kim**, Yeungnam University, Republic of Korea

14:55-15:10	**Title: Fabrication and ion-irradiation response of SiC_f/SiC with different sintering additives for nuclear reactor applications** **Pipit Fitriani,** Yeungnam University, Republic of Korea
15:10-15:25	**Title: Piezo-energy harvester of aligned electrospun PVDF nanofibers** **Wen-Yuan, Zeng,** National Taiwan University of Science and Technology, Taiwan
15:25-15:40	**Title: Pyroelectricity of electrospun polyvinylidene fluoride/tungsten oxide nanofibrous membranes** **Min-Hui, Chou,** National Taiwan University of Science and Technology, Taiwan
15:40-15:55	**Title: Effects of boric acid on the phase stability of poly (1-oxotriemethylene) solutions in the aqueos solution of $ZnCl_2$, $CaCl_2$, and LiCl** **Dae Eon Jung,** Hanyang University, Republic of Korea

Networking and Refreshments Break 15:40-16:00

Poster Presentations
Posters AMS01-AMS15 @ 16:00-17:00
Posters AMS16-AMS29 @ 17:00-18:00

Poster Judge: Antonio Ribeiro, University of Coimbra, Portugal

Poster Judge: Shamik Ghosal, MacDermid Performance Solutions, India

AMS-01	**Title: Corrosion and wear behaviour of harmonic structured SUS304L austenitic stainless steel** **Prabhat Kumar Rai,** Indian Institute of Technology Kanpur, India
AMS-02	**Title: A self-corrugated surface of graphene oxide to enhance sensitivity and responsibility for various graphene oxide applications** **Seungdu Kim,** Korea Aerospace University, Republic of Korea
AMS-03	**Title: Polymer-derived nitrogen-doped carbon nanocage as an enhanced oxygen electrode in Li-O2 battery** **Heejun Kweon,** Yonsei University, Republic of Korea
AMS-04	**Title: Oxidative catalytic activity from the cysteinly bolaamphiphile assembly with hemin cofactor** **Chaemyeong Lee,** Yonsei University, Republic of Korea
AMS-05	**Title: Mechanism of copper oxide nanostructured particles synthesized using silk fibroin template** **Jong Wook Kim,** Seoul National University, Republic of Korea
AMS-06	**Title: Effect of Nd doping on the structural, magnetic and magnetocaloric properties of double perovskite Sr2-xNdxFeMoO6** **So Eun Jeon,** Changwon National University, Republic of Korea
AMS-07	**Title: Collagen-hyaluronan in colloidal silver** **Andrea Kargerova,** Brno University of Technology Purkynova, Czech Republic
AMS-08	**Title: Perpendicular orientation of lamella-forming block copolymer thin film by controlling interfacial interaction with substrate** **Jisoo Ha,** Yonsei University, Republic of Korea
AMS-09	**Title: Orientation controlled gyroid structure thin films by substrate interactions in solvent vapor annealing** **Yeongsik Kim,** Yonsei University, Republic of Korea
AMS-10	**Title: Influence of reaction gases on the structural and optical characteristics of Ce-oxide thin film coatings** **Zainab Jaf,** Murdoch University, Australia
AMS-11	**Title: Polymeric mixed micelles as an efficient strategy for Meloxicam oral administration** **Francisco Veiga,** University of Coimbra, Portugal
AMS-12	**Title: Modeling of nanoparticle surface charge for targeting glioblastoma** **Joao Sousa,** Faculdade de Farmácia da Universidade, Portugal
AMS-13	**Title: One-dimensional Poly (L-Lysine)-Block-Poly (L-Threonine) assemblies as anticancer agents** **Chao-Liang Wu,** National Cheng Kung University Medical, Taiwan
AMS-14	**Title: Oligopeptide-based polymers targeting Human Antigen R (HUR) for the treatment of psoriasis** **Ai-Li Shiau,** National Cheng Kung University, Taiwan
AMS-15	**Title: Molecular dynamics study of graphene mobius bands: Equilibrium shapes and energies** **Yoichi Takato,** Okinawa Institute of Science and Technology Graduate University, Japan
AMS-16	**Title: Complex characterization of ZK60 alloy processed by ECAP** **Florina-Diana Dumitru,** National Institute for Research and Development in Environmental Protection, Romania
AMS-17	**Title: Performant cement based materials reinforced with nano-SiO2** **Mihaela-Andreea,** National Institute for Research and Development in Environmental Protection, Romania

AMS-18	**Title: Purification of waste waters contaminated with heavy metals using filters made of advanced silica based materials** **Andreea-Georgiana,** National Institute for Research and Development in Environmental Protection, Romania
AMS-19	**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** **Eun-Kyung Lim,** Hazards Monitoring BioNano Research Center, Republic of Korea
AMS-20	**Title: Development of technology for improving the durability of the hydrogen electrode in Solid Oxide Electrolyzer Cells(SOECs)** **Min Jin Lee,** Inha University, Republic of Korea
AMS-21	**Title: Fabrication and performance of Ni/MgO methane steam reforming catalysts by exsolution** **Yong Sun Park,** Inha University, Republic of Korea
AMS-22	**Title: Evolution of microstructure of CSM345 steel from the surface to the interior of multifunction cavitation** **Daichi Shimonishi,** Tokyo University of Science, Japan
AMS-23	**Title: Surface modification of low-alloy steels by a multifunction cavitation** **Masataka Ijiri ,** Tokyo University of Science, Japan
AMS-24	**Title: Synthesis of high ion conductivity solid electrolyte NASICON – Glass complex** **Keun Young Yoon,** Inha University, Republic of Korea
AMS-25	**Title: Synthesis and characterization of solids with strong basic properties applied as catalysts in the synthesis of pseudo ionone** **Rodrigo Rodolfo González Jiménez,** Benemérita Universidad Autónoma de Puebla, Mexico
AMS-26	**Title: Material effects on arc characteristics and electrical contact damage** **Seulki Hwang,** Myongji University, Republic of Korea
AMS-27	**Title: The biological resistance improvement of painted stainless steel by changing paint composition and adding nano-metals** **Chi-Chi Lin,** National University of Kaohsiung, Taiwan
AMS-28	**Title: Preparation of the SAHA-Pluronic F127 nanoparticels and anticancer activity in vitro** **Xiong Wang,** Xi'an Jiaotong University Suzhou Research Institute, China
AMS-29	**Title: Effect of substrate temperature and flow rate of hydrogen gases on the characteristics of Mzo and Igzo thin films** **Ji-Hoon Jeong,** Korea University of Education and Technology, Republic of Korea
AMS-30	**Title: Synthesis of carbon nanotubes using catalytic chemical vapor deposition** **Shatakshi Gupta,** Indian Institute of Technology Roorkee, India
AMS-31	**Title: NANOPUMP - Nanopumping effect in nanochannels by surface acoustic wave** **Insepov Zinetula Zeke,** Tynyshtykbaev Nazarbayev University Research and Innovation System, Kazakhstan
AMS-32	**Title: Virus- metal nano-composites prepared by electrodeposition** **Kyuwon Kim,** Incheon National University, Republic of Korea
AMS-33	**Title: A study on the collision characteristic of the side crash simulation with three dimensional structure** **Min-sik Lee,** School of Mechanical Engineering, Pusan National University, Republic of Korea
AMS-34	**Title: Target specific detachment of multiple RNA probes from graphene oxide using RNase H for a simple and direct molecular diagnostics** **Joong Hyun Kim,** Daegu-Gyeongbuk Medical Innovation Foundation, Republic of Korea
AMS-35	**Title: Plasma polymer fluorocarbon thin films deposited by roll-to-roll sputtering** **Sung Hyun Kim,** Korea Research Institute of Chemical Technology, Republic of Korea
AMS-36	**Title: Effect of outgassing in polymer substrate for high performance conducting oxide thin films** **Tae-Woon Kang,** Korea Research Institute of Chemical Technology, Republic of Korea

Panel Discussion

Day 3 October 28, 2017

HALL

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

Session Chair: Jianhua Hao, The Hong Kong Polytechnic University, Hong Kong
Session Chair: Yuyan Jiang, Chinese Academy of Sciences, China

09:30-09:50	**Title: Electrically driven plasmon nanosource, application to a plasmonic lens** **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** **Yuyan Jiang,** Chinese Academy of Sciences, China
10:10-10:30	**Title: Nonlinear Optical properties of the WS2 and its pulsed laser applications** **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** **Jianhua Hao,** The Hong Kong Polytechnic University, Hong Kong

Networking and Refreshments Break 10:50-11:10

11:10-11:30	**Title: Interfacial segregation and embrittlement of elements of groups 14 and 15 in ferritic iron and steels** **Pavel LEJČEK,** Institute of Physics, ASCR, Prague, Czech Republic
11:30-11:50	**Title: 3D Printing Graphene Oxide Geopolymer Nanocomposites and Its Structural Failure Model** **Jing Zhong,** Harbin Institute of Technology, China
11:50-12:10	**Title: Large-scale high quality monolayer graphene grown directly at 150°C via plasma-assisted thermal CVD without transfer process** **Soon-Gil Yoon,** Chungnam National University, Republic of Korea
12:10-12:30	**Title: High performance of patterned sapphire substrate light-emitting diodes with embedded air void by textured Si3N4 intermediate layer** **Shih-Chieh Hsu,** Tamkang University, Taiwan
12:30-12:50	**Title: Evaluation of carbon nanotube strength for application to composite materials** **Keiichi Shirasu,** Tohoku University, Japan

Lunch Break 12:50-13:40

13:40-14:00	**Title: High performance complex oxide heterostructures for nanoelectronic devices** **Sean Li,** University of New South Wales, Australia

Young Researchers Forum

14:00-14:15	**Title: An atomistic approach of thiophene hydrodesulfurization over γ-Mo2N catalyst** **Zainab Naji Jaf,** Murdoch University, Australia
14:15-14:30	**Title: A bifunctional graphene oxide nanohybrid for photostimulated nitric oxide release and photothermia** **Marta Perez-Lloret,** University of Catania, Italy
14:30-14:45	**Title: Improve microstructure and mechanical properties of Cf/SiC- Cf/SiC joint by TiCoNb + Nb foil** **Qiang Zhang,** Harbin Institute of Technology, China
14:45-15:00	**Title: Joining of Sicf/Sic using preceramic polymers** **Dong Hyuk Jeong,** Yeungnam University, Republic of Korea
15:00-15:15	**Title: Microstructure and mechanical properties of SiC/SiC joints brazed with Ti-Ni and Ti-Ni-Zr filler alloy** **Qin Qi,** Harbin Institute of Technology, China
15:15-15:30	**Title: Visible-light nanoscale photoconductivity of grain boundaries in self-supported Zno platelets** **Nastaran Faraji,** School of Materials Science and Engineering, UNSW Australia, Australia
15:30-15:45	**Title: In-situ synthesis of vertical standing nanosized nio encapsulated in graphene as electrodes for high-performance supercapacitors** **Jinghuang Lin,** Harbin Institute of Technology, China
15:45-16:00	**Title: pH-sensitive amphiphilic polypeptide prodrug for NIR imaging-guided combined photodynamic therapy and chemotherapy** **Zheng Ruan,** University of Science and Technology of China, China

Awards & Closing Ceremony

Networking and Refreshments Break 16:15-16:35

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 :
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Glimpses of past conference













Tourist Attractions











Venue

Osaka is the second largest metropolitan area in Japan and serves a major economic hub . Osaka is Japan's third largest and second most important city. It has been the economic powerhouse of the Kansai region for many centuries. It is a standout amongst those biggest open aquariums in the world, widespread Studios japan spotted over Osaka, may be a standout amongst four widespread Studios subject parks settling on it those world's speediest entertainment mecca will bring attained those 10 million point of reference toward those time. Historically a merchant city, Osaka has also been known as the "Nation's Kitchen". With a population of 2.5 million, The city's west side has the main port as well as a tourist destination with attractions such as Kyocera Dome, Universal Studios Japan, Osaka aquarium, Minami, Osaka castle, Umeda sky building and the Tempozan Harbour Village. Osaka is known for its food, both in Japan and abroad. Author Michael Booth and food critic François Simon of Le Figaro have both suggested that Osaka is the food capital of the world. Osaka aquarium Kaiyukan spotted in the ward about Minato to Osaka, Japan, close to Osaka cove Those Umeda sky fabricating may be those nineteenth-tallest fabricating to Osaka Prefecture, Japan, and a standout amongst those city's the vast majority unmistakable landmarks.

You'll fall in love with Japan



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Japan 559-0034

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