Scientific Program

2nd International Conference and Exhibition on

Materials Science and Chemistry

July 13, 14 2017 Berlin, Germany
Day 1  July 13, 2017

08:15-09:15  Registrations

Sylt 3

ConferenceSeries.com 09:15-09:25

Opening Ceremony

Keynote Forum

09:25-09:30  Introduction
09:30-10:00  Selected applications of molecular spectroscopy in cultural heritage studies
Ian S Butler, McGill University, Canada
10:00-10:30  Strategies for materials development in the field of solar light-driven water splitting
Sandra Luber, University of Zurich, Switzerland

Group Photo

Networking & Refreshments Break 10:30-10:45 @ Sylt Foyer

Sessions: Materials Science and Engineering | Materials Chemistry in Developing Areas | Materials Synthesis and Characterization

Session Chairs: Patrick S Grant, Oxford University, UK
               Alain Demourgues, University of Bordeaux, ICMCB-CNRS, France
Session Co-chair: Stéphane Cordier, Institute of Chemical Sciences of Rennes, CNRS, France

Session Introduction

10:45-11:10  Title: Novel manufacturing and materials combinations for structured electrodes with improved energy storage performance
Patrick S Grant, Oxford University, UK
11:10-11:35  Title: DFT study on the partial oxidation mechanism of benzyl alcohol to benzaldehyde by \( \text{O}_2 \) on \( \text{TiO}_2 \) surface under visible-light irradiation
Hisayoshi Kobayashi, Kyoto Institute of Technology, Japan
11:35-12:00  Title: Anions tied up in a molecular knot
Rana A Bilbeisi, American University of Beirut, Lebanon
12:00-12:25  Title: Ir catalyzed asymmetric tandem reaction of meso-diols
Takeyuki Suzuki, Osaka University, Japan
12:25-12:50  Title: Inorganic metal atom clusters as phosphorescent dyes for the design of hybrid copolymers and nanomaterials
Stéphane Cordier, Institute of Chemical Sciences of Rennes, CNRS, France

Lunch Break 12:50-13:50 @ Restaurant Rienäcker

13:50-14:15  Title: New cerium and praseodymium-based oxides as redox catalysts
Alain Demourgues, University of Bordeaux, ICMCB-CNRS, France
14:15-14:40  Title: Mechnanochemical synthesis: Novel materials for magnetic cooling applications
V P Balema, Ames Laboratory, US DOE, USA
14:40-15:05  Title: The heterogeneous distribution of the transition metal oxidation states controls the magnetic and electronic properties of perovskite related oxides
Olivier Toulemonde, University de Bordeaux, ICMCB-CNRS, France

Video Presentation

15:05-15:30  Title: Analysis and structural characterization of pigments and materials used in Nicolae Grigorescu heritage paintings
Mihaela Olaru, Petru Poni Institute of Macromolecular Chemistry, Romania
Young Researchers Forum

15:45-16:00

Title: Investigations on properties of polyhedral oligomeric silsesquioxane (POSS) and halloysites nanotubes (HNT) reinforced polyurethane elastomer hybrid nano-composites

Alinda Oyku Akar, Ravago R&D Center, Turkey

16:00-16:15

Title: Solubilization of phosphate minerals using organic acids and implications on rare earth processing

Daniel E Lazo, Curtin University, Australia

16:15-16:30

Title: Protein adsorption from aqueous solution by alumina supports: A new process for enzyme recovery and reuse

Razieh Sadraei, University of Torino, Italy

16:30-16:45

Title: Intramolecular locked dithioalkyl bithiophene based semiconductors for high performance organic field effect transistors

Sureshraju Vegiraju, National Central University, Taiwan

16:45-17:10

Special Talk: Highlight of spark plasma sintering effect through the structural study and luminescence properties of YNbO$_3$:Eu$^{3+}$

Véronique Jubera, University of Bordeaux, ICMCB-CNRS, France

Panel Discussion

Day 2 July 14, 2017

Sylt 3

Sessions: Polymer Materials and Technology | Applied Materials Chemistry | Materials Chemistry and Physics | Nanomaterials

Session Chair: Hwan Kyu Kim, Korea University, South Korea
Session Co-chair: P Hemalatha, Qatar University, Qatar

Session Introduction

09:00-09:25

Title: Infrared and Raman spectroscopic study of the effect of high mechanical pressures on selected organometallic complexes embedded in poly(methylmethacrylate)

Ian S Butler, McGill University, Canada

09:25-09:50

Title: Inorganic nanotubes and fullerene-like nanoparticles: Progress report

Reshef Tenne, Weizmann Institute, Israel

09:50-10:15

Title: Organic and polymeric semiconductor materials for commercially useful dye-sensitized solar cells

Hwan Kyu Kim, Korea University, South Korea

10:15-10:40

Title: Design and synthesis of hybrid nano-objects of unconventional morphologies

M Tréguer-Delapierre, University of Bordeaux, ICMCB-CNRS, France

Networking & Refreshments Break 10:40-10:55 @ Sylt Foyer

10:55-11:20

Title: Dual purpose antimicrobial phase change materials

Carl M Lentz, Microtek Laboratories, USA

11:20-11:45

Title: Piezoelectric and dielectric properties of poly(vinylidene fluoride)/ZnO nanocomposites

P Hemalatha, Qatar University, Qatar

11:45-12:10

Title: Photocatalytic and gas sensing applications for lanthanide-doped/co-doped ZnO nanoparticles

Sonik Bhatia, Kanya Maha Vidyalaya, India

12:10-12:35

Title: Effect of siwak and bamboo fibers on tensile properties of self-cure acrylic resin used for denture applications

Jawad K Oleiwi, University of Technology, Iraq
Title: The effect of laser penetration depth on photothermal ablation of cancer cells by surface functionalized Fe₃O₄

Donglu Shi, Tongji University, China

Lunch Break 13:00-14:00 @ Restaurant Rienäcker

Poster Presentations 14:00-14:30 @ Sylt Foyer

Poster Judge: M Tréguer-Delapierre, University of Bordeaux, ICMCB-CNRS, France

<table>
<thead>
<tr>
<th>Title</th>
<th>Poster:</th>
<th>Institution</th>
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<tbody>
<tr>
<td>PPMC001 Title: Synthesis of silver vanadates (AgVO₃, Ag₃VO₄, and Ag₄V₂O₇) by controlled hydrothermal method and their photocatalytic properties</td>
<td>Chung-Shin Lu, National Taichung University of Science and Technology, Taiwan</td>
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<tr>
<td>PPMC002 Title: Synthesis and characterization of conductive core-shell Ag-polystyrene latex particles used as fillers in anisotropic conductive films</td>
<td>Chia-Fen Lee, Chia Nan University of Pharmacy and Science, Taiwan</td>
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<td>PPMC003 Title: Polymerization of N-1-naphthylacrylamide revisited</td>
<td>Valeria Pozzoli, University of Buenos Aires, Argentina</td>
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<td>PPMC004 Title: Mg²⁺ doped nano-hydroxyapatite/chitosan: Synthesis, characterization and study on bio-properties</td>
<td>Mina Samadipour, K N Toosi University of Technology, Iran</td>
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<td>PPMC005 Title: The effect of catalyst preparation for the competitive hydrogenation of an octanal/octene mixture using Cu–SCILL catalysts</td>
<td>Letisha Deeplal, University of KwaZulu-Natal, South Africa</td>
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<td>PPMC006 Title: State of the art on laser sealing of zirconia-based plasma sprayed thermal barrier coatings</td>
<td>Maryam Ali Bash, University of Technology, Iraq</td>
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<td>PPMC007 Title: Enhancement of photovoltaic characteristics of Si nanostructure via metal-assisted etching</td>
<td>Falah A H Mutlak, University of Baghdad, Iraq</td>
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Sessions: Current Innovations in Materials Chemistry | Research Aspects of Materials Chemistry | Role of Graphene in Advanced Materials

Session Chair: Janah Shaya, University of Strasbourg, France
Session Co-chair: Yan Jiao, University of Adelaide, Australia

Session Introduction

14:30-14:55 Title: Crystallite size, composition and structural feature correlations and their impact on opto-electronic properties of inorganic oxides
Manuel Gaudon, University of Bordeaux, France

14:55-15:20 Title: Crystalline characterization in atomistic simulation by predominant and cumulative atomic common neighborhood perspective
Ali Radhi, University of Toronto, Canada

15:20-15:45 Title: Electronic properties of graphene on metal substrates
Elena Voloshina, Humboldt University of Berlin, Germany

Networking & Refreshments Break 15:45-16:00 @ Sylt Foyer

16:00-16:25 Title: Towards liquid optoelectronics
Janah Shaya, University of Strasbourg, France

16:25-16:50 Title: Evaluation of doped graphene materials for electrochemical hydrogen evolution reaction and oxygen reduction reaction
Yan Jiao, University of Adelaide, Australia

16:50-17:15 Title: Effect of laser sealing on hot corrosion resistance of ceria-yttria stabilized zirconia thermal barrier coating exposed to eutectic vanadium pentoxide-sodium sulfate
Maryam Ali Bash, University of Technology, Iraq
Title: How to highlight the history of a material through the registration of luminescence properties
Véronique Jubera, University of Bordeaux, ICMCB-CNRS, France

Title: How green is green nano?
Reshma Karkera, A J Institute of Dental Sciences, India

Bookmark your dates
6th International Conference and Exhibition on
Materials Science and Chemistry
March 22-23, 2018 London, UK

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