



August 24-26 2017

TENTATIVE SCIENTIFIC PROGRAM

Day 1

24-Aug-17

Breakout Room 1

24-Aug-17

24-Aug-17

08:30-09:00 Registrations

09:00-09:15 Opening Ceremony

Keynote Forum

09:15-09:30 Introduction

Keynote

09:30-10:00 **Manuel de Llano**, Instituto de Investigaciones en Materiales, UNAM, Mexico

10:00-10:30 **Pavel Baranov**, Ioffe Institute, Russia

10:30-11:00 **Regina Hernandez Gama**, National Polytechnic Institute, Mexico

Coffee break: 11:00-11:20

Session Introduction

Biomaterials and Tissue Engineering

Graphene and Energy Materials

Advances in Polymer Science

Advances in Instrumentation Technology

Session Chair **Mattias Edén**, Stockholm University, Sweden

11:20-11:40 **Title: Biomimetic Apatite Formation of Mesoporous Bioactive Glasses Probed by Solid-State NMR Spectroscopy**

Mattias Edén, Stockholm University, Sweden

11:40-12:00 **Title: Electromagnetic-Based Chemical Sensor using Metamaterial Absorber**

Sungjoon Lim, Chung-Ang University, South Korea

12:00-12:20 **Title: Model of how Post-Translational Detyrosination of C-Termini of Microtubules Impacts Kinesin in Intra-Cellular Traffic**

Miljko Sataric, University of Novi Sad, Serbia

12:20-12:40 **Title: Nanoscale oxide-graphene hybrid powders for enhanced solar-driven evaporation of water**

Francesca Marchetti, Fondazione Bruno Kessler, Italy

12:40-13:00 **Title: Driving force dependence of the size of a faceted macrostep in step droplet zone: non-equilibrium steady state**

Noriko Akutsu, Osaka Electro-Communication University, Japan

13:00-13:20 **Title: Design of Advanced Double-network Hydrogels with Hydrophilic Polyurethane**

Bin FEI, Hong Kong Polytechnic University, Hong Kong

Lunch: 13:20-13:50

13:50-14:10 **Title: Development of low-Cost Ti-Mn-Fe-Al beta type alloys**

Masahiko Ikeda, Kansai University, Japan

14:10-14:30 **Title: Smart polymeric nanocarriers loaded with active principles for colo-rectal cancer therapy**

Catalin Zaharia, University Politehnica of Bucharest, Romania

14:30-14:50 **Title: Investigation of the interaction between graphene and steel using Raman spectroscopy**

Yusuke Fushiwaki, JFE Steel Corporation, Japan

14:50-15:10 **Title: Electron microscopy studies of dentinal occlusion using a toothpaste formulation containing both NaF and bioactive glass**

Richard Langford, University of Cambridge, England

15:10-15:30 **Title: A NEW GRAPHENE-BASED HYDROGEL AS 3D SCAFFOLD FOR NEURONAL GROWTH**

CRISTINA MARTÍN JIMÉNEZ, University of Castilla-La Mancha, Spain

15:30-15:50 **Title: Study of the tribological behavior of Metal on Metal friction couple in hip joint application: Effect of bio-lubricants**

Manel Guezmil, Ecole Nationale d'Ingénieurs de Monastir, Tunisia

15:50-16:10 **Title: Effects of metallic implants on magnetic resonance images**

Omer Burak Istanbulu, Erciyes University, Turkey

Coffee break: 16:10-16:30

16:30-16:50	Title: Phase Structure for Highly Drawn Ultrahigh Molecular Weight Polyethylene investigated by Solid-state High Resolution ¹³C NMR
	Takahiko NAKAOKI , Ryukoku University, Japan
Production issues of Polymerization Processes Nano sciences and nanotechnologies Next Generation Materials and Technologies Carbon nanomaterials, devices and technologies Emerging Areas of Materials Science	
Session Chair	Orlova Albina, State University of Nizhny Novgorod, Russia
16:50-17:10	Title: Next Generation Ceramic Materials for Consolidation of radioactive alpha-wastes using the Innovative Technology Spark Plasma Sintering for their preparation
	Orlova Albina , State University of Nizhny Novgorod, Russia
17:10-17:30	Title: Nanostructure Engineering for High-performance Oxide Thermoelectric Materials
	Michitaka Ohtaki , Kyushu University, Japan
17:30-17:50	Title: Structural and Chemical Analysis of filled Nanotubes
	Leonard Deepak Francis , International Iberian Nanotechnology Laboratory, Portugal
17:50-18:10	Title: ZnO-based 1D nanostructured transparent thin films obtained by full bottom-up approach from solution for electronic applications
	Viorica Muşat , University of Galati, Romania
18:10-18:30	Title: Mass Production of High Quality Boron-doped Diamond Shortfilm by Surface Wave Plasma CVD
	Tae Gyu Kim , Pusan National University, South Korea
18:30-18:50	Title: Novel hybrid materials based on dissolution and decondensation of cellulose and aluminosilicate in alkaline conditions
	Mirja Illikainen , University of Oulu, FINLAND
18:50-19:10	Title: Finite-size scaling of separation transitions in alloy nanoparticles: Modeling of size and shape effects on critical temperatures
	Leonid Rubinovitch , Ben-Gurion University of the Negev, Israel
19:10-19:20	Title: Contact Multiphysics in Spark Plasma Sintering: a New Science to Develop Advanced Materials by Design
	Giovanni Maizza , Politecnico di Torino, Italy
19:20-19:40	Title: Nano Science and Nanotechnology session Imprinted polymer inverse opals for the detection of nanoparticles
	Catherine Schwob , University Pierre and Marie Curie, France
19:40-20:00	Title: Nitride-based nanowire and multi-quantum shell active layer for advanced photonic devices
	Satoshi Kamiyama , Meijo University, Japan
Day-2	25-Aug-17
09:00-09:20	Title: Nanovehicles design for bioactives compounds
	Oscar E Pérez , National Lanús University, Argentina
09:20-09:40	Title: Viscoelastic behavior of Carbon Nanotubes-Ionic Liquids dispersions with potential lubricating applications
	Ramón Pamies , Universidad Politécnica de Cartagena, Spain
09:40-10:00	Title: Nanozymes: Enzymatic Activities, Catalytic Mechanisms and Extensive Applications in Biomedicine
	Xiyun Yan , Institute of Biophysics, Chinese Academy of Sciences, China
10:00-10:20	Title: Laser ablation of conductive porous structures
	Jadranka Blazevska Gilev , University St. Cyril and Methodius, Macedonia
10:20-10:40	Title: Topological insulator heterostructures: electronic structure simulation and growth by sputtering
	Yuta Saito , National Institute of Advanced Industrial Science and Technology (AIST), Japan
Coffee break: 11:00-11:20	
11:20-11:40	Title: Project of very thin targets operating under extreme conditions in NUMEN experiment
	Federico Pinna , Politecnico di Torino, Italy
Keynote	
11:40-12:10	Shen-Ming Chen , National Taipei University of Technology, Taiwan
12:10-12:40	Makarova Irina R. , VNIGRI, Russian Federation
Session Introduction	

Nanomaterials and Nanocomposites Kinetics, Thermodynamics, and Multi-Scale Modeling Materials Chemistry and Sustainable Chemistry	
Session Chair	Lucian Baia, Babes-Bolyai University, Romania
12:40-13:00	Title: Shape tailoring as a critical issue in photocatalysis Lucian Baia, Babes-Bolyai University, Romania
13:00-13:10	Title: Eco-friendly preparation of oxynitride pigments, phosphors and electrode materials Toshihiro MORIGA , Tokushima University, Japan
Lunch: 13:10-13:40	
13:40-14:00	Title: Ultrasonic and Photoacoustic Studies of Polymer Composites with Nanoparticles Vytautas Samulionis, Vilnius University, Lithuania
14:00-14:20	Title: Polymeric materials from Tulipalin A Jaroslav Mosnáček, Slovak Academy of Sciences, Slovakia
14:20-14:40	Title: Homogeneous nucleation kinetics of polymorphic phases in solution Zdeněk Kožíšek, Institute of Physics CAS, Prague, Czech Republic
14:40-15:00	Title: Derivation of analytic relation between phonon mean free path spectrum and ballistic thermal resistance using ballistic-diffusive equation Ohmyoung Kwon, Korea University, South Korea
15:00-15:20	Title: Interface driven spontaneous formation of microstructures Dongchoul Kim, Institut de Ciència de Materials de Barcelona, Spain
15:20-15:40	Title: Plasmonic Hybrid Nanomaterials for Surface-Enhanced Raman Spectroscopy Sung-Gyu Park, Korea Institute of Materials Science, Korea
15:40-16:00	Title: Synthesis of polymer-grafted carbon nanotubes by combination of ROP and RAFT polymerization Katarina Mosnackova, Polymer Institute SAS, Slovakia
Coffee break: 16:00-16:20	
16:20-16:40	Title: Preparation of cellulose- and chitin-based functional materials using ionic liquids Jun-ichi Kadokawa, Kagoshima University, Japan
16:40-17:00	Title: Optical and XPS analysis of the early growth stages of chemically deposited ZnS thin films Carlos Aníbal Rodríguez , University of La Serena, Chile
17:00-17:20	Title: Multi-scale Simulation with Phase Field Crystal Model for Hyper-branched Nanoparticles Wooju Lee , Sogang University, Korea
Materials Science and Engineering	
Introduction	
Session Chair	Mohamed A. Taha, Ain-Shams University, Egypt
17:20-17:40	Title: Al-SiCp MMC: "Application Promises and Processing Challenges" Mohamed A. Taha, Ain-Shams University, Egypt
17:40-18:00	Title: Effect of Reflectors on the Productivity Rate of Solar Water Desalination Systems Nahed El Mahallawy, German University in Cairo, Egypt
18:00-18:20	Title: Influencing factors onto the crystallization of phosphorus compounds by means of Calcium-Silicate-Hydrate with respect to P-RoC-technology Anke Ehbrecht, Karlsruhe Institute of Technology (KIT), Germany
18:20-18:40	Title: Effect of basic composition on the hydration heat evolution of magnesium phosphate cement (MPC) Jun Liu, Shenyang Ligong University, China
18:40-19:20	Title: PORE SIZE DISTRIBUTION OF AN ALKALI ACTIVATED CEMENTITIOUS (AACM) MORTAR Pal Mangat, Sheffield Hallam University, England Olalekan Ojedokun, Sheffield Hallam University, England
19:20-19:40	Title: Welding of similar and dissimilar materials Zakaria Boumerzoug, University of Biskra, Algeria
Day-3	26-Aug-17
09:20-09:40	Title: Physical-mechanical properties of PVC/Chitosan composites Taurino Rosa, Università degli Studi di Parma, Italy
09:40-10:00	Title: Whitening Limit Diagram of the zinc sheet phosphate coating Marc Milesi, Umicore Building Products, France
10:00-10:20	Title: Characterization and Modelling of Mechanical Behavior of Heat Treated Wood Filled SMA Composites

	Mustafa Zor , Bulent Ecevit University, TURKEY
10:20-10:40	Title: Direct Measurement of Tensile-Like Properties by Vickers Depth Sensing Test of Solid-State Aluminum-alloy Welded Joints
	Renato Pero , Università di Roma "Tor Vergata", Italy
10:40-11:00	Title: Temperature effect on strengthening mechanisms of nano-ODS steel
	Alessandra Fava , University of Rome Tor Vergata, Italy
Coffee break: 11:00-11:20	
11:20-11:40	Title: Analysis of effect the CMC and surfactant on the rheological properties and certain stability of micro-nano fibrillated cellulose
	Abdelaâdim Tibouda , Université du Québec à Trois Rivières –UQTR, Canada
Electronic, Optical, and Magnetic Materials	
Surface Science and Engineering	
Process Modeling, Simulation, Optimization and Control	
Thin films, Corrosion and degradation of materials	
Introduction	
Session Chair	Kun Yang, Florida State University, USA
11:40-12:00	Title: Interplay of Topology and Geometry in Fractional Quantum Hall Liquids
	Kun Yang , Florida State University, USA
12:00-12:20	Title: Indicatrices of the wave vectors of elastic and electromagnetic waves in piezomagnetic medium of rhombic symmetry
	Sadriten Tleukenov , L.N. Gumilyov Eurasian National University, Kazakhstan
12:20-12:40	Title: Electrochemical CO₂ Reduction in Real Time
	Jens Martin , National University of Singapore, Singapore
12:40-13:00	Title: The Prewetting transition in Liquid Gallium-Lead mixture
	El Sayed M. Osman , Sultan Qaboos University, Oman
13:00-13:20	Title: The Impact of Thermal Annealing on the Electrical and Thermal Conductivity of Electroformed Ni₅₂Fe₄₈ Alloy film
	Hyeonjin Eom , Korea Institute of Industrial Technology (KITECH), South Korea
Lunch: 13:20-13:50	
13:50-14:10	Title: Application of the Phase-Field Variational Approach to Analyze the Thermoelectric Effects
	Peng Zhou , Harbin Institute of Technology, China
14:10-14:20	Title: Nondestructive evaluation using ACPD measurements to detect corrosion susceptibility of 2507 super duplex stainless steel
	Alberto Ruiz , Universidad Michoacana de San Nicolas de Hidalgo, Mexico
14:20-14:40	Title: Conversion of porous calcium phosphate ceramics into immature bone like skeleton
	Sophie Cazalbou , CIRIMAT, France
14:40-15:00	Title: Chitosan Processing from Shrimp Shell waste: Solvent Extraction as Decolorization Step
	Len Foong Koong , Hong Kong University of Science and Technology, Hong Kong
15:00-15:20	Title: Stability performance of different anodic alumina (AAO) films in aqueous sulfate solutions
	Fakiha El-TaibHeikal , Cairo University, Egypt
15:20-15:40	Title: Electrochemical characteristics of battery-supercapacitor hybrid device having bi-material electrode
	Anjan Sil I , Indian Institute of Technology Roorkee, India
Posters: 16:20-17:20	
Title: Polyaldol, a new yellow-orange coloured biovarnish	
Francisco Javier Toledo Marante , University of Las Palmas de Gran Canaria, Spain	
Title: Experimental observation of fracture mechanism in tensile test for unidirectional CFRP	
Hideaki Kusano , Shimadzu Corporation, Japan	
Title: The Low Temperature Grain Growth Behavior of Nanocrystalline Fe-52wt% Ni alloy	
Tai Hong Yim , Korea Institute of Industrial Technology (KITECH), South Korea	
Minsu Lee , Korea Institute of Industrial Technology (KITECH), South Korea	
Title: Surface-area-controlled synthesis of porous titanium dioxide thin films	
Hohyeong Kim , Korea Institute of Industrial Technology, South Korea	
Jae Young Park , Korea Institute of Industrial Technology, South Korea	
Title: Fabrication of nanocellulose/waterborne polyurethane/PEDOT:PSS nanocomposite dispersion for bio-based electrical polyurethane matrix	
Eun Joo Shin , Dong-A University, South Korea	
Title: Ionic strength upon the structure and morphology of WO₃ semiconductors. Study of WO₃ and WO₃-TiO₂ composites photoactivity	
Monica Baia , Babeş-Bolyai University, Romania	

Title: Interface interactions and enhanced room temperature ferromagnetism of Ag@CeO₂ nanostructures	
Shih-Yun Chen, National Taiwan University of Science and Technology, Taiwan	
Title: Fabrication of gelatin-based scaffold for tissue engineering and drug delivery system	
Soonmo Choi, Yeungnam University, South Korea	
Title: Dispersion of Y₂O₃ Particles in Ni-base Superalloy Powders by Ball Milling and High Pressure Homogenizer	
Sung-Tag Oh, Seoul National University of Science and Technology, South Korea	
Title: Mechanical Properties of PVA Fiber Reinforced Porous Concrete	
Tomoya Masuhira, Ritsumeikan University, Japan	
Title: Mineralized nanoparticles as contrast agents for multimodal imaging	
Kyung Hyun Min, Kyung Hee University, South Korea	
Title: Porosity Estimation of Porous Concrete by RI Method	
Yuma Kawasaki, Ritsumeikan University, Japan	
Title: Study on Damage Assessment for Laminated Rubber Bearings using AE Method	
Akihiro Tanaka, Ritsumeikan University, Japan	
Title: Study on Quantity Control of Calcium Ion separated from Concrete Member	
Yuki Shimo, Ritsumeikan University, Japan	
Title: Design Self-recoverable Panel with Reversible Plasticity Shape Memory Polymer	
Youngwan Kim, Sogang University, South Korea	
Title: Claudin 4-targeted phototherapy of nanographene	
Gayong Shim, Seoul National University, South Korea	
Title: Study on the Crystallinity of Laser Irradiated Titanium Oxide Thin Film	
Chaewon Bak, Korea Institute of Industrial Technology (KITECH), South Korea	
Jaeho Shin, Seoul National University, South Korea	
Title: Solution-processed AlO_x gate dielectrics for metal-oxide thin-film transistors	
Jaeyoung Kim, SKKU Advanced Institute of Nanotechnology (SAINT), South Korea	
Title: Solution Processed Fluoropolymer Passivation for Suppressing the Back-channel Effect in Metal Oxide TFT	
Seungbeom Choi, SKKU Advanced Institute of Nanotechnology (SAINT), South Korea	
Title: Fabrication of ideal bio-functional scaffold in bone tissue engineering	
Sunmi Zo, Yeungnam University, South Korea	
Title: Study for high bonding strength between CFRP and metal	
HeungJae Choi, Sogang University, South Korea	
Title: Evaluation of surface condition of road material with ultrasonic method	
Yuki Ogi, Meijo University, Japan	
Title: Understanding Engineered Nanomaterials in the Environment: Silver Nanoparticles (AgNPs)	
Maryam Alejji, Imperial College London, England	
Title: Relation between fabric properties and straight fit virtual dress base patterns	
Agne Lage, Kaunas University of Technology, Lithuania	
Title: Microtexture characterization of laser welded 5A90 Al-Li alloys	
Li Cui, Beijing University of Technology, China	
Title: Effect of thermal aging on mechanical and dynamic-mechanical properties of short fiber reinforced Polyphenylene sulfide (PPS) and its oxidative degradation mechanism	
Peiyuan Zuo, Arts et Métiers ParisTech, France	
Title: Synthesis of amphiphilic diblock copolymers of N-[3-(diméthylamino)propyl] méthacrylamide and methyl methacrylate by reverse iodine transfer polymerization (RITP)"	
wahiba chaibi, University "Djillali Liabes" of Sidi Bel-Abbes, Algeria	
Title: Reinforcement of biodegradable polymers with electrospun nanowhisker containing nanofibers	
Dana Al-Ghoul, Qatar University, Qatar	
Reem Aljindi, Qatar University, Qatar	
3rd World Congress on Oil, Gas and Petrochemistry	
Room--Barcelona	
26-Aug-17	
Session Introduction	
Enhanced Oil and Gas Recovery & Petro chemistry & Chemical Applications	
09:00-09:30	Title: Effect of High and Low Salinity Solutions on the Oil Desorption Efficiency from Calcite and Silica Surfaces
	Arije Al Khafaji, University of Leeds, United Kingdom
09:30-10:00	Title: Effect of Polymeric Inhibitor on Asphaltene Precipitation

	Mahmoud Alhreez, University of Leeds, United Kingdom
10:00-10:30	Title: Hydrogen production with carbon dioxide capture by reforming natural gas using chemical-looping combustion technologies
	Drazen Jovicic, ZIK d.o.o. , Croatia, EU
Reservoir Engineering & Sustainable Energy	
10:30-11:00	Title: Development of mineral-filled polymeric Membranes obtained by extrusion to implement in Separation
	Kian Habibi , Polytechnic University of Catalonia, Spain
Coffee break: 11:00-11:20	
11:20-11:50	Title: Use of Gas Networks for Energy Storage across interconnected Energy Networks
	Mohammad Ali Ekhtiari, University College Dublin, Ireland
Health, Safety & Environment & Oil and Gas Technology	
11:50-12:20	Title: Reduction of Methane Emissions from Natural gas Systems: Risks and Opportunities
	Alexander Gusev, Institute for Advanced Sustainability Studies (IASS), Potsdam, Germany
12:20-12:50	Title: External soil corrosion failure analysis of gas condensate steel Pipeline
	Hisham Abdussalam Mahfud, Libyan Petroleum Institute,Libya
12:50-13:20	Title: External soil corrosion failure analysis of gas condensate steel Pipeline
	K. A. Abousouh , Libyan Petroleum Institute,Libya
Lunch: 13:20-14:20	
14:20-14:50	Title: Spatio Temporal Analysis of Oil Pit and Oil-Polluted Surfaces from Remote Sensing Data in one of the Libyan Oil Fields
	Khalifa Abdunaser, Libyan Petroleum Institute,Libya
14:50-15:20	Title: Safe Design Philosophy
	Danaybel Aranguibel, PDVSA,Venezuela
15:20-16:50	Title: Safe Design Philosophy
	Manuel Torres, PDVSA,Venezuela
16:50- 17:20	Title: The Risk Assessment Methodology in Operations MVR-PRO
	Rubert Hurtado, PDVSA,Venezuela
17:20- 17:50	Title: The Risk Assessment Methodology in Operations MVR-PRO
	Danaybel Aranguibel, PDVSA,Venezuela
17:50- 18:20	Title:Laboratory assessment of a scale inhibitor performance to prevent calcium carbonate precipitation in oil production equipment
	Mhamed Kahrwad, Libyan Petroleum Institute, Libya
18:20- 18:50	Title: Health Safety Officer
	AUBIN GILDAS MASSAMBA, South Africa
18:50- 19:50	Title: Risk Management in a complex of Interconnected Deep conversion Units
	Maciej Szczepankiewicz, Poznan University of Technology, Poland
Posters	
	Title: The Fiscal Optimization to Achieve a Win-Win Gross Spli PSC
	Sasoni, Arsyan Hilman, University of Aberdeen, United Kingdom
	Title: Synergistic effect of biosurfactant and nanoparticle mixture on microbial enhanced oil recovery
	Hossein Amani, Babol Noshirvani University of Technology, Babol, Iran
	Title: Eastern Skills For Logistics and Transportation
	Fahad Aldossary, Eastern Skills for Logistics & Transportation, Saudi Arabia
	Nassar A Al Dossary, Eastern Skills for Logistics & Transportation, Saudi Arabia
	Abdulrahman B Al Dossary, Eastern Skills for Logistics & Transportation, Saudi Arabia
	Bader A Al Dossary, Eastern Skills for Logistics & Transportation, Saudi Arabia
	Title:
	Makoumboumakou Donald Rodrigue, South Africa