EuroSciCon

Crystallography 2018

June 04-05

London, UK



Day 1, Agenda

General Session

08:00 AM — INTRODUCTION

09:00 AM — PLENARY

10:00 AM — KEYNOTE

Networking & Refreshments Break @ Foyer

	HALL 01	HALL 02	HALL 03
11:00 AM	Talks On: **Chemical Crystallography**	Talks On: **Crystallography of Novel Materials**	Talks On: **Electron Crystallography**
	SESSION DISCUSSION	**SESSION DISCUSSION**	**SESSION DISCUSSION**
02:00 PM	Panel Over: **Novel crystallization strategies for XFEL studies**	Panel Over: **Inorganic and Organic Crystal Studies**	Panel Over: **Engineering of Crystalline and Non-crystalline Solids**
	Workshop On: **Colloidal crystallization**	Workshop On: **Crystallography research**	Workshop On: **Electronic properties of single crystals**
	Lunch Break @ Restaurant	***Lunch Break @ Restaurant***	***Lunch Break @ Restaurant***
04:00 PM	Talks On: **Crystallography in Biology**	Talks On: **Crystallographic Defects**	Talks On: **Crystal Growth**
	Lectures on: **Powder diffraction**	Lectures on: **Structural plasticity of proteins**	Lectures on: **Electron Diffraction in Crystallography**
06:00 PM	Session On: **Cryo-electron microscopy (cryo-EM)**	Session On: **Industrial Crystallization**	Session On: **Protein crystallography and structures**
	NETWORKING	**NETWORKING**	**NETWORKING**

Day 2, Agenda

General Session

08:00 AM — INTRODUCTION

09:00 AM — PLENARY

10:00 AM — KEYNOTE

Networking & Refreshments Break @ Foyer

	HALL 01	HALL 02	HALL 03
11:00 AM	Talks On: **Recent development in the X-ray studies**	Talks On: **Crystallography Applications**	Talks On: **Advanced Crystallography**
	SESSION DISCUSSION	**SESSION DISCUSSION**	**SESSION DISCUSSION**
02:00 PM	Panel Over: **Liquid Crystals and Quasicrystals**	Panel Over: **Chemical Crystallography: General Interest**	Panel Over: **2D Crystal Engineering**
	Workshop On: **Protein crystallization**	Workshop On: **Polymorphs**	Workshop On: **Diffractometer**
	Lunch Break @ Restaurant	***Lunch Break @ Restaurant***	***Lunch Break @ Restaurant***
04:00 PM	Talks On: **Precession electron diffraction (PED)**	Talks On: **Nuclear magnetic resonance crystallography (NMR crystallography)**	Talks On: **Modeling of polymer crystals**
	Lectures on: **Advances in X-ray and Neutron Crystallography**	Lectures on: **X-ray fluorescence (XRF)**	Lectures on: **X-ray scattering (SAXS)**
06:00 PM	Session On: **Pharmaceutical Co-crystals**	Session On: **Nanocrystallography**	Session On: **Crystallography Companies and Market Analysis**
	NETWORKING	**NETWORKING**	**NETWORKING**

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City Attractions









City Attractions









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Day 1 October 17, 2016

Registrations

Windsor I

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Opening Ceremony

Keynote Forum

Introduction

Title: Crystal structure and organic solid-state reactions

Gerd Kaupp, University of Oldenburg, Germany

Networking and Refreshments Break and Group Photo

Group Photo @ Windsor I

Title: Orientational disorder of dipolar molecules: A key to understand polarity formation in materials

Jurg Hulliger, University of Berne, Switzerland

Panel Discussion

Sessions: Advanced Crystallography | Crystallography in Biology | Recent development in X-ray studies and Crystallography Applications

Session Chair: Gerd Kaupp, University of Oldenburg, Germany

Session Introduction

Title: Breathing crystals - P,T-induced dynamics of heterospin crystals
Victor Ovcharenko, International Tomography Center, Russia
Title: Structure-based mechanistic insights into PAM-dependent spacer acquisition for incorporation into the CRISPR array
Yanli Wang, Chinese Academy of Sciences, China
Title: Two alternative structures of oxygen-evolving complex in photosystem II found by X-ray crystallography at extremely low doses
Nobuo Kamiya, Osaka City University, Japan
Title: Hydrated Nickel(II) ions- The new secondary building units for the formation of 2D and 3D cationic water networks
Geeta Hundal, Guru Nanak Dev University, India

Lunch Break

Title: Structural insights into the activation process of the opioid mu receptor
Helene Demene, Centre of Biochimie Structrale, France
Title: Numerical simulation of liquid phase diffusion growth of SiGe single crystals using fixed and dynamic grid techniques: A comparison
Mandeep Sekhon, University of California, USA
Title: Structure determination by correlated scattering
Dilano K Saldin, University of Wisconsin-Milwaukee, USA

Networking and Refreshments Break

Title: Structural insights into mode of regulation of serine protease HtrA2
Kakoli Bose, Tata Memorial Centre, India
Title: Structure determination from powder diffraction data of self-assembled structures consisting of beta-peptide foldamers
Jintaek Gong, Korea Advanced Institute Science and Technology, Republic of Korea

Panel Discussion 16:40-17:00

Day 2 October 18, 2016

Windsor I

Keynote Forum

Introduction

Title: Attrition-induced deracemization of racemizable crystal-liquid suspensions for the production of industrially relevant compounds
Richard M. Kellogg, Syncom BV, The Netherlands

Title: Macromolecular computational crystallography: Looking forward (and backward)
Alexandre Urzhumtsev, Université de Lorraine, France

Networking and Refreshments Break

Crystallography in Materials Science

Session Chair: Andriy Lotnyk, Leibniz Institute of Surface Modification (IOM), Germany

Session Introduction

Title: Local atomic arrangement in Ge-Sb-Te phase-change thin films
Andriy Lotnyk, Leibniz Institute of Surface Modification (IOM), Germany
Title: NMR Crystallography: when nuclear magnetic resonance and diffraction meet
Christian BONHOMME, Pierre et Marie Curie University, France
Title: Directionally tunable and mechanically deformable ferroelectric crystals from rotating polar globular ionic molecules
Tamotsu Inabe, Hokkaido University, Japan
Title: Redox orbital and electronic structure in energy materials by Compton scattering spectroscopy
Kosuke Suzuki, Gunma University, Japan
Title: Algorithms for generating Coincidence Site Lattices (CSLs) and near-CSLs in arbitrary bravais lattice systems
Srikanth Patala, North Carolina State University, USA
Title: Synthesis of (doped) ABO2 nanoparticles: Can this work at temperatures ≤ 90 °C without using an additional reducing agent?
Melanie John, Ludwig-Maximilians-Universität München, Germany

Lunch Break

Title: Crystallographic and molecular packing interaction analysis of cholest-based steroids: A CSD study
Rajni Kant, University of Jammu, India
Title: Synthesis and applications of porous materials for gas storage
Li-Xian SUN, Guilin University of Electronic Technology, China
Title: Surfactant-mediated shape evolution of 3D organic molecular architecture
Myobin Jeon, Korea Advanced Institute Science and Technology, Republic of Korea

Networking and Refreshments Break

Title: A new approach for estimating the density of noncrystalline materials
Takahiro Sakagami, Ehime University, Japan
Title: Effect of change in structural properties on gas sensing performance of Polyaniline-SrO2 nanocomposites
Janhavi Talegaonkar, R. L. College, India
Title: Crystal growth of gallium oxide based wide bandgap semiconductors
Qixin Guo, Saga University, Japan

Panel Discussions

Day 3 October 19, 2016

Windsor I

Chemical Crystallography

Session Chair: Jean-Guillaume Eon, Universidade Federal do Rio de Janeiro, Brazil

Session Introduction

Title: Topological features in crystal structures: A quotient graph-assisted analysis of underlying nets and their embeddings
Jean-Guillaume Eon, Universidade Federal do Rio de Janeiro, Brazil

Title: X-ray crystal structures of the one-electron oxidized metal–phenolate complexes; Geometric and electronic structures relationship
Yuichi Shimazaki, Ibaraki University, Japan

Networking and Refreshments Break

Title: Magnetic ordering, frustration and possible spin liquid state from 1D Cr3-triangles in the TiCrIr2 xOsxB2 series
Boniface P T Fokwa, University of California-Riverside, USA
Title: Oxide cluster-surfactant hybrid single crystals toward solid electrolyte
Takeru Ito, Tokai University, Japan
Title: The investigation of chemical crystallography and kinetic reactivity of Re(I) tricarbonyl complexes
Marietjie Schutte-Smith, University of the Free State, South Africa
Title: Relations between crystal structures and physical properties in the ternary systems cextysnz (t = pd or pt)
Werner Paschinger, University of Vienna, Austria

Lunch @ Churchill

Award Ceremony



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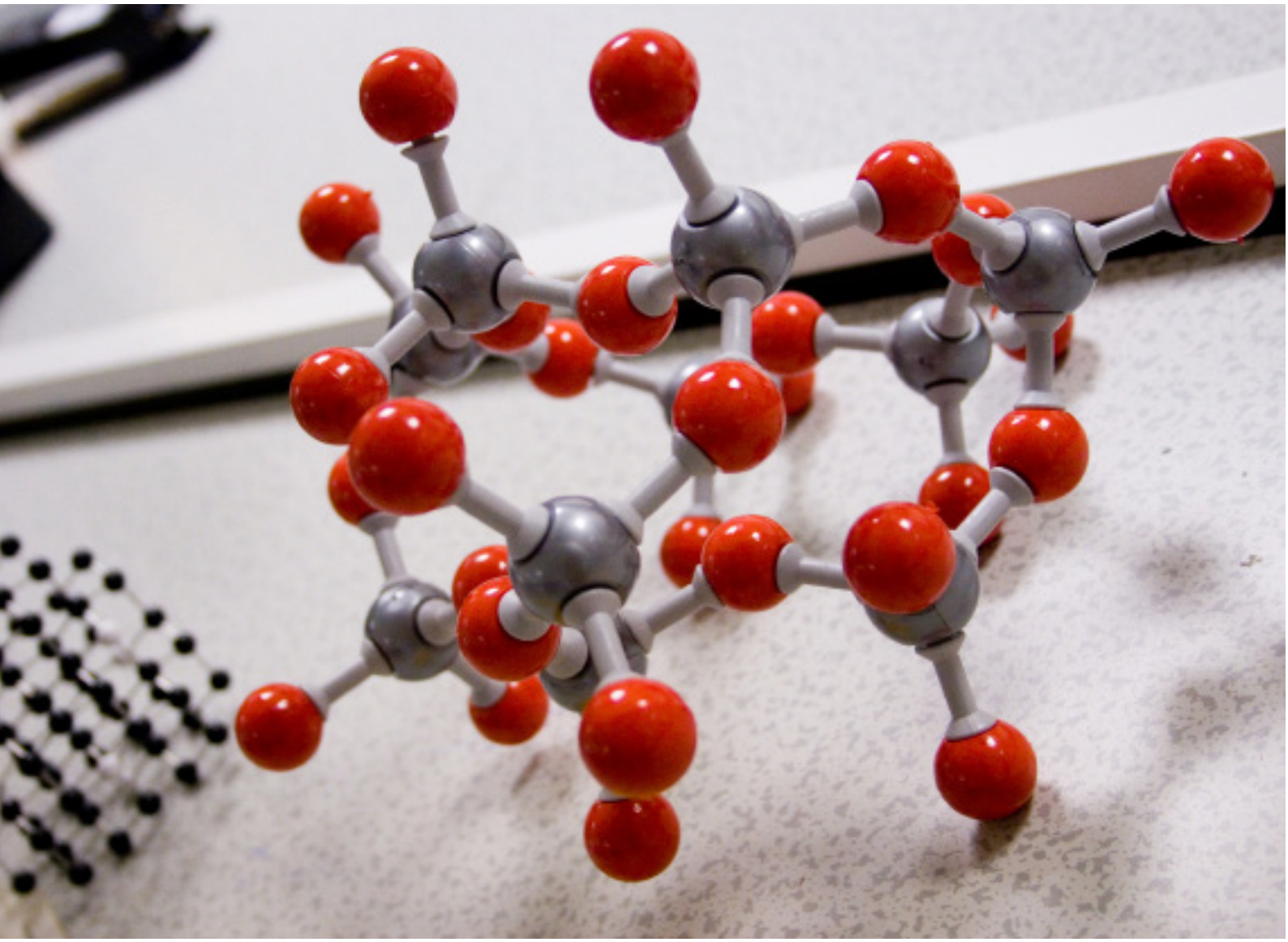
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Registrations

Olimpica 1

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Opening Ceremony

Keynote Forum

Introduction

New ways of vision: Protein structures in translational medicine and business development - My experience
Robert Huber, Nobel Laureate, Chemistry 1988

Nanogenerators for self-powered systems and piezotronics for artificial intelligence
Zhong Lin Wang, Georgia Institute of Technology, USA

Sessions: Materials Science and Engineering | Metals, Metallurgy and Materials

Session Chair: Nekane Guarrotxena, Spanish National Research Council (CSIC), Spain
Session Co-Chair: Augusto Di Gianfrancesco, Consultant, Rome Area, Italy

Session Introduction

Title: Building up smart optical organic-inorganic nanosystems
Nekane Guarrotxena, Spanish National Research Council (CSIC), Spain
Title: Materials for advanced ultra-super critical power plants
Augusto Di Gianfrancesco, Consultant, Rome Area, Italy

Networking & Refreshments Break

Title: Helical light induced chiral surface relief in azo-polymer thin film
Takashige Omatsu, Chiba University, Japan
Title: Multi-scale deformation analysis in a thermoplastic polyurethane
Alexander M Korsunsky, University of Oxford, UK
Title: Proposed link between the periodic table and the standard model
John Roberts, University of Liverpool, UK
Title: Fine-controlled subano-metal particles in a dendrimer reactor
Kimihisa Yamamoto, Tokyo Institute of Technology, Japan
Title: Structure and dynamics of polymer materials at the single molecule scale studied by novel fluorescence microscopy techniques
Hiroyuki Aoki, Japan Atomic Energy Agency, Japan
Title: Development of highly stretchable conductive fiber and fiber-based electronic sensors for textile electronics
Taeyoon Lee, Yonsei University, Republic of Korea

Lunch Break

Title: Finite-element analysis of velocity mode transition of crack propagation in rubber materials
Atsushi Kubo, University of Tokyo, Japan
Title: Light driven directional mass transport of azo-benzene containing materials for complex tri-dimensional structures on surfaces
Stefano L. Oscurato, University of Naples Federico II, Italy
Title: Enhancing the photocatalytic activity for pollutant degradation and H_2 evolution by modifying ZrO_2 with nanoclusters of $BiVO_3$, Ag_3PO_4, $SrTiO_3$ and WO_3: A first-principles study
Francis Opoku, University of Johannesburg, South Africa

Sessions: Nanomaterials

Session Chair: Hikaru Kobayashi, Osaka University, Japan
Session Co-Chair: Marzia Quaglio, Italian Institute of Technology, Italy

Session Introduction

Title: Si nanopowder for internal hydrogen generation materials
Hikaru Kobayashi, Osaka University, Japan
Title: N-doped carbon-based nanofibers as oxygen reduction reaction catalysts
Marzia Quaglio, Italian Institute of Technology, Italy
Title: Controlled synthesis of vertical and planar graphenes using plasma-enhanced chemical vapor deposition
Mineo Hiramatsu, Meijo University, Japan
Title: Rational clustering and fractionation of SERS hot-spot plasmonic nanoparticles
Nekane Guarrotxena, Spanish National Research Council (CSIC), Spain

Networking & Refreshments Break

Title: The nanophotonic behaviors of wideband diluted magnetic semiconductor nanostructures
Bing Suo, Beijing institute of Technology, China
Title: Fabrication of nanoporous graphene membranes for nanofiltration applications
Marco Laurenti, Politecnico di Torino, Italy
Title: Noble metal nanostructures
Sarmiza Elena Stanca, Leibniz Institute of Photonic Technology, Germany
Title: Fabrication and characterization of carbon nanotube–recycled polyethylene terephthalate nanocomposites
Ravindra Reddy Chowreddy, Norner AS, Norway
Title: Adatom's Berry phase as a classification toolkit and responsible for enhanced lifetimes of degenerated ground states
Marta Prada, University of Hamburg, Germany
Title: Nanostructured Mn_xO_y as catalyst for oxygen reduction reaction
Angelica Chiodoni, Italian Institute of Technology, Italy

Panel Discussion

Day 2 June 13, 2017

Olimpica 1

Keynote Forum

An approximate semi-classical method that uses real valued trajectories for time dependent tunneling calculations
Michael F. Herman, Tulane University, USA
Implementation of new magnesium sheets into application from laboratory to service
Karl Ulrich Kainer, Helmholtz-Zentrum Geesthacht, Germany
Towards the growth of 3D forests of carbon nanotubes: Selective height control using reservoirs and overlayers
Gilbert Daniel Nessim, Bar Ilan University, Israel

Sessions: Nanomaterials | Mechanics, Characterization Techniques and Equipments

Session Chair: Kyuman Cho, Sogang University, South Korea
Session Co-Chair: Olga Barrera, University of Oxford, UK

Session Introduction

Title: Photoelectron spectra of GexSb20Se80-x Glasses
Li Wang, Beijing University of Technology, China
Title: Nanocellulose based flexible, environment-friendly nonvolatile resistive switching memory
Kazuki Nagashima, IMCE Kyushu University, Japan

Networking & Refreshments Break

Title: 2D material fluid nanocomposites for reconfigurable integrated optoelectronics and Si photonics
Anna Baldycheva, University of Exeter, UK

Title: Supporting titanium on silica, graphene, epoxy graphene and carbon nanotubes: A first-principles study
Penny Govender, University of Johannesburg, South Africa
Title: Nanostructure Layered Double Hydroxides (LDH): synthesis, characterization and possible applications
Maria Richetta, University of Rome Tor Vergata, Italy
Title: Nanocrystalline cellulose from abaca fibers
Anniver Ryan P. Lapuz, Forest Products Research and Development Institute, Philippines
Title: A high resolution, multi-purpose scanning I/Q-interferometer scheme for material diagnostics
Kyuman Cho, Sogang University, South Korea
Title: Coupling diffusion and mechanics modeling for hydrogen embrittlement (HE)
Olga Barrera, University of Oxford, UK

Lunch Break

Title: Effects of plasticity and pressure on the morphology and propagation of blisters: formation of croissant and donut-like buckles
Jérôme Colin, University of Poitiers, France
Title: Rational design of organic electrode materials: New advances and tools
Christine Frayret, Université de Picardie Jules Verne, France
Title: Computational investigation of the kneading process of bread dough
Natalie German, Technical University of Munich, Germany
Title: Materials characterization by X ray diffraction techniques
Aitor Larrañaga Varga, University of the Basque Country, Spain
Title: Internal stress and friction measurements during MoS_2-nickel electrodeposition
Ebru Saraloglu Güler, Baskent University, Turkey
Title: In-situ measurement for ablation geometry during impinging of plume with laser triangulation method
Juhwan Lim, Agency for Defense Development, South Korea

Networking & Refreshments Break

Title: Chemically bonded aramid-MWCNTs nano-composites: Morphology and thermal-mechanical properties
Zahoor Ahmad, Kuwait University, Kuwait
Title: The fate, behaviour and effect of WO_3 nanoparticles on the functionality of an aerobic treatment unit
Sandile Simelane, University of Johannesburg, South Africa
Title: Flexible synthesis of anatase TiO_2 nanocrystallines for dye-sensitized solar cells applied at regular sunlight and room light conditions
Yu-Ling Guo, National Cheng Kung University, Taiwan
Title: Single particle spectroscopic studies on two-photon photoluminescence of plasmon coupled gold nanotriangle dimers
Monalisa Garai, National University of Singapore, Singapore
Title: Fiber networks modified with graphene for durable and versatile flexible electronics
Pietro Cataldi, Italian Institute of Technology, Italy
Title: Mechanical and thermal properties of propylene glycol extended and paper waste sludge modified polyurethane foams
Agne Kairytė, Vilnius Gediminas Technical University, Lithuania

Break-out Session Day 2 @ Olimpica 3

Sessions: Biomaterials and Medical Devices | Polymer Science and Technology | Ceramics and Composite Materials

Session Chair: Bing Lu, Wanhua Chemical Group Co. Ltd., China
Session Co-Chair: Loubat Cédric, Specific Polymers, France

Session Introduction

Title: New development and applications of polyurethane materials
Bing Lu, Wanhua Chemical Group Co. Ltd., China

Title: Specific Polymers – Alkoxysilane and phosphonic acid functional groups to improve compatibility between inorganic surfaces and polymers
Loubat Cédric, Specific Polymers, France
Title: Improving separation of polymers by size-exclusion and liquid chromatography on the background of the theoretical model
Miloš Netopilík, Academy of Sciences of the Czech Republic, Czech Republic
Title: Sticky degradable bioelastomers
Richard Vendamme, Flemish Institute for Technological research, Belgium

Special Session on:

Title: Physics versus non-physical ISO/NIST standards in nano, micro and the numerous macro-techniques are detrimental for daily life: what can be done?
Gerd Kaupp, University of Oldenburg, German

Lunch Break

Title: Fabrication of Co-Cr alloys for biomedical applications by implementing rapid solidification
Julio Juarez Islas, Instituto de Investigaciones en Materiales, Mexico
Title: An enzymatic-based process for the extraction of fibers from diss stems with for composites reinforcement
Antonio Zuorro, Sapienza University of Rome, Italy
Title: Flexible and soft bioelectronics for the biotic/abiotic interface
Damia Mawad, University of New South Wales, Australia
Title: Strategies for enhancing interfacial adhesion between chicken feather filler and thermoplastic matrices in biocompositess
Jorge Macanás de Benito, UniversitatPolitècnica de Catalunya, Spain
Title: Geometry and size dependent structural reversibility of sub-micrometer polymer structures
Hong Yee Low, Singapore University of Technology and Design, Singapore
Title: Perlite metal syntactic foam (PMSF) in impact engineering
Thomas Fiedler, University of Newcastle, Australia

Networking & Refreshments Break

Title: Synthesis and characterization of titanium carbide nanofibers using a modified carbothermal reduction process
Kanchan Mondal, Southern Illinois University, USA
Title: Highly dispersed zinc based sorbents for hot gas desulphurization: Synthesis and application
David Lokhat, University of KwaZulu-Natal, South Africa
Title: Melt infiltration casting of alumina, silicon carbide and boron carbide reinforced aluminium matrix composites
Ali Kalkanli, Middle East Technical Univeristy, Turkey
Title: Biomaterial surface modification to control inflammation: Effect of nanotopography and surface chemistry on protein adsorption and cell response
Rahul Madathiparambil Visalakshan, University of South Australia, Australia
Title: High performance rubber concrete
Samaneh Pourmohammadimojaveri, Western Sydney University, Australia
Title: Investigation of the microstructure and oxidation properties of NbB2-SiC-GNP composites
Burak Cagri Ocak, Istanbul Technical University, Turkey

Poster Presentations (Session 1)

MSE01	**Title: Optoelectronic studies on hybrid perovskites films for solar cells applications** **Mauricio Solis de la Fuente,** Lawrence Berkeley National Laboratory, USA
MSE02	**Title: Valorization of feather wastes as useful and environmental friendly materials** **Marta Casadesús,** Universitat Politècnica de Catalunya, Spain
MSE03	**Title: Manufacturing of gasket sheet using paper manufacturing process without organic solvent** **Yoonjong Yoo,** Korea Institute of Energy Research, Republic of Korea

MSE04	**Title: Visible light driven photo-active nano Ag-TiO_2 for coating applications** **Jia Liang Cheng, Temasek Polytechnic, Singapore**
MSE05	**Title: Preparation of leucite from analcime by ion exchange process: An experimental study** **Qianqian Chang,** China University of Geosciences, China
MSE06	**Title: Preparation and luminescent properties of orange reddish emitting phosphor $KCaBi(PO_4)_2:Sm^{3+}$** **Mi Ruiyu,** China University of Geosciences, China
MSE07	**Title: Synthesis of nano-analcime with potassic hornblende syenite by direct alkali-hydrothermal treatment** **Yuxiang Qi,** China University of Geosciences, China
MSE08	**Title: Angle-insensitive multicolor display device based on phase change materials** **Hongkai Ji,** University of Science and Technology, China
MSE09	**Title: Gate-tunable Schottky junction solar cells with light transparent and electric-field permeable graphene mesh on n-Si** **Won Il Park,** Hanyang University, South Korea
MSE10	**Title: Characterization and stability of TiO_2 nanoparticles in industrial dye stuff effluent** **Langelihle Nsikayezwe Dlamini,** University of Johannesburg, South Africa
	Poster Presentations (Session 2)
MSE11	**Title: Effect of binder on adsorption of cesium on silica gel containing embedded phosphotungstic acid** **Aleksey Vasiliev,** East Tennessee State University, USA
MSE12	**Title: A highly efficient photoanode for enhancing degradation of the azo dye and electricity generation of dual-photoelectrode photocatalytic fuel cell** **He Yun,** City University of Hong Kong, China
MSE13	**Title: Preparation of zeolite for slow-release fertilizer using K-feldspar powder** **Jiangyan Yuan,** China University of Geosciences, China
MSE14	**Title: Raman microspectroscopy in dental research** **Tomasz Buchwald,** Poznan University of Technology, Poland
MSE15	**Title: Inverse gas chromatography - A novel method for the examination of bond strength between tooth hard tissues and restorative materials** **Zuzanna Okulus,** Poznan University of Technology, Poland
MSE16	**Title: Study on deposition rate and microstructure of niobium coating prepared by CVD from niobium pentafluoride** **Mingmin Zheng,** State Power Investment Corporation Science and Technology Research Institute, China
MSE17	**Title: Effect of reduced graphene oxide on the mechanical, thermal and electrical properties of epoxy** **Ahmed Alzahrany,** University of Sheffield, United Kingdom
MSE18	**Title: Solar cell: Photochemical cells based on dye sensitization of titanium dioxide and with indium tin oxide as a conductor** **Ari A Mohammed,** University of Zakho, Iraq
MSE19	**Title: Preparation and properties of protective coating on inner surface of nickel-based alloy tube** **Yanhong Liu,** State Power Investment Corporation Science and Technology Research Institute, China

MSE20 **Title: Specific Polymers – Alkoxysilane and phosphonic acid functional groups to improve compatibility between inorganic surfaces and polymers**
Loubat Cédric, Specific Polymers, France

MSE21 **Title: Response of S-phase to rapid annealing**
Yana Liang, University of Birmingham, UK

Panel Discussion

Day 3 June 14, 2017

Olimpica 1

Sessions: Electronic, Optical and Magnetic Materials

Session Chair: Henri Jaffres, Unité Mixte de Physique CNRS, France
Session Co-Chair: Alessandra Vitale, Politecnico di Torino, Italy

Session Introduction

Title: Electrical spin injection and detection in molybdenum disulfide multilayer channel
Henri Jaffres, Unité Mixte de Physique CNRS, France
Title: Microscopic background in metal-insulator criterion for doped Mott-Hubbard materials
Vladimir A Gavrichkov, Kirensky Institute of Physics, Russia
Title: An electromagnetic-thermal model for heating patterns prediction of microwave treated palm to contrast the Red Palm Weevil
Rita Massa, University Naples Federico II, Italy
Title: Study on chemical reaction under microwave irradiation
Satoshi Fujii, Tokyo Institute of Technology, Japan
Title: $L1_0$-FePt based systems for ultra high-density magnetic recording
Gaspare Varvaro, ISM-CNR, Italy
Title: Photoluminescent crystalline magnetic materials based on trivalent lanthanide ions and polycyanidometallates
Szymon Chorazy, Jagiellonian University, Poland

Networking & Refreshments Break

Title: Rare-metal-free supermagnet $L1_0$-type FeNi ordered alloy
Masato Kotsugi, Tokyo University of Science, Japan
Title: Rare-metal-free high-performance Ga-Sn-O thin film transistor
Tokiyoshi Matsuda, Ryukoku University, Japan
Title: Ferroelectricity and magnetism in the organic charge transfer salts k-$(ET)_2X$
Luca Fausto Tocchio, Politecnico di Torino, Italy
Title: Materials by design for thermodynamically stable electrides
Mina Yoon, University of Tennessee, USA
Title: Intrinsic charge transport in stanene: Role of buckling and electron-phonon coupling
Yuma Nakamura, Tsinghua University, China

Lunch Break

Sessions: Emerging Smart Materials | Materials for Energy and Environmental Sustainability

Session Chair: Tsvetanka Zheleva, US Army Research Lab, USA
Session Co-Chair: Antonina Pirrotta, University of Palermo, Italy

Session Introduction

Title: Materials research in energy and power for defense
Tsvetanka Zheleva, US Army Research Lab, USA
Title: A new perspective for analyzing experimental tests on biomaterials
Antonina Pirrotta, University of Palermo, Italy
Title: Solar cells efficiency enhancement by plasmons generation
Alexander Axelevitch, Holon Institute of Technology, Israel
Title: Sustainable solutions for industrial waste minimization: Environmental and material applications
Shivani Bhardwaj Mishra, University of South Africa, South Africa

Title: Quasiparticle approach to study the kinetics of self-assembly in complex material
Helena Zapolsky, University of Normandy, France
Title: Screen printable molecular copper ink for printed electronics
Bhavana Deore, National Research Council, Canada

Networking & Refreshments Break

Title: Relation between nanoscale structures and transport phenomena in materials of polymer electrolyte fuel cell
Takashi Tokumasu, Tohoku University, Japan
Title: Siloxane photopolymers for PCR microfluidics
Alessandra Vitale, Politecnico di Torino, Italy
Title: The quantum Hall effect, the theta angle, instantons and all that
Adrianus M M Pruisken, University of Amsterdam, Netherlands
Title: CO_2 adsorption equilibria on calcium exchanged bentonite modified by mono-, di- and triethanolamines
Ali Elkhalifah, Al-Neelain University, Sudan
Title: Structural features and functions of ZIF crystals made via a reaction diffusion process at room temperature
Mohamad Hmadeh, American University of Beirut, Lebanon
Title: Influence of grain size on super elasticity and actuation properties of Cu-Al-Mn shape memory alloys
Nazim Babacan, Ghazi University, Turkey

Panel Discussion

Award Ceremony