Tentative Program

5th International Conference on
Physical and Theoretical Chemistry
October 11-13, 2018     Edinburgh, Scotland

Theme: Exploring the Emerging Trends in the Realm of Physical and Theoretical Chemistry

***For available speaker slots***
physicalchemistry@chemistryconference.org

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

Conference Secretariat
One Commerce Center-1201, Orange St. #600, Wilmington, Zip 19899, Delaware, USA
2860 Corporate Circle, Suite 400 Henderson, NV 89074-7722, USA
Email: physicalchemistry@chemistryconference.org ,theoreticalchemistry@chemistryconference.org

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

#### Day 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 1</th>
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<tr>
<td>09.00-10.40</td>
<td>5 Speakers (20 Mins Each)</td>
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<td>10.55-12.35</td>
<td>5 Speakers (20 Mins Each)</td>
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<td>13.25-15.05</td>
<td>5 Speakers (20 Mins Each)</td>
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<td>15.20-17.00</td>
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<table>
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<tr>
<th>Time</th>
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</table>
Major Scientific Sessions

- Theoretical and Computational Chemistry
- Physical Chemistry: A Molecular Approach
- Physical Chemistry of Macromolecules
- Chemical Physics
- Chemical Kinetics

- Surface Science
- Femtochemistry
- Spectroscopy
- Photochemistry
- Quantum Chemistry
- Solid-state Chemistry
- Thermochemistry
- Biophysical Chemistry

Best Poster Award

- You will be given about 5-7 minutes to present your poster including questions and answers. Judges may pose questions during the evaluation of the poster.
- Judges will even evaluate the student’s enthusiasm towards their study, interest and knowledge in the area of their research.
- The winners will be announced at the closing ceremony of the conference. The decision of the winner will be withdrawn if the winner/winners is/are not present at the time of announcement.
- Apart from the judging time you may also be present at the poster to share your research with interested delegates.

Young Researchers Forum

- Present your research through oral presentations.
- Learn about career development and the latest research tools and technologies in your field.
- This forum will give pertinent and timely information to those who conduct research and those who use and benefit from research.
- Develop a foundation for collaboration among young researchers.
- The forum will provide an opportunity for collegial interaction with other young investigators and established senior investigators across the globe.
- Interact and share ideas with both peers and mentors.

General Queries
physicalchemistry@chemistryconference.org

Conference Venue
Edinburgh, Scotland
Glimpses of Physical Chemistry Conferences
Glimpses of Physical Chemistry Conferences
4th International Conference on

PHYSICAL AND THEORETICAL CHEMISTRY

September 18-19, 2017   Dublin, Ireland
Day 1  September 18, 2017

Registrations

Redwood Suite B

Keynote Forum

Introduction

Title: Excited state lifetimes of isolated iron(ii) complexes and electron injection into TiO₂ film
Stefan Haacke, Université de Strasbourg, France

Title: Electron/Hole Transformation between Two Atomic Layers
Junrong Zheng, Peking University, China

Title: Electrical potential near hydrated solid surface by pH spin probes and labels
Elena G Kovaleva, Ural Federal University

Group Photo

Networking and Refreshments Break

Sessions: Physical Chemistry: A Molecular Approach | Physical Chemistry of Macromolecules
Session Chair: Elena G Kovaleva, Ural Federal University, Russia
Session Co-chair: Alex BOEGLIN, Université de Strasbourg, France

Session Introduction

Title: Sum-frequency generation from chiral bisoxazoline metal complexes: Experiments and dft calculations
Alex BOEGLIN, Université de Strasbourg, France

Title: The role of anharmonicity in the confinement effect in zeolites: Structure, spectroscopy and adsorption free energy of ethanol in H-ZSM-5
Roger Rousseau, Pacific Northwest National Laboratory, USA

Title: Electron coupling and electron transfer between two bridged dimolybdenum units
Chun Yuan Liu, Jinan University, China

Title: Experimental and theoretical studies of coordination fullerene polymers conductivity
Krzysztof Winkler, University of Bialystok, Poland

Title: Soft based hypersonic phononics
George Fytas (Talk will be delivered by Yu Cang), Max Planck Institute for Polymer Research, Germany

Title: Theoretical study of the chemical reactions by the combination of quantum mechanical and molecular dynamics methods
Toshiaki Matsubara, Kanagawa University, Japan

Title: Recent advances in quantum monte carlo: Applications to lithium ion – stockmayer clusters, hydrogen isotopic separation, and the investigation of excited state manifolds
Emanuele Curotto, Arcadia University, USA

Title: What is hidden behind a phase diagram?
Fabienne Berthier, Paris-Sud University-CNRS, France

Lunch Break

Sessions: Theoretical and Computational Chemistry | Chemical Physics | Femtochemistry
Session Chair: Vassiliki-Alexandra Glezakou, Pacific Northwest National Laboratory, USA
Session Co-chair: Ivan Štich, Slovak Academy of Sciences, Slovakia

Session Introduction
Networking and Refreshments Break

Title: Molecular design strategies for task-specific solvent technologies
Vassiliki-Alexandra Glezakou, Pacific Northwest National Laboratory, USA

Title: Magnetism and spin transport in transition metal organometallic clusters
Ivan Štich, Slovak Academy of Sciences, Slovakia

Title: Threshold photoelectron and electron-ion coincidence spectroscopies: Past, present and future
Richard Tuckett, University of Birmingham, UK

Title: Homogeneous nucleation of solid, liquid and glass phases close to revolution
Robert F Tournier, University of Grenoble, France

Title: Recent advances in theoretical spectroscopy from ab initio molecular dynamics
Sandra Luber, University of Zurich, Switzerland

Title: Ab initio theory for computing sum frequency generation spectra at aqueous interfaces
Tatsuhiko Ohto, Osaka University, Japan

Title: Ab initio theory for computing sum frequency generation spectra at aqueous interfaces
Isa Degirmenci, Ondokuz Mayis University, Turkey

Panel Discussion

Day 2 September 19, 2017

Redwood Suite B

Keynote Forum

Title: Abnormal deformation behavior in a super-soft material: Amorphous zeolite imidazolate framework (a-zif)
Wai-Yim Ching, University of Missouri-Kansas City, USA

Title: Non-stoichiometric transition metal oxides: On the interplay of structural complexity, electronic correlations and phonon assisted oxygen ion diffusion
Werner PAULUS, University of Montpellier, France

Title: Making headway in understanding the rotation-vibration spectrum of protonated methane CH₅⁺ - an extremely flexible molecule
Per Jensen, University of Wuppertal, Germany

Networking and Refreshments Break

Sessions: Photochemistry | Solid-state Chemistry | Spectroscopy | Surface Science | Quantum Chemistry | Biophysical Chemistry
Session Chair: Werner PAULUS, University of Montpellier, France
Session Co-Chair: Hideaki Shirota, Chiba University, Japan
Session Introduction

Title: Temperature dependent spectral features of room temperature ionic liquids: Aromatic vs. nonaromatic
Hideaki Shirota, Chiba University, Japan

Title: Complex magnetic phases and photo-enhanced ferromagnetism in nano-sized core-shell Prussian blue analogue cubes
Wen-Hsien Li, National Central University, Taiwan

Title: Photoinduced electron transfer through silicon bridge: The source for blue-green emission
Malgorzata Bayda, Adam Mickiewicz University, Poland

Title: Why is gas phase photolysis of 2-nitrophenol a significant source of OH in the polluted atmosphere?
Lei Zhu, University at Albany, USA

Title: Intra- and intermolecular strategies to improving photoluminescence quantum yields of n-π* fluorophores capable of harvesting triplet excitons
Youngmin You, Ewha Womans University, South Korea

Title: A computational investigation of the photochemical oxaziridine conversion process of some experimentally analyzed small-chain conjugated nitrones
Anjan Chattopadhyay, BITS Pilani, India

Title: Topotactic synthesis of mixed-anion oxide epitaxial thin films
Akira Chikamatsu, The University of Tokyo, Japan

Lunch Break

Title: On the structure and tribological effect of interfacial water between a graphite surface and metallic or semiconducting counter bodies
Arnaud Caron, KoreaTech - Korea University of Technology and Education, South Korea

Title: Anion and cation diffusion in complex oxides
Manfred Martin, RWTH Aachen University, Germany

Title: New Aspects of an old class of compounds: Tetrelphosphides and their thermoelectric performance
Ulrich Wedig, Max Planck Institute for Solid State Research, Germany

Title: Gold nanoparticles characterization by scattering correlation spectroscopy
Nadia Djaker, Université Paris 13, France

Title: The golden doxorubicin: A tunable design of gold (III)-Doxorubicin complex – PEGylated nanocarrier for oncological therapy
Jolanda Spadavecchia, Université Paris 13, France

Title: Particle growth, assembly and extended particle-solvent interactions in deep eutectic solvents
Joshua Hammons, Lawrence Livermore National Laboratory, USA

Networking and Refreshments Break

Poster Presentations

PC001
Title: Modelling of electronic spectra of matrix-isolated atoms: Comparison of theoretical approaches
Dmitry S Bezrukov, Skolkovo Institute of Science and Technology, Russia

PC002
Title: Inversion of the lowest singlet excited states induced by the presence of the silicon atom in a styrlycarbazole derivative
Karolina Rachuta, Adam Mickiewicz University, Poland

PC003
Title: Single pulse shock tube investigation of the inter-isomerization and decomposition mechanism of quinoline and isoquinoline. Experimental results and computer simulation
Faina Dubnikova, The Hebrew University of Jerusalem, Israel

PC004
Title: Exciton-mediated electrochemical degradation of blue-phosphorescent organic light-emitting devices
Sinheui Kim, Ewha Womans University, South Korea

PC005
Title: Circularly polarized phosphorescence from cyclometalated Ir(III) complexes having axially chiral ligands
Gyurim Park, Ewha Womans University, South Korea
PC006

Title: Very fast and surprisingly accurate GIAO-mPW1PW91/3-21G//PM7 scaling factor for 13C NMR chemical shifts calculation
Fabio L P Costa, UFG-REJ, Brasil

Young Researchers Forum

Title: Interactions between sodium fire aerosols and fission products- a theoretical chemistry and experimental approach
Ankita Jadon, University of Lille 1, France
Title: Strongly red-shifted photoluminescence band induced by molecular twisting in cyanine (cy3) dye films
Surendra B Anantharaman, Swiss Federal Laboratories for Materials Science and Technology, Switzerland
Title: Mechanistic insight towards the activation of aerobic oxidative coupling reactions of alcohols on nanoporous gold
Wilke Dononelli, University of Oldenburg, Germany
Title: Correlations between structural and optical properties of peroxy bridges from first principles
Blaž Winkler, University of Nova Gorica, Slovenia
Title: Tolerance factors for organic-inorganic perovskites: Applicability only for high temperature phases
Markus Becker, Carl von Ossietzky University, Germany
Title: Multiphoton-fragmentation of molecules: REMPI and VMI of HBr
Arnar Hafliðason, University of Iceland, Iceland

Awards & Closing Ceremony
Break Out @ Fahrenheit Suite

Day 2  September 19, 2017

Sessions: Photochemistry | Solid-state Chemistry | Spectroscopy | Surface Science | Quantum Chemistry | Biophysical Chemistry
Session Chair: Titus A Beu, Babeş-Bolyai University, Romania
Session Co-Chair: Shigeharu Kittaka, Okayama University of Science, Japan

Session Introduction

Title: CHARMM force field and molecular dynamics simulations of polyethylenimine chains
Titus A Beu, Babeş-Bolyai University, Romania
Title: Neutron scattering study of super cooled water confined in mesoporous silicas, MCM-41 and SBA-16: Role of component pores and their size
Shigeharu Kittaka, Okayama University of Science, Japan
Title: 57-Fe mössbauer spectroscopy on Fe-Mg-O nanocomposite particles grown by a novel chemical vapor synthesis method
Werner Lottermoser, Salzburg University, Austria
Title: In situ hard X-ray photoelectron study of O₂ and H₂O adsorption on Pt nanoparticles
Masaharu Oshima, University of Tokyo, Japan
Title: Pyridinium salts as photoinduced electron traps
R Marshall Wilson, Bowling Green State University, USA
Title: Unpicking vibrational and vibrational torsional couplings in substituted benzenes
Timothy G Wright, University of Nottingham, UK
Title: Reactive surface sites at metal oxide nanoparticles: From fundamental studies to potential medical application
Slavica Stankic, Paris Institute of Nanosciences-CNRS, France

Lunch Break
**Title: An embedding technique based on a strategic use of atomic pseudo potentials**  
Yannick Carissan, Aix-Marseille University, France

**Title: Theoretical study of magnetic properties in redox-active ruthenium complexes**  
Corentin BOILLEAU, Polish Academy of Sciences, Poland

**Title: Water interaction and dissociation on the (0001) hematite surface: A DFT+U approach**  
Fabio R Negreiros, Federal University of ABC, Brazil

**Title: Polymer-brush lubrication**  
Torsten Kreer, Leibniz Institute for Polymer Research Dresden e. V. (IPF), Germany

**Title: Excited-state symmetry breaking of linear quadrupolar chromophores: A transient absorption study**  
Nadia Dozova, Pierre and Marie Curie University, France

**Title: Phase equilibrium of the melt-vapor in the tellurium-sulfur system**  
Valery N Volodin, Institute of Metallurgy and Ore Benefication, Kazakhstan

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**Networking and Refreshments Break**

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**Bookmark your dates**

5th International Conference on

**PHYSICAL AND THEORETICAL CHEMISTRY**

October 11-13, 2018 | Edinburgh, Scotland

E-mail: physicalchemistry@chemistryconference.org; theoreticalchemistry@chemistryconference.org  
Website: physicalchemistry.conferenceseries.com
Scientific Program

European Chemistry Congress

June 16-18, 2016   Rome, Italy
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 Introduction

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 trimetallo cyclophanes 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

Group Photos

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
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

Synthesis of natural biologically active poly[3-(3,4-dihydroxyphenyl)-glyceric acid] analogues
Maia Merlani, Tbilisi State Medical University, Georgia

Preparation and synthetic application of 1-Azoniabicyclo[n.1.0]alkanes
Hyun-Joon Ha, Hankuk University of Foreign Studies, Korea

Sulfur based metal complexes for synthesis of semiconductor nanoparticles
Makwena Justice Moloto, Vaal University of Technology, South Africa

Functionalization of Keggin type nickel substituted phosphotungstate by imidazole: Synthesis, characterization and catalytic activity
Anjali Patel, The M S University of Baroda, India

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

Coffee Break

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

Protein-specific approach to osteopontin purification from Chlamydomonas reinhardtii
Zivko Nikolov, Texas A&M University College Station, USA

Green forest and agricultural waste bio-refinery techniques and breakthrough materials
Janis Gravitis, Latvian State Institute of Wood Chemistry, Latvia

Photocatalytic H2-production by homogeneous and heterogeneous advanced materials
Peter Brüggeller, University of Innsbruck, Austria

New conceptual diary lidonium salts for metal-free arylation of carboxylic acids and other coupling reactions
Toshifumi Dohi, Ritsumeikan University, Japan

Loss mechanism in the open circuit voltage of polymer solar cells
Zhicai He, South China University of Technology, P R China

Preparation and swelling capacity of superabsorbent polymer composites based on attapulgite clay
El-Refaie Kenawy, Tanta University, Egypt

Laccases: biocatalysts towards new heterocyclic cores
M Paula Robalo, Instituto Politécnico de Lisboa, Portugal

Effect of Quercetin and Apigenin on LDL receptor gene (LDLR) and Hydroxy-methyl gluturate reductase gene (Hmgcr) in a cholesterol attenuating trial.
Marwa E Kenawy, Tanta University, Egypt

Keynote Forum

Selectivity control of Au-catalyzed oxidation of glycerol in water
Bo-Qing Xu, Tsinghua University, China

Functions of nucleic acids with non-canonical structures
Naoki Sugimoto, Konan University, Japan

Pyrrolo[3,2-b]pyroles-new electron-rich functional π-electron system
Daniel T Gryko, Polish Academy of Sciences, Poland

Poster Presentations

Unnatural fluoro-oxindole alkaloids produced by Uncaria guianensis plantlets
Adriana A Lopes, Universidade de Ribeirão Preto, Brazil
ECPP002  Title: Spectrophotometric investigation of early lanthanide(III) porphyrin complexes  
Melitta Patrícia Kiss, University of Pannonia, Hungary

ECPP003  Title: Photoinduced heterogenous catalysis with TiO₂ and kaolinite  
Orsolya Fónagy, University of Pannonia, Hungary

ECPP004  Title: Photocatalytic decomposition of a nonionic detergent  
Hegedüs Péter, University of Pannonia, Hungary

ECPP005  Title: Patented method-based evaluation of the toxicity of some uncoupling dinitrophenol-like compounds  
Marius Zaharia, Alexandru Ioan Cuza University, Romania

ECPP006  Title: Synthesis, antiproliferative activity and molecular docking of new colchicine derivatives  
Adam Huczynski, Adam Mickiewicz University, Poland

ECPP007  Title: Antimycobacterial activity and QSAR studies of 2H-chromene and coumarin based hydrazones  
Violina T Angelova, Medical University of Sofia, Bulgaria

ECPP008  Title: Selective and stoichiometric fatty acids sensing with a polydiacetylene liposome  
Chang Wook Song, Pohang University of Science and Technology, Republic of Korea

ECPP009  Title: Novel two-photon dyes: Minimal autofluorescence in tissue imaging  
Juryang Bae, Pohang University of Science and Technology, Republic of Korea

ECPP010  Title: Lysosomal zinc ions imaging with two-photon fluorescent probe  
Hyeonjin Park, Pohang University of Science and Technology, Republic of Korea

ECPP011  Title: How to enhance fluorescence and two-photon properties of typical dipolar dyes in aqueous media?  
Hyerim Kim, Pohang University of Science and Technology, Republic of Korea

ECPP012  Title: Ionic conductivity on cyano-bridged bimetal assemblies  
Kosuke Nakagawa, The University of Tokyo, Japan

ECPP013  Title: A fluorenyl-based metal-organic framework with photocatalytic property  
Rong-Xin Yuan, Changshu Institute of Technology, P.R.China

ECPP014  Title: Palladium nanoparticles supported on four different materials as efficient catalysts for suzuki cross-coupling reactions  
Bilgehan Guzel, University of Cukurova, Turkey

ECPP015  Title: Synthesis of ScCO₂ soluble perfluorinated chiral shiff-base ligand and its metal complexes  
Burcu Darendeli, University of Cukurova, Turkey

ECPP016  Title: Synthesis and enzyme inhibition study of dihydrofurocumarin and dihydrofuropyrene compounds  
Asli Ustalar, Kocaeli University, Turkey

ECPP017  Title: Signaling of Hg(II) ions by reaction-based probes based on depro-tection of dithiane  
In Jung Chang, Chung-Ang University, Republic of Korea

ECPP018  Title: Smartphone-based fluorescence signaling of hypochlorite in tap water by oxidative hydrolysis of sulfonhydrazone  
Min Jeoung Cho, Chung-Ang University, Republic of Korea

ECPP019  Title: Dual signaling of the water content of biofuel-relevant ethanol and butanol by pyranines  
Yun-uk Jung, Chung-Ang University, Republic of Korea

ECPP020  Title: Photophysical properties of boron trifluoride complexes based on 2(2',4'-dihydroxyphenyl) benzothiazole and benzimidazole  
Sang Hun Lee, Chung-Ang University, Republic of Korea

ECPP021  Title: Phytochemical screening and antitumor effect of ethanol extract of Egyptian wild plants  
Thoria Diab, Tanta University, Egypt

ECPP022  Title: Calcineurin levels and activity in breast cancer: Relation to apoptosis  
Abeer Abdel Hamid Ahmed Khamis, Tanta University, Egypt

ECPP023  Title: Protection and functionalization of magnetic iron oxide nanoparticles with phthalic acid for the efficient removal of reactive black 5 from aqueous solutions  
Gehan M Nabil, Alexandria University, Egypt
| ECPP024 | 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 |
|---|---|
| ECPP025 | Title: A novel iron(II) selective membrane electrode based on 2-cyanomethyl n-methyl-n-phenyl di thiocarbamate and its applications  
Tugba Ozer, Yildiz Technical University, Turkey |
| ECPP026 | Title: Computer simulation of the molecules of thermotropic substituted biphenyls  
Abulyaissova L K, Buketov State University of Karagandy, Kazakhstan |
| ECPP027 | Title: Comparative study of corrosion of iron in cyanide and thiourea media in hydrometallurgical processes  
Hugo Romero, Universidad Técnica de Machala, Ecuador |
| ECPP028 | 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 |
| ECPP029 | Title: In situ preparation of nitrogen enriched hierarchically nanoporous carbon from polybenzoxazine precursor for CO₂ capture and storage  
Nicharat Manmuanpom, Chulalongkorn University, Bangkok |
| ECPP030 | 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 Introduction**

**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

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<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Promotion of sorghum hybrids bran grown in southern italy for PHB ecological production by <em>Sphingomonas cynarae</em></td>
<td>Roberta Romano</td>
<td>University of Salento, Italy</td>
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<tr>
<td>Synthesis of NiO nanoparticles for new nanocomposite materials</td>
<td>Sevil Çetinkaya</td>
<td>Kirikkale University, Turkey</td>
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<td>Antioxidant activity of wild garlic extract (<em>Allium ursinum</em>) obtained by subcritical water extraction</td>
<td>Alena Tomskí</td>
<td>University of Novi Sad, Serbia</td>
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<td>Preparation of biological active steroids</td>
<td>Sevinc İlkar Erdagi</td>
<td>Kocaeli University, Turkey</td>
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<td>Synthesis of 4-amino-N-4-pyridin-1,8-naphthalimide, a new ligand for complexes and metalorganic frameworks</td>
<td>Ulisses Fiorin Angelo</td>
<td>University of São Paulo, Brazil</td>
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<td>In vivo anti-wrinkle and anti-melasma activities of peptides isolated from Pigeon pea (<em>Cajanus cajan</em> L. <em>Millsp</em>)</td>
<td>Tuanta Sematong</td>
<td>Thailand Institute of Scientific and Technological Research, Thailand</td>
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<td>Effect of porogen type and cationic, anionic and nonionic surfactant ratio on the properties of porous polymer supports</td>
<td>Vesile Şima Ünnü</td>
<td>Kirikkale University, Turkey</td>
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<td>In vivo anti-wrinkle and anti-melasma activities of peptides isolated from Pigeon pea (<em>Cajanus cajan</em> L. <em>Millsp</em>)</td>
<td>Sang Jun Lee</td>
<td>Kwangwoon University, Korea</td>
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<td>Air annealing technique to improve photoelectric properties of pristine graphene</td>
<td>Dapeng Wei</td>
<td>Chinese Academy of Sciences, China</td>
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<td>Development of lateral-flow immunossay for the diagnosis of laryngopharyngeal reflux disease</td>
<td>Jiyoon Kwon</td>
<td>Kwangwoon University, Korea</td>
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<td>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</td>
<td>Silvia Antonia Brandan</td>
<td>Institute of Inorganic Chemistry, Argentina</td>
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<td>Multiresidue analysis of selected pharmaceutical compounds in poultry manure by gas chromatography—mass spectrometry</td>
<td>Ramón Aznar</td>
<td>Spanish National Institute for Agricultural and Food Research and Technology, Spain</td>
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<td>Study on the micro pulsed electro-chemical machining of invar alloy according to electrolyte variables</td>
<td>Seong-Hyun Kim</td>
<td>Inha University, Republic of Korea</td>
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<td>Antimicrobial activity of collagen/silver doped hydroxyapatite composites against gram-positive and gram-negative bacteria</td>
<td>A M Prodan</td>
<td>Carol Davila University of Medicine and Pharmacy, Romania</td>
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<tr>
<td>Antimicrobial activity of collagen/silver doped hydroxyapatite composites against gram-positive and gram-negative bacteria</td>
<td>C L Popa</td>
<td>National Institute of Materials Physics, Romania</td>
</tr>
</tbody>
</table>
| 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 ZnMoSb₂O₂ 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 Mumtaz 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

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### Day 3 June 18, 2016

**Track 11: Medicinal Chemistry
Track 12: Materials Chemistry**

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<th>Session Introduction</th>
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<td><strong>Session Chair:</strong> Brian W Dymock, University of Singapore, Singapore</td>
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<tr>
<td><strong>Session Co-chair:</strong> Marc Le Borgne, Université Lyon, France</td>
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<thead>
<tr>
<th>Title</th>
<th>Author</th>
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<tr>
<td>Ruthenium organometallic compounds as promising anti-metastatic drugs for breast cancer chemotherapy</td>
<td>M Helena Garcia, Universidade de Lisboa, Portugal</td>
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<tr>
<td>Polymer-metal conjugates: Versatile scaffolds for the synthesis of new antitumor drugs</td>
<td>Andreia Valente, Universidade de Lisboa, Portugal</td>
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<td>Novel functional materials based on cyanido-bridged metal assemblies and metal oxides</td>
<td>Shin-ichi Ohkoshi, The University of Tokyo, Japan</td>
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<tr>
<td>The medicinal chemist's toolbox: how to use it to develop small molecule CK2 inhibitors</td>
<td>Marc Le Borgne, Université Lyon, France</td>
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<th>Coffee Break</th>
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<td>Designed bispecific molecules selectively inhibiting both JAK2 and HDAC at low nanomolar concentrations</td>
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<tr>
<td>In silico screening of Aloysia citrodora Palau. leaf essential oil for anticholinesterase inhibitors</td>
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<tr>
<td>Design of active and durable catalysts with non-precious materials for oxygen reduction and evolution reactions: First principles prediction and experimental validation</td>
</tr>
<tr>
<td>The effect of doping NiMgAl catalysts with lanthanum on the dry reforming of methane</td>
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<tr>
<td>S-Nitrosothiol-modified silica/polymer hybrid nanofibers as a nitric oxide storage/delivery scaffold</td>
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<tr>
<th>Lunch Break</th>
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<tbody>
<tr>
<td>Study of intermolecular and intramolecular vibrations in heterocyclic aromatic hydrocarbons</td>
</tr>
<tr>
<td>From discrete to supported antibacterial calixarenes: toward bacteriophilic materials</td>
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<tr>
<td>First-principles calculation of ε-Fe₂O₃ with a huge coercive field</td>
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<tr>
<td>Thymus and Origanum species growing in Turkey: Their phytochemical and biological activity properties</td>
</tr>
<tr>
<td>Bentonite-Treatment of Bentonite with Na₂CO₃ and MgO</td>
</tr>
<tr>
<td>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?</td>
</tr>
</tbody>
</table>
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

Award Ceremony
**Day 1 **

**March 31, 2016**

**Registrations**

**Melia Meeting 4 & 5**

**conference series.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 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: Wlodzimierz 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
Wlodzimierz 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

Session Introduction

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 monosaccharides
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 β-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-Villacortes, 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-$\text{WS}_2$ ($\text{MoS}_2$)
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 $\text{WS}_2$ and nanowires of $\text{MoS}_2$
Johann G Meier, ITAINNOVA Instituto Tecnológico de Aragón, Spain
Scientific Program

6th International Conference and Exhibition on

Materials Science and Engineering

September 12-14, 2016    Atlanta, USA
Registrations

Chattahooche-A

Day 1 September 12, 2016

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

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

Lunch Break

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
Memento Presentation to Organizing Committee Members

Lunch Break

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

Session Introduction

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

Panel Discussions
Networking & Refreshments Break

Young Research Forum

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

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 CdCr$_2$O$_4$
Najmeh Bolandhemat, Universiti Putra Malaysia, Malaysia

Panel Discussions
Poster Presentations

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 Cr$_2$O$_3$ 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
MSE-05  
Title: Analysis of valonia oak (Quercus aegylops) acorn tannin and wood adhesives application  
Fatmah Bahabri, King Abdulaziz University, Saudi Arabia

MSE-06  
Title: Rate-dependent hardening model for HCP metals with effect of deformation twinning and dynamic recrystallization  
Jonghun Yoon, Hanyang University, South Korea

MSE-07  
Title: Effect of gamma irradiation on the structural and color properties of CR 6-2 polycarbonate  
Mymona Abutalib, King Abdulaziz University, Saudi Arabia

MSE-08  
Title: Corrosion inhibition effects of Tungstate and Nitrite ions on sputter-deposited nanocrystalline W–42Cr–5Ni Alloy in 0.5 M NaCl solution  
Durga Bhakta Pokharel, Tribhuvan University, Nepal

MSE-09  
Title: Vanadium nitride nanoparticles encapsulated in carbon sheets for stable high energy lithium ion anodes  
Haoyang Wu, University of Science and Technology Beijing, China

MSE-10  
Title: An intelligent electronic control unit to limit vehicle speed  
Srivas M C, B M S College of Engineering, India

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

Session Introduction
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\textsubscript{7} and B\textsubscript{2} 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
Scientific Program

6th International Conference and Exhibition on

BIOSENSORS & BIOELECTRONICS

September 22-23, 2016   Phoenix, USA
**Scientific Program**

**Day 1  September 22, 2016**

**Keynote Forum**

**Introduction**

*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 Chair:** Mahmoud Almasri, University of Missouri, USA  
**Session Co-chair:** Jeroen De Buck, University of Calgary, Canada

*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 escherichiacoli 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 (CdCl₂ and NiCl₂) 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**

**Keynote Forum**

*Title: Biomedical and environmental sensing applications of lateral wave vector response to refractive index*

*Kevin L Lear, Colorado State University, USA*
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

Workshop on A to Z of a terahertz spectroscopy and imaging experiment
by
Anis Rahman, Applied Research & Photonics, Inc., USA

Lunch Break

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

Young Researchers Forum

Title: The BIOFOS-LoC: Microring resonator based biophotonic system for food analysis
George Tsekenis, Biomedical Research Foundation of the Academy of Athens, Greece

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

Poster Session

Award Ceremony

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