

# 4<sup>th</sup> “NanoBio Surfaces and Interfaces in Healthcare and Science Workshop”

## Program of the 2 day workshop:

### Programme Morning 16 May 2019

<b>07.00</b>	Hall open for table booth installations	
<b>08.00</b>	Doors open/coffee	
<b>08.40</b>	Welcome & Opening by Chair <b>Peter Fratzl &amp; Hugo de Haan</b>	
<b>9.00-9.30</b>	1 <sup>st</sup> keynote: <b>Peter H. Seeberger</b> , Director Max-Planck-Institute of Colloids and Interfaces Department of Biomolecular Systems, Potsdam and Freie Universität Berlin, Institute of Chemistry and Biochemistry “Materials Made of Synthetic Polysaccharides”	
<b>9.30-10.00</b>	2 <sup>nd</sup> Keynote: <b>Katja Fricke</b> , Head Research Programme ‘Bioactive Surfaces’, Head Junior Research Group ‘Biosensing Surfaces’ Leibniz Institute for Plasma Science and Technology (INP), Greifswald, Germany “Fabrication of biosensing coatings with tailored functionality by using atmospheric-pressure plasma-based polymerization”	
<b>10.00-10.20</b>	Coffee / tea at booth area	
	<b>Biosensing &amp; Biosystems</b> Moderator: <b>Wilhelm Ansorge</b>	<b>Biosensing &amp; Biosystems</b> Moderator: <b>Pedro Alpuim</b>
<b>10.20-10.40</b>	<b>Wilhelm Ansorge</b> , EPFL “Genome Analysis Techniques in Medicine and Biology”	<b>Pedro Alpuim</b> , INL-International Iberian Nanotechnology Laboratory, Portugal “Development of a biosensing platform based on graphene field-effect transistors”
<b>10.40-11.00</b>	<b>Julia Michaelis</b> , Scienion, HU Berlin “Advantages and Challenges of Assay Miniaturization and Multiplexing”	<b>Katja Skorb</b> , ITMO University, Russia “Dynamic self-assemblies and ion concentration gradients for cell guiding on the surface”
<b>11.00-11.20</b>	<b>Kokoura Mensah</b> , Nanobiophysique, ESPCI Paris, France “Biosensing with graphene transistor arrays”	<b>Cees Otto</b> , University of Twente, Applied Sciences Medical Cell BioPhysics, Enschede, The Netherlands, “Bio-applications of Raman-in-SEM hybrid microscopy”
<b>11.20-11.40</b>	<b>Giovanna Brusatin</b> , Industrial Engineering Department, Hymat lab, Università di Padova, Italy “2D and 3D cell cultures systems in biomedical studies”	<b>Stephan Eickelmann</b> , Max Planck Institute of Colloids and Interfaces, Potsdam, Germany “Laser-assisted chemical synthesis of peptide microarrays for infectious disease research”
<b>11.40-12.10</b>	Coffee Break	
	<b>Biosensing &amp; Biosystems</b> Moderator: <b>Felix von Stetten</b>	
<b>12.10-12.30</b>	<b>Felix von Stetten</b> , Associate Director of Hahn-Schickard “Universal microarray for voltammetric real-time detection of DNA-amplification by mediator displacement loop mediated isothermal amplification (MP LAMP)”	
<b>12.30-12.50</b>	<b>Lars Dahne</b> , CEO Surfplay Nanotec GmbH Berlin, Germany “Miniaturization of label-free protein analytics by means of “Whispering Gallery Mode” microparticles”	
<b>12.50-13.10</b>	<b>Arturo Susarrey Arce</b> , Postdoc Group Han Gardeniers, Chemical Systems, MESA+ Institute for Nanotechnology, University of Twente, Enschede, The Netherlands “Bacterial patterns on structured surfaces”	
<b>13.10-13.30</b>	<b>Nils Goedecke</b> , SwissLitho AG, Zurich, Switzerland “Thermal Scanning Probe Lithography for Bio-Applications”	
<b>13.30-14.40</b>	Lunch & Photo shoot participants	

### Programme Afternoon 16 May 2019

	<b>Commercial</b> Moderator: <b>Hugo de Haan</b>	
<b>14.40-14.45</b>	<b>Ilka Mai</b> , Standortmanagement Golm, Potsdam, Germany “Introduction to Potsdam Science Park”	
<b>14.45-14.50</b>	<b>Rainer Knoch</b> , Fluigent, France “Commercial talk”	
	<b>Human diagnostics &amp; <math>\mu</math>Fluidics</b> Moderator: <b>John Brennan</b>	
<b>14.50-15.10</b>	<b>John Brennan</b> , Director Biointerfaces Institute, McMaster University, USA “Integrating Aptamer Technology with Paper-Based Point-of-Care Devices for Biomedical Monitoring”	
<b>15.10-15.30</b>	<b>Iwona Ziemecka</b> , $\mu$ Flow Group, Department of Chemical Engineering (group Wim de Malsche), Vrije Universiteit Brussel, Belgium “Production and handling of particles in microfluidic devices”	
<b>15.30-15.50</b>	<b>Tai-De Li</b> , Nanoscience Initiative, CUNY Advanced Science Research Center (ASRC), UC Berkeley, “Mechanobiochemistry of branched actin network”	
<b>15.50-16.10</b>	<b>Naresh Yandrapalli</b> , Biomicrofluidic Systems Lab, Department of Theory & Bio-Systems, Max Planck Institute of Colloids and Interfaces, Potsdam, Germany “Optimization of a microfluidic device for the production of lipid-based micro-reactors”	
<b>16.10-16.40</b>	Break/coffee/ (meeting International Scientific Committee / ISC)	
<b>19.00-23.00</b>	Dinner cruise	

## Programme Morning 17 May 2019

07.30-8.20	Coffee / tea at booth area
	<b>Surface functionalization</b> Moderator: <b>Paola Brun</b>
08.20-08.40	<b>Paola Brun</b> , Department of Molecular Medicine, University of Padova – Italy “Development of a helium based plasma source for biomedical applications “ ( biomedical applications of cold atmospheric plasma and, in particular, on its effects on ocular tissues)
08.40-09.00	<b>Bilel Rais</b> , InnoPhysics bv, Eindhoven , NL “µPlasmaPrint: digital on-demand surface engineering for biological, chemical and medical applications”
09.00-09.20	<b>Claudio Ricci</b> (postdoc from group of Serena Danti) , University of Pisa, OTOLab @ Cisanello Hospital, Pisa, Italy “Bioresorbable nanofibers as a bioactive textured coating for implantable robotic”
09.20-09.40	<b>Christian Mathis</b> , SuSoS AG, Duebendorf, Swi “PAcrAm-N3: a single-step biofunctionalization for highly sensitive diagnostics”
09.40-10.10	Coffee Break
10.10-10.40	3 <sup>rd</sup> keynote: <b>Carsten Werner</b> , TU Dresden “Glycosaminoglycan-based biohybrid hydrogels to promote healing of chronic skin wounds
10.40-11.10	4 <sup>th</sup> keynote: <b>Regina Luttge</b> , Neuro-Nanoscale Engineering group, Microsystems section & ICMS Institute for Complex Molecular Systems, Eindhoven University of Technology, the Netherlands “ <i>Bringing the nervous system on a chip: a perspective on Parkinson’s Disease modeling</i> ”
11.10-11.40	Coffee Break
	<b>Biosensing technology</b> Moderator: <b>Heiner Linke</b>
11.40-12.00	<b>Heiner Linke</b> , Professor of Nanophysics; Director of NanoLund, Lunds universitet, Sweden “Biosensing enhanced by waveguiding in nanowires”
12.00-12.20	<b>Thomas Hayes</b> , Bioinicia / I&L Biosystems GmbH “Electrospinning for drug delivery”
12.20-12.40	<b>Cesar Pascual</b> , ( group Sivashankar Krishnamoorthy), Nano-Enabled Medicine and Cosmetics Group (NEMC), Luxembourg Institute of Science and Technology (LIST), BELVAUX, LUXEMBOURG “Improving sensor reliability and sensitivity by design”
12.40-13.00	<b>Raimund Sauter</b> , LOT-QuantumDesign GmbH “Biofunctionalization of metal surfaces to study protein interactions by QCM-D”
13.00-13.10	Poster session
	<b>Pelin Tören Özgün</b> , Scientist, JOANNEUM RESEARCH Forschungsgesellschaft mbH, “High-throughput Roll-to-Roll Production of Biofunctionalized Polymer Components”
13.10-14.10	Lunch

## Programme Afternoon 17 May 2019

	<b>Guiding cells with biomaterials</b> Moderator: <b>Lan-Huong Tran</b>
14.10-14.30	<b>Lan-Huong Tran</b> , Biomolecule Design Group (BDG), Institute for Materials Research (IMO), Hasselt University, Belgium “Selection and characterization of nanobodies for the early detection of ovarian cancer biomarkers.”
14.30-14.50	<b>Ondrej Sedlacek</b> , Ghent University, Belgium “Multifunctional poly(2-oxazoline)-dithiolane conjugates as effective linkers for gold surface coatings”
14.50-15.10	<b>Kerstin Blank</b> , Max Planck Potsdam, “Smart mechanoresponsive 2D and 3D interfaces for cell culture applications”.
15.10-15.30	<b>Rita La Spina</b> , EC-Europa “Bioassay for the detection and identification of pathogens”
15.30-15.50	<b>Jo Sing Julia Tang</b> , Fraunhofer Institute for Applied Polymer Research IAP, Potsdam “Functional Glyco-Nanogels for Multivalent Interaction with Lectins”
15.50-16.10	<b>Amaia Cipitria</b> , Max Planck Potsdam “Local patterning of biophysical and biochemical properties of alginate gels”
16.10-16.30	Plenary Closure @ .....Coffee break