



Day 1 | Monday, June 5

14.00 15.30	Registration
15.30 - 16.00	Opening Ceremony Rui L. Reis and Ricardo A. Pires (<i>3B's Research Group, University of Minho, Portugal</i> <i>CHEM2NATURE chairs</i>)
	Session I Chair: João Mano Co-Chair: Ricardo A. Pires
16.00 17.00	KL01 - Cell-Material Interfaces: Artificial Spores and Neurons on Nanotopographies <u>Insung Choi</u> (<i>Center for Cell-Encapsulation Research, KAIST, Korea</i>)
17.00 18.00	KL02 - A high-throughput platform for selecting substrate chemistries for enhanced stem cell pluripotency and growth and polarization of retinal pigment epithelial cells on chemically modified electrospun fibrous matrices <u>Georges Belfort</u> (<i>Rensselaer Polytechnic Institute, USA</i>)
18.00 20.00	Welcome Cocktail

Day 2 Tuesday, June 6	
Session II Chair: Insung Choi Co-Chair: Georges Belfort	
09.00 10.00	KL03 - Bioinspired adhesives and coatings: the case of catechol chemistry <u>Daniel Ruiz-Molina</u> (<i>Catalan Institute of Nanoscience and Nanotechnology, ICN2, Spain</i>)
10.00 11.00	KL04 - Tough Non-Swellable Hydrogels for Cell Encapsulation <u>Andrew Dove</u> (<i>University of Warwick, UK</i>)
11.00 11.30	<i>Coffee break Poster Session</i>
Session III Chair: Insung Choi Co-Chair: Andrew Dove	
11.30 12.30	KL05 - Laser-assisted bioprocessing: more “light” on biomaterials <u>Juan Pou Saracho</u> (<i>University of Vigo, Spain</i>)
12.30 14.30	<i>Lunch</i>
Session IV Chair: Daniel Ruiz-Molina Co-Chair: Job Boekhoven	
14.30 15.30	KL6 - A new challenge for nanotechnology and biomedical sciences: Theranosis <u>Pablo Tabuada</u> (<i>University of Santiago de Compostela, Spain</i>)
Short Oral Presentation I Chair: Daniel Ruiz-Molina Co-Chair: Job Boekhoven	
15.30 15.45	S001 - Carbohydrate nanonets for cancer theranostics <u>A. Brito</u> (<i>3B's Research Group, University of Minho, Portugal</i>)
15.45 16:00	S002 - Gellan Gum-based capsules for cell therapies <u>S. Vieira</u> (<i>3B's Research Group, University of Minho, Portugal</i>)
16.00 16:30	<i>Coffee break Poster Session</i>
16.30 18:00	Chem2Nature Meeting (restricted)
20.00 ...	Dinner

Day 3 | Wednesday, June 7

Session V	
Chair: Marek Urban Co-Chair: André Skirtach	
09.00 10.00	KL07 - Non-equilibrium self-assembly of molecules for the development of unique (bio-)materials <u>Job Boekhoven</u> (Boekhoven Lab, Department of Chemistry, Germany)
10.00 11.00	KL08 – Immune system and nanomaterials: a crosstalk with positive/negative effects <u>África Gonzalez-Fernandez</u> (University of Vigo, Spain)
11.00 11.30	Coffee break Poster Session
Short Oral Presentation II	
Chair: Marek Urban Co-Chair: André Skirtach	
11.30 11.45	S003 - Pigmented and vascularized cell sheet-based 3D skin <u>A. I. Soares</u> (3B's Research Group, University of Minho, Portugal)
11.45 12.00	S004 - Anatomic three-dimensional anisotropy engineered for in-vitro tissue models <u>R. F. Canadas</u> (3B's Research Group, University of Minho, Portugal)
12.00 12.15	S005 - Study of cell behavior in real-time on dynamic and reversible azopolymer substrates <u>L. Rossano</u> (Center for Advanced Biomaterials for Health Care IIT@CRIB, Italy)
12.15 12.30	S006 - Nanoemulsion based artificial antigen presenting cells for T-cell priming <u>D. B. Rodrigues</u> (3B's Research Group, University of Minho, Portugal)
12.30 14.30	Lunch

Day 4 | Thursday, June 8

Session VI	
Chair: Pablo Taboada Co-chair: João Mano	
09.00 10.00	KL09 - From Stimuli-Responsive to Self-Healing Polymeric Materials; Encoding Covalent/Non-Covalent Bonding and Shape Memory Effects <u>Marek Urban</u> (Clemson University, USA)
10.00 11.00	KL10 - Nature-inspired Biomaterials for Scaffolding Applications and Bioprinting <u>Miguel Oliveira</u> (3B's Research Group, University of Minho, Portugal)
11.00 11.30	Coffee break Poster Session
Short Oral Presentation III	
Chair: Pablo Taboada Co-Chair: João Mano	
11.30 11.45	S007 - Tuning the physicochemical properties of surface coatings from elastin-like recombinamers by tailoring their amino acids sequence <u>R. R. Costa</u> (3B's Research Group, University of Minho, Portugal)
11.45 12.00	S008 - Rheological properties of gellan gum for biomedical applications <u>L. Gasperini</u> (3B's Research Group, University of Minho, Portugal)
12.00 12.15	S009 - New antibacterial spider silk coatings to prevent bacteria adherence to surgical sutures <u>A. R. Franco</u> (3B's Research Group, University of Minho, Portugal)

12.15 12.30	<p>S010 - Functionalization of calcium phosphates with ionic dopants for bone tissue engineering</p> <p><u>S. Pina</u> (3B's Research Group, University of Minho, Portugal)</p>
12.30 14.30	Lunch
<p>Session VII</p> <p>Chair: Zhenwei Mao Co-chair: Miguel Oliveira</p>	
14.30 15.30	<p>KL11 - Hydrogel and polymeric coatings - functionalization with particles and capsules</p> <p><u>André Skirtach</u> (University of Ghent, Belgium)</p>
<p>Short Oral Presentation IV</p> <p>Chair: Zhenwei Mao Co-Chair: Miguel Oliveira</p>	
15.30 15.45	<p>S011 - A microfluidic platform for the investigation of cancer cells' nanoparticles uptake and real time tracking</p> <p><u>M. R. Carvalho</u> (3B's Research Group, University of Minho, Portugal)</p>
15.45 16.00	<p>S012 - Redox-sensitive self-assembled glycosaminoglycans nanoparticles for targeted drug delivery</p> <p><u>A. M. Carvalho</u> (3B's Research Group, University of Minho, Portugal)</p>
16.00 16.15	<p>S013 - Capture and neutralization of interleukin-6 by the intra-articular injection of biofunctionalized polymeric nanoparticles as advanced treatment for arthritic diseases</p> <p><u>A. C. Lima</u> (3B's Research Group, University of Minho, Portugal)</p>
16.15 16.30	<p>S014 - Incorporation of modified cellulose nanocrystals in platelet lysate-based hydrogels for 3D microenvironment sequestration of platelet lysate bioactive molecules</p> <p><u>B. B. Mendes</u> (3B's Research Group, University of Minho, Portugal)</p>
16.30 17.00	Coffee break Poster Session
17.00 18.00	<p>KL12 - Gradient biomaterials for guiding cell migration and tissue regeneration</p> <p><u>Nuno Neves</u> (3B's Research Group, University of Minho, Portugal)</p>
<p>Day 5 Friday, June 9</p>	
<p>Session VIII</p> <p>Chair: Nuno Neves Co-Chair: África Gonzalez-Fernandez</p>	
09.00 10.00	<p>KL13 - Polymeric multilayers as bioinstructive building blocks for tissue engineering supports</p> <p><u>João Mano</u> (University of Aveiro, Portugal)</p>
10.00 10.30	Coffee break Poster Session
<p>Session IX</p> <p>Chair: Nuno Neves Co-Chair: África Gonzalez-Fernandez</p>	
10.30 11.30	<p>KL14 - TUMOUR ENVIRONMENT RESPONSIVE POLYMERIC NANOMEDICINE FOR MULTIMODALITY THERANOSTICS</p> <p><u>Zhengwei Mao</u> (Zhejiang University, China)</p>
11.30 12.00	Closing Remarks