

Wednesday September 7, 2011

17:00-18:00	On-site Registration
18:00-18:15	Welcome Address
18:15-19:00 Sappho Room Invited Talk	“Surface plasmon resonance biosensors for multianalyte detection” Prof. Jiri Homola Institute of Photonics and Electronics, the Academy of Sciences of the Czech Republic
19:00-19:30 Sappho Room Invited Talk	“FP7 Call 8: Future trends of Micro and Nano Bio Systems (MNBS)” Dr Javier Bonal Project Officer , Micro and Nanosystems , IST Programme, European Commission, Directorate-General Information Society and Media
19:30-21:00 Erato Room and Mezzanine	Poster Session and Cocktails

Thursday September 8, 2011

9:00-9:15	Welcome Address
9:15-10:00 Invited Talk	“Modularly multiplexable biomolecular analysis using chip-integrated silicon photonic micro-resonators” Prof Ryan C. Bailey Chemistry Department, University of Illinois at Urbana-Champaign
10:00-11:00	Session 1: State-of-the art biosensor components
10:00-10:15	“Aptamers-in-Liposome and Aptamers-Gold Nanoparticles for Selective and Multiplexed Capturing & Detection” Yun Seok Kim ¹ , Jung Hyun Kim ² , In Ae Kim ³ , Su Jin Lee ³ , Man Bock Gu³ ¹ KIST, ² BioNano Res. Center, KRIBB, ³ Life Sci. and Biotechnol., Korea Univ., Republic of Korea
10:15-10:30	“Silicon biosensor surfaces with model protein immunoassay: lateral and vertical structure revealed by AFM and angle-resolved XPS” Kamil Awsiuk ¹ , Andrzej Budkowski¹ , Panagiota Petrou ² , Maria Kitsara ³ , Andrzej Bernasik ⁴ , Sotirios Kakabakos ² , Jakub Rysz ¹ , Ioannis Raptis ³ ¹ M. Smoluchowski Institute of Physics, Jagiellonian University, Reymonta 4, 30-059 Krak w, Poland, ² Institute of Radioisotopes & Radiodiagnostic Products and ³ Institute of Microelectronics, NCSR “Demokritos”, P. Grigoriou & Neapoleos St, Aghia Paraksevi 153 10, Athens, Greece, ⁴ Faculty of Physics and Applied Computer Science, AGH-University of Science and Technology, Al. Mickiewicza 30, 30-059 Krak w, Poland
10:30-10:45	“Nanostructured functionalized surfaces for proteins binding enhancement and biomarkers detections” Antonietta Parracino , Maria Jesus Perez Roldan, Giacomo Ceccone, Pascal Colpo, and François Rossi European Commission, Joint Research Centre, Institute for Health and Consumer Protection, Via E.Fermi 2749, TP203, 21027, Ispra, Varese, Italy

10:45-11:00	<p>“Naturally amplified player for biosensing: tmRNA to the rescue” Ott Scheler^{1,3*}, Lauris Kaplinski^{2,3}, Barry Glynn⁴, Priit Palta^{2,3}, Sven Parkel^{1,3}, Kadri Toome¹, Majella Maher⁴, Thomas Barry⁴, Mairo Remm^{2,3}, & Ants Kurg^{1,3} ¹Department of Biotechnology, IMCB, University of Tartu, Estonia, ²Department of Bioinformatics, IMCB, University of Tartu, Estonia, ³Estonian Biocentre, Tartu, Estonia, ⁴Molecular Diagnostics Research Group, NCBES NUI-Galway, Ireland</p>
11:00-11:15	<p>“Comparative study between Au and GOPTS as functionalization layers for the fabrication of DNA biosensors” Georgios Tsekenis^{1*}, Marianeza Chatzipetrou², Stavros Chatzandoulis³, Georgios Thireos², Ioanna Zergioti¹ ¹<i>Biomedical Research Foundation of the Academy of Athens, Soranou Ephessiou 4, 11527 Athens, Greece</i> ²<i>National Technical University of Athens, Physics Department, Iroon Polytechniou 9, 15780 Zografou, Athens, Greece,</i> ³<i>Institute of Microelectronics NCSR Demokritos, Terma Patriarchou Grigoriou, Aghia Paraskevi, 15310 Athens, Greece</i></p>
11:15-11:45	Coffee Break
11:45-13:00	Session 2: Multi-analyte Biosensors and their applications
11:45-12:00	<p>“Quartz tuning fork as mass-sensitive biosensor for detection of biological interactions” Jacek Rybka¹, Karol Waszczuk², Anna Jakubowska¹, Wiktor Herwich², Andrzej Gamian¹, Teodor Gotszalk² ¹ L. Hirszfeld Institute of Immunology and Experimental Therapy, Polish Academy of Sciences, Weigla 12, 53-114 Wroc aw, Poland, ²Faculty of Microsystem Electronics and Photonics, Wroc aw University of Technology, Janiszewskiego 11/17, 50-372 Wroc aw</p>
12:00-12:15	<p>“Multianalyte optofluidic devices for lab-on-a-chip applications” Marcel Hoekman[*], René Heideman, Floris Falke, Erik. Schreuder LioniX BV, PO Box 456, 7500 AL Enschede, The Netherlands</p>
12:00-12:30	<p>“High Throughput Epitope Mapping using a High Density Peptide Microarray combined with imaging Surface Plasmon Resonance” G.R. Marchesini^{1*}, P. Colpo¹, L. Varani², S. Buus³, E. Maillart⁴, F. Rossi¹, C. Schafer-Nielsen⁵ ¹ European Commission, DG JRC, IHCP, Italy, ² Institute for Research in Biomedicine, Switzerland, ³ University of Copenhagen, Denmark, ⁴ GenOptics, France, ⁵ Schafer-N (S-N), Denmark</p>
12:30-12:45	<p>“Disposable biosensor arrays with integrated microfluidics for multi- analyte biomedical- and biotechnology process –monitoring” Isabella Moser and Gerhard Jobst[*] Jobst Technologies GmbH, Engesser str. 4b, 79108 Freiburg, Germany</p>
12:45-13:00	<p>“Label-free DNA sensor based on a Double Tilted Fiber Bragg Gratings” Michele Sozzi¹, Alessandro Candiani¹, Annamaria Cucinotta¹, Rosanna Veneziano², Roberto Corradini², Rosangela Marchelli², Paul Childs³, Stavros Pissadakis³, and Stefano Selleri^{1*} ¹Dept. of Information Engineering, University of Parma, Viale G.P. Usberti 181/A, Parma 43124, Italy, ²Dept. of Organic and Industrial Chemistry, University of Parma, Viale G. P. Usberti 17/A, Parma 43124, Italy, ³Foundation for Research and Technology-Hellas, Institute of Electronic Structure and Laser, Vassilika Vouton, Heraklion 70013, Greece</p>
13:00-14:30	Lunch Break
14:30-15:15 Invited Talk	<p>“An emerging revolution in diagnostic and analytical science: next generation sensing devices based on distant cell-to-cell communication” Prof. Spyridon Kintzios Department of Agricultural Biotechnology, Agricultural University of Athens</p>

15:15-15:45	Session 3: Bioanalytical Microsystems
15:15-15:30	<p>“Modular instrumentation using novel controls and flexible protocol descriptions for micro-TAS” Athanasios Demiris¹, Nikolaos Vassiliadis¹, Antonis Anyfantis¹, Pantelis Asvestas², Theodore Economopoulos¹, George Kritikos¹, Ioannis Ramfos¹, Spyridon Blionas³ ¹micro2gen Ltd., New Technology Park NCSR Demokritos, 15341, Ag. Paraskevi, Athens, Greece, ²Medical Instruments Technology Dept., Technological Educational Institute of Athens, Athens, Greece, ³ University of Peloponnese, Tripolis, Greece</p>
15:30-15:45	<p>“A bioanalytical microsystem based on monolithically integrated Mach-Zehnder biosensors for real-time label-free monitoring of biomolecular reactions: the PYTHIA approach” Konstantinos Misiakos¹, Eleni Makarona¹, Panagiota Petrou², Sotirios Kakabakos² Gerhard Jobst³, Remco Stoffer⁴, Matti Sopanen⁵, Kari Tukkiniemi⁵ and Ioannis Raptis¹ ¹Institute of Microelectronics and ²Institute of Radioisotopes and Radiodiagnostic Products, NCSR “Demokritos”, 15310 Aghia Paraskevi, Greece, ³Jobst Technologies, GmbH, Engesser-strasse 4b, D-79108 Freiburg, Germany, ⁴PhoeniX BV, Hengelosestraat, 705, 7521 PA Enschede, Netherlands, ⁵VTT, Espoo, FI-02044, Finland</p>
15:45-16:15	Coffee Break
16:15-17:00 Invited Talk	<p>“Plasma processing as an enabling technology for smart microfluidics and improved biomolecule microarrays” Dr Evangelos Gogolides Institute of Microelectronics, NCSR “Demokritos”</p>
17:00-17:15	Closing remarks