Program for EMN Milano Meeting August 14-18, 2017		
14:00-18:00	**Monday Afternoon, August 14th, Onsite Registration & Sign up**	
Tuesday Morning, 15th August Mimosa Room		
07:55-08:00	Opening Ceremony	
Keynote Address	**Chair: Pawel Zarzycki**	
08:00-08:35	A01: Development of Post-Surgical Anti-Adhesion Barriers Made of Nanofibrous Membranes	**Jyh-Ping Chen** Chang Gung University, Taiwan
Session: Biomedical application I	**Chair: Pawel Zarzycki**	
08:35-09:00	A02: Structural characterization of superparamagnetic iron oxide nanoparticles (SPION) for potential biomedical applications	**Fabio Furlan Ferreira** Federal University of ABC, Brazil
09:00-09:25	A03: The effect of chitosan on delaying the senescence of human anterior cruciate ligament cells and synovial cells	**Tai-Horng Young** National Taiwan University, Taiwan
09:25-09:50	A04: Multifunctional nanocrystalline calcium phosphates and further perspective of their application in theranostic	**Rafał J. Wiglusz** Institute of Low Temperature and Structure Research, PAS, Poland
09:50-10:15	A05: Cocowood mechanical efficiency as foundation for potential biomimetic applications	**Mauricio González** Universidad de la Fuerzas Armadas- ESPE, Spain
10:15-10:30	**Session Break**	
Session: General on Biomaterials I	**Chair: Fabio Furlan Ferreira**	
10:30-10:55	A6: Modified Surfaces for Cell Biology Studies and Potential Applications	**Debasish Kuila** North Carolina A&T State University, USA
10:55-11:20	A7: Bionanocellulose as a matrix for functional composite materials	**Jinho Hyun** Seoul National University, South Korea
11:20-11:45	A8: Development of efficient quantification protocols and simple analytical devices involving multifunctional and hybrid biomaterials	**Pawel Zarzycki** Koszalin University of Technology, Poland
11:45-12:10	A09: Vegetation as biomaterial in Environmental Engineering	**Donatella Termini** University of Palermo, Italy
12:10-13:10	**Lunch Break**	

Tuesday Afternoon, 15th August Mimosa Room		
Session: Energy Storage I Chair: Andrew Basile		
13:10-13:35	A10: Theoretical study of halogenated B12H122-	**Manish Sharma** University of Geneva, Switzerland
13:35-14:00	A11: Multilayer Polymer Films for High Energy Density Capacitors	**Mason Wolak** Naval Research Laboratory, USA
14:00-14:25	A12: Hybrid Energy Storage Systems for Smart Grids and Electric Propulsion Systems	**Alessandro Serpi** University of Cagliari, Italy
14:25-14:50	A13: Profitability of Energy Storage Devices for Smart Buildings	**Dimitri Torregrossa** University of Applied Sciences Fribourg, Switzerland
14:50-15:05	**Session Break**	
Session: Memristive Switching & Network I Chair: Josep L. Rosselló		
15:05-15:30	A14: Memristive Implementation of Fuzzy Logic and Neural Networks	**Martin Klimo** University of Zilina, Slovakia
15:30-15:55	A15: Dynamic Behavior of Gold-Based Nanoparticles on Reducible Oxide Supports	**Masayoshi Higuchi** National Institute for Materials Science, Japan
15:55-16:20	A16: Memristors: Material, Device, and Systems	**Mehdi Anwar** University of Connecticut, USA
16:20-16:45	A17:Photomemristive Systems Based on Two-Dimensional Crystals	**Gennady N. Panin** Russian Academy of Sciences, Russia
16:45-17:10	A18: Artificial Insect Equipped with Hardware Neural Networks	**Ken Saito** Nihon University, Japan
17:10-17:35	A19: Switching property of nanowire based ReRAM	**Kouichi Takase** Nihon University, Japan
18:00	**Dinner Social**	

Wednesday Morning, 16th August Azalea Room		
Session: General on Biomaterials II Chair: Hui-Fen Wu		
08:10-08:35	A20: Cationic substitutions in sol-gel derived bioceramics: a fine tuning of biological properties	**Jean-Marie Nedelec** Institut Universitaire de France, France
08:35-09:00	A21: Dialysis versus thermal method: Which procedure for β-1,3-glucan gelation is more suitable for β-1,3-glucan/HA scaffold fabrication?	**Katarzyna Klimek** Medical University of Lublin, Poland
09:00-09:25	A22: TBA	**Giorgio Speranza** CMM - FBK, Italy
09:25-09:50	A23: *Ab Initio* Investigation of Transport Properties of cis/trans Retinal in graphene nanoribbon structures	**Camelia Visan** National Institute for Physics and Nuclear Engineering, Romania
09:50-10:05	A24: Modification of TiO2 with gold nanoparticles: application to Dye-Sensitized Solar Cells	**Liliana Truta** Polytechnic Institute of Porto, Portugal
10:05-10:20	**Session Break**	
Session: Biomedical application II Chair: Keiichiro Kushiro		
10:20-10:45	A25: Photoluminiscent Carbon Dots 'Clathrate-like' nanostructures for targeted bioimaging and photo-chemotherapy of cancer	**Hui-Fen Wu** National Sun Yat-Sen University, Taiwan
10:45-11:10	A26: Design, preparation and applications of uniform biodegradable particles for vaccine adjuvant	**Guanghui Ma** Institute of Process Engineering, CAS, China
11:10-11:35	A27: Carbon nanotubes: a functional nanomaterial for tissue engineering	**Gabriela S. Lorite** University of Oulu, Finland
11:35-12:00	A28: Mimicked tissue engineering scaffolds based on silk fibroin for orthopedic and maxillofacial disease surgery	**Jirut Meesane** Prince of Songkla University, Thailand
12:00-13:30	**Lunch Break**	

Wednesday Afternoon, 16th August Azalea Room		
Session: Antimicrobial and Bioactive Materials Chair: Cristina Bonferoni		
13:55-14:20	A29: A New Family Of Biocompatible Biocide Glasses Free Of P2O5	**Jose Serafin Moya** CINN-CSIC, Spain

14:20-14:45	A30: Surface Control and Cellular Response of Biomaterials Treated by Accelerated Neutral Atom Beam	**Joseph Khoury** Exogenesis Corp, USA
14:45-15:05	A31: Bioadhesive thermoresponsive systems for biomedical applications	**Marcos Luciano Bruschi** State University of Maringá, Brasil
15:05-15:30	A32: Antimicrobial and Bloodcompatibility studies on modifed Silk Fibroin	**Terin Adali** Near East University, Cyprus
15:30-16:00	**Session Break & Poster**	
Poster	P01: Synthesis of a Bioactive and Degradable 50Poly(70Lactic-co-30Glycoric Acid)/50(85SiO2-15CaO) Composite with Dual Pore Structure	**Sang-Hoon Rhee** Seoul National University, South Korea
	P02: Preparation of Hyaluronic Acid - Resveratrol Hydrogel For Treatment of Osteoarthritis	**Andréa Arruda Martins Shimojo** University of Campinas, Brazil
	P03: Separation and analysis of various bisphenols involving supramolecular complexes with macrocyclic oligosaccharides	**A. Kaleniecka** Koszalin University of Technology, Poland
	P04: Adjustment of phenomenological model describing liquid chromatography retention controlled by supramolecular interactions with natural cyclodextrins	**Krzysztof Piaskowski** Koszalin University of Technology, Poland
	P05: Tertiary Dentin Formation in Various Tooth Defect Models Using Cpne7	**Joo Cheol Park** Seoul National University, Korea
	P06: TBA	**Bong-Kyu Choi** Seoul National University, Korea
	P07: Osteogenic effect of α-tricalcium phosphate on canine mesenchymal stromal cells	**Nance Nardi** Universidade Luterana do Brasil, Brazil
	P08: Graft Type Effect on Antibacterial Properties of LDPE Active Surfaces	**Marian Lehocky** Tomas Bata University in Zlín, Czech Republic
	P9: Abstract	**Kadir Ozaltin** Tomas Bata University in Zlín, Czech Republic
	P10: Activated Carbon Derived from Renewable Biomass as a High Performance Electrode for Electrochemical Supercapacitor	**Ji-Hyuk Choi** Korea Institute of Geoscience and Mineral Resources, Korea
	P11: TBA	**Timothy Molter** Knowm Inc,USA
	P12: Resistive switching behaviors in organic-inorganic hybrid halide perovskite CH3NH3PbI3− xClx	**Eun Ji Yoo** Sejong University,Korea

	P13: Thermo-responsive injectable hydrogel based on the simple mixing of polysaccharide and block copolymer for sustained NSAID delivery	**Kun Na** The Catholic University of Korea, Republic of Korea
	P14: Waste material of propolis and gelatin microparticles containing ascorbic acid	**Marcos Luciano Bruschi** State University of Maringá, Brasil
Session: Biomaterials and Translation Chair: Marcos Luciano Bruschi		
16:00-16:30	A33: Amphiphilic chitosans by ionic interaction with fatty acids: possible applications in nanomedicine	**Cristina Bonferoni** University of Pavia, Italy
16:30-16:55	A34: Vascularized soft tissue flap engineering for reconstructive microsurgery	**Qixu Zhang** The University of Texas MD Anderson Cancer Center, USA
16:55-17:20	A35: Effect of Biomaterial Surface Structures and Material Properties on Topography-Driven Cell Migration	**Keiichiro Kushiro** The University of Tokyo, Japan
17:20-17:45	A36: Organic Functionalized magnetic nanoparticles to overcome the biological barriers	**Guglielmo Guido Condorelli** Università di Catania, Italy
18:05	**Dinner Social**	

Wednesday Morning, 16th August Glicine Room		
Session: Memristive Switching & Network II Chair: Mehdi Anwar		
08:00-08:25	B01: Hardware Neural Network: Theory and Applications	**Josep L. Rosselló** Balearic Islands University, Spain
08:25-08:50	B02: TBA	**Nan Du** University of Technology Chemnitz, Germany
08:50-09:15	B03: Memristors to Deep Learning in Six Easy Steps: Machine Learning with the Knowm API	**Alex Nugent** Knowm Inc.,USA
09:15-09:40	B04: Spin-based Binary Memristors for Non-volatile Memory and Logic Applications	**Victor Sverdlov** Technische Universität Wien, Austria
09:40-10:05	B05: Resistive switching in planar metal/metal-oxide bilayer system with low voltage operation	**Takashi Kimura** Kyushu University, Japan
10:05-10:30	B06: Resistance switching in vanadium oxides	**Mariela Menghini** University of Leuven, Belgium
10:30-10:45	**Session Break**	

Session: Energy Storage II Chair: Alessandro Serpi		
10:45-11:10	B07: Understanding of Cyclic Degradation of BCC-type Hydrogen Storage Alloys by Local Structure Analysis	**Sakaki Kouji** National Institute of Advanced Industrial Science and Technology, Japan
11:10-11:35	B08: Two Terawatt-years Storage Yields 40 TWe Average From Intermittent Generation	**William Ernest Schenewerk** Los Angeles, USA
11:35-12:00	B09: The Interphase at Sodium Metal Electrodes and the Effect of Moisture as an Additive	**Andrew Basile** Deakin University, Australia
12:00-12:25	B10: Research on the Low Melt Point Eutectic Molten Salt Nanofluids	**Yuanwei Lu** Beijing Univiersity of Technology, China
12:25-13:30	**Lunch Break**	

Wednesday Afternoon, 16th August Glicine Room		
Session: Energy Storage III Chair: Sakaki Kouji		
13:55-14:20	B11: High-Pressure and High-Temperature Synthesis of Novel Hydrides	**Hiroyuki Saitoh** National Institutes for Quantum and Radiological Science and Technology, Japan
14:20-14:45	B12: Visible-Light Induced Carbon Dioxide Reduction and Fixation with Photoredox System	**Yutaka Amao** Osaka City University, Japan
14:45-15:05	B13: Dielectric, magnetic and optical properties of PZN-4.5PT perovskite nanoparticles deposited on <100> oriented p-type Si for energy storage and solar cells application	**Diouma Kobor** Assane Seck University of Ziguinchor, Senegal
15:05-15:30	B14: Research and Application of Molten Salt Heat Tranfer and Storage	**Yuting Wu** Beijing University of Technology, China
15:30-16:00	**Session Break & Poster**	
Session: General on Biomaterials III Chair: Claudia Tresoldi		
16:00-16:25	B15: Biomimetic materials for sensing cancer biomarkers	**Manuela Frasco** Polytechnic Institute of Porto, Portugal
16:25-16:50	B16: Chitosan/beta-1,3-glucan/HA scaffold for bone regeneration enhances osteogenic differentiation	**Agata Przekora** Medical University of Lublin, Poland

	via induction of augmented TNF-α production by osteoblasts	
16:50-17:05	B17: Biosensors and photovoltaics merged: towards a self-sustained device	**Ana Tavares** Polytechnic Institute of Porto, Portugal
17:05-17:30	B18: A study on dual-phase-lag model of heat transfer in bi-layer tissues during magnetic hyperthermia treatment	**Dinesh Kumar** Eternal University, India
17:30-17:55	B19: Plasma jet surface modification enhanced cellular interaction with PCL nano-fiber substrates	**Seyed Mohammad Atyabi** Pasteur Institute of Iran, Iran
18:05	**Dinner Social**	

Thursday Morning, 17th August **Azalea Room**		
Session: Energy Storage IV	**Chair: Hiroyuki Saitoh**	
08:10-08:35	A37: Numerical and experimental characterization of an innovative PCM storage system	**Jacques Robadey** University of Applied Sciences Fribourg, Switzerland
08:35-09:00	A38: Study on the Influence of Large Scale Wind Power Accessing in Power System on Subcritical and ultra supercritical/supercritical Units	**Yufeng Guo** Harbin Institute of Technology, China
09:00-09:25	A39: Latest Appliations of Energy Storage in Power System Operation and Frequency Control	**Jin Zhong** The University of Hong Kong, China
09:25-09:50	A40: Multi-Dimensional Nano-Structure for High Efficiency Energy Electrodes	**Seong Chan Jun** Yonsei University, Kroea
09:50-10:15	A41: Composite Phase Change Materials for Thermal Storage	**Xuelai Zhang** Shanghai Maritime University, China
10:15-10:25	**Session Break**	
Session: Biomedical application III	**Chair: Manuela Frasco**	
10:25-10:50	A42: Advanced Biomaterials in Total Knee Arthroplasty Articulations	**Thomas M Grupp** Aesculap AG Research & Development, Germany

10:50-11:15	A43: Superparamagnetic Iron Oxide Nanoparticles dispersed in Pluronic F127 Hydrogel: Potential Uses in Topical Applications	**Paula Haddad** Federal University of São Paulo, Brazil
11:15-11:40	A44: C The multifold potential of bioreactor as tools to produce multilayered scaffolds for vascular tissue engineering	**Claudia Tresoldi** Politecnico di Milano, Italy
11:40-12:05	A45: Polypeptides Exhibiting Structure and Function Relationship for Biomedical Applications	**Jeng-Shiung Jan** National Cheng Kung University, Taiwan
12:05	**Lunch Break**	

Thursday Afternoon, 17th August **Azalea Room**		
Session: Biomedical application IV Chair: Paula Haddad		
13:05-13:30	A46: Proton Transfer in Biopolymer Electrolyte of Fuel Cell	**Yasumitsu Matsuo** Setsunan University, Japan
13:30-13:55	A47: Pharmaceutical Applications of Uniform-sized Chitosan Micro/Nanoparticles with Autofluorescent Property	**Wei Wei** Institute of Process Engineering, CAS, China
13:55-14:20	A48: Antibacterial Coatings Based on Immobilized Hyperbranched Polyureas	**Ton Loontjens** University of Groningen, The Netherlands
14:20-14:35	A49: Pulsed Electron Deposition of functional biomaterials for orthopedic applications	**Michele Bianchi** Rizzoli Orthopaedic Institute, Italy
14:35-14:50	**Session Break**	
Session: General on Biomaterials IV Chair: Wei Wei		
14:50-15:15	A50: Electrical biosensors moving towards autonomy: application to cancer biomarkers	**Goreti Sales** Instituto Superior de Engenharia do Porto, Portugal
15:40-16:05	A51: Thermoresponsive polyelectrolyte complex particles: Adhesive material for switchable release of bone healing drugs	**Martin Müller** Leibniz Institute of Polymer Research Dresden, Germany
15:40-16:05	A52: Microengineered Hydrogels for Tissue Engineering and Surgical Applications	**Nasim Annabi** Northeastern University, USA

16:05-16:30	A53: Plastic antibodies on a paper-based sensor applied to cancer detection	**Marcela Oliveira** Polytechnic Institute of Porto, Portugal
16:30-16:55	A54: Hydroxyapatite Coatings for Dental and Orthopedic Implants	**Noam Eliaz** Tel Aviv University, Israel
Session: General on Biomaterials V		**Chair: Ton Loontjens**
16:55-17:20	A55: It is finally possible to create an identical skeleton to those of the bone mineral	**Sophie Cazalbou** Université de Toulouse, France
17:20-17:45	A56: Green synthesis and characterization of multi component magnetic nanoparticles for drug delivery	**Fariba Tadayon** Islamic Azad University Tehran North Branch, Iran
17:45-18:10	A57: Biomaterials and their applications	**K.V.Krishna Sastry** Vinayaka Missions University, India
18:10	**Dinner Social**	

August 18, 2017
One Day Academic Exchange & Excursion