Tentative Program

4th International Conference on
Physical and Theoretical Chemistry
September 18-19, 2017     Dublin, Ireland

Theme: “A Meeting at the Interface on Theory and Experiment”

**For Available Speaker Slots**
physicalchemistry@chemistryconference.org

19+ Interactive Sessions  15+ Keynote Lectures  75+ Plenary Lectures  5+ Workshops

Conference Secretariat
2360 Corporate Circle, Suite 400 Henderson, NV 89074-7722, USA
Email: physicalchemistry@chemistryconference.org physicalchemistry@chemistryconferences.org

http://physicalchemistry.conferenceseries.com/
# Program at a Glance

## Day 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 1</th>
<th>Session 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.00-09.00</td>
<td>General Session</td>
<td>5 Speakers (20 Mins Each)</td>
</tr>
<tr>
<td>09.00-09.15</td>
<td>Inaugural Address</td>
<td>5 Speakers (20 Mins Each)</td>
</tr>
<tr>
<td>09.15-09.45</td>
<td>Keynote/Plenary Talk 1</td>
<td>5 Speakers (20 Mins Each)</td>
</tr>
<tr>
<td>09.45-10.15</td>
<td>Keynote/Plenary Talk 2</td>
<td>5 Speakers (20 Mins Each)</td>
</tr>
<tr>
<td>10.15-10.45</td>
<td>Keynote/Plenary Talk 3</td>
<td>5 Speakers (20 Mins Each)</td>
</tr>
</tbody>
</table>

### Morning Sessions
- Reception/Registration: 08.00-09.00
- Panel Discussions/Group Photo
- Coffee/Tea Break 10.45-11.00 (Networking)
- Lunch Break 12.40-13.30
- Coffee/Tea Break 15.30-15.45 (Networking)

### Evening Sessions
- 5 Speakers (20 Mins Each)

## Day 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 1</th>
<th>Session 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>09.00-10.40</td>
<td>5 Speakers (20 Mins Each)</td>
<td>5 Speakers (20 Mins Each)</td>
</tr>
<tr>
<td>10.55-12.35</td>
<td>5 Speakers (20 Mins Each)</td>
<td>5 Speakers (20 Mins Each)</td>
</tr>
<tr>
<td>13.25-15.05</td>
<td>5 Speakers (20 Mins Each)</td>
<td>5 Speakers (20 Mins Each)</td>
</tr>
<tr>
<td>15.05-15.20</td>
<td>Coffee/Tea Break 15.05-15.20 (Networking)</td>
<td>5 Speakers (20 Mins Each)</td>
</tr>
<tr>
<td>15.20-17.00</td>
<td>5 Speakers (20 Mins Each)</td>
<td>5 Speakers (20 Mins Each)</td>
</tr>
</tbody>
</table>

### Evening Sessions
- 5 Speakers (20 Mins Each)

**NOTE:** Program Schedule is subject to change with final allotment of the speaker slots.

---

For more Details PS: http://physicalchemistry.conferenceseries.com/
physicalchemistry@chemistryconference.org | physicalchemistry@chemistryconferences.org

---

**Note:** Workshops and Symposia slots are available. To book slot for Workshop and Symposium send us the proposal.

**Call for Abstract:** http://physicalchemistry.conferenceseries.com/call-for-abstracts.php

**Registration:** http://physicalchemistry.conferenceseries.com/registration.php

**Abstract Submission:** http://physicalchemistry.conferenceseries.com/abstract-submission.php

**E-Poster:** http://physicalchemistry.conferenceseries.com/eposter-presentation.php

**Sponsors:** http://physicalchemistry.conferenceseries.com/sponsors.php

---

http://physicalchemistry.conferenceseries.com/
Glimpses of Chemistry Conferences

http://physicalchemistry.conferenceseries.com/
Dublin Attractions

- Aqua Zone
- St. Stephens Green Shopping Centre
- Guinness Storehouse
- Irish whiskey Museum
- Phonix Park
- Powerscourt Waterfall
- Science Gallery
- St. Patricks Cathedral
- Dublina

http://physicalchemistry.conferenceseries.com/
Annual Conference and Expo on

Biomaterials

March 14-16, 2016   London, UK
### Keynote Forum

**Introduction**

**Title: Bone graft substitute materials**

*Gordon Blunn*, University College London, UK

**Title: Electron microscopic recording of ATP-induced myosin head power and recovery strokes in hydrated muscle myosin filaments using a film-sealed hydration chamber**

*Haruo Sugi*, Teikyo University, Japan

### Session Introduction

**Sessions:** Track 2: Polymer Biomaterials  
Track 5: Biomaterials Applications  
Track 17: 3D Printing of Biomaterials

**Session Chair:** Andrew Lewis, Biocompatibles UK Ltd, UK  
**Session Co-Chair:** George Youssef, San Diego State University, USA

**Title: Particulate embolization agents: Impact of biomaterial physicochemical properties on clinical performance**

*Andrew Lewis*, Biocompatibles UK Ltd, UK

**Title: Uncovering the fundamentals behavior of annulus fibrosus using composite mechanics**

*George Youssef*, San Diego State University, USA

**Title: A comparison of arterial distribution of bead prototypes in a rabbit renal artery embolization model**

*Hugh Kilpatrick*, Biocompatibles UK Ltd, UK

**Title: Profiling physiochemical properties of drug-eluting bead emulsions: In vitro design evaluation and clinical application**

*Marcus Caine*, Biocompatibles UK Ltd, UK

**Title: Folate-conjugated star branched PLLA-b-(PEG)_{2} copolymer as nanocarrier for targeted delivery**

*Ing Hong Ooi*, International Medical University, Malaysia

### Lunch Break

**Title: Thermoresponsive triblock copolymers as injectable gels**

*Theoni K Georgiou*, Imperial College London, UK

**Title: Encapsulated mesenchymal stem cells promote local neoangiogenesis by a paracrine effect**

*Andrew Lewis*, Biocompatibles UK Ltd, UK

**Title: Novel drug-eluting beads (DEBs) containing tyrosine kinase inhibitors (TKIs) for cancer therapy**

*Alice Hagen*, Biocompatibles UK Ltd, UK

### Session Introduction

**Sessions:** Track 1: Advanced Biomaterials  
Track 3: Dental Biomaterials  
Track 8: Biomaterials Engineering  
Track 9: Biomaterials: Synthesis and Characterization  
Track 13: Biomaterials in Biological Engineering

**Session Chair:** Stella W Pang, City University of Hong Kong, Hong Kong

**Title: Promoting cell migration in confined channels with bends**

*Stella W Pang*, City University of Hong Kong, Hong Kong
Title: Biocompatibility of new fiber-reinforced composite materials for craniofacial bone reconstruction  
Horatiu Rotaru, Iuliu Hatieganu University of Medicine and Pharmacy, Romania

Title: Human embryonic kidney cell behaviour on a new β-type titanium alloy by Alamar Blue assay  
Mehdi Razavi, Brunel University, UK

Title: From muscle balancing to capsular balancing MAASH technique for total hip arthroplasty (THA)  
Felipe G. Delgado Lopez, Hospital Sant Celoni, Spain

Panel Discussion

**Day 2**  
**Tuesday, March 15, 2016**  
**Madison**

**Sessions:** Track 7: Biomaterials and Nanotechnology  
Track 10: Tissue Engineering and Regenerative Medicine

**Session Chair:** Anand Ramamurthi, Cleveland Clinic, USA  
**Session Co-Chair:** Dora Alicia Cortes Hernandez, CINVESTAV-Mexico, USA

Title: Cathepsin-K antibody-conjugated pro-matrix regenerative nanoparticles for abdominal aortic aneurysm repair  
Anand Ramamurthi, Cleveland Clinic, USA

Title: Synthesis and characterization of MnGaFe$_2$O$_4$ magnetic nanoparticles for their potential use in biomedical applications  
Dora Alicia Cortes Hernandez, CINVESTAV-Mexico, USA

**Coffee Break**

Title: Novel bioresorbable scaffolds for 3D cell culture and tissue repair  
Donald A Wellings, SpheriTech Ltd, UK

Title: Innovative substituted hydroxyapatites and collagen scaffolds for enhanced adhesion, growth and proliferation of human osteoblasts *in vitro*  
Maria Tomoaia Cotisel, Babes-Bolyai University, Romania

Title: Production of a new bio-inspired neuro-regeneration structure  
Esra Altun, Marmara University, Turkey

Title: Dynamics of natural killer cells cytotoxicity in microwell arrays with connecting channels  
Xu Yuanhao, City University of Hong Kong, Hong Kong

**Lunch Break**

Title: Electrospinning of PVDF aligned fibers and their potential in neural tissue engineering  
Luanda Chaves Vieira Lins, National Institute of Applied Sciences, France

Title: The role of nanotopography on the design of an optimum nanohydroxyapatite/polyhedral oligomeric silsesquioxane poly(carbonate-urea) urethane nanocomposite scaffold for bone tissue engineering  
Shima Salmasi, University College London, UK

Title: Emergent design of an hierarchically structured bio-intelligent scaffold for vasculogenesis and accelerated healing  
Julian F Dye, University of Oxford, UK

**Sessions:** Track 4: Properties of Biomaterials  
Track 11: Biomaterials for Therapeutic and Investigative Delivery  
Track 12: Biomaterials in Delivery Systems

**Session Chair:** Xiaohui Zhang, Lehigh University, USA

Title: Biomechanical characterization of Von Willebrand factor – A giant multimeric plasma protein  
Xiaohui Zhang, Lehigh University, USA

Title: *In vitro* methods for evaluation of novel radiopaque embolic flow properties  
Marcus Caine, Biocompatibles UK Ltd, UK

Title: Novel method for the evaluation of drug release from drug-eluting beads  
Tanya Sian Swaine, Biocompatibles UK Ltd, UK

Title: Synthesis and characterization of Y$_2$O$_3$: Tm$^{3+}$,Yb$^{3+}$ upconversion nanoparticles for bioimaging  
Adrine Malek Khachatourian, KTH - Royal Institute of Technology, Sweden

**Coffee Break**

**Poster Presentations @ Madison**
BM-01  Title: Thermo-responsive ABC triblock terpolymers for 3D printing  
Anna Constantinou, Imperial College London, UK

BM-02  Title: Strategy for polymer network preparation and ensuring intramolecular conditions for further coupling applications  
Aurica P Chiriac, Petru Poni Institute of Macromolecular Chemistry, Romania

BM-03  Title: Preparation of a new drug delivery carrier based on hydrogels of hyaluronic acid crosslinked with poly(itaconic anhydride-co-3, 9-divinyl-2, 4, 8, 10-dioxaspiro (5.5) undecane) copolymers  
Aurica P Chiriac, Petru Poni Institute of Macromolecular Chemistry, Romania

BM-04  Title: Silibinin-conjugated graphene and hyaluronic acid platforms for osteosarcoma targeting  
Giulia Neri, University of Messina, Italy

BM-05  Title: Densified titanium implants embedded with BMP-2  
Hyun-Do Jung, Korea Institute of Industrial Technology, Korea

BM-06  Title: Functionalized copolymer matrix based on poly(maleic anhydride-co-3, 9-divinyl-2, 4, 8, 10-tetraoxaspiro (5.5) undecane) with potential biomedical applications  
Iordana Neamtu, Petru Poni Institute of Macromolecular Chemistry, Romania

BM-07  Title: Production of the polyurethane/zeolite nanocomposites with electrospinning method for biomedical engineering applications  
Mehmet Onur Aydogdu, Marmara University, Turkey

BM-08  Title: Biocompatible surgical meshes from de-cellularized amniotic membrane and polyurethane  
Yabin Zhu, Ningbo University, China

BM-09  Title: Dynamic freeze casting using titanium (Ti) powders for producing porous Ti  
Hyun-Do Jung, Korea Institute of Industrial Technology, Korea

BM-10  Title: Osteogenic potential of ALLOB® combined with bioceramics in spinal fusion  
Sandra Pietri, Bone Therapeutics, Belgium

BM-11  Title: In vitro characterisation method for comparative evaluation of drug loaded embolic distal perfusion  
Marcus Caine, Biocompatibles UK Ltd, UK

BM-12  Title: Hybrid calcium phosphate coatings for titanium implants  
Elena Kharapudchenko, National Research Tomsk Polytechnic University, Russian Federation

BM-13  Title: Study the effect of pulsed e-beam on properties of biodegradable PLLA scaffolds prepared by different methods  
Valeriya Kudryavtseva, National Research Tomsk Polytechnic University (TPU), Russia

---

Awards Ceremony

Panel Discussion

---

Day 3

Wednesday, March 16, 2016

Scientific Partnering Meetings

Coffee Break @ Foyer Area

Scientific Partnering Meetings

Lunch Break @ Restaurant

Thanks giving & Closing ceremony

---

Bookmark your dates

2nd Annual Conference and Expo on

Biomaterials

March 27-29, 2017 Madrid, Spain

Website: http://biomaterials.conferenceseries.com

---
European Chemistry Congress

June 16-18, 2016   Rome, Italy

Scientific Program
## Keynote Forum

**Title:** Biomacromolecule poly[3-(3,4-dihydroxyphenyl)glyceric acid] with potential therapeutic effect  
**Vakhtang V Barbakadze,** Tbilisi State Medical University, Georgia

**Title:** Carbohydrate microarrays for study of glycan associated biological events  
**Injae Shin,** Yonsei University, Korea

**Track 1:** Fundamentals of Organic Chemistry  
**Track 2:** Inorganic Chemistry  
**Track 3:** Analytical Chemistry

---

**Session Chair:** Ionel I Mangalagiu, “Al.I.Cuza” University of Iasi, Romania  
**Session Co-chair:** Maia Merlani, Tbilisi State Medical University, Georgia

**Title:** An innovative method for the extraction and quantification of curcuminoids from a complex matrix  
**Jarintzi Yared Rico Ruiz,** Euro-Nutec Premix SA de CV, Mexico

**Title:** Conjugates of hyaluronic acid with tyramine - synthesis and application  
**Radovan Buffa,** Contipro Pharma, Czech Republic

**Title:** Diketopyrrolopyrroles - the journey from ferrari pigments to fluorescent functional dyes  
**Daniel T Gryko,** Polish Academy of Sciences, Poland

---

**Coffee Break**

**Title:** Non-coulombic ionic crystals with non-alternate arrangement of complex cations and inorganic anions  
**Takumi Konno,** Osaka University, Japan

**Title:** Toward molecular designing on graphene-based materials for catalytic applications  
**Sungjin Park,** Inha University, South Korea

**Title:** Tailor-made synthesis of multilayered trimetallophanes via transannula π-π Interactions  
**Ok-Sang Jung,** Pusan National University, Korea

**Title:** Supramolecular catalysis within confined environment of metal-organic architectures  
**Chunying Duan,** Dalian University of Technology, P R China

**Title:** Quantification of valproic acid in human plasma using high performance liquid chromatography-photodiode array  
**Yahdiana Harahap,** Universitas Indonesia, Indonesia

**Title:** Validation guidelines of hydralazine hydrochloride spectrophotometric method  
**Laila A Al-Shatti,** The Public Authority for Applied Education and Training, Kuwait

---

**Lunch Break**

**Title:** Synthesis of ultramarine pigment from the mudstone of kutingkeng formation and the improvement of its refractory properties  
**S L Chen,** National Cheng-Kung University, Taiwan

**Title:** New podants with azaheterocycles skeleton as smart versatile building blocks for multiple tasks  
**Ionel I Mangalagiu,** “Al.I.Cuza” University of Iasi, Romania
Title: Analysis of Botulinum Neurotoxin A (BoNT/A) in pharmaceutical products using MALDI-TOF and LC-MS/MS  
Yiu-chung Wong, Hong Kong Government Laboratory, Hong Kong  
Title: Synthesis of natural biologically active poly[3-(3,4-dihydroxyphenyl)-glyceric acid] analogues  
Maia Merlani, Tbilisi State Medical University, Georgia  
Title: Preparation and synthetic application of 1-Azoniabicyclo[n.1.0]alkanes  
Hyun-Joon Ha, Hankuk University of Foreign Studies, Korea  
Title: Sulfur based metal complexes for synthesis of semiconductor nanoparticles  
Makwena Justice Moloto, Vaal University of Technology, South Africa  
Title: Functionalization of Keggin type nickel substituted phosphotungstate by imidazole: Synthesis, characterization and catalytic activity  
Anjali Patel, The M S University of Baroda, India

Coffee Break

Track 4: Green Chemistry: Green chemical principles  
Track 5: Medical Biochemistry

Session Introduction

Session Chair: Janis Gravitis, Latvian State Institute of Wood Chemistry, Latvia  
Session Co-chair: M Paula Robalo, Instituto Politécnico de Lisboa, Portugal, Portugal

Title: Protein-specific approach to osteopontin purification from Chlamydomonas reinhardtii  
Zivko Nikolov, Texas A&M University College Station, USA  
Title: Green forest and agricultural waste bio-refinery techniques and breakthrough materials  
Janis Gravitis, Latvian State Institute of Wood Chemistry, Latvia  
Title: Photocatalytic H2-production by homogeneous and heterogeneous advanced materials  
Peter Brüggeller, University of Innsbruck, Austria  
Title: New conceptual diary liodionium salts for metal-free arylation of carboxylic acids and other coupling reactions  
Toshifumi Dohi, Ritsumeikan University, Japan  
Title: Loss mechanism in the open circuit voltage of polymer solar cells  
Zhicai He, South China University of Technology, P R China  
Title: Preparation and swelling capacity of superabsorbent polymer composites based on attapulgite clay  
El-Refaie Kenawy, Tanta University, Egypt  
Title: Laccases: biocatalysts towards new heterocyclic cores  
M Paula Robalo, Instituto Politécnico de Lisboa, Portugal  
Title: Effect of Quercetin and Apigenin on LDL receptor gene (LDLR) and Hydroxy-methyl glutrate reductase gene (Hmgcr) in a cholesterol attenuating trial.  
Marwa E Kenawy, Tanta University, Egypt

Day 2  June 17, 2016  
Olimpica 1 & 2

Keynote Forum

Title: Selectivity control of Au-catalyzed oxidation of glycerol in water  
Bo-Qing Xu, Tsinghua University, China  
Title: Functions of nucleic acids with non-canonical structures  
Naoki Sugimoto, Konan University, Japan  
Title: Pyrrolo[3,2-b]pyrroles-new electron-rich functional π-electron system  
Daniel T Gryko, Polish Academy of Sciences, Poland

Coffee Break

Poster Presentations

ECPP001 Title: Unnatural fluoro-oxindole alkaloids produced by Uncaria guianensis plantlets  
Adriana A Lopes, Universidade de Ribeirão Preto, Brazil
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spectrophotometric investigation of early lanthanide(III) porphyrin complexes</td>
<td>Melitta Patrícia Kiss, University of Pannonia, Hungary</td>
<td></td>
</tr>
<tr>
<td>Photoinduced heterogenous catalysis with TiO&lt;sub&gt;2&lt;/sub&gt; and kaolinite</td>
<td>Orsolya Fónagy, University of Pannonia, Hungary</td>
<td></td>
</tr>
<tr>
<td>Photocatalytic decomposition of a nonionic detergent</td>
<td>Hegedűs Péter, University of Pannonia, Hungary</td>
<td></td>
</tr>
<tr>
<td>Patented method-based evaluation of the toxicity of some uncoupling dinitrophenol-like compounds</td>
<td>Marius Zaharia, Alexandru Ioan Cuza University, Romania</td>
<td></td>
</tr>
<tr>
<td>Synthesis, antiproliferative activity and molecular docking of new colchicine derivatives</td>
<td>Adam Huczynski, Adam Mickiewicz University, Poland</td>
<td></td>
</tr>
<tr>
<td>Antimycobacterial activity and QSAR studies of 2H-chromene and coumarin based hydrazones</td>
<td>Violina T Angelova, Medical University of Sofia, Bulgaria</td>
<td></td>
</tr>
<tr>
<td>Selective and stoichiometric fatty acids sensing with a polydiacetylene liposome</td>
<td>Chang Wook Song, Pohang University of Science and Technology, Republic of Korea</td>
<td></td>
</tr>
<tr>
<td>Novel two-photon dyes: Minimal autofluorescence in tissue imaging</td>
<td>Juryang Bae, Pohang University of Science and Technology, Republic of Korea</td>
<td></td>
</tr>
<tr>
<td>Lysosomal zinc ions imaging with two-photon fluorescent probe</td>
<td>Hyeonjin Park, Pohang University of Science and Technology, Republic of Korea</td>
<td></td>
</tr>
<tr>
<td>How to enhance fluorescence and two-photon properties of typical dipolar dyes in aqueous media?</td>
<td>Hyerim Kim, Pohang University of Science and Technology, Republic of Korea</td>
<td></td>
</tr>
<tr>
<td>Ionic conductivity on cyano-bridged bimetal assemblies</td>
<td>Kosuke Nakagawa, The University of Tokyo, Japan</td>
<td></td>
</tr>
<tr>
<td>A fluorenyl-based metal-organic framework with photocatalytic property</td>
<td>Rong-Xin Yuan, Changshu Institute of Technology, P.R.China</td>
<td></td>
</tr>
<tr>
<td>Palladium nanoparticles supported on four different materials as efficient catalysts for suzuki cross-coupling reactions</td>
<td>Bilgehan Guzel, University of Cukurova, Turkey</td>
<td></td>
</tr>
<tr>
<td>Synthesis of ScCO&lt;sub&gt;2&lt;/sub&gt; soluble perfluorinated chiral shiff-base ligand and its metal complexes</td>
<td>Burcu Darendeli, University of Cukurova, Turkey</td>
<td></td>
</tr>
<tr>
<td>Synthesis and enzyme inhibition study of dihydrofurocumarin and dihydrofuropyrae compounds</td>
<td>Asli Ustalar, Kocaeli University, Turkey</td>
<td></td>
</tr>
<tr>
<td>Signaling of Hg(II) ions by reaction-based probes based on depro-tection of dithiane</td>
<td>In Jung Chang, Chung-Ang University, Republic of Korea</td>
<td></td>
</tr>
<tr>
<td>Smartphone-based fluorescence signaling of hypochlorite in tap water by oxidative hydrolysis of sulfonhydrazone</td>
<td>Min Jeoung Cho, Chung-Ang University, Republic of Korea</td>
<td></td>
</tr>
<tr>
<td>Dual signaling of the water content of biofuel-relevant ethanol and butanol by pyranines</td>
<td>Yun-uk Jung, Chung-Ang University, Republic of Korea</td>
<td></td>
</tr>
<tr>
<td>Photophysical properties of boron trifluoride complexes based on 2(2',4'-dihydroxyphenyl) benzothiazole and benzimidazole</td>
<td>Sang Hun Lee, Chung-Ang University, Republic of Korea</td>
<td></td>
</tr>
<tr>
<td>Phytochemical screening and antitumor effect of ethanol extract of Egyptian wild plants</td>
<td>Thoria Diab, Tanta University, Egypt</td>
<td></td>
</tr>
<tr>
<td>Calcineurin levels and activity in breast cancer: Relation to apoptosis</td>
<td>Abeer Abdel Hamid Ahmed Khamis, Tanta University, Egypt</td>
<td></td>
</tr>
<tr>
<td>Protection and functionalization of magnetic iron oxide nanoparticles with phthalic acid for the efficient removal of reactive black 5 from aqueous solutions</td>
<td>Gehan M Nabil, Alexandria University, Egypt</td>
<td></td>
</tr>
</tbody>
</table>
Title: A new polymeric membrane Fe (III) ion-selective sensor based on Fe (III)-Morin (3, 5, 7, 2', 4'-Pentahydroxyflavone) Schiff Base
Tugba Ozer, Yildiz Technical University, Turkey

Title: A novel iron(II) selective membrane electrode based on 2-cyanomethyl n-methyl-n-phenyl dithiocarbamate and its applications
Tugba Ozer, Yildiz Technical University, Turkey

Title: Computer simulation of the molecules of thermotropic substituted biphenyls
Abulyaissova L K, Buketov State University of Karagandy, Kazakhstan

Title: Comparative study of corrosion of iron in cyanide and thiourea media in hydrometallurgical processes
Hugo Romero, Universidad Técnica de Machala, Ecuador

Title: Adsorption kinetics, isotherms and thermodynamic studies for Hg2+ adsorption from aqueous medium using alizarin red-S loaded amberlite IRA-400 resin
Mu Naushad, King Saud University, Saudi Arabia

Title: In situ preparation of nitrogen enriched hierarchically nanoporous carbon from polybenzoxazine precursor for CO2 capture and storage
Nicharat Manmuanpom, Chulalongkorn University, Bangkok

Title: Direct voltammetric determination of redox-active iron in carbon nanotubes
Wei Zhe Teo, Nanyang Technological University, Singapore

Speaker Presentations to be continued

Track 6: Physical Chemistry
Track 9: Nuclear chemistry

Session Chair: Piotr Cysewski, Nicolaus Copernicus University in Toruń, Poland
Session Co-chair: Ken Cham-Fai Leung, The Hong Kong Baptist University, Hong Kong

Title: Impacts of conformational geometries in fluorinated hydrocarbons
Tim Brandenburg, Helmholtz Zentrum Berlin, Germany

Title: Decarboxylative fluorination of carboxylic acids with heterogeneous catalysts
Giulia Tarantino, Cardiff University, UK

Title: Conceptual design of a nano-leaf for artificial photosynthesis
Jacinto Sá, Uppsala University, Sweden

Title: Fabrication and characterization of Pd-Ni porous membrane for hydrogen separation
Sun Hee Choi, Korea Institute of Science and Technology, South Korea

Title: Anti-inflammatory and wound healing activities of Hemisgraphis alternata
Joo Kheng Goh, Monash University Malaysia, Malaysia

Title: RNA self-assembly and RNA bio-nanotechnology
Luc Jaeger, University of California, USA

Title: Extraction and characterization of collagen from the white jellyfish (Lobonema smithi Mayer.)
Ubon Rerk-am, Thailand Institute of Scientific and Technological Research, Thailand

Title: Interfacial assembly and theranostic applications of organic-inorganic hybrid nanomaterials
Ken Cham-Fai Leung, The Hong Kong Baptist University, Hong Kong

Title: An efficient coformers selection for co-crystals screening of active pharmaceutical ingredients
Piotr Cysewski, Nicolaus Copernicus University in Toruń, Poland

Track 7: Biological Chemistry
Track 8: Environmental Chemistry
Track 10: Theoretical Chemistry
**Session Chair:** Yanli Wang, National Center for Biotechnology Information, USA  
**Session Co-chair:** Min Jae Lee, Seoul National University, Korea

### Title: Data mining drug, chemical probe and their biological activity in PubChem  
**Yanli Wang,** National Center for Biotechnology Information, USA

### Title: NMR Molecular Replacement, NMR  
**Julien Orts,** Swiss Federal Institute of Technology, Switzerland

### Title: Opening the core particle gate of mammalian proteasomes to enhance their degradatory activity  
**Min Jae Lee,** Seoul National University, Korea

---

### Poster Presentations

| ECPP031 | Title: Promotion of sorghum hybrids bran grown in southern Italy for PHB ecological production by *Sphingomonas cynarae*  
|---|---|
| **Roberta Romano,** University of Salento, Italy

| ECPP032 | Title: Synthesis of NiO nanoparticles for new nanocomposite materials  
|---|---|
| **Sevil Çetinkaya,** Kırıkkale University, Turkey

| ECPP033 | Title: Antioxidant activity of wild garlic extract (*Allium ursinum*) obtained by subcritical water extraction  
|---|---|
| **Alena Tomskik,** University of Novi Sad, Serbia

| ECPP034 | Title: Preparation of biological active steroids  
|---|---|
| **Sevinc Ilkar Erdagli,** Kocaeli University, Turkey

| ECPP035 | Title: Synthesis of 4-amino-N-4-pyridin-1,8-naphthalimide, a new ligand for complexes and metalorganic frameworks  
|---|---|
| **Ulisses Fiorin Angelo,** University of São Paulo, Brazil

| ECPP036 | Title: In vivo anti-wrinkle and anti-melasma activities of peptides isolated from Pigeon peas (*Cajanus cajan* L. *Millsp*)  
|---|---|
| **Tuanta Sematong,** Thailand Institute of Scientific and Technological Research, Thailand

| ECPP037 | Title: Effect of porogen type and cationic, anionic and nonionic surfactant ratio on the properties of porous polymer supports  
|---|---|
| **Vesile Şima Ünnü,** Kırıkkale University, Turkey

| ECPP038 | Title: Polyaniline–Ionic liquid mixtures and their application in dye-sensitized solar cells  
|---|---|
| **Sang Jun Lee,** Kwangwoon University, Korea

| ECPP039 | Title: Air annealing technique to improve photoelectric properties of pristine graphene  
|---|---|
| **Dapeng Wei,** Chinese Academy of Sciences, China

| ECPP040 | Title: Development of lateral-flow immunoassay for the diagnosis of laryngopharyngeal reflux disease  
|---|---|
| **Jiyoon Kwon,** Kwangwoon University, Korea

| ECPP041 | Title: Characteristics of the different S=O, S-O, N-H, O-H and Na-O bonds into the powerful laxative sodium picosulphate drug and their effects on the properties  
|---|---|
| **Silvia Antonia Brandan,** Institute of Inorganic Chemistry, Argentina

| ECPP042 | Title: Multiresidue analysis of selected pharmaceutical compounds in poultry manure by gas chromatography–mass spectrometry  
|---|---|
| **Ramón Aznar,** Spanish National Institute for Agricultural and Food Research and Technology, Spain

| ECPP043 | Title: Study on the micro pulsed electro-chemical machining of invar alloy according to electrolyte variables  
|---|---|
| **Seong-Hyun Kim,** Inha University, Republic of Korea

| ECPP044 | Title: Antimicrobial activity of collagen/silver doped hydroxyapatite composites against gram-positive and gram-negative bacteria  
|---|---|
| **A M Prodan,** Carol Davila University of Medicine and Pharmacy, Romania

| ECPP045 | Title: Antimicrobial activity of collagen/silver doped hydroxyapatite composites against gram-positive and gram-negative bacteria  
|---|---|
| **C L Popa,** National Institute of Materials Physics, Romania
| ECPP046 | Title: The Nitrogen Cycle in air, soil and water  
Reza Pashaei, University of Siena, Italy |
| ECPP047 | Title: Tunable magnetic property and millimeter wave absorption property of ε-Fe₂O₃ by metal substitution  
Asuka Namai, The University of Tokyo, Japan |
| ECPP048 | Title: Anticonvulsant activity of newly synthesized benzoylhydrazones with 2H-chromene and coumarin moieties in ICR mice  
Valentin Karabelyov, Medical University of Sofia, Bulgaria |
| ECPP049 | Title: Perpendicularly-oriented microdomain ordering of lamella-forming PS-b-PMMA thin film observed by tuning film thickness  
Wooseop Lee, Yonsei University, Republic of Korea |
| ECPP050 | Title: Phase transition behavior of asymmetric polystyrene-b-poly(2-vinylpyridine) thin films under strong interfacial Interactions : A stable hexagonally modulated layer (HML) structure  
Sungmin Park, Yonsei University, Republic of Korea |
| ECPP051 | Title: Interaction between the hydroxyl functionalized PS and dPS in dry brush system  
Seongjun Jo, Yonsei University, Republic of Korea |
| ECPP052 | Title: Synthesis and characterization of new quaternary niobium selenites  
Bongsu Kim, Chung-Ang University, Republic of Korea |
| ECPP053 | Title: Polar noncentrosymmetric ZnMoSb₂O₇ and nonpolar centrosymmetric CdMoSb₄O₁₀: d₁₀ transition metal size effect influencing the stoichiometry and the centricity  
Hongil Jo, Chung-Ang University, Korea |
| ECPP054 | Title: Effective removal of rare earth metals using surface-active agent  
Dzhevaga Natalia Vladimirovna, National Mineral Resources University, Russia |
| ECPP055 | Title: Thermodynamic characteristics of sorption extraction of anionic complexes of erbium with trilon B on weakly basic anionite  
Ponomareva Mariya, National Mineral Resources University, Russia |
| ECPP056 | Title: The interaction of 1-nitro- and 1-bromo-1-nitro-3,3,3-trifluoro(chloro)propenes with phenylazide  
Alena Kuzhaeva, National Mineral Resources University, Russia |
| ECPP057 | Title: Modern glassy phosphate fertilizers  
Kirill Karapetian, National mineral resources university, Russia |

**Speaker Presentations to be continued**

Title: Arsenic speciation studies in *Oriza sativa* L. grown in wahalkada, Sri Lanka  
Samanthika R Hettiarachchi, The Open University of Sri Lanka, Sri Lanka

Title: Effect of preanalytical techniques and variables on plasma ammonia determination  
Ibraheem M Al-Qurashi, Taif University, Saudi Arabia

Title: Bioavailability and concentration of selected heavy metals from soils at the Ecton mining area with long-mining history of Cu, Pb, and Zn, Derbyshire, UK  
Zahid O Alibrahim, Wolverhampton University, United Kingdom

Title: Ion-imprinted thermoresponsive fluorescent hydrogel for removal and determination of uranyl ion  
Elif Gökçe Atçakan, Istanbul Technical University, Turkey

Title: Electrophilic phosphinidene complex affords novel organophosphorus compounds  
Arif Ali Khan, Guru Gobind Singh Indraprastha University, India

Title: Synthesis of composite materials for chromatographic column separations  
Amjad Mumtaq Khan, Aligarh Muslim University, India

Title: Regulation of electron transfer in nitric oxide synthase by conformational dynamics  
Changjian Feng, University of New Mexico, USA
Title: Aggregation-free gold nanoparticles in ordered mesoporous carbons: towards highly active and stable heterogeneous catalysts for selective oxidation of alcohols and selective reduction of nitroarenes

Ying Wan, Shanghai Normal University, China

---

**Day 3 June 18, 2016**

**Olimpica 1 & 2**

<table>
<thead>
<tr>
<th>Track 11: Medicinal Chemistry</th>
<th>Track 12: Materials Chemistry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Session Introduction</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Session Chair:</strong> Brian W Dymock, University of Singapore, Singapore</td>
<td></td>
</tr>
<tr>
<td><strong>Session Co-chair:</strong> Marc Le Borgne, Université Lyon, France</td>
<td></td>
</tr>
</tbody>
</table>

**Title:** Ruthenium organometallic compounds as promising anti-metastatic drugs for breast cancer chemotherapy  
M Helena Garcia, Universidade de Lisboa, Portugal

**Title:** Polymer-metal conjugates: Versatile scaffolds for the synthesis of new antitumor drugs  
Andreia Valente, Universidade de Lisboa, Portugal

**Title:** Novel functional materials based on cyanido-bridged metal assemblies and metal oxides  
Shin-ichi Ohkoshi, The University of Tokyo, Japan

**Title:** The medicinal chemist’s toolbox: how to use it to develop small molecule CK2 inhibitors  
Marc Le Borgne, Université Lyon, France

**Coffee Break**

**Title:** Designed bispecific molecules selectively inhibiting both JAK2 and HDAC at low nanomolar concentrations  
Brian W Dymock, University of Singapore, Singapore

**Title:** In silico screening of Aloysia citrodora Palau. leaf essential oil for anticholinesterase inhibitors  
Sawsan Abuhamdah, The University of Jordan, Jordan

**Title:** Design of active and durable catalysts with non-precious materials for oxygen reduction and evolution reactions: First principles prediction and experimental validation  
Byungchan Han, Yonsei University, Korea

**Title:** The effect of doping NiMgAl catalysts with lanthanum on the dry reforming of methane  
Samer Aouad, University of Balamand, Lebanon

**Title:** S-Nitrosothiol-modified silica/polymer hybrid nanofibers as a nitric oxide storage/delivery scaffold  
Soo Ji Son, Kwangwoon University, Korea

**Lunch Break**

**Track 13: Petro Chemistry**

**Track 14: Multi-disciplinary Chemistry**

<table>
<thead>
<tr>
<th>Session Introduction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Session Chair:</strong> Jean-Bernard Regnouf-de-Vains, Université de Lorraine, France</td>
</tr>
<tr>
<td><strong>Session Co-chair:</strong> Rukan Can Seyfeli, Gazi University, Turkey</td>
</tr>
</tbody>
</table>

**Title:** Study of intermolecular and intramolecular vibrations in heterocyclic aromatic hydrocarbons  
Patricia Guevara Level, Université de Pau et des Pays de l’Adour, France

**Title:** From discrete to supported antibacterial calixarenes: toward bacteriophilic materials  
Jean-Bernard Regnouf-de-Vains, Université de Lorraine, France

**Title:** First-principles calculation of ε-Fe$_2$O$_3$ with a huge coercive field  
Marie Yoshikiyo, The University of Tokyo, Japan

**Title:** Thymus and Origanum species growing in Turkey: Their phytochemical and biological activity properties  
Ufuk Özgen, Karadeniz Technical University, Turkey

**Title:** Bentonite-Treatment of Bentonite with Na$_2$CO$_3$ and MgO  
Rukan Can Seyfeli, Gazi University, Turkey

**Title:** The benefit of supplementing with Iron and vitamin B12 singly and in combination on haemoglobin among 6 to 9 years old rural primary school children in Kilifi County, Kenya?  
Priscilla Monyangi Nyakundi, Kenya Medical Research Institute, Kenya
Title: Exploring DNA interaction and anticancer activity of ruthenium (II) mononuclear complexes and their luminescent properties
S Satyanarayana, Osmania University, India

Title: Determination of skin softeners, skin shiners and phytoconstituents from eugenol oil extracted from clove buds of clove trees found in zanzibar
Ochieng Anthony, Sumait University, Tanzania

Title: Quantitative analysis of multi-component alkane mixture with fourier transform infrared spectrometer based on TR-LSSVM-PSO
Feng Zhang, Xi’an Jiaotong University, China

Title: An attractor-repulsor molecular design principle for the exploration of supramolecular steric hindrance (SSH) effects
Linghai Xie, Nanjing University of Posts & Telecommunications, China

Title: Arithmetic progression way in calibration STD curve
Hisham H A Mohammedkhair, University of Khartoum, Sudan
Day 1
March 31, 2016

Registrations

Melia Meeting 4 & 5

conferenceseries.com

Opening Ceremony

Keynote Forum

Introduction

Michael W. Tausch
University of Wuppertal, Germany

Jas Pal Badyal
Durham University, UK

Track 1: Materials Science and Engineering
Track 2: Informatics in Various Fields of Materials

Session Introduction

Session Chair: Urs Meier, Swiss Federal Laboratories for Materials Science and Technology, Switzerland
Session Co-chair: Jijeesh R Nair, Polytechnic University of Turin, Italy

Title: Molecular magnetic switches
Marat M. Khusniyarov, Friedrich-Alexander-University of Erlangen-Nuremberg, Germany
Title: The role of polymer electrolyte in constructing an aging resistant high energy lithium battery for wide temperature application
Jijeesh R Nair, Polytechnic University of Turin, Italy

Group Photo

Coffee Break

Title: The prediction of long-term creep data of fibrous polymer composites based on short term experiments
Urs Meier, Swiss Federal Laboratories for Materials Science and Technology, Switzerland
Title: Group III-Nitride semiconductor nanostructures for novel photonic applications
Yong-Hoon Cho, Korea Advanced Institute of Science and Technology (KAIST), Republic of Korea
Title: Polymer derived boron nitride ceramics for energy applications
Philippe Miele, University of Montpellier, France
Title: Teaching from practice to theory
Mario Pablo Spector, National Technological University, Argentina
Title: Novel biological method for iron rust removal
S. Rajendran, Madurai Kamaraj University, India

Lunch Break

Young Researchers Forum

Title: Towards more efficient upconverting materials based on NaYF₄ nanoparticles: Phase and size controlled synthesis and optical evaluation
Fabrizio Guzzetta, Universitat Jaume I, Spain
Title: High efficiency for photo-polymerizable VCP ester-amide resins: A universal concept providing low volume shrinkage, high reactivity and selectivity
Paul Pineda, University of Bayreuth, Germany
Title: Non-ionic UCST-type polymers: Synthesis and analysis of new thermoresponsive properties in aqueous media
Beatriz A Pineda-Contreras, University of Bayreuth, Germany
Title: Expanding the NMR palette: Insights on artificial charge separators
Brijith Thomas, Leiden Institute of Chemistry, Netherlands
Track 3: Role of Materials Chemistry in Pharmacy
Track 4: Design and Synthesis of Materials

Session Chair: Włodzimierz Stanczyk, Polish Academy of Sciences, Poland
Session Co-chair: Bruno Bureau, Institut Universitaire de France, France

Title: Synthesis of the first POSS cage - anthracycline nano-conjugates
Włodzimierz Stanczyk, Polish Academy of Sciences, Poland
Title: Synthesis of fine-controlled subano-metal particles using a dendrimer reactor
Kimihisa Yamamoto, Tokyo Institute of Technology, Japan
Title: Tellurium based glasses for far infrared and thermoelectric applications
Bruno Bureau, Institut Universitaire de France, France
Title: Game-based materials to teaching and learning the periodic table
Antonio Joaquín Franco-Mariscal, University of Malaga, Spain

Coffee Break

Title: Fibre structures for energy harvesting in wearables
Elias Siores, Bolton University, UK
Title: Microstructure evolution at different cooling rates of a low carbon microalloyed steel
Elena Brandaleze, National Technological University, Argentina

Day 2 April 01, 2016
Melia Meeting 4 & 5

Keynote Forum

Reshef Tenne
Weizmann Institute, Israel
Der-Jang Liaw
National Taiwan University of Science and Technology, Taiwan

Track 5: Foundational Challenges in Predictive Materials Chemistry
Track 6: Rational Chemical Synthesis on Nanoscale and Nanostructured Materials
Track 7: Polymer Materials and their Technology

Session Chair: Michael W. Tausch, University of Wuppertal, Germany
Session Co-chair: Ruben D. Costa, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany

Title: Photoprocesses in science education
Michael W. Tausch, University of Wuppertal, Germany
Title: Hybrid organic-inorganic materials for thin-film lighting technologies
Ruben D. Costa, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany

Coffee Break

Title: Novel polymer-peptide conjugates and polymer-based peptidomimetics
Marc Devocelle, Royal College of Surgeons in Ireland (RCSI), Ireland
Title: Conjugated copolymers and their optimization for ambipolar field effect transistors
Martin Baumgarten, Max Planck Institute for Polymer Research, Germany
Title: Spectroscopic tools to study and interpret macromolecular dynamics at a molecular scale
Jorge Teno Diaz, Carlos III University of Madrid, Spain
Title: Ultrasonic fabrication of microfluidic polymer chips
Werner Karl Schomburg, RWTH Aachen University, Germany
Title: Synthetic polymers from easily available monossacharides
M. Gracia García-Martín, University of Seville, Spain

Lunch Break

Poster Presentations

PPMC001
Title: Inclusion complexes of propiconazole nitrate with substituted β-cyclodextrins II: In vitro assessment of antifungal properties
Irina Rosca, Petru Poni Institute of Macromolecular Chemistry, Romania
Title: Inclusion complexes of propiconazole nitrate with substituted \( \beta \)-cyclodextrins: Synthesis, characterization and in silico assessment

Narcisa Laura Marangoci, Petru Poni Institute of Macromolecular Chemistry, Romania

Title: Silver nanoclusters doped in mordenite zeolite as photocatalysts toward pesticides

Imad A Abu-Yousef, American University of Sharjah, UAE

Title: Improving PLA properties through the incorporation of electrospun nanofibers based on PVA and cellulose nanowhiskers

Carol Lopez de Dicastillo, Santiago de Chile University, Chile

Title: Antimicrobial supercritical impregnation of nanocomposites for food packaging

Maria Jose Galotto, Santiago de Chile University, Chile

Title: Preparation and characterization of chitosan-co-hyaluronic acid cryogels

Tugce Kutlusoy, Marmara University, Turkey

Title: Synthesis and characterization of high performance polyimide nanofibers and application on lithium-ion batteries

Emre Aytan, Marmara University, Turkey

Title: Molecularly imprinted polymeric nanoparticle: Preparation and characterization

Merve Yasar, Marmara University, Turkey

Title: Novel macroporous poly-pickering-HIPE composites for heterogeneous photocatalysis

Elif Yüce, Yalova University

Title: Poly-pickering-HIPEs as heterogeneous photocatalysts

Fatma Nur Parın, Yalova University

Track 8: Applied Materials Chemistry
Track 9: Current Innovations and Emerging Areas in Materials Chemistry
Track 10: Research Aspects of Materials Chemistry
Track 11: Science of Advanced Materials

Session Chair: Yan Huang, Brunel University London Institute of Materials and Manufacturing, UK
Session Co-chair: Yo Tanaka, RIKEN, Japan

Title: Solute effect on grain boundary migration in ultrafine/nanostructured materials
Yan Huang, Brunel University London Institute of Materials and Manufacturing, UK

Title: Application of ultra-thin flexible glass sheets to microfluidic devices
Yo Tanaka, RIKEN, Japan

Title: Nanoscale strategies towards development of advanced Mn-based permanent magnets
Felix Jimenez-Villacorta, Materials Science Institute of Madrid (ICMM-CSIC), Spain

Title: Sialon nano-composites matrix reinforced by cubic boron nitride prepared by using spark plasma sintering
Abbas Saeed Hakeem, King Fahd University of Petroleum & Minerals, Saudi Arabia

Title: Segregation of ions in deliquesced droplets of alkali halide nano-crystals on SiO\(_2\)
Kenta Arima, Osaka University, Japan

Title: Nanomechanics with nanotubes and fullerene-like-WS\(_2\) (MoS\(_2\))
Reshef Tenne, Weizmann Institute, Israel

Coffee Break

Video Presentation: One-pot waterborne superhydrophobic pigment coatings at high solids with improved scratch and water resistance
Agne Swerin, SP Technical Research Institute of Sweden – Chemistry, Sweden

Title: On the peculiar mechanical and tribological behavior of polymer nanocomposites with nanotubes of WS\(_2\) and nanowires of MoS\(_2\)
Johann G Meier, ITAINNOVA Instituto Tecnológico de Aragón, Spain
### Keynote Forum

**Introduction**

**Title:** Small things offer big promise  
*Carlo Montemagno*, University of Alberta, Canada

**Title:** Materials and processing opportunities and challenges for transformation of global electricity infrastructure  
*Rajendra Singh*, Clemson University, USA

**Title:** Heat resistant engineering materials for industrial application  
*Zofia Niemczura*, Arcelormittal Global R&D, USA

---

**Group Photo @ Chattahooche-A**

**Networking & Refreshments Break**

**Title:** A multi-layered composite ensuring harmless to the human body and implant longevity of hip prosthesis in orthopedics  
*Masaru Matsuo*, Dalian University of Technology, China

---

**Sessions:**  
Materials Science and Engineering | Computational Materials Science | Polymer Technology

**Session Chair:** Matthew E Edwards, Alabama A&M University, USA  
**Session Chair:** Michael F Herman, Tulane University, USA

---

**Session Introduction**

**Title:** Electrical conduction mechanism of volume and surface resistivites of multi-walled carbon nanotubes doped polyvinyl alcohol (PVA) and the pyroelectric behavior of polyvinylidene difluoride (PVDF) thin films  
*Matthew E Edwards*, Alabama A&M University, USA

**Title:** An approximate semiclassical method that uses real valued trajectories for time dependent tunneling calculations  
*Michael F Herman*, Tulane University, USA

**Title:** Tuning electrical conductivity with photoirradiation and electric field in organic crystals and ionic solids  
*Nobuhiro Ohta*, National Chiao Tung University, Taiwan

**Title:** Fine-controlled subnano-metal particles in a dendrimer reactor  
*Kimihisa Yamamoto*, Tokyo Institute of Technology, Japan

**Title:** Study of the adsorption of simple molecules on metal oxides by ab initio calculations. Application to the detection of gas  
*Caroline Lambert-Mauriat*, Aix Marseille Université, France

**Title:** In situ investigations of particle-mediated crystal growth  
*Dongsheng Li*, Pacific Northwest National Laboratory, USA

---

**Lunch Break**

**Title:** Terahertz laser sources based on difference frequency generation of infrared nonlinear optical materials $SnGa_2Q_x$ ($Q = S, Se$)  
*Wen-Dan Cheng*, Chinese Academy of Sciences, China

**Title:** Microstructure and mechanical properties of a low C medium Mn heavy plate steel  
*Lin-Xiu Du*, Northeastern University, China

**Title:** Microstructure and mechanical property of vacuum rolled Ni-based alloy/pipeline steel clad plate  
*Guang-ming XIE*, Northeastern University, China

---

**Panel Discussion**

**Memento Presentation to Organizing Committee Members**
Session Chair: Jun Ding, National University of Singapore, Singapore  
Session Chair: Hideo Miura, Tohoku University, Japan

Session Introduction

Title: Spinel ferrite films with enhanced magnetization and large magneto-resistance  
Jun Ding, National University of Singapore, Singapore

Title: Degradation of crystallinity and properties of advanced functional materials caused by anisotropic local diffusion of component atoms under severe operating conditions  
Hideo Miura, Tohoku University, Japan

Title: A high-entropy alloy with ultrahigh ductility breaks strength-ductility paradox  
Yonghao Zhao, Nanjing University of Science and Technology, China

Title: Research on the optimization mechanism of loading path for hydroforming process  
Zong-an LUO, Northeastern University, China

Networking & Refreshments Break

Title: Process research on the stainless steel / low alloy steel clad plate prepared by vacuum hot rolling  
Feng Ying-ying, Northeastern University, China

Young Research Forum

Title: On sample structure for fabricating micro-material by electromigration  
Yasuhiro Kimura, Tohoku University, Japan

Title: Tailoring surface charge to antifouling applications  
Guo Shanshan, National University of Singapore, Singapore

Panel Discussions

Day 2 September 13, 2016

Chattahoochee-A

Keynote Forum

Introduction

Title: Recent progress in acoustic metamaterials membranes for low frequency sound attenuation  
Ramesh K Agarwal, Washington University in St. Louis, USA

Title: Nanostructured functional organic materials synthesized by a laser irradiation method for applications of molecular devices and high-sensitive sensors  
Masahiro Goto, National Institute for Materials Science, Japan

Sessions: Nanotechnology in Materials Science | Energy Materials | Emerging Areas of Materials Science and Nanotechnology

Session Chair: Rajendra Bordia, Clemson University, USA  
Session Chair: Masumi Saka, Tohoku University, Japan

Session Introduction

Title: Analysis and simulation guided processing of hierarchical porous and multi-layered ceramics for energy applications  
Rajendra Bordia, Clemson University, USA

Title: Effect of passivation on suppression or utilization of atomic migration phenomena in metallic thin-film materials  
Masumi Saka, Tohoku University, Japan

Networking & Refreshments Break

Title: Fabrication of aluminum matrix composites with nano-sized reinforcements via friction stir processing  
Zong-yi Ma, Chinese Academy of Sciences, China

Title: Synthesis and preparation of nanocomposites of metal oxide and metal sulphide by electrochemical, hydrothermal and biological method: Its application for polymer nanocomposites, antibacterial, photo-voltaic and as photocatalyst  
Sannaiah Ananda, University of Mysore, India

Title: Energy storage material  
Subramanian Selladurai, Anna University, India

Title: Micro-beam laser ablation/mass spectrometry for materials depth-profiling and elemental surface distribution studies – Polymers, waxes, asphaltenes, steels  
Avin Pillay, The Petroleum Institute, UAE
Title: Synthesis of carbon hollow spheres by a modified hydrothermal carbonization method  
Mingli Qin, University of Science and Technology Beijing, P.R. China

Title: Transmission electron microscopy – A versatile tool to study the microstructure of HT-PEMFC  
Christina Scheu, Max-Planck-Institute, Germany

Title: Hollow polydopamine nanoparticles loaded ionic liquid and doxorubicin for combined chemotherapy and microwave thermal therapy of cancer  
Tianlong Liu, Chinese Academy of Sciences, P. R. China

Panel Discussions

<table>
<thead>
<tr>
<th>Memento Presentation to Organizing Committee Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lunch Break</td>
</tr>
</tbody>
</table>

Session Chair: Avin Pillay, The Petroleum Institute, UAE  
Session Chair: Zong-yi Ma, Chinese Academy of Sciences, China

Title: Large pulsed electron beam surface treatment of woven carbon fiber/ZnO nanorod/polyester resin composites  
Hyung Wook Park, Ulsan National Institute of Science and Technology, Rep. of Korea

Title: The design, synthesis and application of microwave susceptible agents for tumor microwave thermotherapy based on confinement mechanism  
Xianwei Meng, Chinese Academy of Sciences, China

Title: Synthesis and characterization of hybrid nanoparticles for biomedical and environmental remediation applications  
Soubantika Palchoudhury, University of Tennessee, USA

Title: Luminescent periodic microstructures for medical applications  
Keniti Miura, Gunma University, Japan

Title: Alumina-based nanocomposites using graphite nanoplatelets as reinforcement  
Syed Nasimul Alam, National Institute of Technology Rourkela, India

Title: BiVO₄ and WO₃ nanophotocatalysts: Water-splitting and environmental applications  
G. T. Chandrappa, Bangalore University, India

Title: Null current hysteresis for acetylacetone based perovskite solar cells as electron extraction layer  
Abd. Rashid bin Mohd Yusoff, Kyung Hee University, South Korea

Session Introduction

Networking & Refreshments Break

Title: Nitrogen doping into ZnO branched nanowire by plasma treatment and its effect on photo electrochemical performance  
Shrok Allami, Ministry of Science and Technology, Iraq

Young Research Forum

Title: Polymeric nanocomposites gate dielectric for organic thin film transistors  
Davoud Dastan, Savitribai Phule Pune University, India

Title: Engineered metal oxide nanoparticles, nano-bio interaction and toxicology  
Avnika S Anand, Defence Research and Development Organization, India

Title: Density functional theory calculations for the electronic, magnetic, and chemical bonding properties of geometrically frustrated spinel CdCr₂O₄  
Najmeh Bolandhemat, Universiti Putra Malaysia, Malaysia

Panel Discussions

<table>
<thead>
<tr>
<th>Poster Presentations</th>
</tr>
</thead>
</table>
| MSE-01 | Title: A study of natural radioactivity in the welding workshops waste  
Zain M Al-Amoudi, King Abdulaziz University, Saudi Arabia |
| MSE-02 | Title: Synthesis of polymer composites thin films of Cr₂O₃ nanoparticles and study of its optical and electrical properties  
Venkatesha B M, University of Mysore, India |
| MSE-03 | Title: Solid state decarburization of high carbon ferrochromium  
Amit Bhalla, University of Witwatersrand, South Africa |
| MSE-04 | Title: Synthesis of vanadium oxide/carbon nanotubes for anodes for lithium-ion batteries  
Baorui Jia, University of Science and Technology Beijing, P R China |
<table>
<thead>
<tr>
<th>Title</th>
<th>Author/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis of valonia oak (Quercus aegylops) acorn tannin and wood adhesives application</td>
<td>Fatmah Bahabri, King Abdulaziz University, Saudi Arabia</td>
</tr>
<tr>
<td>Rate-dependent hardening model for HCP metals with effect of deformation twinning and dynamic recrystallization</td>
<td>Jonghun Yoon, Hanyang University, South Korea</td>
</tr>
<tr>
<td>Effect of gamma irradiation on the structural and color properties of CR 6-2 polycarbonate</td>
<td>Mymona Abutalib, King Abdulaziz University, Saudi Arabia</td>
</tr>
<tr>
<td>Corrosion inhibition effects of Tungstate and Nitrite ions on sputter-deposited nanocrystalline W-42Cr-5Ni Alloy in 0.5 M NaCl solution</td>
<td>Durga Bhakta Pokharel, Tribhuvan University, Nepal</td>
</tr>
<tr>
<td>Vanadium nitride nanoparticles encapsulated in carbon sheets for stable high energy lithium ion anodes</td>
<td>Haoyang Wu, University of Science and Technology Beijing, China</td>
</tr>
<tr>
<td>An intelligent electronic control unit to limit vehicle speed</td>
<td>Srivas M C, B M S College of Engineering, India</td>
</tr>
</tbody>
</table>

Best Poster Award Presentation

Day 3  September 14, 2016

Chattahoochee-A

Keynote Forum

Introduction
Title: Generating efficient and tunable white light using electronically coupled nanocrystal and molecular building blocks
Pavle V Radovanovic, University of Waterloo, Canada
Title: The scientific adventure of packing: From space saving to material design
Ho-Kei Chan, Harbin Institute of Technology, Shenzhen, China

Sessions:
Mining, Metallurgy and Materials Science  Surface Science and Engineering  Biomaterials and Tissue Engineering  Materials Chemistry and Physics  Electrical, Optical and Magnetic Materials

Session Chair: Padmaja Guggilla, Alabama A&M University, USA
Session Chair: Nezar H Khdary, King Abdulaziz City for Science and Technology, Saudi Arabia

Title: Effects of ionic irradiation on PMN-PT ferroelectric materials for space applications
Padmaja Guggilla, Alabama A&M University, USA
Title: Super high surface area mesoporous carbon for arsenic removal from ground water
Nezar H Khdary, King Abdulaziz City for Science and Technology, Saudi Arabia

Networking & Refreshments

Title: Effect of tempering time on strength and toughness of a ultra-low C medium Mn steel
Hong-Yan Wu, Northeastern University, China
Title: Soft nanomaterials of POSS-based copolymer for stone arts conservation
Ling He, Xian Jiaotong University, China
Title: Dielectric study of hydrogen sulphate ( AHSO₄ and BHSO₄, A= Sodium, B= Potassium) crystals
Azha Periasamy, Bharathiar University, India
Title: Generator retaining ring steel(Mn18Cr18N) prepared by powder metallurgy
Shubin Ren, University of Science and Technology Beijing, China
Title: Biocompatibility and human osteoblast response to template-assisted electrohydrodynamic atomized interlocked ceramic patterns on curved 3D metallic substrates for medical implants
Anouska Nithyanandan, University College London, United Kingdom

Panel Discussions

Memento Presentation to Organizing Committee Members

Lunch Break
Session Chair: Sampath Kumar M C, B.M.S. College of Engineering, India
Session Chair: Veena Prasad, Centre for Nano and Soft Matter Sciences, India

Session Introduction

Title: Application of cleaner development mechanisms
Sampath Kumar M C, B.M.S. College of Engineering, India

Title: Azo substituted achiral bent-core liquid crystals: photo-induced studies in $B_2$ and $B_7$ mesophases
Veena Prasad, Centre for Nano and Soft Matter Sciences, India

Title: Mechanically deformable and programmable nanoscale surface textures with tunable wetting and mechanical properties
Wei Li Lee, Massachusetts Institute of Technology, USA

Title: The study of fatigue property of S500LF wheel spoke steel
Cai-Ru GAO, Northeastern University, China

Title: A low-C 5-Mn ultra-heavy plate steel with high microstructural homogeneity and excellent strength-toughness combination
Jun Hu, Northeastern University, China

Title: Characterization of plasma sprayed CNT reinforced alumina coatings on ASME-SA213-T91 boiler tube steel
Buta Singh Sidhu, IKG Punjab Technical University, India

Title: Parametric investigations into manufacturing of magnetic abrasives by sintering process
Balkar Singh, IKG-Punjab Technical University, India

Young Research Forum

Title: Fracture toughness of austenitic stainless steel welds for ultra-high vacuum and cryogenic applications
Ignacio Aviles Santillana, CERN, Switzerland

Title: Synthesis and luminescence properties of pyrophosphate phosphors doped with rare earth
Wafa Hami, Cadi Ayyad University, Morocco

Panel Discussions

Special Appreciation Awards

Refreshments
6th International Conference and Exhibition on

BIOSENSORS & BIOELECTRONICS

September 22-23, 2016  Phoenix, USA
**Keynote Forum**

**Title:** Advances in terahertz spectroscopy nano-scanner and sub-surface 3D imaging for biomaterial  
*Anis Rahman, Applied Research & Photonics Inc., USA*

**Networking & Refreshment Break**

**Title:** Biosensors for genes, pathogens, parasites, biomarkers and toxins  
*Raj Mutharasan, Drexel University, USA*

**Session:**  
Biosensors | Biosensors Applications | Transducers in Biosensors | Bioelectronics | Biosensors for Imaging | Environmental Biosensors | Gas Sensors

**Session Co-chair:** Jeroen De Buck, University of Calgary, Canada

**Session Chair:** Mahmoud Almasri, University of Missouri, USA

**Title:** Turning the glucose sensor into a versatile point-of-care platform for the detection of a wide range of biological analytes  
*Jeroen De Buck, University of Calgary, Canada*

**Title:** An impedance biosensor for rapid detection of low concentration of *Escherichia coli* O157:H7  
*Mahmoud Almasri, University of Missouri, USA*

**Group Photo**

**Lunch Break**

**Title:** Translating biosensors to market at the university  
*Jeffrey T La Belle, Arizona State University, USA*

**Title:** Shear horizontal surface acoustic wave sensors for rapid detection of enterohemorrhagic *Escherichia coli*  
*Justin T Baca, University of New Mexico, USA*

**Title:** Interferometric biosensors for advanced Point-of-Care diagnostics  
*Ana Belen Gonzalez-Guerrero, Catalan Institute of Nanoscience and Nanotechnology, Spain*

**Title:** Optical and electrical properties of bacteria were based bio-detector for heavy metals (CdCl$_2$ and NiCl$_2$) pollutants  
*Al-Shanawa Maytham Abdala Ali, University of Basra, Iraq*

**Title:** Pedot: Pss and gold nanocomposite activated electrochemical sensor for the recognition of fungal DNA  
*Sabo Wada Dutse, Hussaini Adamu Federal Polytechnic, Nigeria*

**Networking & Refreshment Break**

**Young Researchers Forum**

**Title:** Wearable device for pH monitoring in wounds  
*Paola Fanzio, Delft University of Technology, Netherlands*

**Title:** Tuning the selectivity of nitrogen doped carbon nanotubes using ionic liquid towards electrochemical sensing of dopamine  
*Anju Joshi, Indian Institute of Technology, India*

**Panel Discussion**

Day 2  September 23, 2016

**Hall Name**

**Keynote Forum**

**Title:** Biomedical and environmental sensing applications of lateral wave vector response to refractive index  
*Kevin L Lear, Colorado State University, USA*

**Networking & Refreshment Break**
Title: Biomaterials as biosensors for microbial biomarkers in human tears and saliva: Proof of concept
Mouad Lamrani, Menicon Co., Ltd R&D, Geneva, Switzerland

Title: Backscattering interferometry marries aptamer-based assays to enable quantitation of nerve agent metabolites and human cytomegalovirus in urine at clinical relevant levels
Darryl J Bornhop, Vanderbilt University, USA

Session: DNA Chips and Nucleic acid Sensors | Photonic Sensor Technologies | Biosensing Technologies | Bioinstrumentation | Advancement in Nanotechnology | BioMEMS/NEMS

Session Chair: Kevin L Lear, Colorado State University, USA

Title: Split deoxyribozyme sensors for highly selective analysis of nucleic acids
Yulia V Gerasimova, University of Central Florida, USA

Title: Capacitive sensor for respiratory monitoring
Victoria Wang Yue, Hill-Rom Services Private Limited, Singapore

Session Introduction

Lunch Break

Poster Session

Networking & Refreshment Break

Title: Development toward a multi-marker and label-free platform sensor technology using electrochemical impedance spectroscopy and nanomaterials
Chi Lin, Arizona State University, USA

Title: Automated single cell arrays based on magnetophoretic circuits
Roozbeh Abedini-Nassab, Duke University, USA

Award Ceremony