

<p align="center">Program for The EMN Barcelona Meeting 2018 <i>Sept 10 - 14, Barcelona, Spain</i></p>		
<p align="center">Monday, Sept 10 Registration Time: 14:00~17:00</p>		
<p align="center">Tuesday morning, Sept 11 Room A</p>		
<p align="center">Opening: 8:30-8:35</p>		
<p align="center">Session: General I Chair: Anna Roig</p>		
8:35-9:00	A01: Nanocup arrays – a novel platform for nanoplasmonics	<p align="center">Rana Biswas Ames Laboratory & Iowa State University, USA</p>
9:00-9:25	A02: Structure and thermoelectric properties of materials based on Bi ₂ Te ₃ , SnSe y CoSb ₃	<p align="center">Norbert Marcel Nemes Complutense University of Madrid, Spain</p>
9:25-9:50	A03: Nano- and Micro-Structured Materials and Surfaces for Photonics	<p align="center">Sharath Sriram RMIT University, Australia</p>
9:50-10:15	A04: Preparation of Electrospun Carbon Nanofibers with Improved Mechanical Properties	<p align="center">Su-Hyeong Chae Chonbuk National University, Korea</p>
10:15-10:30	Coffee Break	
<p align="center">Session: General II Chair: Flavio Y. Bruno</p>		
10:30-10:55	A05: Strategies for the efficient application of metal-organic frameworks and derived materials as sorbents for the extraction of water pollutants	<p align="center">Carlos Palomino Cabello Universitat de les Illes Balears, Spain</p>
10:55-11:20	A06: Covalent Triazine-based Frameworks and their application in catalytic upgrading of biogenic compounds	<p align="center">Jens Artz RWTH Aachen University, Germany</p>
11:20-11:45	A07: Adsorption in MOFs materials: impact of the hydrophobic hydrophilic character	<p align="center">Fabrice Salles Université Montpellier, France</p>
11:45-12:10	A08: Metal-organic frameworks from preorganized heterometallic building units for separations	<p align="center">Aleksandr Sopianik Nikolaev Institute of Inorganic Chemistry, Russia</p>
12:10-14:00	Lunch Break	

Tuesday afternoon, Sept 11		
Room A		
Session: General III Chair: Rana Biswas		
14:00-14:25	A09: Substrate and substitution tuned metal insulator transition in rare-earth nickelate NdNiO ₃ films grown on single crystalline substrates : some emerging issues .	Arup Kumar Raychaudhuri S. N. Bose National Centre for Basic Sciences, India
14:25 -14:50	A10: Two-dimensional electron gases at the (111) - surfaces of KTaO ₃ and SrTiO ₃	Flavio Y. Bruno University of Geneva, Switzerland
14:50 -15:15	A11: Theoretical Investigation of Spin Orbit Physics and Correlation Effects in Complex Oxides and Heterostructures	Satoshi Okamoto ORNL - Oak Ridge National Laboratory, USA
15:15-15:30	Coffee Break	
Session: General IV Chair: Sharath Sriram		
15:30-15:55	A12: Interfacial synthetic approach for constructing metal-organic frameworks using metal ion-doped polymer substrate	Takaaki Tsuruoka (FIRST)Konan University, Japan
15:55-16:20	A13: ZIFs for radioactive iodine capping	Vera V. Butova Southern Federal University, Russia
16:20-16:45	A14: Study of Six Green Insensitive High Energetic Coordination Polymers Based on Alkali/Alkali-Earth Metals and 4,5-Bis(tetrazol-5-yl)-2 ^H -1,2,3-triazole	Dong Chen Institute of Chemical Materials, CAEP, China
16:45-17:10	A15: Controlling the orientation of metal-organic framework crystals by an interfacial growth approach using a metal ion-doped polymer substrate	Takashi Ohhashi (FIRST)Konan University, Japan
17:35	Dinner Social	

Tuesday afternoon, Sept 11 Room B		
Session: General V Chair: Anna Roig		
14:00-14:25	B01: Computational Study on MgTaO ₂ N Photocatalysts: Perovskite versus Ilmenite Structure.	Koichi Yamashita The University of Tokyo, Japan
14:25 -14:50	B02: DNA-Doped p-OLED Materials	Dong June Ahn Korea University, Korea
14:50 -15:15	B03: Modifying surface morphology and properties via nano-crystalline/amorphous phase separation in thin films	Alejandro Borroto Université de Lorraine, CNRS, IJL, France
15:15-15:40	B04: Silicon photonics for integrated quantum optics	Daniele Bajoni University of Pavia, Italy
15:40-15:55	Coffee Break	
Session: General VI Chair: Daniele Bajoni		
15:55-16:20	B05: Topography modifications and nanocomposites of bacterial nanocellulose	Anna Roig Institut de Ciència de Materials de Barcelona (ICMAB-CSIC), Spain
16:20-16:45	B06: Discovery of a cellulose-restructuring hetero-trans- β -glucanase: its enzymology and potential applications	Stephen Fry The University of Edinburgh, United Kingdom
16:45-17:10	B07: Hetero-trans- β -glucanase catalyses covalent bond formation between cellulose and xyloglucan (in-vivo and in-situ evidence)	Klaus Herburger The University of Edinburgh, United Kingdom
17:10-17:35	B08: Confined nanoparticle multilayer bacterial cellulose composite	Soledad Roig Institut de Ciència de Materials de Barcelona (ICMAB-CSIC), Spain
17:35	Dinner Social	

Wednesday morning, Sept 12		
Room A		
Session: General VII Chair: Gianpiero Buscarino		
8:35-9:00	A16: Development of Mass Production Technology of Two-Component Nanofibers: Centrifugal Electrospinning	Taewoo Kim Chonbuk National University, Korea
9:00-9:25	A17: High-pressure optical properties of the weaklybonded ReS ₂ and ReSe ₂ transition metal dichalcogenides	Robert Oliva Vidal Wydział Podstawowych Problemów Techniki, Poland
9:25-9:50	A18: Surface Wettability Controllable Polyimides Having Various Photoreactive Groups by Photo-irradiation	Yusuke Tsuda Kurume National College of Technology, Japan
9:50-10:15	A19: Nanostructured of metal oxide/carbon nanotube composite and its electrochemical performance in simulated body fluid for energy storage device	Ji Su Chae Energy & Environmental Division, Korea Institute of Ceramic Engineering & Technology(KICET), Korea
10:15-10:30	Coffee Break	
Session: General VIII Chair: Robert Oliva Vidal		
10:30-10:55	A20: Effects of mechanical compaction of HKUST-1 powder investigated through the changes of its magnetic properties	Gianpiero Buscarino Università di Palermo, Italy
10:55-11:20	A21: MOF materials for gas separations	Jinsoo Kim Kyung Hee University, Korea
11:20-11:45	A22: From a novel energetic coordination polymer precursor to diverse Mn ₂ O ₃ nanostructures: the control of pyrolysis products morphology achieved by changing the calcination atmosphere	Qi Zhang Institute of Chemical Materials, CAEP, China
11:45-12:10	A23: Computer Simulations of Metal Organic Frameworks for CO ₂ Capture	Seda Keskin Koc University, Turkey
12:10-14:00	Lunch Break	

Wednesday afternoon, Sept 12		
Room A		
Session: General IX Chair: Javier Carrasco		
14:00-14:25	A24: Iron Oxides Anode Active Materials for Rechargeable Lithium Ion Batteries	Chang Woo Lee Kyung Hee University, Korea
14:25 -14:50	A25: Area-selective atomic layer deposition of copper oxide and metallic copper thin films for facile synthesis of p-Cu ₂ O/n-ZnO junctions	Claudia De Melo Sanchez Université de Lorraine, CNRS, IJL, France
14:50 -15:15	A26: Microstructural evolution and magnetic properties of precipitates comprising ferromagnetic element atoms in a copper matrix	Mahoto Takeda Yokohama National University, Japan
15:15-15:40	A27: Electrically Metal-doped Transparent Conductive Oxide: Its Application to Various Light-Emitting and Absorbing Devices	Tae Geun Kim Korea University, Korea
15:40--16:20	POSTER & Coffee Break	
Session: General X Chair: Chang Woo Lee		
16:20-16:45	A28: The enhanced electrical and optical properties of CVD grown MoS ₂ film	Jang-Yeon Kwon Yonsei University, Korea
16:45-17:10	A29: Ion insertion into 2D layered oxide structures for energy storage: A molecular-level perspective using first-principles calculations	Javier Carrasco CIC Energigune, Spain
17:10-17:35	A30: Dramatic Enhancement of Triboelectric Nanogenerator Performance by Using an Electron Blocking Layer	Huynh Dinh Nghia Kyung Hee University, Korea
17:35-17:50	A31: Antifragile tandem triboelectric nanogenerators for irregular vibration energy scavenging	Divij Bhatia Kyung Hee University, Korea
17:50	Dinner Social	

Wednesday morning, Sept 12 Room B		
Session: General XI Chair: Rolando Pedicini		
8:35-9:00	B09: Cellulose and related biopolymers as active supports for development of hybrid microanalytical devices	Pawel Zarzycki Koszalin University of Technology, Poland
9:00-9:25	B10: Modification of cellulose-based materials and nanomaterials by cold, atmospheric-pressure plasma treatments	Luc Stafford Université de Montréal, Canada
9:25-9:50	B11: Preparation of ‘powder’ cellulose nanocrystal (nanowhisker) filler with natural surface	Toshihiko Arita Tohoku University, Japan
9:50-10:15	B12: Hybrid Nano-composite of Aspect Ratio Controlled ZnO and Cellulose Nanofiber for Flexible UV Sensor	Teahoon Park Korea Institute of Materials Science, Korea
10:15-10:30	Coffee Break	
Session: General XII Chair: Pawel Zarzycki		
10:30-10:55	B13: Application of Molecular Dynamic Simulation for Transport Mechanism in Water Solution	ChangKyo Yoo Kyung Hee University, Korea
10:55-11:20	B14: Hydrogen Storage Materials at CNR-ITAE: a review	Rolando Pedicini Istituto di Tecnologie Avanzate per l’Energia “Nicola Giordano”, CNR-ITAE, Italy
11:20-11:45	B15: Structure-Property Relationships of Green Polymers: From Single-Chain Characteristics to Crystalline Properties	Yuji Sasanuma Chiba University, Japan
11:45-12:10	B16: Encapsulation of materials into carbon nanotubes: from tubular van der Waals heterostructures to biomedical applications	Gerard Tobias Institut de Ciencia de Materials de Barcelona (ICMAB-CSIC), Spain
12:10-14:00	Lunch Break	

Wednesday afternoon, Sept 12 Room B		
Session: General XIII Chair: Piotr Habdas		
14:00-14:25	B17: Acoustic loading at supersonic and hypersonic speeds	Dimitris Drikakis University of Strathclyde, UK
14:25 -14:50	B18: Collapse phenomenon of n-point vortices accompany by formation of vorticity filaments	Henryk Kudela Wroclaw University of Science and Technology, Poland
14:50 -15:15	B19: Nonlinear electrophoresis in the salt-free limit	Yasuya Nakayama Kyushu University, Japan
15:15 -15:40	B20: Fluid Dynamics in Astrophysics	Yu-Qing Lou Tsinghua University, China
15:40-15:55	POSTER & Coffee Break	
Session: General XIV Chair: Henryk Kudela		
15:55-16:20	B21: Sediment Transport and Sediment Delivery Ratio in Semiarid Watersheds	Jose Ramon Barros Cantalice Rural Federal University of Pernambuco, Brasil
16:20-16:45	B22: Impacts of Sectoral Emissions in China and the Implications: Air Quality, Public Health, Crop Production, and Economic Costs	Hung-Lam Steve Yim The Chinese University of Hong Kong, Hong Kong
16:45-17:15	B23: History as a Springboard for the Algarve Landscape Sustainability	Ana Duarte Rodrigues University of Lisbon, Portugal (Keynote)
17:15-17:40	B24: The Water Crisis in South Africa	Francois Durand University of Johannesburg, South Africa
17:40	Dinner Social	

Thursday morning, Sept 13		
Room A		
Session: General XV Chair: Alejandro Borroto		
8:35-9:00	A32: Antiferromagnetic Order in FeSe/ STO thin films	Dong Qian Shanghai Jiao Tong University, China
9:00-9:25	A33: Control of photo-thermal therapies with magnetic fields	Borja Sepúlveda & Zhi Li ICN2, CSIC and The Barcelona Institute of Science and Technology, Spain
9:25-9:50	A34: Characterization of pico Iron Hydride	Jacques Dufour S*PIC*E 70, Rue du Vertbois, France
9:50-10:15	A35: A New Wearable Sensor in The Shape of A Braided Cord Developed by Weaving Piezoelectric poly-l-lactic acid Fiber	Yoshiro Tajitsu Kansai University, Japan
10:15-10:30	Coffee Break	
Session: General XVI Chair: Jacques Dufour		
10:30-10:55	A36: Synthesis of Cellulose-graft-HEMA Copolymer Nanofiber Membrane to Remove Heavy Metal Ions	Mohamed Gouda King Faisal University, Saudi Arabia
10:55-11:20	A37: On the kinetics of cellulose degradation. A Copernican revolution.	Paolo Calvini Free-lance consultant
11:20-11:45	A38: Ni-mediated direct electro-oxidation of cellulose	Yasuhito Sugano Tokyo University of Science, Japan
11:45-12:10	A39: 3D printable Metal organic Frameworks	Sahar Sultan Stockholm University, Sweden
12:10-14:00	Lunch Break	

Thursday afternoon, Sept 13		
Room B		
Session: General XVII		Chair: Dimitris Drikakis
14:00-14:25	A40: Forced motion of a probe particle in dilute colloidal suspensions	Piotr Habdas Saint Joseph's University, USA
14:25 -14:50	A41: Size-dependent margination of nanoscale drug delivery carriers	Tong Wang Nanjing University of Aeronautics and Astronautics, China
14:50 -15:15	A42: Demonstration of a unified and flexible coupling environment for nonlinear fluid-structure interaction problems	David Thomas University of Liège, Belgium
15:15-15:30	Coffee Break	
Session: General XVIII		Chair: Jinsoo Kim
15:30-15:55	A43: Towards an eco-efficient approach to the preparation of MOFs	Ana M. López Periago Instituto de Ciencia de Materiales de Barcelona (ICMAB-CSIC), Spain
15:55-16:20	A44: Hysteretic sorption behavior in microporous metal-organic frameworks	Marina Barsukova Nikolaev Institute of Inorganic Chemistry, Russia
16:20-16:45	A45: Characterization of adsorbed water in MIL-53(Al) by FTIR spectroscopy and ab-initio calculations	Marcos Salazar Université de Bourgogne, France
16:45-17:10	A46: Impact of border traps in p-Si/Cu ₃ (BTC) ₂ /Al based MIS capacitors	Liz Montañez Laboratory of Nano and Quantum Engineering, Leibniz Universität Hannover, Germany
17:10-17:35	A47: MB-UiO-66-NH ₂ Metal-Organic Framework composite as Chromogenic and Fluorogenic Sensor for Amine	Aasif Helal Center of Research Excellence in Nanotechnology, King Fahd University of Petroleum and Minerals, Saudi Arabia
17:35	Dinner Social	

Wednesday afternoon, Sept 12**Poster session (15:40--16:20)**

P01	Nano-architectures reduced graphene oxide for energy storage applications	Kwang Chul Roh Energy & Environmental Division, Korea Institute of Ceramic Engineering & Technology(KICET), Korea
P02	Wire type Triboelectric Nanogenerator as accurate frequency sensor	Jiseop Yu Kyung Hee University, Korea
P03	Fabrication of structures with nano voids using nanoparticles and their characteristics for different surface charge	Jae Sung Yoon Korea institute of Machinery and Materials (KIMM), Korea
P04	Flexible and stretchable supercapacitor using MnO ₂ nanoparticles and carbon nanotube coated textile electrode	Seungmin Hyun Korea Institute of Machinery and Materials, Korea
P05	Fabrication and Microstructure of Lead Free Solder Nanowires	Jung-Hsuan Chen National Taiwan Normal University, Taiwan
P06	Development of a Compact X-ray Tube Comprising Field-Emission Based Cold Cathode and Transmission Type Anode for Semi-stationary and Stationary CT Architectures	Hyoung K. Lee Missouri University of Science Technology, USA
P07	Physical Properties of Nanocomposites based on Chemically Modified Boron Nitride (BN) and High-density Polyethylene (HDPE)	Soon Man Hong Korea Institute of Science and Technology, Korea
P08	Catalytic depolymerization of cellulose to nanocellulose using an ionic liquid/heteropoly acid composite catalyst	Wen-Hua Chen Chemistry Division, Institute of Nuclear Energy Research, Taiwan
P09	Methylene blue adventures over MIL-100(Fe): photocatalysis and charge transfer	Daria Poloneeva St. Petersburg State University, Russia
P10	Study of optical properties of europium based MOF-76	Dmitrii Zharovov Saint Petersburg State University, Russia
P11	Optimum Morphology of Mixed-Olivine Mesocrystals for Li-Ion Batteries	Seunghoon Nam Korea Institute of Machinery and Materials (KIMM), Korea
P12	Investigation of the structure, morphology and optical properties of nano-scale dysprosium (Dy ³⁺) doped zinc silicate glasses	Pontsho Mbule University of South Africa, South Africa
P13	Centrifuge-based stepwise chemical loading disc for high-throughput gold nanoparticle synthesis	Tae Seok Seo Kyung Hee University, Korea

P14	3D Printable Nanocellulose-Pectin ink formulations	Adriana Lungu University Polytechnica of Bucharest, Romania
P15	Isolation of nano-cellulose from “Tall Golden-rod” of Korean invasive alien plant fibers by eco-friendly and easy processes using electron beam irradiation, and its characterization	Hye Kyung Shin Jeonju University, Korea
Friday, Sept 14 One-day excursion		