Materials Research 2017

7th Annual Congress on

Materials Research and Technology

February 20-21, 2017 Berlin, Germany

Tentative Program	
Day 1 February 20, 2017	
	Registrations
	Opening Ceremony
Keynote Forum	
	Introduction
	Jim De Yoreo, Pacific Northwest National Laboratory ,USA
	Gerd Kaupp, University of Oldenburg, Germany
	Xiang Zhang, University of Cambridge, UK
	Hyoyoung lee, Sungkyunkwan University, Republic of Korea
	Coffee Break
	Track 1: Materials Science and Engineering **Track 4: Materials in Industry**
Chair	**Yet to be decided**
Co-Chair	**Yet to be decided**
	Title: A mechanical characterization of joints and bonded connections in material compounds
	Robert Brandt, University of Siegen, Germany
	Title: Ductile behavior of hard MoBC and WBC nanolaminated coatings
	Petr Vasina, Masaryk University, Czech Republic
	Title: Dynamics of single ions and molecules at the surface of solids in solution
	Kislon Voitchovsky, Durham University, UK
	Title: Engineering optical raman active nanoassemblies for nanosensor purposes
	Nekane Guarrotxena, Spanish National Research Council, Spain
	Title: Design and evaluation of new ligands with highly extractability and selectivity for palladium from secondary raw material
	Emad Mowafy, University of Hail , Saudi Arabia
	Title: Evaluating mechanical properties of complex material structures from a new combination of calotte grinding and indentation tests
	Nick Bierwisch, Saxonian Institute of Surface Mechanics, Germany
	Title: Optimizing electrical conductivity and optical transparency of IZO thin film deposited by radio frequency (RF) magnetron sputtering
	Lei Zhang, Winston Salem State University, USA
	Title: Fabrication, optical and thermal properties of glass and crystalline rare-earth aluminates
	Vijaya Kumar, University of Mysore, India
	Lunch Break
	Title: Effect of process parameters and post heat treatment in the development of microalloyed HSLA tubes for torsional applications
	Thendralarasu Udhayakumar, Tube Investments of India Ltd, India

	Title: Effect of process parameters and post heat treatment in the development of microalloyed HSLA tubes for torsional applications
	Elakkiya Mani, Tube Investments of India Ltd, India
	Title: Graphite based minimum quantity dry lubrication at drilling CFRP
	Robert Beckenlechner, University of Stuttgart, Germany
	Title: Insights into linear supramolecular polymer formation via TPE and BODIPY containing host-guest interaction
	Chinmayananda Gouda, National Chiao Tung University, Taiwan
	Track 2: Nanomaterials **Track 3: Biomaterials and Healthcare**
Chair	**Yet to be decided**
Co-Chair	**Yet to be decided**
	Title: Recent progress in epitaxial quantum dots for lasers and light emitting diodes
	Nikolay Ledentsov, VI Systems GmbH, Germany
	Title: Functional metal-ceramic nanocomposites based on tubule clay
	Yuri Lvov, Louisiana Tech University, USA
	Title: Characterization of nanosuspension using pulsed field gradient nuclear magnetic resonance
	Haruhisa Kato, National Institute of Advanced Industral Science and Technology, Japan
	Coffee Break
	Title: Mechanical and Topographical Characterization of Biomaterials, Cells and Tissues by Enhanced Atomic Force Microscopy
	Jörg Barner, JPK Instruments AG, Germany
	Title: Soft thermal nanoimprint lithography
	Mark Schvartzman, Ben-Gurion University of the Negev, Israel
	Title: Electrochemical and biosynthesis of Nano-Photocatalytic materials and its applications in photovoltaic, anti-bacterial, anti-cancer and in preparation of polymer composites
	Sannaiah Ananda, University of Mysore, India
	Title: Synthesis and characterization of single-crystal bismuth telluride nanowires
	Ming Yau Chern, Ming Y Chern, National Taiwan University, Taiwan
	Title: Bioinspired gradient surfaces with controlling of dynamic wettability
	Yongmei Zheng, Beihang University, China
	Title: EHDA technology utilizing different bio-structure
	Rita Haj Ahmad, De Montfort University, UK
	Title: Doxorubicin Conjugated Fe3O4-GQD Nanoparticle for Magnetically Targeted and pH Responsive Drug Delivery Vehicle: A Two Way Targeted Approach
	Ankan Dutta Chowdhury, National Chiao Tung University, Taiwan
	Title: Reversible and Irreversible Self-folding Behavior of Water Responsive Poly (vinyl alcohol) Films
	Amrita Rath, Indian Institute of Technology Madras, India

	Title: On-demand release of Paclitaxel and 5-Flourouracil using Thermoresponsive poly(NIPAAm-co-HMAAm)/Polyurethane partnered with Alternating Magnetic field Induced hyperthermia on Non-vascular nitinol stent
	Ludwig Erik Aguilar, Chonbuk National University, South Korea
Day 2 February 21, 2017	
Keynote Forum	
	Elias Siores, University of Bolton, UK
	Alex guskov, Institute of Solid State Physics of RAS, Russia
	Udo Schwingenschloegl, King Abdullah University of Science & Technology,Saudi Arabia
	Dae Joon Kang, Sungkyunkwan University, Republic of Korea
	Coffee Break
	Track 5: Materials Chemistry **Track 6: Materials Physics** **Track 7: Energy Materials**
Chair	**Yet to be decided**
Co-Chair	**Yet to be decided**
	Title: Solid state electrochemistry: a tool for synthesis and characterization of solids
	Claude Delmas, University of Bordeaux, France
	Title: Chemical effects on metals friction at the nanometer scale
	Arnaud Caron, KoreaTech, Republic of Korea
	Title: Graphene Oxide Supported Layered Double Hydroxide Hybrids: Synthesis and Applications
	Mohamed Mokhtar Mohamed Mostafa, , King Abdulaziz University, Saudi Arabia
	Title: Massive Parallel Electron Beam Direct Write (MPEBDW)
	Hiroshi Miyaguchi, Tohoku University, Japan
	Title: Imaging electrons motion in semiconductor materials
	Michael K L Man, Okinawa Institute of Science and Technology Graduate University, Japan
	Title: Neutron scattering investigations of hydrogen storage in porous materials
	Margarita Russina, Helmholtz Centre Berlin for Material and Energy Research, Germany
	Title: Development of Novel Organic Radical Batteries
	Shinichi Nakatsuji, University of Hyogo, Japan
	Title: A Dual-Carbon Phase Modified and Nanostructured Nickel Sulfide Anode for Sodium-Ion Batteries
	Zhiqiang Gao, National University of Singapore, Singapore
	Title: Hierarchical Conducting Polymers Micro/nanostructures and their Electrochemical Energy Conversion
	Ying Zhu, Beihang University, China
	Title: Environmental Benign Graphene Quantum Dots embedded Halloysite Nanotubes as high performance supercapacitor electrode material
	Akhilesh Babu Ganganboina, National Tsing Hua University, Taiwan
	Lunch Break

	Track 8: Metallurgy and Materials Science **Track 9: Advanced Materials and Devices** **Track 10: Characterization and Testing of Materials**
	Title: Development of solar grade silicon refining via metallurgical route: Thermodynamic properties of silicon based alloys
	Kazuki Morita, The University of Tokyo, Japan
	Title:Controlling microstructure via thermal science analysis during resistance spot welding
	Peng-Sheng Wei, National Sun Yat-Sen University, Taiwan
	Title: Light-induced Superconductivity in an Organic Mott Insulator induced by Light-driven Carrier Doping
	Masayuki Suda, Institute for Molecular Science, Japan
	Title: Large tunnel magnetocapacitance in magnetic tunnel junctions
	Hideo Kaiju, Hokkaido University, Japan
	Title: Crack-closing of superelastic NiTi SMA short fibers in mortar beams
	Eunsoo Choi, Hongik University, Korea
	Title: Correlated versus random behavior of dislocations in jerky flow of Al-Mg alloys
	Mikhail Lebyodkin, University of Lorraine, France
	Title: The Development of Smart Materials for Medical Applications using Laser Scanning Micrometry
	Daniel Melling, University of Dundee, UK
	Title: Quantum Contact Mechanics For Holistic Material Optimization
	Norbert Schwarzer, Saxonian Institute of Surface Mechanics, Germany
	Coffee Break
	Title: Magnetic characterization of the phase transformations during synthesis of the FeWO4 nanoparticles using WS2 nanotubess
	Gregory Leitus, Weizmann Institue of Science, Israel
	Title: Advanced alloys and steels microstructure characterization by analytical high resolution scanning transmission electron microscopy
	Mihaela Albu, Graz Centre of Electron Microscopy, Austria
	Title: Evaluation of liquid tin corrosion on austenitic steels as well as nickel-based alloys and first tests on possible protective surface layers at high temperature
	Thomas Emmerich, Karlsruher Institute of Technology, Germany
	Title: Optimization of Sustainable Cutting Conditions in Turning Carbon Steel by CNC Turning Machine
	Haider M. Mohammad Albu-Swelim, University of Basrah, Iraq
	Title: Enhancement the Mechanical Properties of Aluminum Casting Alloys (A356) by Adding Nanorods Structures from Zinc Oxide
	Murtadha Abbass Jabbar Al Maliky
	Title: Prediction of hardness, yield strength, and tensile strength for single roll melt spinning of 5083 Al-alloy ribbons
	Ahmad Kadhim Jassim Al-Dawod, University of Basrah, Iraq
	Title: Water Content Dependent Mechanical Properties of Biopolymer thin films: A molecular Dynamics Study
	Santhosh Mathesan

Poster Presentations on Day 2 (February 21, 2017)	
	Title: Predictive Wear Modelling - The ultimate simulation tool for optimum tribo coatings
	Nick Bierwisch, Saxonian Institute of Surface Mechanics, Germany
	Title: Synthesis and characterization of conductive polymer hydrogels and the investigation of their application as biosensor hybrid for catechol detection
	Ezer Castillo, Adelphi University, USA
	Title: Dynamic Response of a Modified Water Tank Exposed to Concentrated Solar Energy
	Mohammed H. Alhamdo, University of AlMustansirya, Iraq
	Title: Experimental study of the thermal behavior of heated natural composite material
	Qasim Saleh Mahdi, AL-Mustansiryah University, Iraq
	Title: Engineering of Multi-functional Composite Nano-particles to address Anti-Microbial Resistance Using EHDA Particle Technology
	Suleman Ramzan, De Montfort University, UK
	Title: Rare earth Chalcogels NaLnSnS4 (Ln= Y, Gd, Tb) for Selective Adsorption of Volatile Hydrocarbons and Gases
	Fatimah Edhaim, King Abdullah University of Science & Technology, SA
	Title: On the friction and wear on-set of fcc metals by atomic force microscopy
	Hui-Eun Ko, KoreaTech, Republic of Korea
	Award Ceremony

****Note: Tentative Program has been designed with the projected Speakers Names and Titles. Dates and timings in this Program are subject to change**