



MeetingPoint  
FunctionalLayers

## 1st MPFL Research Symposium

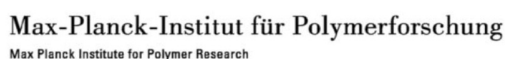
Auditorium, Complexo Interdisciplinar, Técnico, University of Lisbon, Lisbon, Portugal  
5-6 September 2019

### Thursday, 5 September

- 9:00 **Registration**
- 9:30 **Welcome**, *João Pedro Conde, Virginia Chu*  
**Introduction**, *Hildegard Moebius*
- 9:45 **Keynote Talk**  
**“Adaptive Surfaces in Wetting and Material Science”**, *Werner Steffen, Lijun Ye, Jie Liu, Aiting Gao, Hans-Jürgen Butt*, Max Planck Institute for Polymer Research, Mainz, Germany
- 10:15 **“Inkjet printing of macro lenses for pixelated OLEDs”**  
*Ian Sachs, Hildegard Moebius*, University of Applied Sciences, Zweibruecken, Germany
- 10:30 **“Ultrasonically spray coated PEIE as electron injection layer for OLEDs application”**, *Rachith Kumar, Inge Verboven, Wim Deferme*, Hasselt University, Belgium
- 10:45 **“Polymer light-emitting diodes with an emitting layer based on a nano-confined semiconducting polymer”**, *Anielen Halda Ribeiro, Paul Blom, Katharina Landfester, Jasper Michels*, Max Planck Institute for Polymer Research, Mainz, Germany
- 11:00 **“Magnetic Force Microscopy of Superparamagnetic Nanoparticles for Biomedical Applications”**, *Alexander Krivcov, Hildegard Moebius*, University of Applied Sciences, Zweibruecken, Germany
- 11:15 COFFEE BREAK AND INDIVIDUAL DISCUSSIONS
- 11:45 **“Characterization of Superparamagnetic Nanoparticles Encapsulated in Polystyrene”**, *Marc Fuhrmann, Hildegard Moebius*, University of Applied Sciences, Zweibruecken, Germany

- 12:00 **“Screening of built-in electric field by ion diffusion in perovskite solar cells”**, *Mohammad Sajedi Alvar, Paul W.M. Blom, Gert-Jan A. H. Wetzelaer*, Max Planck Institute for Polymer Research, Mainz, Germany
- 12:15 **“Thin-film Silicon MEMS for Mass Sensing and Biosensing Applications”**, *Rui Pinto (1), Virginia Chu (1), João Pedro Conde (1,2)*, (1) INESC Microsistemas e Nanotecnologias (INESC MN), Lisbon, Portugal; (2) Dept. Bioengineering, Instituto Superior Técnico, Univ. Lisbon, Portugal
- 12:30 **“Optimizing a thermal based sensor setup for monitoring physical changes of thin films over time using numerical modelling”**, *Gilles Oudebrouckx, Ronald Thoelen*, Hasselt University, Belgium
- 12:45 LUNCH
- 14:15 **“Photosynthetic reaction center-based biophotovoltaics”**, *K. Kalyani (1), Vincent Friebe (2), Mike Jones (3), Paul Blom (1), Charusheela Ramanan (1)*, (1) Max Planck Institute for Polymer Research, Mainz, Germany; (2) VU Amsterdam, The Netherlands; (3) University of Bristol, United Kingdom
- 14:30 **“Miniaturized and portable sensor system based on a thermal principle for the determination of textile moisture”**, *David Schoenfisch, Antoni Picard*, University of Applied Sciences, Zweibruecken, Germany
- 14:45 **“The organic electrochemical transistor to measure reversible and irreversible tight junction modulation”**, *Katharina Lieberth (1), L. V. Lingstedt (1), M. Brückner (1), J. Reinholz (1), M. Ghittorelli (2), F. Torricelli (2), N. I. Craciun (1), V. Mailänder (1), P. Gkoupidenis (1), P. W. M. Blom (1)*, (1) Max Planck Institute for Polymer Research, Mainz, Germany; (2) Department of Information engineering, University of Brescia, Italy
- 15:00 **“A microfluidic platform for rapid detection of antibiotic resistant bacteria at the point-of-need”**, *Catarina R. F. Caneira (1), Elisabete Fernandes (2), Virginia Chu (1), João Pedro Conde (1,3)*, (1) INESC Microsistemas e Nanotecnologias (INESC MN), Lisbon, Portugal; (2) International Iberian Nanotechnology Laboratory, Braga, Portugal; (3) Dept. Bioengineering, Instituto Superior Técnico, Univ. Lisbon, Portugal
- 15:15 **“Elastic surface for blood repellent materials”**, *Jie Liu, Hans Jürgen Butt, Werner Steffen*, Max Planck Institute for Polymer Research, Mainz, Germany

- 15:30 **“Printed Flexible Multi Sensory Array Towards Wound Monitoring Applications”**, *Manoj Jose, Wim Deferme*, Hasselt University, Belgium
- 15:45 COFFEE BREAK AND INDIVIDUAL DISCUSSIONS
- 16:15 **“A microfluidic device for cell culture and targeted phage selection”**, *Pedro G.M. Condelpes (1), Pedro M. Fontes (1,2), Eduardo J.S. Brás (1,4), Ricardo F. Serrão (1), André Faria (1), Vanda Marques (2), Marta B. Afonso (2), Cecília M.P. Rodrigues (2), Virginia Chu (1), João Gonçalves (2), João Pedro Conde (1,3)*, (1) INESC Microsistemas e Nanotecnologias (INESC MN), Lisbon, Portugal; (2) iMed.Ulisboa - Research Institute for Medicines, Faculty of Pharmacy, University of Lisbon, Lisbon, Portugal; (3) Dept of Bioengineering, Instituto Superior Técnico, Universidade de Lisboa, Lisbon, Portugal; (4) IBB – Institute for Bioengineering and Biosciences, Instituto Superior Técnico, Universidade de Lisboa, Lisbon, Portugal
- 16:30 **“Monitoring of cell growth with a thermal based biosensor”**, *Sepp Bormans, Ronald Thoelen*, Hasselt University, Belgium
- 16:45 **“Practical microfluidics for real-world applications”**, *Thijs Vandereyt, Ronald Thoelen*, Hasselt University, Belgium
- 17:00 **“Microfluidic biosensors for plant health assessment”**, *Eduardo J.S. Brás (1,2), Ana Margarida Fortes(3), Virginia Chu(1), Pedro Fernandes(2,4,5), João Pedro Conde(1,4)*, (1) INESC Microsistemas e Nanotecnologias (INESC MN), Lisbon, Portugal, (2) IBB – Institute for Bioengineering and Biosciences, Instituto Superior Técnico, Universidade de Lisboa, Lisbon, Portugal; (3) Universidade de Lisboa, Faculdade de Ciências de Lisboa, BiolSI, Lisboa, Portugal; (4) Department of Bioengineering, Instituto Superior Técnico, Universidade de Lisboa, Lisbon, Portugal; (5) DREAMS and Faculty of Engineering, Universidade Lusófona de Humanidades e Tecnologias, Lisbon, Portugal
- 17:15 **Final Remarks**, *Hildegard Moebius, João Pedro Conde, Virginia Chu*
- 20:00 **Symposium Dinner** at Topo Chiado (see details attached)



**Friday, 6 September**

INESC MN, Rua Alves Redol, 9 (across the street from Symposium venue)

10:00 – 12:00 Visit to INESC MN Laboratory and cleanroom; Demonstrations

