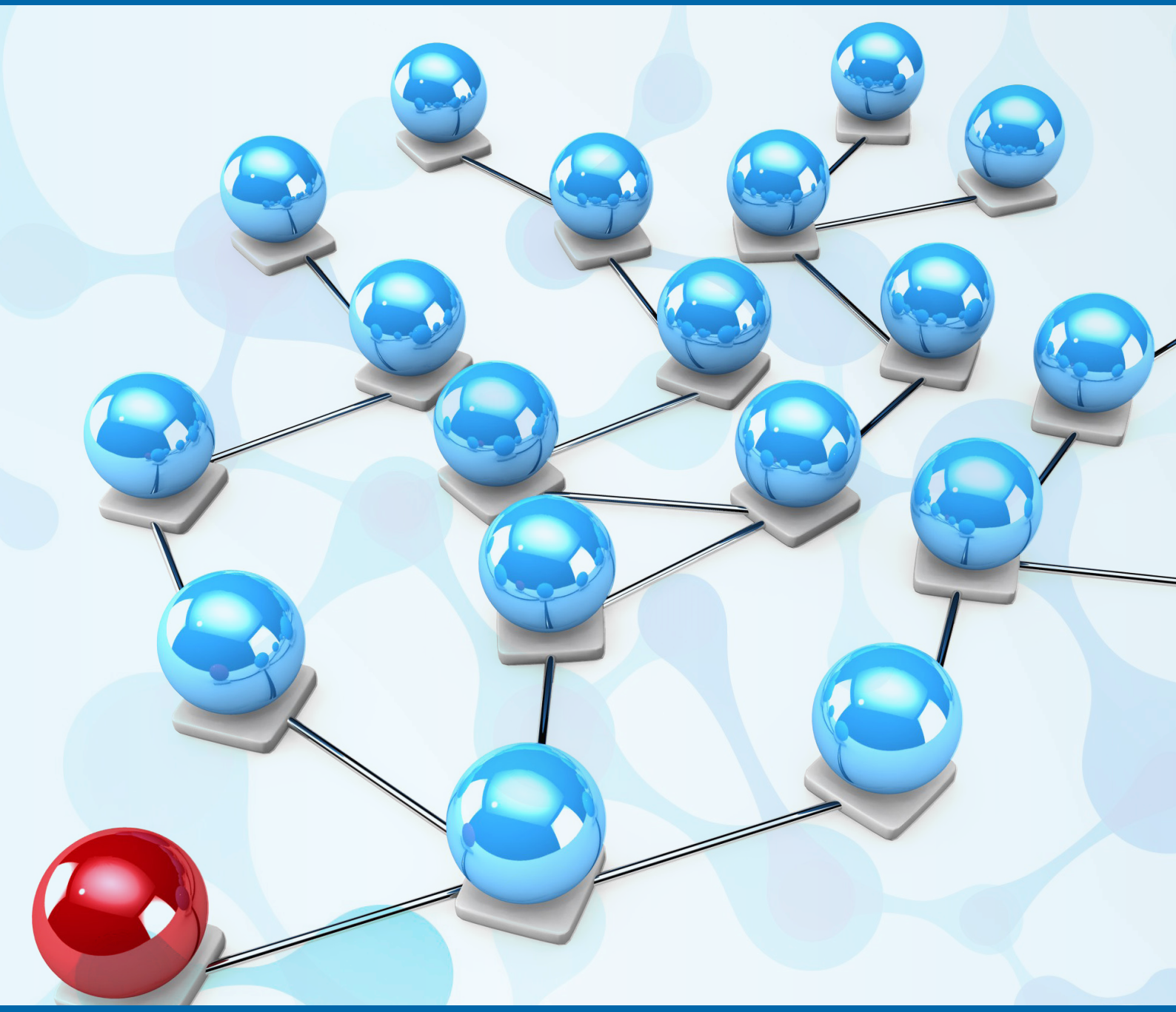
OMICS International
conferenceseries.com

Scientific Program

4th International Conference and Exhibition on

Materials Science & Engineering

September 14-16, 2015 Orlando, USA



OMICS International Conferences
2360 Corporate Circle, Suite 400 Henderson, NV 89074-7722, USA Ph: +1-888-843-8169, Fax: +1-650-618-1417 Toll free: +1-800-216-6499
Email: materialsscience@conferenceseries.com; materialsscience@omicsgroup.com

Scientific Program

Day 1 September 14, 2015

08:00-09:00 Registrations

Continental Ballroom 5-7

OMICS International conferenceseries.com

09:00-09:25 **Opening Ceremony**

Keynote Forum

09:25-09:30	**Introduction**
09:30-09:55	**Igor Kosacki** Honeywell International, Inc., USA
09:55-10:20	**Haruo Sugi** Teikyo University, Japan
10:20-10:45	**Jas Pal Badyal** Durham University, United Kingdom

Group Photo @ Continental Ballroom 5-7

Coffee Break 10:45-11:00 @ Foyer

Track 1: Materials Science and Engineering

Session Chair: Wei Pan, Tsinghua University, China

Session Co-Chair: Rahul Basu, Sambhram Institute of Technology (SAIT), India

Session Introduction

11:00-11:20	**Promising thermal barrier coating candidates for next generation gas turbine** **Wei Pan,** Tsinghua University, China
11:20-11:40	**Perturbation analysis of the solidification problem for a sphere in porous media** **Rahul Basu,** Sambhram Institute of Technology (SAIT), India
11:40-12:00	**Effect of heat treatment on precipitation behaviour of intermetallic phases in duplex steel** **Pavel Podany,** COMTES FHT a.s., Czech Republic
12:00-12:20	**Failure of an Inconel 718 die used in production of hot copper direct extrusion** **Michal Burchis Schwartz,** S.C Laromet S.A, Romania
12:20-12:40	**High temperature phase transformation and the mechanism in $YTaO_4$** **Jing Feng,** Kunming University of Science and Technology, People's Republic of China
12:40-13:00	**A visual method for systematic multi-objective material selection in engineering design** **Luca Masi,** Granta Design, UK

Lunch Break 13:00-13:45 @ Continental Ballroom 2-4

13:45-14:00	**Characterization of magnetic glass ceramics derived from iron oxides bearing rolling mill scales wastes** **Nehal Ali Erfan Abdelwahab,** East Carolina university, USA
14:00-14:15	**A theoretical framework for predicting the temperature variation of the properties of metals established on a feasible electronic basis** **Reza Rahemi,** University of British Columbia, Canada
14:15-14:30	**Effect of high impact loading on nanoclay reinforced polypropylene** **Shishay Amare Gebremeskel, Indian Institute of Technology Delhi, India**
14:30-14:45	**Low-temperature heat treatment (80°C) effect on the electrochemically synthesized $CuInTe_2$ thin films for energy harvesting applications** **Manorama Lakhe,** Savitribai Phule Pune University, India

Symposium Session

14:45-15:45 **Materials surface analysis**
Luisa Amelia Dempere, University of Florida, USA

Track 4: Mining and Metallurgy
Track 5: Surface Science and Engineering

Session Chair: Junhua Dong, Chinese Academy of Sciences, China

15:45-16:05 **Atmospheric corrosion monitoring and modeling of a low alloy steel under an electrolyte film in cyclic wet–dry condition**
Junhua Dong, Chinese Academy of Sciences, China

16:05-16:25 **Hot forging of high-Aluminum content Magnesium alloys by using a servo press**
Hisaki Watari, Tokyo Denki University, Japan

Coffee Break 16:25-16:40 @ Foyer

16:40-17:00 **The development of thermomechanical treatment of duplex steel**
Michal Duchek, COMTES FHT, Czech Republic

17:00-17:20 **TiO_2 mineral from Ilmenite : Development of extraction method and its characterization**
Muhammad Nurdin, Universitas Halu Oleo, Indonesia

17:20-17:35 **Optimisation of pack chromising process for proton exchange membrane (PEM) fuel cell bipolar plate applications**
Atinuke Oladoye, Dublin City University, Ireland

17:35-17:50 **A comparison of two different principles of 3D surface reconstruction with regard to fabric defect detection**
Lenka Techniková, Technical University of Liberec, Czech Republic

17:50-18:05 **Dry and wet sliding wear behaviours of laser-clad TiNiZrO_2 coatings in 3.5% NaCl**
Babatunde Abiodun Obadele, Tshwane University of Technology, South Africa

18:05-18:20 **Antibiotic release from implant surfaces using immobilized PLGA microspheres**
Dongwei Wang, Southwest Jiaotong University, China

Panel Discussion

Day 2 September 15, 2015

Continental Ballroom 5-7

Keynote Forum

09:00-09:25 **Lixin Xue**
Ningbo Institute of Industrial Technologies (CAS), China

09:25-09:50 **Yutaka Ohno**
Nagoya University, Japan

Track 2: Nanotechnology in Materials Science
Track 3: Energy Materials

Session Chair: Martin Ntwaeaborwa, University of the Free State, South Africa
Session Co-Chair: Jun DING, National University of Singapore, Singapore

Session Introduction

09:50-10:10 **Luminescent properties of powder and pulsed laser deposited thin film phosphors and their applications in lighting, phototherapy and solar cells**
Martin Ntwaeaborwa, University of the Free State, South Africa

10:10-10:30 **Synthesis of Fe3O4 nanostructures and their applications**
Jun DING, National University of Singapore, Singapore

Coffee Break 10:30-10:45 @ Foyer

10:45-11:05 **High efficiency organometal halide perovskite devices by spray and brush solution-processing methods**
Padmaja Guggilla, Alabama A & M University, USA

11:05-11:25 **Controlling electron recombination in nanowire-based DSSCs**
Kirk J Ziegler, University of Florida, USA

11:25-11:45	**Self-assembly of DNA with inorganic material** **Enrique C Samano,** UNAM, Mexico
11:45-12:05	**Atomistic mechanism of lithiation of nanomaterials as Li-ion battery anodes studied by *in-situ* TEM** **Xuedong BAI,** Chinese Academy of Sciences, China
12:05-12:25	**Amyloid fibrils for functional nanomaterial applications** **Sreenath Bolisetty,** ETH, Switzerland
12:25-12:45	**Enhancement of 3D electrospun polycaprolactone/collagen constructs to facilitate the integration of nanofiber/cell mats in skin graft** **Seyed Babak Mahjour,** Stevens Institute of Technology, USA
12:45-13:05	**Magnetic relaxation phenomena in Fe nanoparticles composited with activated carbon** **Satyendra Prakash Pal,** Indian Institute of Science Education and Research, India
	Lunch Break 13:05-13:50 @ Continental Ballroom 2-4
13:50-14:05	**Studying the effects of functionalized multi-wall carbon nanotubes on mechanical and thermal properties of epoxy composites** **Nasim Hadiashar,** Santa Clara University, USA
14:05-14:20	**Hydrothermal synthesis of MoS_2 nanostructured films as high performance counter electrodes for dye-sensitized solar cells** **Mohammad Al-Mamun,** Griffith University, Australia
14:20-14:35	**The effect of preparation method on the properties of titanium dioxide nanoparticles used as a dielectric material** **Davoud Dastan,** Savitribai Phule Pune University, India
14:35-14:50	**Y_2O_3:Eu^{3+} nanophosphors: Synthesis by microwave-assisted heating method and characterization** **Adrine Malek Khachatourian,** KTH – Royal Institute of Technology, Sweden
	Workshop
14:50-15:50	**Dielectric and pyroelectric nano-particle doped organic thinfilm: theory and application** **Matthew Edwards,** Alabama Agriculture and Mechanical University, USA
	Coffee Break 15:50-16:05 @ Foyer
	Track 8: Electrical, Optical and Magnetic Materials **Track 11: Polymer Technology**
	Session Chair: Matthew E Edwards, AAMU, USA **Session Co-Chair: Santiranjan Shannigrahi,** Institute of Materials Reserach and Engineering, Singapore
16:05-16:25	**Physical mechanisms of temperature dependent surface resistivity outcomes of doped nanoparticles, and single-wall or multi-wall carbon nanotubes polyvinyl alcohol thin films** **Matthew E Edwards,** Alabama Agricultural & Mechanical University, USA
16:25-16:45	**Polymer-ceramic composite film fabrication and characterization for harsh environment applications** **Santiranjan Shannigrahi,** Institute of Materials Reserach and Engineering, Singapore
16:45-17:05	**Development of highly sensitive micro magnetic sensor for biomagnetic field measurement utilizing magneto-impedance element** **Tsuyoshi Uchiyama,** Nagoya University, Japan
17:05-17:25	**Strength, elastic and electrical properties of non-stoichiometric materials under various Oxygen partial pressures** **Kazuhisa SATO,** Tohoku University, Japan
17:25-17:40	**Auxiliary anode on large-area organic light-emitting diode lighting** **Apisit Chittawanij,** National Formosa University, Taiwan
17:40-17:55	**A first-principles study on the structural and electronic properties of $CdCr_2O_4$ from density functional theory** **Najmeh Bolandhemat,** Universiti Putra Malaysia, Malaysia
	Panel Discussion

Poster Presentations @ Continental Ballroom 1-3 **15:50-17:50**

MSE-01 **Photocatalytic and antioxidant activities of ZnO nanoparticles synthesized using Citrus paradisi peel extract**
Alexis Debut, Universidad de las Fuerzas Armadas ESPE, Ecuador

MSE-02 **Determination of antimicrobial activity of textiles treated with encapsulated nanodispersion biocidal systems**
Katerina Klanova, National Institute of Public Health, Czech Republic

MSE-03 **Preparation of polyurethane/buckypaper composites films and characterization of their structural vibration damping and strain sensing properties**
Weiwei LIN, Florida International University, USA

MSE-04 **Raman spectroscopy of ZnS nanoparticles**
Nebojsa Romcevic, University of Belgrade, Serbia

MSE-05 **Informatics guided computation of physical and chemical properties of nanomaterials**
Claudia Loyola Canales, Universidad Andrés Bello, Chile

MSE-06 **Formation of hair follicle using 3D biomimetic nanofibers constructs**
Seyed Babak Mahjour, Stevens Institute of Technology, USA

MSE-07 **The effect of pressure on feeding characteristic and porosity formation of A356 alloy**
Jae-Ik Cho, Korea Institute of Industrial Technology, Rep. of Korea

MSE-08 **Modification of molecular and optical properties of cellulose triacetate by alpha particles irradiation**
Mymona Mohseen Ahmad Abutalib, King Abdulaziz University, Saudi Arabia

MSE-09 **Design of silicon nanoparticles to improve the barrier effect on hardened Portland cement-based materials**
Roberto Madrigales, UNAM, Mexico

MSE-10 **Luminescence properties of the ($A_2B_2O_7$) type $Eu_{1.90}Dy_{0.10}Ge_2O_7$**
Esra ÖZTÜRK, Karamanoglu Mehmetbey University, Turkey

MSE-11 **Synthesis and thermoluminescence characterization of nano and micro-crystals of LiF doped with Ag**
Miguel A Vallejo, Universidad de Guanajuato, Mexico

MSE-12 **Graphene based solar light sensitive photodiode**
Asmaa Hendi, King Abdulaziz University, Saudi Arabia

MSE-13 **Low temperature magnetotransport study of pulsed laser deposited $Mg_{0.15}Zn_{0.85}O$ film**
Tanveer A Dar, Devi Ahilya University, India

MSE-14 **Removal of Mercury, Lead and Cadmium in aqueous solution by natural and modified zeolites**
Dulce Kristal Becerra Paniagua, Universidad de Ciencias y Artes de Chiapas, Mexico

MSE-15 **Structural and dielectrical properties of hard-soft ferrite composites**
Chirag Patel, Gujarat University, India

MSE-16 **Synthesis and characterization of Pyrochlore ($A_2B_2O_7$) structure $Eu_{1.90}La_{0.10}Zr_2O_7$ phosphor**
Erkul KARACAOGLU, Karamanoglu Mehmetbey University, Turkey

MSE-17 **Novel Ag/YVO_4 nanoparticles prepared by a hydrothermal method for photocatalytic degradation of methylene-blue dye**
Elham S Aazam, King Abdulaziz University, Saudi Arabia

MSE-18 **Super-hydrophobic polymer coating materials based on PS/SiO_2**
Ialy Sousa, Universidade Federal de Campina Grande, Brazil

MSE-19 **Biosynthesis of silver nanoparticles and their characterization**
Sangappa Y, Georgia Institute of Technology School of Materials Science and Engineering, USA

MSE-20 **Anti-corrosive material coating based on PMMA/ montmorillonite (MMT)**
Ariosvaldo A B Sobrinho, Universidade Federal de Campina Grande, Brazil

MSE-21 **Asymmetric bi-layer composite membrane containing Boron modified nano bioactive glass for guided bone regeneration**
Reza Moonesi Rad, Middle East Technical University, Turkey

MSE-22 **A facile strategy for the fabrication of three-dimensional nanofibrous scaffold**
Suresh Raj Pant, Research Institute for Next Generation, Nepal

MSE-23	**Preparation of polypyrrole-diamond/Au/Cu_2O nanocomposite modified electrode and study of its electrocatalytic activity for methanol oxidation** **H Ashassi-Sorkhabi,** University of Tabriz, Iran
MSE-24	**Study of optical nonlinearity in PLD grown NiZnO thin film** **Arpana Agrawal,** Devi Ahilya University, India
MSE-25	**Liquid hydrocarbons internal reforming in a solid oxide fuel cell reactor** **A Al-Musa,** King Abdulaziz City for Science & Technology, Saudi Arabia
MSE-26	**Optical and dielectric study of bis (thiourea) nickel barium chloride single crystals** **Rakesh R Hajiyani,** Saurashtra University, India
MSE-27	**Effect of additives on the structure and properties of Nickel Silicon Carbide (Ni-SiC) nano-composite coating** **Kailash Hamal,** Tribhuvan University, Nepal

Day 3 September 16, 2015

Continental Ballroom 5-7

Keynote Forum

09:00-09:30 **Dieter M Gruen**
Dimerond Technologies. LLC. USA

Track 6: Biomaterials and Tissue Engineering
Track 7: Materials Chemistry (Organic and Inorganic) and Sustainable Chemistry
Track 10: Emerging Areas of Materials Science and Nanotechnology

Session Chair: Ramesh K Agarwal, Washington University in St. Louis, USA
Session Co-Chair: Nezar H Khdary, KACST, Saudi Arabia

Session Introduction

09:30-09:50	**Acoustic metamaterials membranes for low frequency sound attenuation** **Ramesh K Agarwal,** Washington University in St. Louis, USA
09:50-10:10	**Uniformly distributed copper nanoparticles supported on mesoporous silica for greenhouse gas capturing** **Nezar H Khdary,** KACST, Saudi Arabia

Coffee Break 10:10-10:25 @ Foyer

10:25-10:45	**The response of HMSC-bm, SaOS-2 and imunocompetent cells to calcium phosphate doped alginate coatings on titanium surfaces** **Lucie Himmlova,** Charles University, Czech Republic
10:45-11:05	**Synthesis and characterization of modified (PVA) membranes** **Ferial M Tera,** National Institute of Standards, Egypt
11:05-11:25	**Cleaner technologies through optimization of resources** **Sampath Kumar M C,** B.M.S College of engineering, India
11:25-11:45	**Assessment of biomimectic modification on a novel low elastic modulus Ti–Nb–Hf alloy for dental implants** **Virginia Paredes,** Universidad ECCI Bogotá, Colombia
11:45-12:05	**The effect of the type of HA on the degradation and mechanical properties of PLGA/HA composites** **Ashutosh Naik,** Biocon research Limited, India
12:05-12:25	**Mechanism of material removal in Ti-6Al-4V at the incubation and advanced water droplet erosion stages** **Dmytro Kevorkov,** Concordia University, Canada
12:25-12:45	**A new portable reactor for photoelectrocatalytic system on organic compound Rhodamine B degradation** **Maulidiyah,** Universitas Halu Oleo, Indonesia

Lunch Break 12:45-13:30 @ Continental Ballroom 2-4

13:30-13:50 **Synthesis, characterization and application of mesoporous silicas SBA-15 and its hybrid containing Glycidyl Methacrylate organo bridge for the controlled release of ibuprofen and mesalamine drugs in biological fluids**

Fozia Rehman, University of Campinas, Brazil

13:50-14:10 **Synthesis and characterization of nanodiamonds-zinc oxide nanocomposites by ball milling technique**

Hameed Ullah, Hazara University, Pakistan

Closing Ceremony 14:10-14:30

Bookmark your dates

5th World Congress on

Materials Science & Engineering

June 20-22, 2016 Alicante, Spain

Website: materialsscience.conferenceseries.com/europe

6th International Conference and Exhibition on

Materials Science & Engineering

September 01-03, 2016 Atlanta, USA

Website: materialsscience.conferenceseries.com

e-mail: materialsscience@conferenceseries.com; materialsscience@omicsgroup.com



OMICS Group Inc.
2360 Corporate Circle, Suite 400
Henderson, NV 89074-7722, USA
Ph: +1-888-843-8169
Fax: +1-650-618-1417
contact@omicsgroup.com

OMICS International
5716 Corsa Ave., Suite 110, Westlake
Los Angeles, CA 91362-7354, USA
Ph: +1-650-268-9744
Fax: +1-650-618-1414
contact.americas@omicsonline.org

OMICS Group
SEZ Unit, Building No. 20, 9th Floor
APIIC Layout, HITEC City
Hyderabad-500081, Telangana, INDIA
Ph: 040-40131823, 040-47482222
contact.asiapacific@omicsonline.org

Toll free
USA & Canada: +1-800-216-6499
Australia: +1-800-651-097
Europe: 0805-080048