

# EUROPT(R)ODE VII SCIENTIFIC PROGRAMME

MONDAY April 5, 2004			
Room A – “Ramón y Cajal” Amphitheater		Room B – “Prof. Botella” Auditorium	
09:00		Welcome	
<b>Opening Plenary Session</b>			
Chair: O.S. Wolfbeis			
09:30	PL1	<b>Economical Optical Real-Time DNA Arrays – Optical Biosensors at the Onset of the XXI Century</b> <i>K. Cammann,<sup>a</sup> C. Peter<sup>b</sup></i> <sup>a</sup> University of Münster, Germany; <sup>b</sup> ICB GmbH, Germany	
10:30	Coffee break		
<b>Plenary Session</b>			
Chair: G. Gauglitz			
11:00	PL2	<b>Confronting the Challenge of Design of Selectivity for Optical DNA Biosensors and Biochips</b> <i>U.J. Krull, P.A.E. Piuñno</i> University of Toronto, Canada	
<b>Session 1</b>		<b>Session 2</b>	
Chair: H. Podbielska		Chair: L. Lechuga	
12:00	IL1.1	<b>Optical Detection of DNA-Modifying Enzymes on Immobilized Substrates</b> <i>F. F. Bier, N. Gajovic-Eichelmann, E. Ehrentreich-Foerster, P.M. Schmidt, J. Henkel</i> Fraunhofer IBMT, Germany	12:00 IL1.2 <b>Recent Development in Transducers Based on Planar Integrated Optical Waveguides</b> <i>S. Scott Saavedra, J.T. Bradshaw, S.B. Mendes, N.R. Armstrong</i> University of Arizona, USA
12:30	OA1.1	<b>Signal Enhancement of Protein Chips</b> , <i>C. Preininger,<sup>a</sup> U. Sauer,<sup>a</sup> M. Trombitas,<sup>a</sup> O. Obersriebnig,<sup>a</sup> G. Krumpel,<sup>b</sup> W. Kern<sup>c</sup></i> <sup>a,b</sup> ARC Seibersdorf Res. GmbH, Austria; <sup>c</sup> University of Technology Graz, Austria	12:30 OB1.1 <b>Development of Deep Silicon Hollow Waveguides for Optical Sensing</b> <i>V.J. Cadarso,<sup>a</sup> A. Llobera,<sup>b</sup> C. Domínguez<sup>a</sup></i> <sup>a</sup> IMB-CSIC, Spain; <sup>b</sup> Technische Universität Braunschweig, Germany
12:50	OA1.2	<b>Protein Immobilization for Multi-Channel Biosensors</b> <i>C. Boozer,<sup>a</sup> J. Ladd,<sup>a</sup> S. Chen,<sup>a</sup> Q. Yu,<sup>a</sup> J. Homola,<sup>b</sup> S. Jiang<sup>a</sup></i> <sup>a</sup> University of Washington, USA; <sup>b</sup> Academy of Sciences of the Czech Republic, Czech Republic	12:50 OB1.2 <b>Deep Probe Optical Waveguide Biosensors with Reverse Symmetry Design for Micron Scale Biological Objects</b> <i>R. Horváth, H.C. Pedersen, N. Skivessen, D. Selmeczi, N.B. Larsen</i> Risø National Lab., Denmark
13:10	OA1.3	<b>Analytical Biosensing Based on Measurement of Biomolecule Conformation Changes Using Surface Plasmon Resonance</b> <i>L.M. May, D.A. Russell</i> University of East Anglia, UK	13:10 OB1.3 <b>Ultra-Thin Freestanding Si<sub>3</sub>N<sub>4</sub> Membrane Waveguides for Application in Evanescent Field Sensing of MEMS Movements</b> <i>G. Altena, M. Dijkstra, G. Van Elzakker, G. Venhorts, H. Hoekstra, P. Lambeck</i> University of Twente, The Netherlands
13:30	Lunch		

<b>Plenary Session</b> Chair: T. Vo-Dihn					
15:00	PL3	<b>Room Temperature Phosphorescence Detection for Optical Sensors</b> <i>A. Sanz Medel</i> University of Oviedo, Spain			
<b>Session 3</b> Chair: M. Nakagawa			<b>Session 4</b> Chair: P. Nikitin		
16:00	IL1.3	<b>Optical Detection in Microfluidic Systems</b> <i>A. Dybko</i> Warsaw University of Technology, Poland	16:00	IL1.4	<b>Integrated Optochemical Sensors Based on New Vis-NIR Chromoionophores</b> <i>J. Alonso, M. Puyol, L. Rivera</i> Universidad Autónoma de Barcelona, Spain
16:30	OA1.4	<b>Plasmonic Enhancement of Fluorescence for Sensor Applications</b> <i>O. Stranik, C. McDonagh, B.D. MacCraith</i> Dublin City University, Ireland	16:30	OB1.4	<b>Application of Tailored Integrated Optical Chips for Label-Free (Bio)Chemical Sensing</b> <i>R.E. Kunz, K. Cottier</i> CSEM, Switzerland
16:50	OA1.5	<b>Zwitter-Ionic Conjugated Polyelectrolytes, New Fluorescent Probes for the Recording of Biospecific Interactions</b> <i>K.P.R. Nilsson, O. Inganäs</i> Linköpings University, Sweden	16:50	OB1.5	<b>Label Free Detection of Proteins</b> <i>C. Hoffmann, B. Schirmer, H. Benter, A. Brandenburg</i> Fraunhofer-Institut für Physikalische Messtechnik, Germany
17:10	OA1.6	<b>Fluorescence Detection of Small Molecules by Fused-Ring Heterocycles</b> <i>T. Bell</i> University of Nevada, USA	17:10	OB1.6	<b>An Optical Fibre-Based System that Measures the Quality and Temperature of Food in a Full-Scale Production Environment</b> <i>M. O'Farrell,<sup>a</sup> E. Lewis,<sup>a</sup> C. Flanagan,<sup>a</sup> T. Sun,<sup>b</sup> K.T.V. Grattan,<sup>b</sup> N. Jackman<sup>c</sup></i> <sup>a</sup> University of Limerick, Ireland; <sup>b</sup> London City University, UK; <sup>c</sup> Food Design Applications Ltd, Ireland
17:30	<b>POSTER SESSION "O" &amp; Technical Exhibition + Refreshments</b>				
19:30	End of session				
<b>19:00</b>	PSC Meeting (meeting room)				