

Sixth International Conference on  
**Multifunctional, Hybrid and Nanomaterials**

11-15 March 2019, Sitges, Spain



# Oral Programme

Sunday, 10 March 2019					
17:00-19:00	Registration	Room: Hall Auditorium			
Monday, 11 March 2019					
07:00-08:30	Registration	Room: Hall Auditorium			
Room:	Auditorium				
08:30-08:45	Welcome				
08:45-09:25	<b>Honorary Lecture 1: [HON1] Hybrid Materials: A successful marriage between polymers and sol-gel chemistries</b> C. Sanchez, <i>Collège de France, France</i>				
09:25-10:05	<b>Honorary Lecture 2: [HON2] Organic-inorganic hybrid materials engineered by controlled radical polymerization: How to grow polymer chains in dense environment</b> K. Matyjaszewski, <i>Carnegie Mellon University, USA</i>				
10:05-10:40	Coffee Break   Room: Hall Auditorium/Tramuntana 1&2				
Rooms:	Garbi	Auditorium	Tramuntana 3	Llevant	Mestral
10:40-13:00	<b>Symposium A: Session 1</b>	<b>Symposium B: Session 1</b>	<b>Symposium C: Session 1</b>	<b>Symposium B1: Session 1</b>	<b>Symposium ABC: Session 1</b>
10:40-11:00	<b>10:40-11:10</b> <b>Featured Talk: [FTA01]</b> <b>Nanocellulose-based hybrids and foams: From single fibril properties to functional assemblies</b> L. Bergstrom <i>Stockholm University, Sweden</i>	<b>[SYMB01.01]</b> <b>Triaxial piezoelectric nanocomposite fibers for energy harvesting application</b> F. Mokhtari*, J. Foroughi, G.M. Spinks, Z. Cheng, <i>University of Wollongong, Australia</i>	<b>[SYMC01.01]</b> <b>Metal pyrazolate frameworks as multifunctional catalysts for C-C and C-N bond formations</b> F. Cirujano* <sup>1</sup> , E. Lopez Maya <sup>2</sup> , J. Navarro <sup>2</sup> , D. De Vos <sup>1</sup> <sup>1</sup> KU Leuven, Belgium, <sup>2</sup> Universidad de Granada, Spain	<b>[SYMB101.01]</b> <b>Active optical composites with responsive hybrid particles inside liquid inclusions</b> D. Doblas Jiménez* <sup>1</sup> , J. Hubertus <sup>1</sup> , T. Kister <sup>1</sup> , T. Kraus <sup>1,2</sup> <sup>1</sup> INM - Leibniz Institute for New Materials, Germany, <sup>2</sup> Saarland University, Germany	<b>[ABC01.01]</b> <b>MicroRNA-targeted nanomedicine using porous silicon nanomaterials interfaced with nucleic acid engineering</b> A. Bertucci* <sup>1,2</sup> , K-H. Kim <sup>3</sup> , J. Kang <sup>1</sup> , J.M. Zuidema <sup>1</sup> , E.J. Kwon <sup>1</sup> , D. Kim <sup>3</sup> , S. Howell <sup>1</sup> , F. Ricci <sup>2</sup> , H-J. Jang <sup>3</sup> , M.J. Sailor <sup>1</sup> <sup>1</sup> University of California San Diego, USA, <sup>2</sup> University of

					Rome Tor Vergata, Italy, <sup>3</sup> Kyung Hee, Republic of Korea
11:00-11:20	11:10-11:30 <b>[SYMA01.01]</b> <b>Controlled anchoring of iron-oxide nanoparticles on polymeric nanofibers: A simple approach towards hybrid materials and multifunctional scaffolds</b> H. Awada* <sup>1</sup> , A. Al samad <sup>1</sup> , D. Laurencin <sup>1</sup> , R. Gilbert <sup>2</sup> , A. El Jundi <sup>1</sup> , L. Lemaire <sup>3,4</sup> , F. Franconi <sup>3,4</sup> , J. Larionova <sup>1</sup> , Y. Guari <sup>1</sup> , B. Nottelet <sup>1</sup> <sup>1</sup> Université de Montpellier, France, <sup>2</sup> Rensselaer Polytech Inst, USA, <sup>3</sup> UNIV Angers, France, <sup>4</sup> PRISM-Icat, France	<b>[SYMB01.02]</b> <b>Transparent multifunctional nanocomposite thin films: Extended study on electrophoretic deposition process of inorganic octahedral metal cluster</b> F. Grasset* <sup>1,2</sup> , N.T.K. Nguyen <sup>1,2</sup> , A. Renaud <sup>3</sup> , M. Wilmet <sup>1,3</sup> , M. Dubernet <sup>1,2</sup> , N. Dumait <sup>3</sup> , M. Amela-Cortes <sup>3</sup> , Y. Molard <sup>3</sup> , N. Ohashi <sup>1,2</sup> , T. Ushikoshi <sup>1,2</sup> et al <sup>1</sup> CNRS, Japan, <sup>2</sup> RCFM, NIMS, Japan, <sup>3</sup> Univ Rennes, France	<b>[SYMC01.02]</b> <b>Exploring versatile catalytic activity of stable porphyrin based MOFs</b> A. Fateeva* <sup>1</sup> , J-B. Tommasino <sup>1</sup> , B. Abeykoon <sup>1</sup> , F. Maillard <sup>4</sup> , A. Sorokin <sup>2</sup> , A. Demessence <sup>2</sup> , T. Devic <sup>3</sup> <sup>1</sup> University Claude Bernard Lyon 1, France, <sup>2</sup> IRCELYON, France, <sup>3</sup> Institut des Matériaux de Nantes, France, <sup>4</sup> LEPMI, France	<b>[SYMB101.02]</b> <b>Core-dual shell heterostructure nanocomposites towards enhanced microwave absorption, heat dissipation, and sustainability</b> Y. Bhattacharjee*, S. Bose Indian Institute of Science, India	<b>[ABC01.02]</b> <b>Self-evolving thermal and motion sensors based on PP-g-PNIPAAm surgical meshes: From preparation to exploration of thermo-sensitivity</b> S. Lanzalaco* <sup>1,2</sup> , P. Turón <sup>1,3</sup> , C. Weis <sup>3</sup> , C. Aleman <sup>1,2</sup> , E. Armelin <sup>1,2</sup> <sup>1</sup> Universitat Politècnica de Catalunya, Spain, <sup>2</sup> Barcelona Research Center in Multiscale Science and Engineering, Spain, <sup>3</sup> B. Braun Surgical, Spain
11:20-11:40	11:30-11:50 <b>[SYMA01.02]</b> <b>Silk based bionanocomposite engineering for medical applications</b> C. Belda Marín* <sup>1</sup> , X. Mu <sup>2</sup> , S. Vidal Yucha <sup>2</sup> , D. L. Kaplan <sup>2</sup> , C. Egles <sup>1</sup> , J. Landoulsi <sup>1</sup> , E. Guénin <sup>1</sup> <sup>1</sup> Sorbonne Universités, Université de Technologie de Compiègne, France, <sup>2</sup> Tufts University, USA	<b>11:20-11:50</b> <b>Featured Talk: [FTB01]</b> <b>Membrane filtration and other applications of nanostructured polyaniline</b> R. Kaner University of California, Los Angeles, USA	<b>[SYMC01.03]</b> <b>Switchable photo-cathodic and photo-anodic behaviour of a metal-organic framework film in a photo-electrochemical cell</b> R. Ifraemov, R. Shimoni, W. He, G. Peng, I. Hod* Ben-Gurion University of the Negev, Israel	<b>[SYMB101.03]</b> <b>Functional molecular-nanostructured bulk metal oxide memory for nanoscale-nanosecond information storage</b> A. Balliou*, D. Skarlatos, G. Papadimitropoulos, N. Glezos <sup>1</sup> NCSR Demokritos, Greece,	<b>[ABC01.03]</b> <b>Cellulose-based photonic architectures</b> C. Dore <sup>1</sup> , A. Espinha <sup>1</sup> , J. Osmond <sup>2</sup> , A. Mihi* <sup>1</sup> <sup>1</sup> Institute of Materials Science of Barcelona ICMAB - CSIC, Spain, <sup>2</sup> Institute of Photonic Sciences, Spain

11:40-12:00	11:50-12:10 <b>[SYMA01.03]</b> <b>Single and multiple-core composite plasmonic-polymer structures</b> D. Jimenez de Aberasturi* <sup>1,2</sup> , M. Henriksen-Lacey <sup>1,2</sup> , J. Langer <sup>1,2</sup> , L. Scarabelli <sup>1,3</sup> , M. Schumacher <sup>4</sup> , H. Weller <sup>4</sup> , L.M. Liz Marzán <sup>1,3</sup> <sup>1</sup> CIC biomaGUNE, Spain, <sup>2</sup> Ciber-BBN, Spain, <sup>3</sup> University of California, USA, <sup>4</sup> Universität Hamburg, Germany	11:50-12:20 <b>Featured Talk: [FTB02]</b> <b>Unravelling the amazing optoelectronic properties of halide perovskites</b> D. Cahen <sup>1,2</sup> , <sup>1</sup> Weizmann Institute, Israel, <sup>2</sup> Bar-Ilan University, Israel	<b>[SYMC01.04]</b> <b>CO2 separation with water complicity: In situ crystallographic characterization of a unique pocket for CO2 separation experiments in humid conditions</b> V. Colombo* <sup>1</sup> , M. Rodríguez-Albelo <sup>2</sup> , C. Montoro <sup>2</sup> , A. Sironi <sup>1</sup> , J.A. Rodríguez Navarro <sup>2</sup> <sup>1</sup> Università degli Studi di Milano, Italy, <sup>2</sup> Universidad de Granada, Spain	<b>[SYMB101.04]</b> <b>Structural characterization of Mg/SiC nano-composite fabricated by powder metallurgy</b> A. Al-Maamari, A. Iqbal*, D. Nuruzzaman University Malaysia Pahang (UMP), Malaysia	<b>[ABC01.04]</b> <b>Bioinspired nacre-like alumina-based composites assembled by heteroaggregation of particles</b> M. Muñoz*, M. Cerbelaud, A. Videcoq, F. Rossignol Univ. Limoges, IRCER, France
12:00-12:20	12:10-12:30 Presentation withdrawn		<b>[SYMC01.05]</b> <b>Highly specific molecules as linkers in MOFs: A solid state sensor for the selective detection of NO2</b> M. Schulz*, A. Gehl, J. Schlenkrich, H.A. Schulze, S. Zimmermann, A. Schaate Leibniz University Hanover, Germany	<b>[SYMB101.05]</b> <b>Polymer-based thermoelectric materials</b> J.W. Xu Agency for Science, Technology and Research (A*STAR), Singapore	<b>[ABC01.05]</b> <b>Bio-inspired nanochannels with superwettability</b> Y. Tian Chinese Academy of Sciences, China
12:20-12:40	12:30-12:50 <b>[SYMA01.05]</b> <b>Janus, Triphasic, and Step-Gradient Nanocomposite Hydrogels for Controlled Cell Migration in 3D Network</b> N. Kehr University of Münster, Germany	<b>[SYMB01.03]</b> <b>Magnetocatalytic Janus micromotors as multifunctional materials in nanoscale operations</b> B. Jurado Sánchez*, M. Pacheco, A. Escarpa Universidad de Alcalá de Henares, Spain	12:20-12:50 <b>Featured Talk: [FTC01]</b> <b>Chemical approach for the synthesis of silica-based porous materials</b> Kazuyuki Kuroda Waseda University, Japan	<b>[SYMB101.06]</b> <b>Contribution of Auger spectroscopy to the study of hybrid materials interfaces at nanoscale</b> J. Allouche IPREM CNRS, France	<b>[ABC01.06]</b> <b>Improved biocatalytic activity of enzymes immobilized in tailored siliceous mesostructured cellular foams for the conversion of CO2 to methanol</b> M. Zezzi do Valle Gomes*, P. S. Nabavi Zadeh, B. Åkerman, A. Palmqvist Chalmers University of Technology, Sweden

12:40-13:00		<b>[SYMB01.04]</b> Investigation of the catalytic effects of electrophoretically deposited ZnO/ZnS/carbon nanocomposites J.D. Goossen*, M. Bredol Fachhochschule Münster, Germany		<b>[SYMB101.07]</b> Chiral hybrid materials based on pyrrolidine builder units to perform asymmetric michael additions with high stereocontrol S. Llopis*, T. García, A. Cantín, A. Velty, U. Díaz, A. Corma CSIC/UPV(ITQ), Spain	<b>[ABC01.07]</b> Tunable color film inspired by structural color change of a longhorn beetle <i>Tmesisternus Isabellae</i> H-B. Seo, S-Y. Lee* Sogang University, Republic of Korea
13:00-14:00	Lunch   Noray Restaurant				
Rooms:	Garbi	Auditorium	Tramuntana 3	Llevant	Mestral
<b>14:00-16:00</b>	<b>Symposium A: Session 2</b>	<b>Symposium B: Session 2</b>	<b>Symposium C: Session 2</b>	<b>Symposium B1: Session 2</b>	<b>Symposium ABC: Session 2</b>
14:00-14:20	<b>[SYMA02.01]</b> Functional hybrid nanostructures of DNA-spider silk conjugates M. Humenik*, T. Preiß, D. Piro, A. Molina, T. Scheibel University Bayreuth, Germany	<b>[SYMB02.01]</b> Bioinspired functional materials W.L. Noorduin AMOLF, The Netherlands	<b>14:00-14:30</b> <b>Featured Talk: [FTC02]</b> Optoelectronic processes in covalent organic frameworks T. Bein, University of Munich (LMU), Germany	<b>[SYMB102.01]</b> Enhanced thermoelectric properties of reinforcing fibers covered with nanoparticle-based hierarchical coatings G. Karalis*, K. Tsirka, L. Tzounis, A. Paipetis University of Ioannina, Greece	<b>[ABC02.01]</b> Hierarchical coral-like carbon nanoarchitectures as versatile porous supports for metalloporphyrin electrocatalysts S. Kubo*, A. Endo, T. Imura, S. Yamazaki National Institute of Advanced Industrial Science and Technology (AIST), Japan
14:20-14:40	<b>[SYMA02.02]</b> Pathway to "intelligence": Using stimuli-responsive materials for constructing smart systems S. Soh National University of Singapore, Singapore	<b>[SYMB02.02]</b> DENdrimicelles: Dendrimer-encapsulated-nanoparticle based coacervate-core micelles J.B. ten Hove <sup>1,2</sup> , F.W.B. van Leeuwen <sup>2,1</sup> , A.H. Velders <sup>*1,2</sup> <sup>1</sup> Wageningen University, The Netherlands, <sup>2</sup> Leiden University Medical Centre, The Netherlands	14:30-14:50 <b>[SYMC02.01]</b> Computational-guided discovery of MOFs for energy and environmental-related application M. Wahiduzzaman, G. Maurin* Université Montpellier, France	<b>[SYMB102.02]</b> Self-assembly of 3-dimensional single crystal piezoelectric PbTiO <sub>3</sub> nanostructure arrays H.C. Song <sup>*1</sup> , W.T. Reynolds Jr. <sup>2</sup> , S. Priya <sup>3</sup> <sup>1</sup> Korea Institute of Science and Technology, Republic of Korea, <sup>2</sup> Virginia Tech, USA, <sup>3</sup> Penn State University, USA	<b>[ABC02.02]</b> Interfacial synthesis of graphdiynes R. Sakamoto <sup>*1,2</sup> , R. Shiotsuki <sup>1</sup> , J. Komeda <sup>1</sup> , H. Nishihara <sup>1</sup> <sup>1</sup> The University of Tokyo, Japan, <sup>2</sup> JST-PRESTO, Japan

14:40-15:00	<p><b>[SYMA02.03]</b>  <b>Multifunctional nanoparticles for early diagnosis of Alzheimer's disease</b>  S. Rahimipour*<sup>1</sup>,  R. Popovtzer<sup>1</sup>, D. Frenkel<sup>2</sup>  <sup>1</sup>Bar-Ilan University, Israel,  <sup>2</sup>Tel-Aviv University, Israel</p>	<p><b>14:40-15:10</b>  <b>Featured Talk: [FTB03]</b>  <b>Graphene and related materials for photonics and optoelectronics</b>  Andrea Ferrari  <i>University of Cambridge, UK</i></p>	<p>14:50-15:10  <b>[SYMC02.02]</b>  <b>Exploring the MOF-peptide interface</b>  A. Sola Rabada*<sup>1</sup>,  Z. Westcott<sup>1</sup>, I. Efimov<sup>1</sup>,  S. Lymperopoulou<sup>2</sup>,  D. Bradshaw<sup>2</sup>, C. Perry<sup>1</sup>  <sup>1</sup>Nottingham Trent University, UK, <sup>2</sup>University of Southampton, UK</p>	<p><b>[SYMB102.03]</b>  <b>Finely tuned smart hybrid silica nanocontainers structure for control release</b>  A.S. Rodrigues E. Coutinho,  J. Gonçalves, B. Lopes,  T. Ribeiro, J.P.S. Farinha,  C. Baleizão*  <i>Instituto Superior Técnico, Portugal</i></p>	<p><b>[ABC02.03]</b>  <b>Macroscopic morphology control for mesoporous inorganic particles from multicomponent polymer blends</b>  S. Kim*<sup>1</sup>, J. Hwang<sup>2</sup>, U. Wiesner<sup>3</sup>, J. Lee<sup>2</sup>  <sup>1</sup>Pohang University of Science and Technology (POSTECH), Republic of Korea, <sup>2</sup>Korea Advanced Institute of Science and Technology (KAIST), Republic of Korea, <sup>3</sup>Cornell University, USA</p>
15:00-15:20	<p><b>[SYMA02.04]</b>  <b>Microvascularized hydrogel chips via programmed self-assembly</b>  V. Adibnia*<sup>1</sup>,  M. Mirbagheri<sup>1,2</sup>,  P. Latreille<sup>1</sup>, J. Faivre<sup>1,3</sup>,  B. Cecyre<sup>1</sup>, J. Bouchard<sup>1</sup>,  T. Delair<sup>3</sup>, L. David<sup>3</sup>,  D.K. Hwang<sup>2</sup>, X. Banquy<sup>1</sup>  <sup>1</sup>University of Montreal, Canada, <sup>2</sup>Ryerson University, Canada, <sup>3</sup>Universite de Lyon, France</p>	<p><b>15 :10-15:30</b>  <b>[SYMB02.07]</b>  <b>Soft and smart hybrid materials containing emissive metal clusters</b>  Y. Molard<sup>1</sup>, M. Amela-Cortes<sup>1</sup>, S. Khlifi<sup>1</sup>, N. Dumait<sup>1</sup>,  S. Paofai<sup>1</sup>, K. Guy<sup>1</sup>, M. Robin<sup>1</sup>, N. Brandhonneur<sup>1</sup>,  G. Dollo<sup>1</sup>, P. Ehni<sup>2</sup>, S. Cordier*<sup>1</sup>, <sup>1</sup>Université de Rennes, France, <sup>2</sup>University of Stuttgart, Germany</p>	<p>15 :10-15 :30  <b>[SYMC02.03]</b>  <b>Tailored microporous solids as macroligands for heterogenized molecular catalysts</b>  J. Canivet<sup>1,2</sup>, F.M. Wisser<sup>1,2</sup>,  Y. Mohr*<sup>1,2</sup>, E.A. Quadrelli<sup>1,3</sup>,  D. Farrusseng<sup>1,2</sup>  <sup>1</sup>CNRS, France, <sup>2</sup>University of Lyon, France, <sup>3</sup>CPE Lyon, France</p>	<p><b>[SYMB102.04]</b>  <b>A one-pot synthesis of multibranched Au/TiO<sub>2</sub> hybrid nanoparticles under flow conditions: Exploiting the plasmonic features for catalytic purposes</b>  M. Marelli*, F. Bossola,  V. Dal Santo, R. Psaro,  L. Polito  <i>ISTM-CNR, Italy</i></p>	<p><b>[ABC02.04]</b>  <b>Noble carbons potential in the field of catalysis</b>  N. Lopez Salas  <i>Max Planck Institute of Colloids and Interfaces, Germany</i></p>
15:20-15:40	<p><b>[SYMA02.05]</b>  <b>Nanofibrillar cellulose hydrogels as lyoprotective matrices in freeze-drying of adipose tissue extract and HepG2 cell spheroids</b>  A. Merivaara*<sup>1</sup>, V-V. Auvinen<sup>1,2</sup>, J. Kiiskinen<sup>1</sup>, H. Paukkonen<sup>1</sup>, P. Laurén<sup>1</sup>, R. Koivuniemi<sup>1</sup>, R. Sarkanen<sup>3</sup>, T. Ylikomi<sup>3</sup>, T. Laaksonen<sup>2</sup>, M.</p>	<p><b>15:30-15:50</b>  <b>[SYMB02.08]</b>  <b>A novel composite based on a tungsten-containing cluster with hydrogen evolution reaction activity</b>  M. Morant-Giner*<sup>1</sup>, J. Romero<sup>1</sup>, N.Y. Shmelev<sup>2</sup>,  A.L. Gushchin<sup>2</sup>, A. Alberola<sup>1</sup>,  S. Tatay<sup>1</sup>, A. Forment-Aliaga<sup>1</sup>, E.</p>	<p>15:30-15:50  <b>[SYMC02.04]</b>  <b>Synthesis and functionalization of (dynamic) porous polymer thin films</b>  M. Tsotsalas  <i>Karlsruhe Institute of Technology, Germany</i></p>	<p><b>[SYMB102.05]</b>  <b>Surprisingly high sensitivity of copper nanoparticles toward coordinating ligands: Consequences for the hydride reduction of benzaldehyde</b>  X. Frogneux*<sup>1,2</sup>,  F. Borondics<sup>3</sup>, S. Lefrançois<sup>1</sup>,  F. D'Accriscio<sup>1,2</sup>,</p>	<p><b>[ABC02.05]</b>  <b>Expandable covalent organic frameworks</b>  M. Fang*, C. Montoro, M. Semsarilar  <i>Institut Européen des Membranes, France</i></p>

	Yliperttula <sup>1,4</sup> et al <sup>1</sup> University of Helsinki, Finland, <sup>2</sup> Tampere University of Technology, Finland, <sup>3</sup> University of Tampere, Finland, <sup>4</sup> University of Padova, Italy	Coronado <sup>1</sup> , <sup>1</sup> Instituto de Ciencia Molecular, Spain, <sup>2</sup> Nikolaev Institute of Inorganic Chemistry, Russia		C. Sanchez <sup>1,2</sup> , S. Carencó <sup>1</sup> <sup>1</sup> Sorbonne Université, France, <sup>2</sup> Collège de France, France, <sup>3</sup> SOLEIL Synchrotron, France	
15:40-16:00	<b>[SYMA02.06]</b> <b>Synthetic gene networks encoded on magnetic microparticle scaffolds</b> T-Y. Wei, W. Ruder* University of Pittsburgh, USA	<b>15:50-16:10</b> <b>[SYMB02.03]</b> <b>Co-assembly of cellulose nanocrystals and clay nanoplatelets studied by time-resolved X-ray scattering</b> P. Munier*, M. Segad, L. Bergström Stockholm University, Sweden		<b>[SYMB102.06]</b> <b>A free-standing reduced graphene oxide (RGO) aerogel as supporting electrode in a catholyte Li-S battery</b> C. Cavallo* <sup>1</sup> , M. Agostini <sup>1</sup> , J. Genders <sup>1,2</sup> , M.E. Abdelhamid <sup>3</sup> , A. Matic <sup>1</sup> <sup>1</sup> Chalmers University of Technology, Sweden, <sup>2</sup> University of Southampton, UK, <sup>3</sup> CSIRO, Australia	<b>[ABC02.06]</b> <b>MOF derived bimetal oxide/carbon nanocomposites: Synthesis and photocatalytic applications</b> M.Z. Hussain* <sup>1,2</sup> , R.A. Fischer <sup>2</sup> , Y. Xia <sup>1</sup> <sup>1</sup> University of Exeter, UK, <sup>2</sup> Technical University of Munich, Germany
16:00-17:00	Coffee Break and Poster Session 1   Room: Hall Auditorium/Tramuntana 1&2				
Rooms:	Garbi	Auditorium	Tramuntana 3	Llevant	Mestral
<b>17:00-18:20</b>	<b>Symposium A: Session 2 (cont.)</b>	<b>Symposium B: Session 2 (cont.)</b>	<b>Symposium C: Session 2 (cont.)</b>	<b>Symposium B1: Session 2 (cont.)</b>	<b>Symposium ABC: Session 2 (cont.)</b>
17:00-17:20	<b>17:00-17:30</b> <b>Featured Talk: [FTA02]</b> <b>Nano-and microfabricated hydrogels for regenerative engineering</b> A. Khademhosseini, UCLA, USA	<b>[SYMB02.04]</b> <b>Switchable, helical assemblies of gold nanorods based on liquid-crystalline templates</b> M. Baginski <sup>1</sup> , G. González-Rubio <sup>2</sup> , W. Lewandowski* <sup>1</sup> <sup>1</sup> University of Warsaw, Poland, <sup>2</sup> CICbiomaGUNE, Spain	<b>[SYMC02.05]</b> <b>Conjugated polymers for photocatalytic hydrogen evolution from water – Porous or non-porous?</b> R.S. Sprick*, Y. Bai, C. Aitchison, A. Cooper University of Liverpool, UK	<b>[SYMB102.07]</b> <b>Nanoconfined controlled reduction and growth of silver in hollow gold nanoshell particles</b> S. Boujday* <sup>1</sup> , L. Zhang <sup>1,2</sup> , P. Chen <sup>3</sup> , A. Loiseau <sup>1</sup> , D. Brouri <sup>1</sup> , S. Casale <sup>1</sup> , M. Salmain <sup>1,2</sup> , B. Liedberg <sup>3</sup> <sup>1</sup> Sorbonne Université, France, <sup>2</sup> CNRS, France, <sup>3</sup> Nanyang Technological University, Singapore	<b>[ABC02.07]</b> <b>Restoration of mechanical and electrical properties of nanomodified epoxy materials</b> M. Kosarli, G. Foteinidis*, K. Tsirka, A.S. Paipetis University of Ioannina, Greece


17:20-17:40	<b>17:30-18:00</b> <b>Featured Talk: [FTA03]</b> <b>Bioinspired structures using biopolymers and bioactive glass nanoparticles in biomedicine</b> J. Mano, <i>University of Aveiro, Portugal</i>	<b>[SYMB02.05]</b> <b>Anchoring organophosphorus ligands in solid functional materials for lanthanide separation</b> W. Zhang*, R. Koivula <i>University of Helsinki, Finland</i>	<b>[SYMC02.06]</b> <b>3d printed scaffolds with microporosity for tissue engineering and drug delivery</b> H. Dang <sup>1</sup> , Q. Peiffer <sup>1</sup> , T. Shabab <sup>1</sup> , A. Shafiee <sup>1</sup> , K. Fox <sup>2</sup> , D. Hutmacher <sup>1</sup> , P. Tran* <sup>1</sup> <sup>1</sup> <i>Queensland University of Technology, Australia</i> , <sup>2</sup> <i>RMIT University, Australia</i>	<b>[SYMB102.08]</b> <b>Magic number colloidal clusters</b> N. Vogel*, M. Engel, E. Spiecker, J. Wang, C. Mbah, T. Przybilla <i>Friedrich-Alexander University Erlangen-Nürnberg, Germany</i>	<b>[ABC02.08]</b> <b>Synthesis of porous core-shell nanostructures by low temperature ozone treatment of silica-based organic-inorganic hybrid materials</b> H. Joshi*, W. Schmidt, F. Schüth <i>Max-Planck-Institut für Kohlenforschung, Germany</i>
17:40-18:00		<b>[SYMB02.06]</b> <b>Ionic liquid-mediated low-temperature synthesis of hexagonal titanium-oxyhydroxyfluoride particles</b> P. Voepel <sup>1</sup> , I. Djerdj <sup>2</sup> , B.M. Smarsly* <sup>1</sup> <sup>1</sup> <i>Justus-Liebig-University, Germany</i> , <sup>2</sup> <i>J. J. Strossmayer University of Osijek, Croatia</i>	<b>[SYMC02.07]</b> <b>Synthesis of porous polymeric dispersions from the combination of RAFT-mediated PISA and hypercrosslinking chemistry</b> A. James*, R. Dawson <i>University of Sheffield, UK</i>	<b>[SYMB102.09]</b> <b>The application of CO<sub>2</sub>-induced self-assembly to the synthesis of amine-functionalized silica for CO<sub>2</sub> capture</b> M. Afeworki, Q. Li, D. Calabro* <i>ExxonMobil Research and Engineering Company, USA</i>	<b>[ABC02.09]</b> <b>Influence of micropores to the capacitance of electric double layer capacitors based on polymer gel electrolytes and porous carbon xerogel electrodes</b> K. Anneser, S. Braxmeier, G. Reichenauer* <i>ZAE Bayern, Germany</i>
Room:	Auditorium				
18:15-19:00	<b>[TT01] New hybrid materials for ultrasensitive biosensing and regenerative medicine</b> M.M. Stevens, <i>Imperial College London, UK</i>				
19:00-20:30	Welcome Reception and Poster Session 1   Room: Tramuntana 1&2				

Tuesday, 12 March 2019

Room:	Auditorium				
08:30-09:15	<b>Plenary Lecture 1: [PL01] Smart interfacial materials from super-wettability to binary cooperative complementary systems</b> L. Jiang <sup>1</sup> , <sup>1</sup> Chinese Academy of Sciences, China, <sup>2</sup> Beihang University, China				
Rooms:	Garbi	Auditorium	Tramuntana 3	Llevant	Mestral
09:20-10:20	<b>Symposium A : Session 3</b>	<b>Symposium B: Session 3</b>	<b>Symposium C: Session 3</b>	<b>Symposium B1: Session 3</b>	<b>Symposium ABC: Session 3</b>
09:20-09:40	<b>[SYMA03.01]</b> <b>Nanoporous plasmonic meta-electrodes for intracellular recordings at network level on high-density CMOS-MEAs</b> M. Dipalo* <sup>1</sup> , G. Melle <sup>1</sup> , L. Lovato <sup>1</sup> , A. Jacassi <sup>1</sup> , F. Santoro <sup>1</sup> , V. Caprettini <sup>1</sup> , A. Schirato <sup>2</sup> , A. Alabastri <sup>2</sup> , D. Garoli <sup>1</sup> , G. Bruno <sup>1</sup> et al <sup>1</sup> Istituto Italiano di Tecnologia, Italy, <sup>2</sup> Rice University, USA	<b>[SYMB03.01]</b> <b>Luminescent mechanochromic and thermochromic materials based on copper iodide compounds</b> B. Huitorel <sup>1</sup> , T. Gagoin <sup>1</sup> , S. Perruchas* <sup>1,2</sup> <sup>1</sup> Laboratoire PMC Ecole Polytechnique, France, <sup>2</sup> Institut des Matériaux, France	<b>09:20-09:50</b> <b>Featured Talk: [FTC03]</b> <b>Functional porous hydrogels through emulsion templating: Superabsorption, stimulus response, and shape memory</b> M. Silverstein, Technion – Israel Institute of Technology, Israel	<b>[SYMB103.01]</b> <b>Cationic silica nanoparticle-based nanocomposite bioink</b> M. Lee*, K. Bae, M. Zenobi-Wong ETH Zurich, Switzerland	<b>[ABC03.01]</b> <b>Total scattering studies of water-mediated exfoliation of hybrid two-dimensional thioestannates</b> M.S. Hvid <sup>1</sup> , H.S. Jeppesen <sup>1</sup> , P. Lamagni <sup>1</sup> , K.M. Jensen <sup>2</sup> , N. Lock* <sup>1</sup> <sup>1</sup> Aarhus University, Denmark, <sup>2</sup> University of Copenhagen, Denmark
09:40-10:00	<b>[SYMA03.02]</b> <b>Encapsulation, germination, and outgrowth of bacterial spores encapsulated in non-physiological materials, and implications for the detection and healing of cracks</b> J. Benson*, M. Quin, C. Schmidt-Dannertt, A. Aksan University of Minnesota, USA	<b>[SYMB03.02]</b> <b>Hybrid nanomaterials based on 3D graphene and polyporphyrins for visible-light photocatalysis</b> M. Ussia* <sup>1,2</sup> , E. Bruno <sup>1,2</sup> , F. Ruffino <sup>1,2</sup> , D. Vitalini <sup>3</sup> , E. Spina <sup>3</sup> , V. Privitera <sup>2</sup> , S.C. Carroccio <sup>2,3</sup> <sup>1</sup> University of Catania, Italy, <sup>2</sup> CNR-IMM Ct-Unit, Italy, <sup>3</sup> CNR-IPCB, Italy	<b>09:50-10:20</b> <b>Featured Talk: [FTC04]</b> <b>Reticular chemistry: MOF design strategies to applications</b> Mohamed Eddaoudi King Abdullah University of Science and Technology (KAUST), Saudi Arabia	<b>[SYMB103.02]</b> <b>Design of multi-functionalized mesoporous silica nanoparticles for biomedical applications</b> C. von Baeckmann* <sup>1</sup> , R. Guillet-Nicolas <sup>1</sup> , D. Renfer <sup>2</sup> , H. Kählig <sup>1</sup> , F. Kleitz <sup>1</sup> <sup>1</sup> University of Vienna, Austria, <sup>2</sup> University of Laval, Canada	<b>[ABC03.02]</b> <b>Preparation and characterization of polyamide-6 based composite chitosan membranes modified by various clays</b> E. Chrzanowska, W. Kujawski*, M. Gierszewska Nicolaus Copernicus University, Poland
10:00-10:20	<b>[SYMA03.03]</b> <b>Amyloid-tagged proteins as building blocks for functional materials</b> R. Milani* <sup>1</sup> , A. Tullila <sup>1</sup> , M. Lienemann <sup>1</sup> , C. Pigliacelli <sup>3,2</sup> , T. Nevanen <sup>1</sup> ,	<b>[SYMB03.03]</b> <b>MP-SPR for characterization of functional nanolayers and evaluation of surface interactions</b> R. Bombera*, A. Järvinen, J. Kuncova-Kallio		<b>[SYMB103.03]</b> <b>Electron-rich carbon nanodots for base-catalysis</b> S. Rat*, M. Antonietti Max Planck Institute for Colloids and Interfaces, Germany	<b>[ABC03.03]</b> <b>Nanoparticle catalysts comprising of immiscible elements for direct H<sub>2</sub>O<sub>2</sub> synthesis: A joint theory-experiment study</b>



	P. Metrangolo <sup>2,1</sup> <i><sup>1</sup>VTT Technical Research Centre of Finland Ltd, Finland, <sup>2</sup>Politecnico di Milano, Italy, <sup>3</sup>Aalto University, Finland</i>	BioNavis Ltd, Finland			D. Kim <sup>1</sup> , H. Nam <sup>1</sup> , Y-H. Cho <sup>2</sup> , J-P. Ahn <sup>1</sup> , K-Y. Lee <sup>2</sup> , S.Y. Lee <sup>1</sup> , S.S. Han* <sup>1</sup> <i><sup>1</sup>Korea Institute of Science and Technology, Republic of Korea, <sup>2</sup>Korea University, Republic of Korea</i>
10:20-11:20	Coffee Break and Poster Session 2   Room: Hall Auditorium/Tramuntana 1&2				
Rooms:	Garbi	Auditorium	Tramuntana 3	Llevant	Mestral
11:20-12:40	<b>Symposium A: Session 3 (cont.)</b>	<b>Symposium B: Session 3 (cont.)</b>	<b>Symposium C: Session 3 (cont.)</b>	<b>Symposium B1: Session 3 (cont.)</b>	<b>Symposium ABC: Session 3 (cont.)</b>
11:20-11:40	<b>11:20-11:50</b> <b>Featured Talk: [FTA04]</b> <b>Fracture resistance and internal architecture of hybrid materials</b> P. Fratzl <i>Max Planck Institute, Germany</i>	<b>[SYMB03.04]</b> <b>Metal nanoclusters based emissive hybrids for smart solar windows</b> S. Khelifi* <sup>1</sup> , J. Bignon <sup>1</sup> , M. Amela-Cortes <sup>1</sup> , N. Dumait <sup>1</sup> , G. Loas <sup>1</sup> , S. Cordier <sup>1</sup> , S. Morris <sup>2</sup> , Y. Molard <sup>1</sup> <i><sup>1</sup>Université de Rennes 1, France, <sup>2</sup>University of Oxford, UK</i>	<b>[SYMC03.01]</b> <b>Soft functional nanocellulose biohybrid foams</b> G. Nyström <i>Empa, Switzerland</i>	<b>[SYMB103.04]</b> <b>Novel synthesis of SERS tags via galvanic replacement-seeded growth method</b> S. Rodal-Cedeira* <sup>1</sup> , L. Polavarapu <sup>2</sup> , A. Laporta <sup>3</sup> , S. Bals <sup>3</sup> , J. Pérez-Juste <sup>1</sup> , I. Pastoriza-Santos <sup>1</sup> <i><sup>1</sup>CINBIO Universidade de Vigo, Spain, <sup>2</sup>Ludwig-Maximilians University of Munich, Germany, <sup>3</sup>EMAT Universiteit Antwerpen, Belgium</i>	<b>[ABC03.04]</b> <b>Synchrotron based techniques for studying hybrid nanomaterials as electrodes in lithium/sodium ion batteries</b> Q.F. Gu* <sup>1</sup> , H. Brand <sup>1</sup> , A. D'angelo <sup>1</sup> , B. Zhang <sup>2</sup> , X.B. Yu <sup>2</sup> , W.J. Li <sup>3</sup> , S.L. Chou <sup>3</sup> <i><sup>1</sup>Australian Synchrotron (ANSTO), Australia, <sup>2</sup>Fudan University, China, <sup>3</sup>University of Wollongong, Australia</i>
11:40-12:00	11:50-12:10 <b>[SYMA03.04]</b> <b>Bioelectrochemical TiN   FDH Catalyst for CO2 Reduction to HCOOH</b> F. Arena* <sup>1,2</sup> , G. Giuffredi <sup>1,2</sup> , A. Perego <sup>1</sup> , S. Donini <sup>1</sup> , E. Parisini <sup>1</sup> , F. Di Fonzo <sup>1</sup> <i><sup>1</sup>Istituto Italiano di Tecnologia, Italy, <sup>2</sup>Politecnico di Milano, Italy</i>	<b>[SYMB03.05]</b> <b>PbZrTiO3 Ferroelectric oxide as electron extraction material in stable halide perovskite solar cells</b> M. Lira-Cantu <i>Catalan Institute of Nanoscience and Nanotechnology (ICN2), CSIC and The Barcelona Institute of Science and Technology (BIST), Spain</i>	<b>[SYMC03.02]</b> <b>Enhanced methane reforming over hierarchically structured supported Ni catalyst</b> A. Tathod <sup>1</sup> , N. Hayek <sup>1</sup> , D. Simakov <sup>2</sup> , O.M. Gazit* <sup>1</sup> <i><sup>1</sup>Israel Institute of Technology-Technion, Israel, <sup>2</sup>University of Waterloo, Canada</i>	<b>[SYMB103.05]</b> <b>A metal-free supercapacitor using poly(ionic liquid)-derived carbon fibers as a current collector</b> E. Josef*, R. Yan, M. Oschatz, R. Guterman, M. Antonietti <i>Max Planck Institute of Colloids and Interfaces, Germany</i>	<b>[ABC03.05]</b> <b>Hybrid nanomaterials activated by plasmonic: Application in sensor devices</b> C. Queffelec* <sup>1</sup> , B. Humbert <sup>1</sup> , B. Bujoli <sup>1</sup> , D.A. Knight <sup>3</sup> <i><sup>1</sup>University of Nantes, France, <sup>2</sup>Florida Institute of Technology, USA</i>
12:00-12:20	12:10-12:30 <b>[SYMA03.05]</b>	<b>[SYMB03.06]</b> <b>New insights in molten salts synthesis of</b>	12:00-12:30 <b>Featured Talk: [FTC05]</b> <b>Cooperative adsorption</b>	<b>[SYMB103.06]</b> <b>Hybrid rGO-PbS QDs film for optoelectronic applications</b>	<b>[ABC03.06]</b> <b>Functional Nanostructures doped PEDOT:PSS for</b>

	<b>Surfactant-free <math>\beta</math>-galactosidase micromotors for "on-the-move" lactose hydrolysis</b> R. María-Hormigos, B. Jurado-Sánchez*, A. Escarpa <i>Universidad de Alcalá de Henares, Spain</i>	<b>nanoperovskites for designing high activity oxygen reduction catalysts</b> F. Gonell*, C. Sánchez-Sánchez, V. Vivier, C. Laberty-Robert, C. Sanchez, D. Portehault <i>CNRS, France</i>	<b>and gas separations in metal-organic frameworks</b> J.R. Long, <i>UCB, USA</i>	A. Litvin*, A. Babaev, S. Cherevkov, P. Parfenov, M. Baranov, A. Baranov <i>ITMO University, Russia</i>	<b>enhanced thermoelectric (TE) applications</b> Q. Zhu <i>IMRE, A*STAR, Singapore</i>
12:20-12:40		<b>[SYMB03.07] Ordered mesoporous silica monoliths with magnetic properties induced by the multi-scale control of nanocrystals of metal cyanide, metal oxide and metal alloy embedded in the porosity</b> A. Bleuzen*, V. Trannoy, L. Altenschmidt, R. Moulin, G. Fornasieri, M. Impéror-Clerc, A. Bordage <i>Université Paris-Sud, France</i>		<b>[SYMB103.07] Fabrication of graphene oxide-carboxymethyl cellulose nanocomposite hydrogel beads for pH-sensitive, controlled release of doxorubicin</b> A. Ayucitra*, Y-H. Ju <i>National Taiwan University of Science and Technology, Taiwan</i>	<b>[ABC03.07] New initiating system for performing photoinduced thermalfrontal polymerization of carbon-fiber/epoxy composites</b> X. Allonas* <sup>1</sup> , M. Lecompère <sup>1</sup> , D. Maréchal <sup>2</sup> et al <sup>1</sup> University of Haute Alsace, France, <sup>2</sup> Mäder Research, France
12:40-14:10	Lunch   Noray Restaurant				
12:40-14:10	The European Research Council: Funding opportunities for scientists to pursue their dreams				
Rooms:	Garbi	Auditorium	Tramuntana 3	Llevant	Mestral
<b>14:10-16:50</b>	<b>Symposium A: Session 4</b>	<b>Symposium B: Session 4</b>	<b>Symposium C: Session 4</b>	<b>Symposium B1: Session 4</b>	<b>Symposium ABC: Session 4</b>
14:10-14:30	<b>14:10-14:40 Featured Talk: [FTA05] Biomimetic polymer vesicles as active functional biomaterials</b> S. Lecommandoux, <i>Université de Bordeaux, France</i>	<b>[SYMB04.01] Effect of process parameter on 3D printing of continuous carbon fiber reinforced plastics</b> S. Kobayashi*, W. Yasunaga, T. Osada <i>Tokyo Metropolitan University, Japan</i>	<b>[SYMC04.01] Nanoparticles organization controls their potency as universal glues for interfaces between polymer networks</b> N. Molinari <sup>1,2</sup> , S. Angioletti-Uberti* <sup>1</sup> <sup>1</sup> Harvard University, USA,	<b>[SYMB104.01] Advanced benzoxazine-functionalized graphene oxide nanocomposites</b> E.I. Biru* <sup>1</sup> , S.A. Garea <sup>1</sup> , H. Iovu <sup>1,2</sup> <sup>1</sup> University Politehnica of Bucharest, Romania, <sup>2</sup> Academy of Romanian Scientists, Romania	<b>[ABC04.01] Integrated manufacturing system for synthesis of nanoparticles of metals and metal compounds</b> A. Zhigach* <sup>1</sup> , M. Kuskov <sup>1</sup> , I. Leipunsky <sup>1</sup> , A. Gorbachev <sup>1</sup> , E. Afanasenkova <sup>1</sup> , O. Safronova <sup>1</sup> , N. Berezkina <sup>1</sup> , G. Lopez <sup>2</sup> , <sup>1</sup> Russian

			<sup>2</sup> Imperial College London, UK		Academy of Science, Russia, <sup>2</sup> Northeastern University, USA
14:30-14:50	14:40-15:00 <b>[SYMA04.01]</b> <b>Gene silencing nanoparticle platform for in situ vascular matrix repair</b> S. Carney <sup>1,2</sup> , A. Camardo <sup>1</sup> , T. Broekelmann <sup>3</sup> , R. Mecham <sup>3</sup> , A. Ramamurthi <sup>*1,2</sup> <sup>1</sup> Cleveland Clinic, USA, <sup>2</sup> Case Western Reserve University, USA, <sup>3</sup> Washington University at St. Louis, USA	<b>[SYMB04.02]</b> <b>Metal-organic nanosheets: Programmable two-dimensional materials</b> J.A. Foster University of Sheffield, UK	<b>[SYMC04.02]</b> <b>Electrochemical fabrication and evaluation of Ni-based catalysts for hydrogen evolution reaction</b> H. Kim*, H. Park, D-K. Kim, S.H. Oh, S-K. Kim Chung-Ang University, Republic of Korea	<b>[SYMB104.02]</b> <b>Avoiding noble metal persistence: The ultrasmall-in-nano approach</b> A. Katrina Mapanao <sup>*1,2</sup> , D. Cassano <sup>1</sup> , S. Pocoví-Martínez <sup>3</sup> , M. Santi <sup>1</sup> , V. Voliani <sup>1</sup> <sup>1</sup> Istituto Italiano di Tecnologia, Italy, <sup>2</sup> Scuola Normale Superiore, Italy, <sup>3</sup> Universitat de Valencia, Italy	<b>[ABC04.02]</b> <b>General mechanism for unique lamellar-like porous nanofibers</b> O. Elishav*, G. Shter, G. Grader Technion – Israel Institute of Technology, Israel
14:50-15:10	15:00-15:20 <b>[SYMA04.02]</b> <b>Hybrid nanocrystals as smart Trojan horses against cancer for effective theranostic applications</b> V. Cauda et al Politecnico di Torino, Italy	<b>14:50-15:20</b> <b>Featured Talk: [FTB05]</b> <b>3- and 2-dimensional materials for capacitive energy storage</b> P. Simon <sup>1,2</sup> , <sup>1</sup> Université Paul Sabatier Toulouse, France, <sup>2</sup> French network on electrochemical energy storage, France	<b>[SYMC04.03]</b> <b>Active adsorbents for molecular separation</b> J. Shang <sup>*1</sup> , G. Li <sup>2</sup> , Q. Gu <sup>3</sup> , Z. Liu <sup>2</sup> , P. Webley <sup>2</sup> , E. May <sup>4</sup> <sup>1</sup> City University of Hong Kong, Hong Kong, <sup>2</sup> The University of Melbourne, Australia, <sup>3</sup> Australian Synchrotron, Australia, <sup>4</sup> The University of Western Australia, Australia	<b>[SYMB104.03]</b> <b>Synthesis of recyclable Fe<sub>3</sub>O<sub>4</sub>@EDTA@Fe nanocomposite for efficient N<sub>2</sub>O recovery from flue gas</b> M-A. Sharif*, H-Y. Cheng, A-J. Wang Research Center for Eco-Environmental Sciences, China	<b>[ABC04.03]</b> <b>Using pyridine amidoximes in the presence of polytopic carboxylic acids for the synthesis of novel coordination polymers</b> I. Mylonas-Margaritis <sup>*1</sup> , C. G. Efthymiou <sup>1</sup> , T. Lazarides <sup>2</sup> , P. McArdle <sup>1</sup> , A. Escuer <sup>3</sup> , C. Papatriantafyllopoulou <sup>1</sup> <sup>1</sup> National University of Ireland Galway, Ireland, <sup>2</sup> Aristotle University of Thessaloniki, Greece, <sup>3</sup> Universitat de Barcelona, Spain

15:10-15:30	15:20-15:40 <b>[SYMA04.03]</b> <b>Surface engineered nanoparticles of biocompatible metal-organic frameworks for cancer treatment</b> A. Mielcarek* <sup>1,2</sup> , T. Simon-Yarza <sup>1,2</sup> , R. Gref <sup>2</sup> , X. Li <sup>2</sup> , P. Couvreur <sup>2</sup> , C. Serre <sup>1</sup> <sup>1</sup> PSL University, France, <sup>2</sup> University Paris Saclay, France	<b>15:20-15:50</b> <b>Featured Talk: [FTB06]</b> <b>Molecularly doped metals: Recent progress</b> D. Avnir, <i>Hebrew University of Jerusalem, Israel</i>	<b>[SYMC04.04]</b> <b>Local polymer functionalization in mesoporous multilayer architectures and its influence on mesopore transport</b> M. Stanzel*, A. Andrieu-Brunsen <i>Technical University Darmstadt, Germany</i>	<b>[SYMB104.04]</b> <b>Modification of the fractal network structure of silica in elastomers by integration of octosilicate layers: Experiments and model</b> J.G. Meier* <sup>1</sup> , R. Córdova <sup>1</sup> , D. Julve <sup>2</sup> , M. Martínez <sup>2</sup> , J. Pérez <sup>2</sup> <sup>1</sup> Instituto Tecnológico de Aragón - ITAINNOVA, Spain, <sup>2</sup> Industrias Químicas del Ebro S.A., Spain	<b>[ABC04.04]</b> <b>Methods for controlling porosity and electronic band structure of nanoporous carbon materials for electrochemical energy storage and conversion</b> M. Oschatz*, R. Walczak, R. Yan, Q. Qin, F. Lai, M. Antonietti <i>Max Planck Institute of Colloids and Interfaces, Germany</i>
15:30-15:50	15:40-16:00 <b>[SYMA04.04]</b> <b>Amino acid functionalized diamond nanoparticles for drug/gene delivery: In vivo biodistribution studies and remodeling of functionalization design to improve gene transfection</b> R. Rai, S. Alwani, E. Krol, H. Fonge, I. Badea* <i>University of Saskatchewan, Canada</i>		<b>[SYMC04.05]</b> <b>Mesoporous (hybrid) silica nanochannel membrane</b> M.D. Pizzoccaro, C. Huiskes, A. Nijmeijer, L. Winnubst, M.W.J. Luiten-Olieman* <i>University of Twente, The Netherlands</i>	<b>[SYMB104.05]</b> <b>Plasmonic evolution and magnetic ordering in iron/copper and iron/gold magneto-plasmonic nanoparticles</b> K. Kollbek*, A. Szkudlarek, M.M. Marzec, A. Żywczak, M. Sikora, M. Przybylski <i>AGH University of Science and Technology, Poland</i>	<b>[ABC04.05]</b> <b>Cubes on a string: Isorecticular series of coordination polymers with chiral cubane-like units and polycarboxylates as linkers</b> M. Folkjaer* <sup>1</sup> , C. Deville <sup>1</sup> , M.S. Hvid <sup>1</sup> , P. Lamagni <sup>1</sup> , K. Borup <sup>1</sup> , V. McKee <sup>2</sup> , K.M.O. Jensen <sup>3</sup> , N. Lock <sup>1</sup> <sup>1</sup> Aarhus University, Denmark, <sup>2</sup> Dublin City University, Ireland, <sup>3</sup> University of Copenhagen, Denmark
15:50-16:10	16:00-16:20 <b>[SYMA04.05]</b> <b>Cytotoxicity and cellular uptake of hollow-shell mesoporous silica nanoparticles (hMSN) in human colon carcinoma cells</b> M. Pérez-Garnes, V. Morales-Pérez, R. Sanz-Martín, C. García-Jiménez, R.A. García-Muñoz*	<b>[SYMB04.03]</b> <b>Molecularly imprinted plasmonic sensor for highly selective SERS detection</b> V. Montes García* <sup>1,2</sup> , A. Castro Grijalba <sup>2</sup> , J. Pérez Juste <sup>2</sup> , I. Pastoriza Santos <sup>2</sup> <sup>1</sup> CNRS, France, <sup>2</sup> Universidad de Vigo, Spain	<b>15:50-16:20</b> <b>Featured Talk: [FTC06]</b> <b>NMR Crystallography of complex materials</b> L. Emsley, <i>Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland</i>	<b>[SYMB104.06]</b> <b>Synthesis and antibacterial properties of a new generation of hybrid polyoxometalate / antibiotic / gold nanoparticle nanocomposites</b> S. Tomane, E. López-Maya, S. Boujday, A. Dolbecq, V. Humblot, P. Mialane, A. Vallée*	<b>[ABC04.06]</b> <b>Redox-enhanced electrochemical capacitors based on mesoporous carbon electrodes and aqueous electrolytes</b> G. Calcagno* <sup>1</sup> , B. Evanko <sup>2</sup> , S.J. Yoo <sup>2</sup> , G. Stucky <sup>2</sup> , A. Palmqvist <sup>1</sup> <sup>1</sup> Chalmers University of Technology, Sweden,

	Universidad Rey Juan Carlos, Spain			Université Paris-Saclay, France	<sup>2</sup> University of California Santa Barbara, USA
16:10-16:30	16:20-16:40 <b>[SYMA04.06]</b> <b>Injectable hydrogel assembled by nucleic acid sequence for tunable delivery of multiple therapeutic molecules</b> L.H. Chen*, T.W. Wang National Tsing Hua University, Taiwan	<b>[SYMB04.04]</b> <b>Self-assembled hybrid nanotubes for x-ray activated photodynamic therapy (X-PDT) on brain cancer</b> I. Villa*, M. Campione, C. Villa, Y. Torrene, A. Vedda, A. Monguzzi Università degli Studi Milano Bicocca, Italy	<b>16:20- 16:50</b> <b>Featured Talk: [FTC07]</b> <b>Mesoporous silica nanoparticles as drug carriers</b> M. Vallet-Regí <sup>1,2</sup> , <sup>1</sup> Universidad Complutense de Madrid, Spain, <sup>2</sup> Networking Research Center on Bioengineering, Biomaterials and Nanomedicine, Spain	<b>[SYMB104.07]</b> <b>Processing nanostructured hybrid sol-gel coatings through top-down/bottom-up combinations, and recent applications in wetting and photonics</b> D. Grosso* <sup>1</sup> , T. Bottein <sup>1</sup> , M. Abbarchi <sup>1</sup> , M. Faustini <sup>2</sup> , O. Dalstein <sup>1,2</sup> <sup>1</sup> IM2NP, France, <sup>2</sup> LCMCP, France	<b>[ABC04.07]</b> <b>Cell adherence and drug delivery from particle based mesoporous silica films</b> E.M. Björk* <sup>1,2</sup> , B. Baumann <sup>1</sup> , R. Wittig <sup>1</sup> , F. Hausladen <sup>1</sup> , M. Lindén <sup>1</sup> <sup>1</sup> Ulm University, Germany, <sup>2</sup> Linköping University, Sweden
16:30-16:50		<b>[SYMB04.05]</b> <b>Synthesis and characterization of Gd<sup>3+</sup>, Tb<sup>3+</sup> and Ho<sup>3+</sup>- doped iron oxide nanoparticles for possible endoradiotherapy and hyperthermia</b> M. Osial, A. Rekorajska, P. Rybicka, M. Pekala, P. Krysinski* University of Warsaw, Poland		<b>[SYMB104.08]</b> <b>Localized enzyme-assisted self-assembly from nanoparticles leading to hybrid covalent/supramolecular hydrogels</b> M. Criado* <sup>1,2</sup> , P. Schaaf <sup>1,2</sup> , L. Jierry <sup>1</sup> , F. Boulmedais <sup>1</sup> <sup>1</sup> Université de Strasbourg, France, <sup>2</sup> Institut National de la Santé et de la Recherche Médicale, France	<b>[ABC04.08]</b> <b>Computational identification of the best mof adsorbents for co2 separations</b> C. Altintas, G. Avci, H. Daglar, A. Azar, S. Velioglu, I. Erucar, S. Keskin* Koc University, Turkey
16:50-17:15	Coffee Break   Room: Hall Auditorium/Tramuntana 1&2				

Rooms:	Garbi	Auditorium	Tramuntana 3	Llevant	Mestral
17:15-18:15	Symposium A: Session 4 (cont.)	Symposium B: Session 4 (cont.)	Symposium C: Session 4 (cont.)	Symposium B1: Session 4 (cont.)	Symposium ABC: Session 4 (cont.)
17:15-17:35	<b>17:15-17:45</b> <b>Featured Talk: [FTA06] Self-assembled supramolecular nanosystems for smart diagnosis and targeted therapy of intractable diseases</b> K. Kataoka <sup>1</sup> , <sup>1</sup> Kawasaki Institute of Industrial Promotion, Japan, <sup>2</sup> The University of Tokyo, Japan	<b>[SYMB04.06]</b> <b>Molecular characterization of hybrid organic-inorganic poly(POSS-imide) networks for gas separations under harsh conditions</b> S. Neyertz <sup>*1</sup> , D. Brown <sup>1</sup> , M.J.T. Raaijmakers <sup>2</sup> , N.E. Benes <sup>2</sup> <sup>1</sup> University Savoie Mont Blanc, France, <sup>2</sup> University of Twente, The Netherlands	<b>[SYMC04.06]</b> <b>Synthesis and surface modification of metal organic frameworks nanoparticles for the processing of mixed matrix membranes</b> N. Steunou <sup>*1,2</sup> , M. Benzaqui <sup>1,2</sup> , C. Sicard <sup>1</sup> , C. Serre <sup>2</sup> <sup>1</sup> Institut Lavoisier Versailles, France, <sup>2</sup> Institut Des Matériaux Poreux de Paris, France	<b>[SYMB104.09]</b> <b>Supramolecular anchoring of octahedral molybdenum clusters onto graphene for the photocatalytic production of H<sub>2</sub> from water</b> M. Feliz <sup>*1</sup> , P. Atienzar <sup>1</sup> , M. Amela-Cortés <sup>2</sup> , N. Dumait <sup>2</sup> , P. Lemoine <sup>2</sup> , Y. Molard <sup>2</sup> , S. Cordier <sup>2</sup> <sup>1</sup> Universitat Politècnica de València – Consejo Superior de Investigaciones Científicas, Spain, <sup>2</sup> Université de Rennes, France	<b>[ABC04.09]</b> <b>Carbon aerogels for cathodes of lithium-sulfur batteries</b> M. Schwan <sup>*</sup> , B. Milow, F. Warth, N. Wagner et al <i>German Aerospace Center, Germany</i>
17:35-17:55	<b>17:14-18:15</b> <b>Featured Talk: [FTA07] Multi-responsive polymeric microstructures with encoded pre-determined and self-regulated deformability</b> J. Aizenberg <i>Harvard University, USA</i>	<b>[SYMB04.07]</b> <b>Rectifying heat flows with polyoxometalate anisotropic structures</b> F. Sousa <sup>*</sup> , C. Mendonça, J. Silveiras, G. Guedes, E. Coimbra, N. Silva <i>University of Aveiro, Portugal</i>	<b>[SYMC04.07]</b> <b>Preparation, structural characterization, and permeation properties of CaF<sub>2</sub>/cellulose acetate asymmetric membranes</b> A. Molina <sup>1</sup> , G. Sánchez <sup>*1</sup> , M. Faria <sup>2</sup> , M.N. de Pinho <sup>1</sup> <sup>1</sup> Universidad Autónoma de San Luis Potosí, Mexico, <sup>2</sup> Instituto Superior Técnico, Universidade de Lisboa, Portugal	<b>[SYMB104.10]</b> <b>Unprecedented stoichiometry and broad-band photoluminescent emission in [(CH<sub>3</sub>)<sub>2</sub>NH<sub>2</sub>]<sub>7</sub>Pb<sub>4</sub>X<sub>15</sub> 2D-perovskite related hybrids</b> A. García-Fernández <sup>1</sup> , J.M. Bermúdez-García <sup>1</sup> , J. Salgado-Beceiro <sup>1</sup> , A. Cuquejo-Cid <sup>1</sup> , A.L. Llama-Saiz <sup>2</sup> , S. Castro-García <sup>*1</sup> , M. Sánchez-Andújar <sup>1</sup> <sup>1</sup> University of A Coruña, Spain, <sup>2</sup> University of Santiago de Compostela, Spain	<b>[ABC04.10]</b> <b>Organogel and microporous polymers from a one-pot synthesis of iron (ii) clathrochelate building blocks</b> B. Alameddine <sup>*1</sup> , N. Baig <sup>1</sup> , S. Shetty <sup>1</sup> , F. Al-Sagheer <sup>2</sup> , S. Al-Mousawi <sup>2</sup> <sup>1</sup> Gulf University for Science and Technology, Kuwait, <sup>2</sup> Kuwait University, Kuwait
17:55-18:15		<b>[SYMB04.08]</b> <b>Graphitic carbon nitride layers as light-harvesting</b>	<b>[SYMC04.08]</b> <b>Artificial light-driven pump for photoelectric energy</b>	<b>[SYMB104.11]</b> <b>New physical hybrid hydrogels with colloid-</b>	<b>[ABC04.11]</b> <b>Effects of nanoscale ligand density on cartilage development and</b>

		<b>semiconductors for photoelectrochemical cells</b> M. Shalom <i>Ben Gurion University of the Negev, Israel</i>	<b>conversion</b> K. Xiao* <sup>1</sup> , L. Jiang <sup>2</sup> , M. Antonietti <sup>1</sup> <sup>1</sup> Max Planck Institute of Colloids and Interfaces, Germany, <sup>2</sup> Chinese Academy of Sciences, China	<b>isasomes as cross-linkers</b> F. Ferdeghini* <sup>1,2</sup> , Z. Guennouni <sup>1,2</sup> , C. Le Cœur <sup>2,3</sup> , F. Muller <sup>1,2</sup> <sup>1</sup> ECE Paris, France, <sup>2</sup> Laboratoire Léon Brillouin (CEA-CNRS), France, <sup>3</sup> ICMPE, France	<b>intercellular communication</b> I. Casanellas* <sup>1,2</sup> , A. Lagunas <sup>3,1</sup> , Y. Vida <sup>4,5</sup> , E. Pérez-Inestrosa <sup>4,5</sup> , C. Rodríguez-Pereira <sup>6</sup> , J. Magalhaes <sup>3,6</sup> , J. Samitier <sup>1,2</sup> <sup>1</sup> Barcelona Institute of Science and Technology (BIST), Spain, <sup>2</sup> University of Barcelona (UB), Spain, <sup>3</sup> Networking Biomedical Research Center (CIBER), Spain, <sup>4</sup> Universidad de Málaga (UMA), Spain, <sup>5</sup> Andalusian Centre for Nanomedicine and Biotechnology (BIONAND), Spain, <sup>6</sup> Universidade da Coruña (UDC), Spain
Room:	Auditorium				
18:30-19:15	<b>[TT02] Noble carbons and their Heterojunctions: From heterogeneous organocatalysis to hybrids with single metal atoms</b> M. Antonietti, <i>Max Planck Institute of Colloids and Interfaces, Germany</i>				
19:15-20:45	Drinks Reception and Poster Session 2   Room: Tramuntana 1&2				

Wednesday, 13 March 2019

Room:	Auditorium				
08:00-08:45	<b>Plenary Lecture 2: [PL02] MXenes and their hybrids open new horizons in materials research</b> Y. Gogotsi, <i>Drexel University, USA</i>				
08:45-09:30	<b>Plenary Lecture 3: [PL03] Compositional and interface engineering of organic-inorganic hybrid perovskites to improve photovoltaic performance and stability</b> M.K. Nazeeruddin, <i>École Polytechnique Fédérale de Lausanne (EPFL), Switzerland</i>				
Rooms:	Garbi	Auditorium	Tramuntana 3	Llevant	Mestral
09:35-10:35	<b>Symposium A: Session 5</b>	<b>Symposium B: Session 5</b>	<b>Symposium C: Session 5</b>	<b>Symposium B1: Session 5</b>	<b>Symposium ABC: Session 5</b>
09:35-09:55	<b>[SYMA05.01]</b> <b>pH-responsive MIL-100(Fe) and MIL-101(Fe) nanoMOFs for safety delivery of camptothecin</b> A. Cabrera-García <sup>1</sup> , E. Checa-Chavarria <sup>2</sup> , E. Rivero-Buceta <sup>1</sup> , V. Moreno <sup>3</sup> , E. Fernández <sup>2</sup> , P. Botella* <sup>1</sup> <sup>1</sup> Universitat Politècnica de València-CSIC, Spain, <sup>2</sup> Universidad Miguel Hernández, Spain, <sup>3</sup> Research Centre "Principe Felipe", Spain	<b>09:35-10:05</b> <b>Featured Talk: [FTB07]</b> <b>From functional silicates to organic-inorganic hybrids: Climbing the ladder?</b> J. Rocha, <i>University of Aveiro, Portugal</i>	<b>[SYMC05.01]</b> <b>Order, intermolecular interactions and properties of zeolites: The organic structure directing agent point of view</b> T. Mineva, E. Dib, P. Gaveau, E. Véron, V. Sarou-Kanian, F. Fayon, B. Alonso* <i>CNRS, France</i>	<b>[SYMB105.01]</b> <b>Au@SCO core@shell nanoparticles with unprecedented abrupt conductive switching</b> R. Sanchis-Gual*, R. Torres-Cavanillas, M. Coronado-Puchau, J. Dugay, M. Giménez-Marqués, E. Coronado <i>University of Valencia / ICMol, Spain</i>	<b>[ABC05.01]</b> <b>A bio-inspired approach to bio-functional hybrid materials: ceramic templated melanin-like nanostructures</b> G. Vitiello <sup>1,2</sup> , A. Costantini <sup>1</sup> , B. Silvestri* <sup>1</sup> , G. D'Errico <sup>1</sup> , A. Pezzella <sup>1</sup> , G. Luciani <sup>1</sup> , M. D'Ischia <sup>1</sup> <sup>1</sup> University of Naples Federico II, Italy, <sup>2</sup> Consorzio Interuniversitario per lo Sviluppo di Sistemi a Grande Interfase, Italy
09:55-10:15	<b>[SYMA05.02]</b> <b>The vanishing MSN drug carrier</b> K. Möller*, T. Bein <i>University of Munich (LMU), Germany</i>	<b>10:05:10:35</b> <b>Featured Talk: [FTB08]</b> <b>Advanced electron microscopy techniques for the study of the properties and dynamical behavior of nanomaterials</b> Ovidiu Ersen <i>University of Strasbourg, France</i>	<b>[SYMC05.02]</b> <b>TEMPO functionalized mesoporous silica particles as a heterogeneous catalyst</b> J.S. Schulze*, J. Migenda, B.M. Smarsly <i>Justus-Liebig University Giessen, Germany</i>	<b>[SYMB105.02]</b> <b>Nature-inspired design: Bio-based photoacoustic nanoprobe</b> B. Silvestri* <sup>1</sup> , P. Armanetti <sup>2</sup> , G. Vitiello <sup>1</sup> , A. Pezzella <sup>1</sup> , A. Lamberti <sup>1</sup> , L. Menichetti <sup>2</sup> , G. Luciani <sup>1</sup> , M. d'Ischia <sup>1</sup> <sup>1</sup> University of Naples Federico II, Italy, <sup>2</sup> CNR Institute of Clinical Physiology, Italy	<b>[ABC05.02]</b> <b>Fully programmable and stimuli-responsive release by designing functional polymers</b> S. Soh <i>National University of Singapore, Singapore</i>
10:15-10:35	<b>[SYMA05.03]</b> <b>Dual disassembly and biological evaluation of</b>		<b>[SYMC05.03]</b> <b>Combination of two different light absorbing</b>	<b>[SYMB105.03]</b> <b>Colloidal nanoparticles of diverse iron oxide's phases</b>	<b>[ABC05.03]</b>



	<b>multifunctional copolymer-based nanoassemblies for cancer therapy</b> J.K. Oh <i>Concordia University, Canada</i>		<b>materials - creating a new potent visible light absorbing photocatalyst</b> J. Timm <sup>1</sup> , A. Blöber* <sup>2</sup> , R. Marschall <sup>2</sup> <sup>1</sup> DECHEMA <i>Forschungsinstitut, Germany, <sup>2</sup>University of Bayreuth, Germany</i>	<b>modified by a cation-exchange approach: Unexpected findings and their effect on the magnetic behaviour</b> A. Falqui <sup>1</sup> , A. Casu* <sup>1</sup> , D. Deiana <sup>2</sup> , S. Lentijo-Mozo <sup>1</sup> <sup>1</sup> King Abdullah University of Science and Technology (KAUST), Saudi Arabia, <sup>2</sup> Ecole Polytechnique Federale de Lausanne, Switzerland	<b>Hybrid Block-copolymer Nanostructured Surfaces for Anti-reflective Applications</b> S.H. Mir*, P. Mokarian-Tabari <i>Trinity College, Ireland</i>
10:35-11:00	Coffee Break   Room: Hall Auditorium/Tramuntana 1&2				
Rooms:	Garbi	Auditorium	Tramuntana 3	Llevant	Mestral
11:00-13:20	<b>Symposium A: Session 5 (cont.)</b>	<b>Symposium B: Session 5 (cont.)</b>	<b>Symposium C: Session 5 (cont.)</b>	<b>Symposium B1: Session 5 (cont.)</b>	<b>Symposium ABC: Session 5 (cont.)</b>
11:00-11:20	<b>[SYMA05.04] On-Chip Combinatorial Synthesis, Lipoplex Formation and Cellular Screening</b> M. Benz, M. Molla, A. Boeser, A. Rosenfeld, P. Levkin* <i>Karlsruhe Institute of Technology, Germany</i>	<b>[SYMB05.01] Polymer-functionalized mesoporous silica: Benefits from polyion complex micelle templating</b> A. Pimphachanh, P. Lacroix-Desmazes, M. In, N. Marcotte, C. Gérardin* <i>University of Montpellier, France</i>	<b>11:00-11:30 Featured Talk: [FTC08] Toward forth generation porous coordination polymers/metal-organic frameworks</b> S. Kitagawa, <i>Kyoto University, Japan</i>	<b>[SYMB105.04] Ethanol dehydration over hydrophobic aluminum and niobium silicates: Influence of homogeneity of metal mixing on catalytic activity and stability of Si-C bonds</b> A. Styskalik* <sup>1,2</sup> , G. Boogaerts <sup>1</sup> , C. Poleunius <sup>1</sup> , D. Debecker <sup>1</sup> <sup>1</sup> Université catholique de Louvain, Belgium, <sup>2</sup> Masaryk University, Czech Republic	<b>[ABC05.04] Polysaccharide-oxide nanocomposites through colloidal self-assembly and soft chemistry routes</b> E. Belamie <sup>1</sup> , K.L. Kostov <sup>2</sup> , B. Alonso* <sup>1</sup> <sup>1</sup> ICGM (CNRS, ENSCM, UM, EPHE), France, <sup>2</sup> Academy of Sciences, Bulgaria
11:20-11:40	<b>[SYMA05.05] Nanocomposite nanofibers scaffolds and nanoparticles/polymer conjugates nanosystems for antibacterial and drug delivery applications - from lab to the market</b> W. Mamdouh*, J. Kegere, A. Shetta, N. ElBaz, L. Ziko,	<b>[SYMB05.02] New plasmonic hybrid silver molybdate nanoheterostructures for visible-light driven photocatalysis and SERS detection</b> R. Dessapt* <sup>1</sup> , K. Hakouk <sup>1</sup> , L. Lajaunie <sup>1,2</sup> , H. El Bekkachi <sup>1</sup> , H. Serier-Brault <sup>1</sup> ,	<b>11:30-12:00 Featured Talk: [FTC09] Molecular understanding and controlled functionalization of surfaces towards single-site catalysts and beyond</b> C. Coperet, <i>ETH Zürich, Switzerland</i>	<b>[SYMB105.05] Chemical mapping of bio- and hybrid materials with 10 nm spatial resolution using scattering-type scanning near-field optical microscopy</b> P. Schäfer*, A. Cernescu, A. Huber <i>neaspec GmbH, Germany</i>	<b>[ABC05.05] Catalytic and electron conducting carbon nanotube reinforced lysozyme crystals</b> R. Contreras-Montoya <sup>1</sup> , G. Escolano <sup>2</sup> , M.T. Lopez-Lopez <sup>1</sup> , J.A. Gavira <sup>2</sup> , L. Alvarez de Cienfuegos* <sup>1</sup> <sup>1</sup> University of Granada,

	R. Siam <i>The American University in Cairo (AUC), Egypt</i>	B. Humbert <sup>1</sup> , R. Arenal <sup>2,3</sup> <i><sup>1</sup>Université de Nantes, France, <sup>2</sup>Instituto de Nanociencia de Aragón, Universidad de Zaragoza, Spain, <sup>3</sup>ARAID Foundation, Spain</i>			<i>Spain, <sup>2</sup>Instituto Andaluz Ciencias de la Tierra, Spain</i>
11:40-12:00	<b>[SYMA05.06]</b> <b>Controlled drug release from mesoporous silica nanoparticles by boronic acid-based molecular gates</b> Y. Salinas*, I. Teasdale, O. Brueggemann <i>Johannes Kepler University Linz, Austria</i>	<b>[SYMB05.03]</b> <b>New plasmonic hybrid silver molybdate nanoheterostructures for visible-light driven photocatalysis and SERS detection</b> R. Dessapt* <sup>1</sup> , K. Hakouk <sup>1</sup> , L. Lajaunie <sup>1,2</sup> , H. El Bekkachi <sup>1</sup> , H. Serier-Brault <sup>1</sup> , B. Humbert <sup>1</sup> , R. Arenal <sup>2,3</sup> <i><sup>1</sup>Université de Nantes, France, <sup>2</sup>Instituto de Nanociencia de Aragón, Universidad de Zaragoza, Spain, <sup>3</sup>ARAID Foundation, Spain</i>		<b>[SYMB105.06]</b> <b>In situ preparation of epoxy-SiO<sub>2</sub> nanocomposites for high voltage insulation</b> M.M. Adnan* <sup>1</sup> , E.G. Tveten <sup>2</sup> , R. Miranti <sup>1</sup> , S. Hvidsten <sup>2</sup> , J. Glaum <sup>1</sup> , M-H. Ese <sup>2</sup> , M-A. Einarsrud <sup>1</sup> <i><sup>1</sup>Norwegian University of Science and Technology NTNU, Norway, <sup>2</sup>SINTEF Energy Research, Norway</i>	<b>[ABC05.06]</b> <b>Dual stimuli-responsive perallyloxycucurbit[6]uril-based nanoparticles for selective drug delivery in cancer cells</b> R. Wang <i>University of Macau, Macao</i>
12:00-12:20	<b>12:00-12:30</b> <b>Featured Talk: [FTA08]</b> Samuel Stupp <i>Northwestern University, USA</i>	<b>[SYMB05.04]</b> <b>Functional hybrid Au-protein supraparticles for nanodelivery</b> F. Baldelli Bombelli* <sup>1</sup> , C. Pigliacelli <sup>1,2</sup> , D. Maiolo <sup>1</sup> , P. Metrangolo <sup>1,2</sup> <i><sup>1</sup>Politecnico di Milano, Italy, <sup>2</sup>Aalto University, Finland</i>	<b>[SYMC05.04]</b> <b>Ru-loaded mesoporous C12A7 mesocrystalline microcubes for catalytic NH<sub>3</sub> synthesis under ambient pressure</b> G. Hasegawa* <sup>1</sup> , S. Moriya <sup>1</sup> , M. Kitano <sup>2</sup> , K. Hayashi <sup>1</sup> <i><sup>1</sup>Kyushu University, Japan, <sup>2</sup>Tokyo Institute of Technology, Japan</i>	<b>[SYMB105.07]</b> <b>Simulation and structural characterization of ordered mesoporous carbon composite materials</b> C. Weinberger* <sup>1</sup> , M. Hartmann <sup>1</sup> , S. Ren <sup>1</sup> , T. Sandberg <sup>2</sup> , J.H. Smått <sup>2</sup> , M. Tiemann <sup>1</sup> <i><sup>1</sup>Paderborn University, Germany, <sup>2</sup>Åbo Akademi University, Finland</i>	<b>[ABC05.07]</b> <b>Nanohybrid hydrogel containing glycosaminoglycan-based polyelectrolyte nanoparticles for the treatment of brain stroke</b> T.W. Wang*, W.H. Jian <i>National Tsing Hua University, Taiwan</i>

12:20-12:40	12:30-12:50 <b>[SYMA05.07]</b> <b>Brain targeting lactoferrin conjugated redox sensitive PEG-S-S-PLA-PCL-OH polymersomes encapsulated with bacosides enhance the reversal of chemically induced amnesia</b> K. Goyal*, V. Koul, <i>Indian Institute of Technology Delhi, India</i>	<b>[SYMB05.05]</b> <b>Bottom-up synthetic approaches to Mie resonant silicon particles for optical metamaterials</b> G.L. Drisko* <sup>1</sup> , S. Semlali <sup>1</sup> , M.L. DeMarco <sup>1</sup> , B. Cormary <sup>1</sup> , C. Aymonier <sup>1</sup> , P. Barois <sup>2</sup> <i><sup>1</sup>Institut de Chimie de la Matière Condensée de Bordeaux (ICMCB), France, <sup>2</sup>Centre de Recherche Paul Pascal (CRPP), France</i>	<b>[SYMC05.05]</b> <b>Lyotropic liquid crystalline mesophases for the synthesis of transparent mesoporous thin film electrodes</b> O. Dag <i>Bilkent University, Turkey</i>	<b>[SYMB105.08]</b> <b>Functional hybrid materials based on electro/photo-switchable cubes: Smart inorganic polymers for energy storage and molecular electronics</b> A. Benchohra <sup>1</sup> , J. Landousli <sup>1</sup> , J.R. Jimenez <sup>1</sup> , R. Plamont <sup>1</sup> , Y. Li <sup>1</sup> , L. Fillaud <sup>1</sup> , E. Maisonhaute <sup>1</sup> , D. Kreher <sup>1</sup> , J. Dreiser <sup>2</sup> , R. Lescouezec* <sup>1</sup> et al <i><sup>1</sup>Sorbonne Université, France, <sup>2</sup>SLS, Paul Scherrer Institute, Switzerland</i>	<b>[ABC05.08]</b> <b>Bioactive Liquid Crystal Droplets</b> N.K. PM <sup>1</sup> , S. Mann <sup>2</sup> , K.P. Sharma* <sup>1</sup> <i><sup>1</sup>Indian Institute of Technology Bombay, India, <sup>2</sup>University of Bristol, UK</i>
12:40-13:00	12:50-13:10 <b>[SYMA05.08]</b> <b>Ultrasound-sensitive piezoelectric nanotransducers for the treatment of brain tumors</b> A. Marino* <sup>1</sup> , C. Tapeinos <sup>1</sup> , M. Battaglini <sup>1,2</sup> , S. Migliorin <sup>3</sup> , F. Tomatis <sup>3</sup> , G. Ciofani <sup>1,3</sup> <i><sup>1</sup>Istituto Italiano di Tecnologia, Italy, <sup>2</sup>Scuola Superiore Sant'Anna, Italy, <sup>3</sup>Politecnico di Torino, Italy</i>	<b>12:40-13:10</b> <b>Featured Talk: [FTB09]</b> <b>When molecular science meets 2D materials: Orchestrating multiple functions</b> P. Samorì, <i>Université de Strasbourg &amp; CNRS, France</i>	<b>[SYMC05.06]</b> <b>Prussian blue nanomembranes on porous supports: Growth mechanism and gas separation</b> R. Selyanchyn*, R. Okeda, K. Kanakogi, S. Fujikawa, N. Kimizuka <i>Kyushu University, Japan</i>	<b>[SYMB105.09]</b> <b>Cobalt-iron mixed metal oxide nanoparticles: Green synthesis using cameroonian palmist oil and structural characterization</b> Y.C. Ngnintedem* <sup>1,3</sup> , F.R. Lontio <sup>2</sup> , C. Poleunis <sup>3</sup> , A. Delcorte <sup>3</sup> , J.L. Ngolui <sup>1</sup> <i><sup>1</sup>University of Yaounde I, Cameroon, <sup>2</sup>German Aerospace Center, Germany, <sup>3</sup>Catholic University of Louvain, Belgium</i>	<b>[ABC05.09]</b> <b>Biocompatible electrospun nanofibers containing cloxacillin: Release profile and activity towards Gram positive bacteria</b> R. Schneider <sup>1,2</sup> , L.A. Mercante <sup>1,2</sup> , R.S. Andre <sup>1</sup> , H.M. Brandão <sup>3</sup> , L.H.C. Mattoso <sup>1,2</sup> , D.S. Correa* <sup>1,2</sup> <i><sup>1</sup>Embrapa Instrumentação, Brazil, <sup>2</sup>UFSCar - PPGQ, Brazil, <sup>3</sup>Embrapa Gado de Leite, Brazil</i>
13:00-13:20				<b>[SYMB105.10]</b> <b>Boron nitride nanomaterials modifications to improve nanocomposites preparation</b> D. Santiago*, C-C. Hung, J. Hurst, M. Lizcano, M. Kelly <i>NASA Glenn Research Center, USA</i>	<b>[ABC05.10]</b> <b>Polymer coated mesoporous silica nanoparticles for controlled delivery of a chemotherapeutic drug to pancreatic cancer cells</b> R.S. Prabhuraj*, U. Majhi, R. Srivastava,

R. Bandyopadhyaya  
Indian Institute of  
Technology Bombay,  
Mumbai, India

FREE AFTERNOON AND EVENING

Thursday, 14 March 2019

Room:	Auditorium				
08:30-09:15	<b>Plenary Lecture 4: [PL04] Functional nanoscale and hierarchical materials by "living" crystallization-driven self-assembly</b> I. Manners <sup>1,2</sup> , <sup>1</sup> University of Bristol, UK, <sup>2</sup> University of Victoria, Canada				
Rooms:	Garbi	Auditorium	Tramuntana 3	Llevant	Mestral
<b>09:20-10:20</b>	<b>Symposium A: Session 6</b>	<b>Symposium B: Session 6</b>	<b>Symposium C: Session 6</b>	<b>Symposium B1: Session 6</b>	<b>Symposium ABC: Session 6</b>
09:20-09:40	<b>[SYMA06.01]</b> <b>Iron oxide/silica core/shell nanocomposites decorated with quantum dots as promising agent for image guided therapy</b> F. Perton <sup>*1</sup> , M. Tasso <sup>2</sup> , F. Meyer <sup>1</sup> , S. Bégin-Colin <sup>1</sup> , D. Mertz <sup>1</sup> <sup>1</sup> Institut de Physique et Chimie des Matériaux de Strasbourg (IPCMS), France, <sup>2</sup> INIFTA, Argentina	<b>[SYMB06.01]</b> <b>From battery waste to hybrid nanocomposites-based electrochemical sensor for multiplex detection of DNA bases: A biomedical prospect for studying DNA damage</b> S.M. Khor <sup>*</sup> , K.L. Ng University of Malaya, Malaysia	<b>09:20-09:50</b> <b>Featured Talk: [FTC10]</b> <b>Periodic materials composed of silicate double four-ring nodes and dimethylsilicone linkers: POSISILS</b> J. Martens University of Leuven, Belgium	<b>[SYMB106.01]</b> <b>Chromonic liquid crystals as precursors for the bottom-up fabrication of organic and inorganic nanofibers</b> C. Rodriguez-Abreu Institute for Advanced Chemistry of Catalonia, Spain	<b>[ABC06.01]</b> <b>Robust structurally colored coatings prepared via cathodic electrophoretic deposition of SiO<sub>2</sub> particles</b> K. Katagiri <sup>*1</sup> , K. Uemura <sup>1</sup> , R. Uesugi <sup>1</sup> , K. Inumaru <sup>1</sup> , T. Uchikoshi <sup>2</sup> , Y. Takeoka <sup>3</sup> <sup>1</sup> Hiroshima University, Japan, <sup>2</sup> National Institute for Materials Science, Japan, <sup>3</sup> Nagoya University, Japan

09:40-10:00	<p><b>[SYMA06.02]</b>  <b>Thrombosis targeted by polysaccharide submicron particles</b>  L.M. Forero Ramirez*<sup>1,3</sup>, F. Moraes<sup>1,2</sup>, A. Zenych<sup>1,3</sup>, D. Letourneur<sup>1,3</sup>, F. Chaubet<sup>1,3</sup>, C. Chauvierre<sup>1,3</sup>  <sup>1</sup>INSERM, France, <sup>2</sup>Université Paris Diderot, France, <sup>3</sup>Université Paris 13, France</p>	<p><b>[SYMB06.02]</b>  <b>Advances in the controlled self-assembly of <math>\pi</math>-conjugated block copolymers for optoelectronic applications</b>  L. MacFarlane*, M. Vespa, I. Manners  University of Victoria, Canada</p>	<p><b>09:50-10:20</b>  <b>Featured Talk: [FTC11]</b>  <b>Covalent organic frameworks (COF) and Covalent triazine frameworks (CTF) : Metal free and highly stable heterogeneous catalysts and adsorbents</b>  P. Van Der Voort, Ghent University, Belgium</p>	<p><b>[SYMB106.02]</b>  <b>Curcuminoid-based materials from supramolecular assemblies to active surfaces</b>  A. González-Campo*<sup>1</sup>, E. Iñiguez<sup>1</sup>, S. Giraldo<sup>1,2</sup>, R. Díaz-Torres<sup>1</sup>, R. Gimeno-Múñoz<sup>1</sup>, N. Joosten<sup>3</sup>, A. Velders<sup>3</sup>, N. Aliaga-Alcalde<sup>1</sup>  <sup>1</sup>Institut de Ciència de Materials de Barcelona (ICMAB-CSIC), Spain, <sup>2</sup>Universitat de Barcelona, Spain, <sup>3</sup>Wageningen University, The Netherlands</p>	<p><b>[ABC06.02]</b>  <b>Modification of mesoporous magnesium carbonate and its applications in drug delivery and waste water treatment</b>  M. Vall*, M. Strømme, O. Cheung  Uppsala University, Sweden</p>
-------------	--	--	--	--	--

10:00-10:20	<p><b>[SYMA06.03]</b>  <b>Protein adsorption on mesoporous silica nanoparticles: Influence of pore diameter on competitive adsorption and applications in prostate cancer diagnosis</b>  C. Vidaurre-Agut<sup>1</sup>, E.M. Rivero-Buceta<sup>1</sup>, E. Romání Cubells<sup>1</sup>, A.M. Clemments<sup>2</sup>, C.D. Vera-Donoso<sup>3</sup>, C.C. Landry*<sup>2</sup>, P. Botella<sup>1</sup>  <sup>1</sup>Instituto de Tecnología Química, Spain, <sup>2</sup>University of Vermont, USA, <sup>3</sup>Hospital Universitario y Politécnico La Fe, Spain</p>	<p><b>[SYMB06.03]</b>  <b>Magneto-optical properties of the magnetite-graphene oxide composites in organic solvents</b>  A. Dimiev*, A. Solodov  Kazan Federal University, Russia</p>		<p><b>[SYMB106.03]</b>  <b>Chemical functionalization of 2D materials with molecular-based systems: Towards tuneable composites</b>  A. Forment-Aliaga*<sup>1</sup>, M. Morant-Giner<sup>1</sup>, R. Torres-Cavanilles<sup>1</sup>, J. Romero<sup>1</sup>, A. Alberola<sup>1</sup>, A.L. Gushchin<sup>2</sup>, N.Y. Shmelev<sup>2</sup>, M. Galbiati<sup>1</sup>, G. Escorcia<sup>1</sup>, S. Tatay<sup>1</sup>, J. Dugay<sup>1</sup>, M. Giménez-Marqués<sup>1</sup>, E. Coronado<sup>1</sup>  <sup>1</sup>Universitat de València, Spain, <sup>2</sup>Russian Academy of Sciences, Russia</p>	<p><b>[ABC06.03]</b>  <b>Synthesis and properties of porous ceria-titania photocatalysts prepared by a facile solvothermal approach</b>  S. Sood*<sup>1</sup>, K. Polychronopoulou<sup>1</sup>, M. Abi Jaoude<sup>1</sup>, A. Safieh<sup>2</sup>, A. Alnuaimi<sup>2</sup>  <sup>1</sup>Khalifa University of Science and Technology, United Arab Emirates, <sup>2</sup>Dubai Electricity and Water Authority (DEWA), United Arab Emirates</p>
10:20-11:20	Coffee Break and Poster Session 3   Room: Hall Auditorium/Tramuntana 1&2				
Rooms:	Garbi	Auditorium	Tramuntana 3	Llevant	Mestral
11:20-12:40	<b>Symposium A: Session 6 (cont.)</b>	<b>Symposium B: Session 6 (cont.)</b>	<b>Symposium C: Session 6 (cont.)</b>	<b>Symposium B1: Session 6 (cont.)</b>	<b>Symposium ABC: Session 6 (cont.)</b>
11:20-11:40	<p><b>11:20-11:50</b>  <b>Featured Talk: [FTA09]</b>  <b>Organic nano-crystals in organisms: Biogenic scatterers, mirrors, multilayer reflectors and photonic crystals</b>  L. Addadi, Weizmann Institute, Israel</p>	<p><b>[SYMB06.04]</b>  <b>Enhanced electrochromic properties of organic-inorganic thin films based on layered double hydroxides</b>  V. Prevot*<sup>1</sup>, C. Mousty<sup>1</sup>, P. Koilraj<sup>1</sup>, A. Rougier<sup>2</sup>, M. Takemoto<sup>3</sup>, M. Takahashi<sup>3</sup>, Y. Tokudome<sup>3</sup>, I. Mjejri<sup>2</sup>  <sup>1</sup>Université Clermont Auvergne, France, <sup>2</sup>Université de Bordeaux, France, <sup>3</sup>Osaka Prefecture University, Japan</p>	<p><b>[SYMC06.01]</b>  <b>Nitrene-based crosslinking agent for overcoming solution-processed multilayer deposition limit in OFETs</b>  T.K. An  Korea National University of Transportation, Republic of Korea</p>	<p><b>[SYMB106.04]</b>  <b>Stabilization of Gelatin-Dextran/LDH vesicles by a w/w Pickering emulsion process. A strategy toward the encapsulation of artificial metabolism</b>  C. Forano*, A. Borgini, V. Prevot, C. Guerard-Helaine, V. Helaine, C. Vachias, M. Lemaire, T. Gefflaud  <sup>1</sup>Université Clermont Auvergne, France</p>	<p><b>[ABC06.04]</b>  <b>Temperature-switch nanomagnetic logic gates for cellular hyperthermia</b>  R.A. Pereira*<sup>1</sup>, R. Oliveira-Silva<sup>2</sup>, F.M. Silva<sup>1</sup>, V.M. Gaspar<sup>1</sup>, A. Ibarra<sup>3</sup>, A. Millán<sup>4</sup>, F.L. Sousa<sup>1</sup>, J.F. Mano<sup>1</sup>, N.J.O. Silva<sup>1</sup>  <sup>1</sup>CICECO - Aveiro Institute of Materials, Portugal, <sup>2</sup>BB - Institute of Bioengineering and Biosciences, Portugal, <sup>3</sup>LMA - Instituto de Nanociencia de Aragón, Spain, <sup>4</sup>Instituto de Ciencia de Materials de Aragón, Spain</p>

11:40-12:00	11:50-12:10 <b>[SYMA06.04]</b> <b>Single-chain polymer nanoparticles as functionalization platform towards protein mimicry</b> A.P.P. Kröger <sup>1</sup> , J.W. Paats <sup>1</sup> , N.M. Hamelmann <sup>1</sup> , J.M.J. Paulusse <sup>*1,2</sup> <sup>1</sup> University of Twente, The Netherlands, <sup>2</sup> University Medical Center Groningen, The Netherlands	<b>[SYMB06.05]</b> <b>Ultra-effective integrated technologies for water disinfection with a novel nanostructured composite</b> Z.T. Hu <sup>*1</sup> , T.T. Lim <sup>2</sup> , E.H. Yang <sup>2</sup> , J. Wang <sup>1</sup> , J. Chen <sup>1</sup> <sup>1</sup> Zhejiang University of Technology, China, <sup>2</sup> Nanyang Technological University, Singapore	<b>[SYMC06.02]</b> <b>Functionalized covalent triazine frameworks for carbon capture, storage, and heterogeneous catalysis</b> H.S. Jena <sup>*</sup> , P. Van Der Voort Ghent University, Belgium	<b>[SYMB106.05]</b> <b>Photosensitive metal-oxo clusters for opto-electronic applications</b> C-C. Yeh <sup>1,2</sup> , S-Y. Yu <sup>1,2</sup> , P-Y. Chang <sup>1,2</sup> , B. Leuschel <sup>1</sup> , D. Berling <sup>1</sup> , A. Spangenberg <sup>1</sup> , H-W. Zan <sup>2</sup> , O. Soppera <sup>*1</sup> <sup>1</sup> CNRS, France, <sup>2</sup> National Chiao Tung University, Taiwan	<b>[ABC06.05]</b> <b>Fabrication of low-loss metal gyroids for optical metamaterials</b> S.N. Abdollahi <sup>*</sup> , I. Gunkel, B.D. Wilts, U. Steiner University of Fribourg, Switzerland
12:00-12:20	12:10-12:30 <b>[SYMA06.05]</b> <b>Conjugation of hydroxamic acid to methacrylated type I collagen for matrix metalloproteinase modulation in chronic wounds</b> G. Tronci <sup>*</sup> , H. Liang, S.J. Russell, D.J. Wood University of Leeds, UK	<b>12:00-12:30</b> <b>Featured Talk: [FTB10]</b> <b>Interface engineering in molecular spintronics</b> E. Coronado, ICMol-Universitat Valencia, Spain	<b>[SYMC06.03]</b> <b>Tailored microstructured organic-inorganic solids as hyperpolarizing matrices for optimal magnetic resonance imaging</b> M. Cavailles <sup>1</sup> , L. Veyre <sup>1</sup> , G. Bodenhausen <sup>2</sup> , J-N. Dumez <sup>1</sup> , S. Jannin <sup>1</sup> , C. Copéret <sup>3</sup> , C. Thieuleux <sup>*1</sup> <sup>1</sup> CNRS, France, <sup>2</sup> ENS Paris-LBM, France, <sup>3</sup> ETH Zurich, Switzerland	<b>[SYMB106.06]</b> <b>Carbon Nanotube/Fluorophore Hybrids as Nano-heaters to Kill Bacteria</b> B. Oruc, H. Unal <sup>*</sup> Sabanci University Nanotechnology Research and Application Center, Turkey	<b>[ABC06.06]</b> <b>Gold nanoclusters as two-photon bioimaging agents</b> J. Olesiak-Banska <sup>*1</sup> , M. Waszkielewicz <sup>1</sup> , J. Sobska <sup>1,2</sup> , W. Krezel <sup>2</sup> , K. Matczyszyn <sup>1</sup> , M. Samoc <sup>1</sup> <sup>1</sup> Wroclaw University of Science and Technology, Poland, <sup>2</sup> Institut de Genetique et de Biologie Moleculaire et Cellulaire, France
12:20-12:40			<b>[SYMC06.04]</b> <b>Functional biobased polyphosphazene hybrid colloids</b> A. Pich <sup>*1,2</sup> , A. Deniz <sup>1</sup> <sup>1</sup> DWI - Leibniz-Institute for Interactive Materials, Germany, <sup>2</sup> RWTH Aachen University, Germany	<b>[SYMB106.07]</b> <b>Highly transparent and flexible organic-inorganic hybrid aerogels: Synthesis and mechanical properties</b> R. Ueoka <sup>*</sup> , K. Kazuyoshi, K. Nakanishi Kyoto University, Japan	<b>[ABC06.07]</b>
12:40-14:00	Lunch   Noray Restaurant				
13:00-14:00	Materials Today Publishing Seminar				
Rooms:	Garbi	Auditorium	Tramuntana 3	Llevant	Mestral

14:00-16:00	Symposium A: Session 7	Symposium B: Session 7	Symposium C: Session 7	Symposium B1: Session 7	Sposium ABC: Session 7
14:00-14:20	<b>14:00-14:30</b> <b>Featured Talk: [FTA10]</b> <b>Hybrid materials with plasmonic chirality</b> L.M. Liz-Marzán, <i>CIC biomaGUNE, Spain</i>	<b>[SYMB07.01]</b> <b>Effects of silica precursor preparations and adding techniques on mixing efficiency and dispersibility of silica particles in silica/natural rubber composites</b> T. Sangthong, A. Chumma, J. Tuffrey* <i>Rajamangala University of Technology Srivijaya, Thailand</i>	<b>[SYMC07.01]</b> <b>Solvent-free synthesis of magnetic two-dimensional coordination polymers</b> J. Lopez-Cabrelles*, S. Manas-Valero, E. Coronado, G. Minguez Espallargas <i>Universitat de Valencia, Spain</i>	<b>[SYMB107.01]</b> <b>Titanate nanotube-based nanohybrids: Radiosensitizers for the treatment of prostate cancer</b> J. Boudon* <sup>1</sup> , A. Loiseau <sup>1</sup> , C. Mirjolet <sup>2</sup> , S. Roux <sup>1</sup> , N. Millot <sup>1</sup> <i><sup>1</sup>CNRS-Université Bourgogne Franche-Comté, France, <sup>2</sup>Département de Radiothérapie, Centre Georges-François Leclerc, France</i>	<b>[ABC07.01]</b> <b>Composite biomaterials as long-lasting scaffolds for 3D bioprinting of highly aligned muscle tissue</b> A. G. Lizarribar* <sup>1</sup> , X. F. Garibay <sup>1</sup> , F. V. Mallorquí <sup>1</sup> , A. G. Castaño <sup>1</sup> , J. Samitier <sup>1,2</sup> , J. R. Azcon <sup>1</sup> <i><sup>1</sup>IBEC, Spain, <sup>2</sup>Universitat de Barcelona, Spain</i>
14:20-14:40	<b>14:30-14:50</b> <b>[SYMA07.01]</b> <b>Performance of cellulose aerogels as reinforcement in thermosets</b> M. Schestakow*, B. Milow, L. Ratke <i>German Aerospace Center (DLR), Germany</i>	<b>[SYMB07.02]</b> <b>Polymer-based fibrous hybrid membranes by in situ synthesis of inorganic nanoparticles</b> D. Morselli* <sup>1,2</sup> , D. Fragouli <sup>1</sup> , E.L. Papadopoulou <sup>1</sup> , P. Fabbri <sup>2</sup> , A. Athanassiou <sup>1</sup> <i><sup>1</sup>Istituto Italiano di Tecnologia, Italy, <sup>2</sup>Università di Bologna, Italy</i>	<b>[SYMC07.02]</b> <b>Plasmonic nanoparticles@MOF nanocomposites as SERS tags for biodetection</b> S. De Marchi Lourenço*, G. Bodelón, L. Vázquez-Iglesias, J. Pérez-Juste, I. Pastoriza-Santos <i>Universidad de Vigo, Spain</i>	<b>[SYMB107.02]</b> <b>Experimental phonon dispersion and lifetimes of tetragonal CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub> perovskite crystals</b> H. Ma <sup>1</sup> , Y.W. Ma <sup>2</sup> , H. Wang <sup>3,4</sup> , C. Slebodnick <sup>2</sup> , J. Urban <sup>4</sup> , Z.T. Tian* <sup>1</sup> <i><sup>1</sup>Cornell University, USA, <sup>2</sup>Virginia Tech, USA, <sup>3</sup>Illinois Institute of Technology, USA, <sup>4</sup>Lawrence Berkeley National Laboratory, USA</i>	<b>[ABC07.02]</b> <b>Rare Earth Nanoparticles functionalized with folic acid for bioimaging of cancer cells</b> D. Chávez-García* <sup>1</sup> , K. Juárez-Moreno <sup>2</sup> , G. Hirata <sup>2</sup> <i><sup>1</sup>Centro de Enseñanza Técnica y Superior, Campus Ensenada, Mexico, <sup>2</sup>Centro de Nanociencias y Nanotecnología, Universidad Nacional Autónoma de México, Ensenada, Baja California, Mexico</i>



14:40-15:00	14:50-15:10 [SYMA07.02] <b>Multivalent proteoglycan mimics generated by glycosaminoglycan end-on oxime ligation</b> R. Novoa-Carballal <sup>1,2</sup> , M. Gomes <sup>1,2</sup> , J. Valcarcel <sup>3</sup> , J.A. Vazquez <sup>3</sup> , A. Carretero <sup>1</sup> , R.L. Reis <sup>1</sup> , I. Pashkuleva <sup>1,2</sup> <sup>1</sup> University of Minho, Portugal, <sup>2</sup> PT Government Associate Laboratory, Braga/Guimarães, Portugal, <sup>3</sup> Marine Research Institute, Spain	14:40-15:10 <b>Featured Talk: [FTB11] Slow photons for photocatalysis and photovoltaics</b> B-L. Su University of Namur, Belgium	[SYMC07.03] <b>Control in gate adsorption pressures of soft MOF (ELM-12) with varied particle sizes</b> S. Watanabe*, A. Fukuta, S. Hiraide, H. Tanaka, M.T. Miyahara Kyoto University, Japan	[SYMB107.03] <b>Multifunctional magneto-plasmonic nanoparticle based-approaches for cancer treatment: Therapy and biodegradation</b> A. Espinosa <sup>2</sup> , F. Mazuel <sup>2</sup> , A. Curcio <sup>1,2</sup> , M. Bugnet <sup>3</sup> , G. Radtke <sup>1</sup> , S. Neveu <sup>1</sup> , G.A. Botton <sup>3</sup> , C. Wilhelm <sup>2</sup> , A. Abou-Hassan* <sup>1</sup> <sup>1</sup> Sorbonne University, France, <sup>2</sup> Paris Diderot University, France, <sup>3</sup> McMaster University, Canada	[ABC07.03] <b>Thermal improvement of macro-encapsulated phase change materials using titanium nanoparticles</b> E. Mohseni*, W.C. Tang, S. Wang University of Newcastle, Australia
15:00-15:20	15:10-15:30 [SYMA07.03] <b>Bacterial spore-cellulose nanofiber composites for large scale responsive materials</b> Y. Ungar*, E. Schenker, I. Johansson, B. Miller, S. Harrelson, H. El Tinay, M. Friedman, O. Cakmak, O. Sahin Columbia University, USA	15:10-15:30 [SYMB07.03] <b>The polyamine derivative decorated with CuO nanoparticles: A robust nanomaterial for visible light mediated sonogashira coupling</b> H. Deol*, V. Bhalla, M. Kumar Guru Nanak Dev University Amritsar, India	[SYMC07.04] <b>Recombination and diffusion dynamics of molecular excitons in fluorescent MOF nanocrystals and porous emitting framework (PEF) nanoparticles</b> R. Crapanzano <sup>1</sup> , J. Peregó <sup>1</sup> , J. Pedrini <sup>1</sup> , A. Comotti <sup>1</sup> , N. Yanai <sup>2</sup> , N. Kimizuka <sup>2</sup> , A. Monguzzi* <sup>1</sup> <sup>1</sup> Università Milano Bicocca, Italy, <sup>2</sup> University of Kyushu, Japan	[SYMB107.04] <b>Calcium alginate/graphene oxide films as cost-effective composites with excellent compression performance, no cytotoxicity for human keratinocytes and able to prevent life-threatening bacterial infections</b> M. Martí, B. Frígols, B. Salesa, A. Serrano-Aroca* Universidad Católica de Valencia San Vicente Mártir, Spain	[ABC07.04] <b>In vitro modeling of the blood-brain barrier: From static systems to 3D biomimetic microdevices</b> M. Battaglini <sup>1,2</sup> , C. Tapeinos <sup>1</sup> , A. Grillone <sup>1</sup> , A. Marino* <sup>1</sup> , G. Ciofani <sup>1,3</sup> <sup>1</sup> Istituto Italiano di Tecnologia, Italy, <sup>2</sup> Scuola Superiore Sant'Anna, The Biorobotic Institute, Italy, <sup>3</sup> Politecnico di Torino, Italy
15:20-15:40	15:30-15:50 [SYMA07.04] <b>Pro-angiogenic effect of geometry in 3D polysaccharide-based hydrogels</b> T. Simon-Yarza* <sup>1</sup> , M.N. Labour <sup>3,1</sup> , R. Aid-Launais <sup>2,1</sup> , D. Letourneur <sup>1,3</sup> <sup>1</sup> INSERM U1148, France,	15:30-15:50 [SYMB07.04] <b>Self-assembly and properties of hierarchical, nanolamellar, hard and tough nanoceramic coatings</b> M. Meindlhumer <sup>1</sup> , J. Zalesak <sup>1</sup> , J. Todt <sup>1</sup> ,	[SYMC07.05] <b>Functionalized covalent organic frameworks (COFs) for photocatalytic hydrogen generation</b> P. Pachfule*, A. Thomas Technische Universität Berlin, Germany	[SYMB107.05] <b>Versatile role of boehmite particles in epoxy-based nanocomposites</b> I. Topolniak* <sup>1</sup> , M. Ghasem Zadeh Khorasani <sup>1,2</sup> , V-D. Hodoroaba <sup>1</sup> , U. Braun <sup>1</sup> , D. Silbernagl <sup>1</sup> , H. Sturm <sup>1,2</sup> <sup>1</sup> Federal Institute for Material Research and	[ABC07.05] <b>Evaluation of photocatalytic properties of amino-iron oxide-functionalized graphene oxide in photo-fenton-like degradation of reactive black 5</b>

	<sup>2</sup> Université Paris Diderot, France, <sup>3</sup> Université Paris 13, France	R. Pitonak <sup>2</sup> , J. Keckes* <sup>1</sup> <sup>1</sup> Montanuniversität Leoben, Austria, <sup>2</sup> Boehlerit GmbH, Austria		Testing (BAM), Germany, <sup>2</sup> Technical University, Germany	M.P. da Silva, L.E.M. Ferreira, Z.B. de Souza, C.M.B. Araújo, T.J.M. Fraga*, M.N. Carvalho, E.M.P.L. Freire, M.G. Ghislandi, M.A. da Motta Sobrinho Federal University of Pernambuco, Brazil
15:40-16:00			<b>[SYMC07.06]</b> <b>Triazine and heptazine based extended organic materials for photocatalysis</b> J. Schmidt*, P. Pachfule, A. Thomas TU Berlin, Germany	<b>[SYMB107.06]</b> <b>Nanocolloidal hydrogel based on cellulose nanocrystals and graphene quantum dots for heavy metal scavenging</b> M. Alizadehgiashi*, N. Khoo, A. Khabibullin, A. Henry, M. Tebbe, T. Suzuki, E. Kumacheva University of Toronto, Canada	<b>[ABC07.06]</b> <b>Development and characterization of thin films of FePO<sub>4</sub>, 2H<sub>2</sub>O Application to lithium ion batteries</b> H. Ould Bouamer <sup>1</sup> , G. Kaichouh <sup>1</sup> , A. El Hourch <sup>1</sup> , K. Ouazouit <sup>2</sup> , H. Faqir <sup>2</sup> , K. Bouziane* <sup>3</sup> , M. Faqir <sup>3</sup> , A. Guessous <sup>1</sup> <sup>1</sup> University of Mohammed V in RABAT, Morocco, <sup>2</sup> REMINEX Research Center, Morocco, <sup>3</sup> Université Internationale de Rabat, Morocco
16:00-17:15	Coffee Break and Poster Sessions 3   Room: Hall Auditorium/Tramuntana 1&2				
Room:	Auditorium				
17:15-18:00	<b>[TT03] Multicellular tumor spheroids (MCTS) as 3D in vitro evaluation tool to understand the behaviour of nanoparticles in a biological setting</b> M. Stenzel, University of New South Wales, Australia				
18:30-22:00	Conference Dinner   Finca Mas Solers				

Friday, 15 March 2019

Room:	Auditorium				
08:30-09:15	<b>Plenary Lecture 5: [PL05] Self-assembled and breakable materials for medical applications</b> Luisa de Cola, CNRS, France				
Rooms:	Garbi	Auditorium	Tramuntana 3	Llevant	Mestral
09:20-10:20	<b>Symposium A: Session 8</b>	<b>Symposium B: Session 8</b>	<b>Symposium C: Session 8</b>	<b>Symposium B1: Session 8</b>	<b>Symposium ABC: Session 8</b>
09:20-09:40	<b>[SYMA08.01]</b> <b>Topotactic conversion of biopolymer foams for 3D cell culture</b> F.M. Fernandes*, C. Parisi, C. Eschenbrenner, C. Rieu, L. Trichet Sorbonne Université, France	<b>09:20-09:50</b> <b>Featured Talk: [FTB12]</b> <b>Synthetic, biomimetic, and nanoparticle-modified cellular constructs</b> C. Jeffrey Brinker University of New Mexico, USA	<b>[SYMC08.01]</b> <b>Catalytic carpets: Pt@MOF@electrospun PCL, a surprisingly active and robust hydrogenation catalyst</b> K. Leus*, C. Krishnaraj, V. Cremers, J. Dendooven, R. Ramachandran, P. Dubruel, P. Van Der Voort Ghent University, Belgium	<b>[SYMB108.01]</b> <b>Nanocolloidal hydrogel based on cellulose nanocrystals and graphene quantum dots for heavy metal scavenging</b> M. Alizadehgiashi*, N. Khoo, A. Khabibullin, A. Henry, M. Tebbe, T. Suzuki, E. Kumacheva University of Toronto, Canada	<b>[ABC08.01]</b> <b>Influence of Morphology in the Magnetic Properties of Layered Double Hydroxides</b> J.A. Carrasco* <sup>1</sup> , G. Abellán <sup>1,2</sup> , E. Coronado <sup>1</sup> <sup>1</sup> University of Valencia, Spain, <sup>2</sup> Department of Chemistry and Pharmacy and Joint Institute of Advanced Materials and Processes (ZMP), Germany
09:40-10:00	<b>[SYMA08.02]</b> <b>Mechanical properties of biomimetic hydrogels produced by injection of spray-dried collagen</b> M. Lama* <sup>1,2</sup> , C. Boissière <sup>1,4</sup> , F.M. Fernandes <sup>1,4</sup> , A. Marcellan <sup>1,3</sup> , N. Nassif <sup>1,3</sup> <sup>1</sup> Sorbonne Université, France, <sup>2</sup> ESPCI Paris, France, <sup>3</sup> PSL University, France, <sup>4</sup> CNRS, France	<b>09:50-10:10</b> <b>[SYMB08.01]</b> <b>Bio-based polyamides and polyamide nanocomposites with tuneable properties for multiple applications</b> Y. Nurhamiyah*, B. Chen Queen's University of Belfast, UK	<b>09:40-10:10</b> <b>Featured Talk: [FTC12]</b> <b>Robust metal organic frameworks for energy related applications</b> C. Serre, PSL University, France	<b>[SYMB108.02]</b> <b>Novel synthesis method for Zr<sub>1-x</sub>Ce<sub>x</sub>O<sub>2</sub> mixed oxide monoliths with adjustable pore structure</b> M. Sieland*, G. Beck, P. Cop, B.M. Smarsly Justus-Liebig University, Germany	<b>[ABC08.02]</b> <b>Sol-gel derived multifunctional hybrid POSS coatings for sensing corrosion</b> J. Yang* <sup>1</sup> , M. Pilz <sup>1</sup> , C. Simon <sup>1</sup> , M. Wilhelm <sup>2</sup> , J. Tedim <sup>2</sup> , T. Galvão <sup>2</sup> <sup>1</sup> SINTEF Industry, Norway, <sup>2</sup> University of Aveiro, Portugal
10:00-10:20	<b>[SYMA08.03]</b> <b>Pancreatic islets construct by 3D-Bioprinting: Combining decellularized extracellular matrix hydrogel with transdifferentiated <math>\beta</math>-cells</b> L. Clua Ferré*, J. Ramón Azcón			<b>[SYMB108.03]</b> <b>Mechanocatalytic and recyclable sponges from enzyme-polymer surfactant bioconjugates and nanoparticles</b> M. Jain, R. Vaze,	<b>[ABC08.03]</b> <b>Nanoparticles-driven nano-assembly of hybrid block copolymer films</b> C.A.M. Loudy, A. Bousquet, J. Allouche, H. Martinez, L. Billon Institut des Sciences Analytiques et de Physico-

	Fundació Institut de Bioenginyeria de Catalunya, Spain			K.P. Sharma* Indian Institute of Technology Bombay, India	Chimie pour l'Environnement et les Matériaux, France
10:20-10:50	Coffee Break   Room: Hall Auditorium/Tramuntana 1&2				
Rooms:	Garbi	Auditorium	Tramuntana 3	Llevant	
10:50-13:10	<b>Symposium A: Session 8 (cont.)</b>	<b>Symposium B: Session 8 (cont.)</b>	<b>Symposium C: Session 8 (cont.)</b>	<b>Symposium B1: Session 8 (cont.)</b>	
10:50-11:10	<b>[SYMA08.04]</b> <b>Nanoparticle-cell mimesis: Exploiting naturally-organised biological recognition motifs</b> C.P. Silveira*, L. Boselli, V. Castagnola, V. Giannone, F. Muraca, K.A. Dawson <i>University College Dublin, Ireland</i>	<b>10:50-11:20</b> <b>Featured Talk: [FTB13]</b> <b>Advances in nanoparticles and interfaces characterization method</b> F. Stellacci, <i>Ecole Polytechnique Fédérale de Lausanne, Switzerland</i>	<b>[SYMC08.02]</b> <b>Ratiometric mixed Eu-Tb metal-organic framework as a new cryogenic luminescent thermometer</b> H. Serier-Brault* <sup>1</sup> , I. N'Dala-Louika <sup>1</sup> , R. Dessapt <sup>1</sup> , C. Latouche <sup>1</sup> , D. Ananias <sup>2</sup> , L.D. Carlos <sup>2</sup> <sup>1</sup> University of Nantes, France, <sup>2</sup> CICECO, Portugal	<b>[SYMB108.04]</b> <b>Transparent and flexible piezoelectric sensor for detecting human movement with a boron nitride nanosheet (BNNS)</b> K.B. Kim*, J.Y. Cho, T.H. Sung <i>Hanyang University, Republic of Korea</i>	
11:10-11:30	<b>[SYMA08.05]</b> <b>Biomimetic systems for water harvesting: structure and surface properties of polymer fibers</b> U. Stachewicz <i>AGH University of Science and Technology, Poland</i>	<b>11:20-11:40</b> <b>[SYMB08.02]</b> <b>Microarchitecturing of chiral-nematic films - expanding the opto-mechanical property spaces</b> B.L. Tardy*, B.D. Mattos, L.G. Greca, K. Klockars, T. Kämäräinen, O.J. Rojas <i>Aalto University, Finland</i>	<b>[SYMC08.03]</b> <b>Selective capture of volatile organic compounds with metal organic framework nanoparticles</b> E. Dumas* <sup>1</sup> , K. Dedecker <sup>1</sup> , C. Boissière <sup>2</sup> , F. Nouar <sup>3</sup> , G. Maurin <sup>4</sup> , B. Lavédrine <sup>2</sup> , N. Steunou <sup>1</sup> , M. Pinto <sup>5</sup> , C. Serre <sup>3</sup> <sup>1</sup> Université de Versailles Saint-Quentin-en-Yvelines, France, <sup>2</sup> Sorbonne Universités, France, <sup>3</sup> Université Paris-Sciences-et-Lettres, France, <sup>4</sup> Université de Montpellier, France, <sup>5</sup> Universidade de Lisboa, Portugal	<b>[SYMB108.05]</b> <b>Nanozyme activity of soybean carbon-zinc nanodots</b> Y. Xie*, M. Khamijan, H. Fan <i>Nazarbayev University, Kazakhstan</i>	

11:30-11:50	<b>[SYMA08.06]</b> <b>Less Phagocytosis of Biohybrid CD47-Virus</b> C.A. Peng <i>University of Idaho, USA</i>	11:40-12:00 <b>[SYMB08.03]</b> <b>Stress-strain behavior of graphene nanocomposites: A computational neural networks approach</b> Y. Najjar*, K. Qatu, H. Almasaeid, A. Manasrah, X. Li, A. Al-Ostaz, H. Alkhateb, G. Rushing <i>University of Mississippi, USA</i>	<b>11:30-12:00</b> <b>Featured Talk: [FTC13]</b> Ferdi Schüth <i>MPI- Mulheim, Germany</i>	<b>[SYMB108.06]</b> <b>New strategies for the functionalization of carbon black for tuning the mechanical properties of polymer-nanocomposites</b> A. Nitschke*, L. Brinkmann, P. Vana <i>Georg-August University Goettingen, Germany</i>
11:50-12:10	<b>[SYMA08.07]</b> <b>Optimized hybrid composite biomaterials for the integration of different tissues in a multi-organ-on-a-chip platform</b> J. Ramon-Azcon*, X. Fernández-Garibay, F. Velasco-Mallorquí, A. Hernández, A. G. Castaño, M.A. Ortega <i>Institute for Bioengineering of Catalonia (IBEC), Spain</i>	12:00-12:20 <b>[SYMB08.04]</b> <b>Hybrid materials made of conjugated polymers towards electronics applications</b> C. Lartigau-Dagron, L. Billon, A. Bousquet* <i>University of Pau, France</i>	12:00-12:20 <b>[SYMC08.04]</b> <b>Inside/outside, grafting-to/grafting-from: Versatile postsynthetic modifications of a metal-organic framework containing a photochemically active linker</b> P. Behrens*, A. Mohmeyer, D.P. Warwas, A. Schaate <i>Leibniz University, Germany</i>	<b>[SYMB108.07]</b> <b>Synthesis and characterization of polymer layered silicate nanocomposites with tunable mechanical properties</b> J.E. Steinhoff*, K.M. Thien, M. Denz, S. Köster, P. Vana <i>Georg-August University Goettingen, Germany</i>
12:10-12:30	<b>12:10-12:40</b> <b>Featured Talk: [FTA11]</b> <b>Shape-specific patterning of polymer-functionalized nanoparticles</b> E. Kumacheva, <i>University of Toronto, Canada</i>	12:20-12:40 <b>[SYMB08.05]</b> <b>Superwetttable ferromagnetic Cu-Fe-Co powder alloy for efficient water/oil separation</b> O. Rius-Ayra*, A. Biserova-Tahchieva, I. Lopez-Jiménez, N. LLorca-Isern <i>Universitat de Barcelona, Spain</i>	12:20-12:40 <b>[SYMC08.05]</b> <b>Breathing-dependent redox activity in a tetrathiafulvalene-based metal-organic framework</b> M. Souto* <sup>1</sup> , J. Romero <sup>1</sup> , J. Calbo <sup>2</sup> , I. Vitórica-Yrezábal <sup>3</sup> , J. Zafra <sup>4</sup> , J. Casado <sup>4</sup> , E. Ortí <sup>1</sup> , A. Walsh <sup>2</sup> , G. Mínguez Espallargas <sup>1</sup> <i><sup>1</sup>ICMol - Universidad de Valencia, Spain, <sup>2</sup>Imperial College London, UK, <sup>3</sup>University of Manchester, UK, <sup>4</sup>Universidad de Málaga, Spain</i>	<b>[SYMB108.08]</b> <b>Structural and electrochemical properties of ultra-thin SNO/rGO hybrid supercapacitor</b> W.H. Lee*, M. Im, S. Nahm <i>Korea University, Republic of Korea</i>
12:45-13:00	Conference Closing			