

| Monday, September 19 <sup>th</sup> |   |
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| 08:00                              | Registration  |
| 09:00                              | Opening   |
| 09:30 – 10:15                      | <b>PL1 – VOIT</b> - Robust responsive polymersomes and nanocapsules for biomedical, biotechnological and microfluidic application: control of multifunctionality and membrane traffic |
| 10:15 – 10:45                      | <b>KN1 – MIJANGOS</b> - Advances in pattern polymer nanostructures and innovative applications  |
| 10:45 – 11:10                      | <b>COFFEE BREAK</b>   |

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| 11:10 – 11:30 | <b>OR1 - BANERJEE</b> - Development And Properties Of Novel High-Temperature Nanostructured Polymer Blends From Rubber-Plastic Compositions  |
| 11:30 – 11:50 | <b>OR2 - MORTIER</b> - A bio-inspired approach for nano-structured polymers with strong water adhesion (parahydrophobic properties) from 3,4-ethylenedioxypyrrole derivatives                          |
| 11:50 – 12:10 | <b>OR3 - DALMAS</b> - Tailored microstructure and mechanical properties of nanocomposite films made from polyacrylic/LDH hybrid latex suspensions synthesized by raft-mediated emulsion polymerization |
| 12:10 – 12:30 | <b>OR4 - SURIANO</b> - Micro/nanostructuring of advanced polymers via two photon polymerization for miniaturized devices   |
| 12:30 – 12:50 | <b>OR5 - MEIKAP</b> - Impedance spectroscopy and current-voltage hysteresis of PVA-MWCNT film for memory device  |
| 12:50 – 13:10 | <b>OR6 - BASU</b> - Electrical transport properties of polyvinyl alcohol - zinc selenide nanocomposite films   |
| 13:10 - 14.30 | <b>LUNCH</b>   |
| 14.30 – 15:00 | <b>KN2 – DUBOIS</b> - Polybenzoxazine-based thermosets: from nanocomposites to bio-based coatings  |
| 15:00 – 15:20 | <b>OR7 – LAZZERI</b> - Effect of different additives on crystallization and properties of polylactic acid  |
| 15:20 – 15:40 | <b>OR8 - FARRIS</b> - Pullulan-graphene nanocomposites with exceptional oxygen barrier performance   |
| 15:40 – 16:00 | <b>OR9 – ZAHARIA</b> - Novel silk fibroin-magnetite nanocomposites for tissue engineering applications   |
| 16:00 – 17:00 | <b>COFFEE BREAK – POSTER SESSION A</b>   |
| 17:00 – 17:30 | <b>KN3 – CASSAGNAU</b> - Rheology and processing of highly filled thermoplastic polymers   |
| 17:30 – 17:50 | <b>OR10 – BENES</b> - Ionic liquids as delaminating agents of layered fillers and their roles in polymer nanocomposites  |
| 17:50 – 18:10 | <b>OR11 - CABANERO</b> - Dynamic polymer networks: from self-healing to processAbility, recyclability and more   |
| 18:10 – 18:30 | <b>OR12 - TOSHCHEVIKOV</b> - Light induced ordering and deformation of liquid crystalline azobenzene polymer networks  |

| Tuesday, September 20 |  |
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| 8:30 – 09:15          | Registration   |
| 9:15 – 10:00          | <b>PL2 – LUGLI</b> - Printing technologies for electronic applications                       |
| 10:00 – 10:30         | <b>KN4 – HEINRICH</b> - Design, Characterization and Modelling of Elastomeric Nanocomposites |
| 10:30 – 11:00         | <b>COFFEE BREAK</b>  |

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| 11:00 – 11:20 | <b>OR13 – STAMM</b> - Nanoporous polymers for high-energy-density batteries   |
| 11:20 – 11:40 | <b>OR14 - MENDIZABAL</b> - Graphene based Composites for Electronic Devices   |
| 11:40 – 12:00 | <b>OR15 - PFLEGER</b> -Photophysical behaviour of metallo-supramolecular polymers for optoelectronics                             |
| 12:00 – 12:20 | <b>OR16 – LOMBARDI</b> - Study on static crack propagation resistance of reinforced elastomers                                    |
| 12:20 – 12:40 | <b>OR17 – MASANIA</b> - Additive manufacturing of bio-inspired heterogeneous composites   |
| 12:40 – 13:00 | <b>OR18 – SERGHEI</b> - Coupled mechanical-electrical investigations on elastomeric composite materials                           |
| 13:00 - 14:30 | <b>LUNCH</b>  |
| 14:30 – 15:00 | <b>KN5 – Li</b> - Polymer Nanocomposites with Simultaneous Organic Nanodomains and Inorganic Nanoparticles                        |
| 15:00 – 15:20 | <b>OR19 – PICH</b> - Functional microgel-based fibers   |
| 15:20 – 15:40 | <b>OR20 – KRAUSE</b> - Melt mixed polypropylene composites with a new carbon nanostructured crosslinked nanotube material         |
| 15:40 – 16:00 | <b>OR21 – BEAUDOIN</b> - Controlled orientation of CdSe platelets in a stretchable composite                                      |
| 16:00 – 17:00 | <b>COFFEE BREAK – POSTER SESSION B</b>  |
| 17:00 – 17:30 | <b>KN6 – HALAGAN</b> - Modeling of complex polymer systems with cooperative dynamics and the dedicated massively-parallel analyze |
| 17:30 – 17:50 | <b>OR22 – LYULIN</b> - Computer simulations of carbon nanoparticles in polymer melts  |
| 17:50 – 18:10 | <b>OR23 – INVERNIZZI</b> - Polyurethane elastomer composites as smart materials for energy harvesting in the shoes industry       |
| 18:10 – 18:30 | <b>OR24 – LAFONT</b> - Multi-functional intrinsic self-healing polymeric composites   |

| Wednesday, September, 21 |  |
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| 08:30 - 09:15            | Registration   |
| 09:15 – 10:00            | <b>PL3 – WINEY</b> – Polymer Melts in Nanoscale Confinement: Polymer Nanocomposites and Cylindrical Nanopores  |
| 10:00 – 10:30            | <b>KN7 – GHIDINI</b> - Advanced ALM manufacturing of innovative materials in aerospace applications  |
| 10:30 – 11:00            | <b>COFFEE BREAK</b>  |
| 11:00 – 11:20            | <b>OR25 – RINALDI</b> - Innovative Nanocomposite materials for FDM: the effect of processing on final performance  |
| 11:20 – 11:40            | <b>OR26 – NATALI</b> - Development and characterization of nanostructured phenolic impregnated carbon ablatives  |
| 11:40 – 12:00            | <b>OR27 – PUPPI</b> - Development of customized polymeric scaffolds with multiscale porosity by a hybrid additive manufacturing technique                    |
| 12:00 – 12:20            | <b>OR28 – RIGHETTI</b> - Time and temperature evolution of the constrained amorphous nanophase in PHB and PLLA   |
| 12:20 – 12:40            | <b>OR29 – IVAN</b> - Nanostructured amphiphilic polymer conetworks as nanoreactors and their nanohybrids for biomaterials and nanocatalysis                  |
| 12:40 – 13:00            | <b>OR30 – HOLDEN</b> - Characterisation of cellulose thin film interaction with protein using deuteration and neutron reflectometry                          |
| 13:00 - 14.30            | <b>LUNCH</b>   |
| 14.30 – 15:00            | <b>KN9 – JIMENEZ</b> - Nano-biocomposites and nanostructured biopolymers for food packaging  |
| 15:00 – 15:20            | <b>OR31 – VILASECA</b> - Mixing strategies for melt-processed cellulose biocomposites  |
| 15:20 – 15:40            | <b>OR32 – VALDES</b> - Development and characterization of fish gelatin edible films reinforced with pomegranate by-products for food packaging applications |
| 15:40 – 16:00            | <b>OR33 – CACCIOTTI</b> - Ecosustainable systems based on compostable polymer and natural fillers for food packaging applications                            |
| 16:00 – 16:30            | <b>COFFEE BREAK</b>  |
| 16:30 – 17:00            | <b>KN8 – BERGLUND</b> - Cellulose nanomaterials with both structural and functional performance  |
| 17:00 – 17:20            | <b>OR34 – DELGADO</b> - Cellulose micro and nanofibers reinforced polyvinyl alcohol composites: a technical and environmental approach                       |
| 17:20 – 17:40            | <b>OR35 – FORTUNATI</b> - Sunflower stalks as novel sources of cellulose nanofibrils and nanocrystals and their effect on wheat gluten based nanocomposites  |
| 17:40 – 18:00            | <b>OR36 – CABANE</b> - Functional lignocellulosic materials: engineering smart bio-hybrids from a natural anisotropic scaffold                               |
| 18:00                    | Conclusion – Announcement of ECNP2018  |

## POSTER session A

**PA1:** J. Stejskal, P. Bober, M. Trchova "Conducting Polyaniline Cryogels"

**PA2:** M.R. Lazzoi, S. Scorrano, L. Mergola, M.P. Di Bello, R. Del Sole, G. Vasapollo "Development Of Molecularly Imprinted Membranes For The Screening Of 2-Deoxyadenosine In Human Urine"

**PA3:** M. R. Lazzoi, L. Mergola, S. Scorrano, M. P. Di Bello, E. Bloise, R. Del Sole, G. Vasapollo, "Preparation Of Novel Molecularly Imprinted Polymers For Mercury Removal From Drinking Water"

**PA4:** A. Kirillova, C. Marschelke, and A. Synytska, "Hybrid Hairy Janus Particles As Novel Building Blocks For Active Surfaces And Interfaces"

**PA5:** C. Marschelke, A. Matura, and A. Synytska, "Stimuli-Responsive Hairy Particles For Enzymatic Catalysis In Bulk And At Interfaces"

**PA6:** M. Schwarzer, A. Synytska, "Anti-Icing And De-Icing Surfaces Based On Core-Shell Particles As Building Blocks"

**PA7:** X. Liu, D. Appelhans, B. Iyisan, B. Voit, "Layer-by-layer Assembly of Polymericosomes and Polyelectrolytes on Planar Substrates and Microsized Particles"

**PA8:** D. Brugat, F.X. Espinach, H. Oliver-Ortega, Q. Tarrés, P. Mutjé, M. Delgado-Aguilar, "Magnetite Nanoparticles As Nanopaper Additive For The Development Of Strong, Lightweight And Flat Loudspeakers"

**PA9:** T. Messin, N. Follain, A. Guinault, G. Miquelard-Garnier, C. Sollogoub, S. Marais, "Impact Of The Multilayer Morphology Of A PC/MXD6 Assembly On Barrier Performances"

**PA10:** I. Sapurina, J. Stejskal, "Architectures Of Silver Nanoparticles Fabricated From Silver Salt During Oxidative Polymerization Of Aniline"

**PA11:** D. Guzman, B. Mateu, X. Fernandez-Francos, X. Ramis, A. Serra, "New Thermosets From Cycloaliphatic Epoxy Resin By Thiol-Epoxy Click Reaction"

**PA12:** M. T. De Angelis, A. Paciello, M. G. Santonicola, "Macromolecular Design And Electrochemical Properties Of Ph-Responsive Polycationic Hydrogels"

**PA13:** M. Ghaani, S. Farris, "MIP Electrochemical Sensor For The Quantification Of Primary Aromatic Amines"

**PA14:** A. Shajkumar, B. Nandan, V. Albrecht, M-H Lee, M. Stamm, A. Horechyy, "Au@SiO<sub>2</sub>@PSS CATALYST PREPARED VIA BLOCK COPOLYMER TEMPLATE APPROACH: CATALYTIC STUDIES"

**PA15:** A. Famengo, A. Ferrario, S. Boldrini, S. Battiston, S. Fiameni, C. Pagura, M. Fabrizio, "Polyaniline-carbon nanohorn composites as thermoelectric materials"

**PA16:** D. Ivaneyko, V. Toshchevikov, M. Saphiannikova, "Dynamics Of Magneto-Sensitive Elastomers: A Coarse-Grained Network Model"

**PA17:** V. Levchenko, G. Boiteux, E. Beyou, P. Alcouffe, A. Serghei, "Polymeric Materials With Giant Permittivity"

**PA18:** A. Houachtia, G. Boiteux, J.-F. Gerard, A. Serghei, "Dynamics And Phase Transitions Of Attograms And Zeptograms Of Polymers"

**PA19:** A. Belmonte, X. Fernandez-Francos, S. De la Flor, A. Serra, "Characterization Of Sequential Dual-Curing Thiol-Epoxy Systems: Processing And Shape-Memory Applications"

**PA20:** S. Carrasco-Hernandez, L. Cano, J. Gutierrez, A. Tercjak, "Reversibility Study Of Polymer Dispersed Liquid Crystals Based On PE-b-PEO Block Copolymer And Liquid Crystals"

**PA21:** A. L. Christie, J. A. Wilson, A. Kassim, A. P. Dove, "One Pot Block Copolymer Synthesis And Self-Assembly"

**PA22:** F. Cecchini "A D.O.E. analysis of the rheological properties of non-Newtonian fluids of different compositions"

**PB23:** K. Jariyavidyanont, W. Focke, R. Androsch "Crystallization Kinetics Of Polyamide 11 Based Nanocomposites At Processing-Relevant Cooling Conditions"

**PA24:** W. Yang, J. S. Owczarek, E. Fortunati, M. Kozanecki, J. M. Kenny, L. Torre, D. Puglia, "Polyvinyl Alcohol/Chitosan Hydrogels Incorporating Antioxidant And Antibacterial Lignin Nanoparticles"

**PA25:** W. Yang, E. Fortunati, L. Torre, J. M. Kenny, D. Puglia, "A Comparative Study: Alkali Nanolignin Isolated By HCl, H<sub>2</sub>SO<sub>4</sub> And H<sub>3</sub>PO<sub>4</sub>"

**PA26:** P. Prospisito, S. Melino, F. Mochi, L. Bruno, F. De Matteis, M. Casalboni, F. R. Lamastra, F. Nanni, R. Congestri, "DIATOM FRUSTULES FOR PHOTOACTIVE NANOSTRUCTURED MATERIAL FABRICATION"

## **POSTER session B**

**PB1:** I-C Radu, C. Zaharia, P. O. Stanescu, E. Vasile, A. Hudita, B. Galateanu, C. Andronescu, H. Iovu, "Nanocomposites Based On Inorganic Clays And Silk Fibroin For Potential Tissue Engineering Applications"

**PB2:** F. Muscas, A. Marcos-Fernandez, A. J. Lopez Galisteo, L. Peponi, A. Urena, "Development Of New Thermally-Activated Self-Healing Thermoplastic Polyurethane"

**PB3:** C. Wan, S. Li, S. Wang, "Core-Shell Structured Carbon Nanoparticles Derived From Light Pyrolysis Of Waste Tires"

**PB4:** V. P. Singh, G. S. Kapur, Veena Choudhary, "Rheological Behavior Of HDPE/Natural Needle Like Clay Nanocomposites Under Shear And Extensional Flow"

**PB5:** C. A. Cozzolino, G. Castelli, S. Trabattoni, S. Farris, "Influence Of Colloidal Silica Nanoparticles On Pullulan-Coated BOPP Film"

**PB6:** C. Rovera, C. A. Cozzolino, D. Romano, S. Farris, "Cellulose Nanocrystals Obtained From *Komagataeibacter Sucrofermentans* Through A Top-Down Chemical Treatment"

**PB7:** R. Suriano, G. Griffini, M. Levi, S. Turri, "Algae Biomass Valorization As Materials Fillers For Biocomposites And 3D Printing Pastes"

**PB8:** M. Triantou, N. Todorova, T. Vaimakis, C. Trapalis, "Morphology And Thermomechanical Performance Of Aged Graphene/Polypropylene Nanocomposites"

**PB9:** K. Stafin, A. Leszczyńska, K. Pielichowski, "Microstructure And Crystallization Behavior Of POSS-Containing Thermoplastic Polyurethane Nanocomposite"

**PB10:** V. Cherubini, M. Rinaldi, F.R. Lamastra, F. Nanni "Synthesis and characterization of nanoparticle reinforced PEI foams"

**PB11:** A. Ivanoska-Dacikj, G. Bogoeva-Gaceva, S. Valić, S. Wiesner, G. Heinrich, "Hybrid Nanofiller Networking In Natural Rubber: Experiment And Theory"

**PB12:** V. S. Vo, S. Mahouche-Chergui, V-H Nguyen, S. Naili, B. Carbonnier, "Elaboration And Characterization Of Bio-Based Epoxy/Clay Nanocomposites"

**PB13:** D. Carnelli, R. Libanori, A. R. Studart, "Composites Reinforced Via Mechanical Interlocking Of Surface-Roughened Microplatelets Within Ductile And Brittle Matrices"

**PB14:** T. P. Niebel, D. Carnelli, R. Libanori, A. R. Studart, "Hierarchically-Roughened Microplatelets Enhance The Strength And Ductility Of Nacre-Inspired Composites"

**PB15:** B. Mico-Vicent, F.M. Martinez-Verdu, M.C. Garrigos, A. Jimenez, "Which 3D Printing Technology Is Better For Using Natural Hybrid Nanopigments On Biopolymers?"

**PB16:** A. Hajian, L. Berglund, "Preparation Of Carbon Nanotube - Cellulose Hybrids For Electrical And Mechanical Performance"

**PB17:** Q. Fu, L. Berglund "Optically Transparent Wood"

**PB18:** L. Sorrentino, C. Bellini, D. Micheli, R. Pastore, A. Vricella, M. Marchetti, F. Santoni, M. Albano, Giulio Rubini, A. Delfini, F. Del Sette "Manufacturing And Testing Of An ABS – Carbon Isogrid Structure"

**PB19:** D. Dupenne, T. Pierre, A. Lonjon, E. Dantras "Metallization Of CFRP Surface Via A Conductive Underlayer"

**PB20:** D. Aranguren Van Egmond, S. Siarov, C. Semprimoschnig, U. Lafont, "Properties Of 3D Printed PEEK Processed By Fused Filament Fabrication"

**PB21:** M. Lutz, A. Nel "Utilizing Polysaccharide Nanowhiskers As Reinforcing Agents In Nanocomposites"

**PB22:** I. Ivaneiko, V. Toshchevikov, K.W. Stockelhuber, M. Saphiannikova, G.Heinrich "Superposition Approach To The Dynamical Behavior Of Reinforced Rubbers"

**PB23:** M. Perchacz, H. Beneš, R. K. Donato, A. Zhigunov, M. Serkis, E. Pavlova, P. Ecorchard, "Ionic Liquids As Multifunctional Agents For Epoxy- Graphite And Epoxy-Silica Hybrid Materials"

**PB24:** J. Bayer, L. Granda, J.A. Méndez, F. Vilaseca, "Rubber Fusion of Wood Plastic Composite, New Functional Green Material for Building Applications. Mechanical simulation for Decking and Sound Barriers"

**PB25:** S. Mbarek, B. Imen, A. Bruno, S. Ezzedine, "A Physicochemical Characterization Of Nanocomposite Based On Recycled Expanded Ps Reinforced With Clay"

**PB26:** K. Jaksik, G. Seide, T. Gries "Melt-Spinning Of Polyamide 6/Ferrite-Compounds: Spinning Behavior And Mechanical Properties As A Function Of The Ferrite Surface-Modification"