

Poster Program

Poster Session 1:

[P1.01]

Detecting methylated double strand DNA Using an Electrochemical AuNPs decorated rGO biosensor

Mina Safarzadeh*, Genhua Pan, *University of Plymouth, UK*

[P1.02]

Application of synthesized Cu based metal organic frameworks in biosensing systems

Yudum Tepeli Büyüksünetçi, Okan Avcı*, Ülkü Anık, *Muğla Sıtkı Koçman university, Turkey*

[P1.03]

Synthesis and characterization of bimetallic Co/2Fe metal organic framework and investigating its utilization in electrochemical biosensors

Hüseyin Furkan Kiyıkçı*, Yudum Tepeli Büyüksünetçi, Ülkü Anık, *Mugla Sıtkı Koçman University, Turkey*

[P1.04]

Development of MOF-based Leishmania biosensors

Benay Perk*, Yudum Tepeli Büyüksünetçi, Ülkü Anık, *Muğla Sıtkı Koçman University, Turkey*

[P1.05]

Development of pseudomonas fragi based whole cell biosensor

Benay Perk*¹, Yudum Tepeli Büyüksünetçi¹, Emre Erden², Suna Timur², Ülkü Anık¹, ¹*Muğla Sıtkı Koçman university, Turkey*,²*Ege University, Turkey*

[P1.06]

Application of L. lactis subsp. lactis of cheese origin in microbial fuel cell system

Yudum Tepeli Büyüksünetçi*¹, Okan Avcı¹, Ziba GÜLEY², Ülkü Anık³, ¹*Mugla Sıtkı Koçman university, Turkey*,²*Alanya Alaaddin Keykubat University, Turkey*,³*Muğla Sıtkı Koçman University, Turkey*

[P1.07]

Gold functionalization of 3D printed Ti electrodes for electrochemiluminescence enhancement

Samatha F. Douman^{1,2}, Miren Ruiz de Eguilaz¹, Loanda R. Cumba¹, Stephen Beirne³, Gordon G. Wallace⁴, Zhilian Yue⁴, Emmanuel I. Iwuoha², Robert J. Forster^{5,6}, ¹*The National Centre for Sensors Research, Chemistry Department, Dublin City University, Dublin, Ireland*,²*SensorLab (University of the Western Cape Sensor Laboratories), University of Western Cape, South Africa*,³*Australian Research Council, Centre of Excellence for Electromaterials Science, Intelligent Polymer Research Institute, University of Wollongong, Australia*,⁴*Australian Research Council, Centre of Excellence for Electromaterials Science, Intelligent Polymer Research Institute, University of Wollongong, Australia*,⁵*The National Centre for Sensor Research, Chemistry Department, Dublin City University, Dublin, Ireland*,⁶*FutureNeuro SFI Research Centre, Dublin, Ireland*

[P1.08]

Amplification-free microRNA diagnostics for drug-induced liver injury using microfluidic biosensors

Appan Roychoudhury^{*1}, James Dear¹, Mäiwenn Kersaudy-Kerhoas², Till Bachmann¹, ¹The University of Edinburgh, UK,²Heriot-Watt University, UK

[P1.09]

Dry detection of microRNA using silicon-on-insulator back gate-MOSFET deposited with Au nanoparticle

Haihua Wang^{*}, Yu-Long Jiang, Jing Wan, Fudan University, China

[P1.10]

Increased sensitivity of *E. coli* detection by ruthenium-based dye and metallic nanoparticles through electrochemiluminescence (ECL).

Estefanía Teruel-Barandiarán^{*}, Robert J. Forster, Dublin City University School of Chemical Sciences, Ireland

[P1.11]

Biosensors for the forensic detection of body fluids

James Gooch^{*}, Nunzianda Frascione, King's College London, UK

[P1.12]

Impedance camera for low cost cell cultivation monitoring

Bo Tang^{*1,2}, Mengxi Liu¹, Andreas Dietzel^{1,2}, ¹Institute of Microtechnology, Technische Universität Braunschweig, Germany,²PVZ-Zentrum für Pharmaverfahrenstechnik, Technische Universität Braunschweig, Germany

[P1.13]

Tuning the sensitivity of nanocluster-based biosensor by alloying or metal replacement

Ditta Ungor^{*1,2,3}, Loretta Kuklis^{1,2}, Edit Csapó^{1,2,4}, ¹University of Szeged, Hungary,²MTA-SZTE "Momentum" Noble Metal Research Group, Hungary,³Biomimetic Systems Research Group, Hungary,⁴Interdisciplinary Excellence Center, Department of Physical Chemistry and Materials Science, Hungary

[P1.14]

Lamp-based electrochemical assay for detection of oncogenic hpv 16/18 on screen-printed gold electrodes

Ravery SEBUYOYA^{*1,2}, Nasim IZADI², Ludmila MORANOVA^{1,2}, Martin BARTOSIK², ¹Masaryk University, Czech Republic,²Masaryk Memorial Cancer Institute, Czech Republic

[P1.15]

A bio-redox reporter for sandwich-type electrochemical detection of carcinoembryonic antigen

Maryam Naseri^{*}, Mohsen Mohammadniaei, Yi Sun, Technical University of Denmark, Denmark

[P1.16]

Evaluation of SARS-CoV-2 nucleocapsid protein and specific antibody interaction kinetics by total internal reflection ellipsometry

Vincentas Maciulis^{1,2}, Ieva Plikusiene², Zigmas Balevicius¹, Ernesta Buzavaite-Verteliene¹, Evaldas Ciplys², Martynas Simanavicius², Aurelija Zvirbliene², Rimantas Slibinskas², Arunas Ramanavicius², Almira Ramanaviciene², ¹State Research Institute Center for Physical Sciences and Technology, Lithuania, ²Vilnius University, Lithuania

[P1.17]

Optimization of defective mode sensitivity for cells immersed in a one-dimensional photonic crystal cavity

FRANCIS SEGOVIA¹, Juan Carlos Trujillo¹, Herbert Vinck Posada², ¹Surcolombian University, Colombia, ²National University of Colombia, Colombia

[P1.18]

Red-fluorescent BODIPY microviscosity sensor for intracellular imaging

Karolina Maleckaitė¹, Jelena Dodonova², Štepas Toliautas³, Rugilė Žilėnaitė¹, Džiugas Jurgutis⁴, Vitalijus Karabanovas⁵, Sigita Tumkevičiūtė⁶, Aurimas Vyšniauskas¹, ¹State Research Institute Center for Physical Sciences and Technology, Lithuania, ²Institute of Chemistry, Faculty of Chemistry and Geosciences, Vilnius University, Lithuania, ³Institute of Chemical Physics, Faculty of Physics, Vilnius University, Lithuania, ⁴Biomedical Physics Laboratory, National Cancer Institute, Macao, ⁵Biomedical Physics Laboratory, National Cancer Institute, Lithuania, ⁶Institute of Chemistry, Faculty of Chemistry and Geosciences, Vilnius University, Lithuania

[P1.19]

Investigation of rolling circle amplification products and their aggregation with magnetic nanoparticles

Darío Sánchez Martín^{*}, Teresa Zardán Gómez de la Torre, Uppsala University, Sweden

[P1.20]

Fast detection of sepsis biomarkers on a multiplexed sensor optimized with metal nanostructures

Ariadna Schuck¹, Hyo Eun Kim¹, Minhee Kang², Yong-Sang Kim¹, ¹Sungkyunkwan University Department of Electrical and Computer Engineering, Republic of Korea, ²Sungkyunkwan University School of Medicine Samsung Medical Center, Republic of Korea

[P1.21]

A colorimetric and electrical dual-mode graphene-based FET for isothermal gene detection

Hyo Eun Kim¹, Ariadna Schuck¹, Minhee Kang^{2,3}, Yong-Sang Kim¹, ¹Department of Electrical and Computer Engineering, Sungkyunkwan University, Republic of Korea, ²Biomedical Engineering Research Center, Smart Healthcare Research Institute, Samsung Medical Center, Sungkyunkwan University School of Medicine, Republic of Korea, ³Department of Medical Device Management and Research, SAHST (Samsung Advanced Institute for Health Sciences & Technology), Sungkyunkwan University, Republic of Korea

[P1.22]

Electropolymerized epitope-imprinted conductive poly(triphenylamine rhodanine-3-acetic acid-co-3,4-ethoxylene dioxothiophene)s for electrochemical sensing of matrix metalloproteinase-1

MEI-Hwa Lee¹, Cheng-Chih Lin², Piyush Sharma³, James Thomas⁴, Chu-Yun Lin⁵, Zofia Iskierko³, Pawel Borowicz³, Wlodzimierz Kutner^{3,6}, Chien-Hsin Yang⁵, Hung-Yin Lin⁵, ¹I-Shou University, Taiwan, ²Kaohsiung Armed Forces General Hospital Zuoying Branch, Taiwan, ³Polish Academy of Sciences, Poland, ⁴University of New Mexico, USA, ⁵National University of Kaohsiung, Taiwan, ⁶Cardinal Stefan Wyszyński University in Warsaw Faculty of History and Social Sciences, Poland

[P1.23]

Sensing of covid-19 spike protein using an extended-gate field-effect transistor with a mxene-doped peptide-imprinted conductive polymer coating electrode

Mei-Hwa Lee¹, Cheng-Chih Lin^{2,3}, James Thomas⁴, Chen-Yuan Chen³, Chuen-Yau Chen³, Chien-Hsin Yang³, Hung-Yin Lin³, ¹I-Shou University, Taiwan,²Kaohsiung Armed Forces General Hospital Zuoying Branch, Taiwan,³National University of Kaohsiung, Taiwan,⁴University of New Mexico, USA

[P1.24]

Tuning the structure of metal-peptide complexes towards the development of efficient receptors for phosphate species

Aleksandra Tobolska^{1,2}, Nina Wezynfeld¹, Wojciech Bal³, Wojciech Wróblewski¹, ¹Warsaw University of Technology, Faculty of Chemistry, Poland,²University of Warsaw, Faculty of Chemistry, Poland,³Polish Academy of Sciences, Institute of Biochemistry and Biophysics, Poland

[P1.25]

Tackling the rapid diagnosis of thromboembolic disease with lipopolysaccharide-binding protein as a prognostic biomarker

Núria Fuster-Valls¹, Álvaro Fernández-Pardo², María José Juárez-Rodríguez¹, Ángel Maquieira^{1,3,4}, Silvia Navarro², Sergi Morais^{5,6}, ¹Instituto Interuniversitario de Investigación de Reconocimiento Molecular y Desarrollo Tecnológico, Universitat Politècnica de València-Universitat de València, Camino de vera s/n, 46022, Valencia, Spain,²Grupo de Investigación Acreditado en Hemostasia, Trombosis, Arterioclerosis y Biología Vascular. Instituto de Investigación Sanitaria La Fe. Hospital Universitario y Politécnico La Fe. Avda. Fernando Abril Martorell nº106, 46025, Valencia, Spain,³Departamento de Química, Universitat Politècnica de València, Camino de Vera s/n, 46022, Valencia, Spain,⁴Unidad Mixta UPV-La Fe, Nanomedicine and Sensors, IIS La Fe, Valencia, Spain,⁵Universitat Politècnica de València-Universitat de València, Spain,⁶Unidad Mixta UPV-La Fe, Spain

[P1.26]

Paper, textile, and printed circuit boards for portable electrochemical DNA biosensors

Anna Toldrà¹, Shirin Khalilazar¹, Georgios Chondrogiannis¹, Alar Ainla², Roman Landin¹, Martin Hanze¹, Pedro Réu¹, Mahiar Max Hamedi¹, ¹Royal Institute of Technology, Sweden,²International Iberian Nanotechnology Laboratory, Portugal

[P1.27]

Evaluation of antibody immobilization on the surface of Qdots

Anton Popov^{1,2}, Viktorija Lisyte², Asta Kausaite-Minkstimiene^{3,2}, Almira Ramanaviciene^{3,2}, ¹Centre for Innovative Medicine, Lithuania,²Nanotechnas – Center of Nanotechnology and Materials Science, Faculty of Chemistry and Geosciences, Vilnius University, Vilnius, Lithuania,³Department of Immunology, Centre for Innovative Medicine, Vilnius, Lithuania

[P1.28]

Low-power detection of biopotentials using MEMS and charge transfer for wearable applications.

Alessandro Manoni¹, Alessandro Gumiero², Chiara Ciarlo¹, Luigi Della Torre², Alessandro Zampogna³, Antonio Suppa^{3,4}, Fernanda Irrera¹, ¹University of Rome La Sapienza Department of Information Engineering Electronics and Telecommunications, Italy,²Stmicroelectronics, Italy,³Sapienza University of Rome Department of Human Neurosciences, Italy,⁴IRCSS NEUROMED Institute 86077 Pozzilli IS, Italy

[P1.29]

Soft colloidal probe-based biosensor as a quantitative point-of-use monitoring platform for pesticides and pharmaceuticals

Veronika Riedl¹, Lara Heiser, Matthias Portius, Philipp Riedl, Manuela Mießler, Tilo Pompe, *Leipzig University, Germany*

[P1.30]

Comparative study of gold and carbon nanoparticles in nucleic acid lateral flow assay

Juan Carlos Porras^{*1}, Mireia Bernuz¹, Arnau Pallares Rusiñol¹, Merce Martí^{2,2}, Maria Isabel Pividori^{1,2}, ¹*Autonomous University of Barcelona, Spain,*²*Autonomous University of Barcelona Institute of Biotechnology and Biomedicine, Spain*

[P1.31]

Electrochemical nanochannel array-based sensor for monitoring infection biomarkers in chronic wounds

Alba Iglesias-Mayor¹, Olaya Amor-Gutiérrez¹, Celia Toyos-Rodríguez^{*1}, Arnau Bassegoda², Tzanko Tzanov², Alfredo de la Escosura-Muñiz¹, ¹*University of Oviedo Department of Physical and Analytical Chemistry, Spain,*²*Polytechnic University of Catalonia, Spain*

[P1.32]

Selective introduction of gold atoms in palladium nanocluster tags for an enhanced electrocatalytic activity: Application for wound infection detection

Celia Toyos-Rodríguez^{*}, Francisco Javier García-Alonso, Alfredo de la Escosura-Muñiz, *University of Oviedo Department of Physical and Analytical Chemistry, Spain*

[P1.33]

Biocatalytic synthesis of nano-atomic clusters for bioanalysis

Silvia Vázquez-Díaz^{*}, Alessandro Silvestri, Maurizio Prato, Valery Pavlov, Aitiziber L.Cortajarena, *CIC biomaGUNE, Spain*

[P1.34]

Electrochemical detection of oxacillin resistance using direct-labelling solid-phase isothermal amplification

Adrian Butterworth^{*1,2}, Pratibha Pratibha³, Andreas Marx³, Lina Gasiūnaitė², Damion Corrigan¹, ¹*University of Strathclyde, UK,*²*Biotangents, UK,*³*University of Konstanz, Germany*

[P1.35]

Molecularly imprinted polymer as testing zone in paper-based vertical flow assay

Jennifer Marfà^{*1,2}, Maria Isabel Pividori^{1,2}, ¹*Autonomous University of Barcelona, Spain,*²*Autonomous University of Barcelona Institute of Biotechnology and Biomedicine, Spain*

[P1.36]

Neuron derived exosomes as a biomarker for Alzheimer's disease diagnosis

Mireia Bernuz^{*1,2}, Marta Gallardo¹, Amanda Cano^{3,4}, Mercè Boada^{3,4}, Mercè Martí², Maria Isabel Pividori^{1,2}, ¹*Autonomous University of Barcelona, Spain,*²*Autonomous University of Barcelona Institute of Biotechnology and Biomedicine, Spain,*³*ACE Foundation, Spain,*⁴*Center for Networked Biomedical Research on Neurodegenerative Diseases, Spain*

[P1.37]

Electrochemical detection of tetracycline residues in milk

Magdalena Raykova¹, Andrew Ward¹, Fiona Henriquez², Damion Corrigan¹, ¹University of Strathclyde, UK,²University of the West of Scotland, UK

[P1.38]

EIS based aptasensor for the sensitive detection of SARS-CoV-2

Assem Kurmangali*, Kanat Dukenbayev, Michael Shola David, Damira Kanayeva, Nazarbayev University, Kazakhstan

[P1.39]

Study and design of a contactless vital-signal-detection sensor based on electromagnetic multiport technology and the Hilbert Huang transform (HHT) algorithm for long-term continuous monitoring

Muh-Dey Wei*, Adham Karakish, Renato Negra, RWTH Aachen University, Germany

[P1.40]

Label-free electronic detection of peptide post-translational modifications with functional enzyme-driven assay at the physical limit

Eleonora Macchia¹, Kim Björkström*¹, Amit Tewari¹, Ville Eskonen², Lucia Sarcina³, Kyriaki Manoli³, Natalia Tong-Ochoa², Luisa Torsi³, Harri Härmä², Ronald Österbacka¹, ¹Abo Akademi University, Finland,²University of Turku, Finland,³University of Bari, Italy

[P1.41]

Chemiluminescent cucurbit[8]uril-based chemosensor for the detection of drugs in biofluids

Pierre Picchetti*, Nilima M. Kumar, Changming Hu, Frank Biedermann, Institute of Nanotechnology, Karlsruhe Institute of Technology (KIT), Germany

[P1.42]

Prussian blue structure regulation and its wearable sensor application

Li Ruizhi*, Li Zongda, Li Xinbo, Xinjiang University, China

[P1.43]

High performance PVDF membranes: The joint contribution of virus imprinted nanoMIPs and chitosan functionalization

Carmen Moreno*, Zeynep Altintas, Technical University of Berlin, Germany

[P1.44]

Synthesis of molecularly imprinted polymer nanoparticles for SARS-CoV-2 virus detection using surface plasmon resonance

Aabha Bajaj*^{1,2}, Ibrahim Abdulhalim², Zeynep Altintas¹, ¹Technical University of Berlin, Germany,²Ben-Gurion University of the Negev, Israel

[P1.47]

Mycobacteria magneto-actuated immunoassay and smartphone readout

Melania Mesas*^{1,2}, Bárbara Araujo³, Maria Valnice³, Esther Julián¹, Maria Isabel Pividori^{1,2}, ¹Universitat Autònoma de Barcelona, Spain,²Institute of Biotechnology and Biomedicine, Spain,³Universidade Estadual Paulista, Brazil

[P1.49]

Mid-Infrared label-free sensing enhanced by Bloch surface waves

Agostino Occhicone^{*1}, Raffaella Polito¹, Marialilia Pea², Valeria Giliberti³, Alberto Sinibaldi¹, Francesco Mattioli², Paolo Biagioni⁴, Francesco Michelotti¹, Michele Ortolani¹, Leonetta Baldassarre¹, ¹University of Rome La Sapienza, Italy, ²National Research Council, Italy, ³Italian Institute of Technology Center for Nano Science and Technology, Italy, ⁴Polytechnic of Milan, Italy

[P1.50]

Dynamic protein biomarkers and cells sensing using optical fiber aptasensors

Médéric Loyez^{*1}, Hadrien Fasseaux¹, Maxime Lobry¹, Maria DeRosa², Christophe Caucheteur¹, Ruddy Wattiez¹, ¹University of Mons, Belgium, ²Carleton University, Canada

[P1.51]

Magneto-catalytic bioconjugates for antigen separation and detection in biotests and biosensors

Polina Ivanova^{*1,2,3}, Kamil Michrowski¹, Marcin Drozd^{1,3}, Stawomir Sęk⁴, Mariusz Pietrzak^{1,3}, ¹Warsaw University of Technology, Faculty of Chemistry, Chair of Medical Biotechnology, Poland, ²University of Warsaw, Faculty of Chemistry, Section of Inorganic and Analytical Chemistry, Poland, ³CEZAMAT PW sp. z o. o., Poland, ⁴University of Warsaw, Faculty of Chemistry, Biological and Chemical Research Centre, Warszawa, Poland

[P1.52]

Detection of breast cancer-associated point-mutations on screen-printed and gold-plated multielectrode array electrochemical sensors

Vanessa Thoeny^{*1}, Eva Melnik¹, Malahat Asadi², Pooyan Mehrabi², Melanie Huetter², Thomas Schalkhammer², Walter Pulverer¹, Thomas Maier¹, Giorgio C. Mutinati¹, Rainer Hainberger¹, ¹Austrian Institute of Technology GmbH, Austria, ²Attphotronics Biosciences GmbH, Wiener Neustadt, Austria

[P1.53]

Using printed circuit boards for nucleic acid amplification tests

Anna Toldrà¹, Alar Ainla², Shirin Khaliliazar¹, Roman Landin¹, Georgios Chondrogiannis¹, Martin Hanze^{*1}, Pedro Réu¹, Mahiar Hamedí¹, ¹KTH Royal Institute of Technology, Sweden, ²International Iberian Nanotechnology Laboratory, Portugal

[P1.54]

In silico designed epitope-mediated portable QCM sensor for virus diagnosis

Ekin Sehit^{*}, Giovanni Battocchio, Muqsit Pirzada, Maria Mroginski, Zeynep Altintas, Technical University of Berlin, Germany

[P1.55]

Self-powered wearable sensors for plants to create biohybrid organisms as “well-being” sensors of the environment

Laura García Carmona¹, Marta Vegas García¹, Mireia Buaki Sogó¹, Mayte Gil Agustí¹, Alfredo Quijano López^{1,2}, ¹Instituto Tecnológico de la energía, Spain, ²instituto de tecnología eléctrica, Spain

[P1.56]

Application of Tamm Plasmon Polaritons and Cavity Modes for Biosensing in the Combinatorial Spectroscopic Ellipsometry and Quartz Crystal Microbalance Method

Ieva Plikusiene^{*1}, Vincentas Maciulis^{2,1}, Silvija Juciute¹, Ernesta Buzavaite-Verteliene², Audrius Valavicius², Zigmantas Balevicius², Almira Ramanaviciene¹, ¹Vilnius University, Lithuania, ²State Research Institute Center for Physical Sciences and Technology, Lithuania

[P1.57]

Some aspects in the development of immunosensors for COVID-19 diagnosis

Almira Ramanaviciene^{*}, Ieva Plikusiene, Asta Kausaite-Minkstiniene, Vincentas Maciulis, Benediktas Brasiunas, Saulius Balevicius, Arunas Ramanavicius, Vilnius University, Lithuania

[P1.58]

The detection of *Legionella pneumophila* retained in filters is enhanced by immunomagnetic separation

Melania Mesas^{*1,2}, Bárbara Molina³, Bárbara Araujo⁴, Maria Valnice⁴, José Dominguez³, Maria Isabel Pividori^{1,2}, ¹Universitat Autònoma de Barcelona, Spain, ²Institute of Biotechnology and Biomedicine, Spain, ³Institut d'Investigació Germans Trias i Pujol (IGTP), Spain, ⁴São Paulo State University, Brazil

[P1.59]

Application of conducting polymers in design of affinity sensors for determination of SARS-CoV-2 proteins and specific antibodies

Arunas Ramanavicius^{*1}, Vilma Ratautaite², Ieva Plikusiene¹, Deivis Plausinaitis¹, Raimonda Boguzaitė², Marija Drobish², Viktorija Liustrovaite¹, Alma Rucinskiene², Almira Ramanaviciene¹, ¹Vilnius University, Lithuania, ²State Research Institute Center for Physical Sciences and Technology, Lithuania

[P1.60]

Fast detection of drug triclabendazole in milk samples using a White Light Reflectance Spectroscopy sensor

Georgios Koukouvlnos¹, Erik Beij Beij², Ioannis Raptis^{1,3}, Jeroen Peters², Sotirios Kakabakos¹, Panagiota Petrou^{*1}, ¹Ethniko Kentro Ereunas Physikon Epistemon 'Demokritos', Greece, ²Wageningen Food safety Research, Wageningen University and Research, Wageningen, The Netherlands, ³ThetaMetris S.A., Athens, Greece

[P1.61]

Sensitive and fast label-free immunochemical determination of hazelnut protein in cookies through immersible photonic chip sensors

Michailia Angelopoulou¹, Alexandros Salapatas¹, Eleni Makarona¹, Konstantinos Misiakos¹, Sotirios Kakabakos¹, Nathalie Smits², Panagiota Petrou^{*1}, ¹Ethniko Kentro Ereunas Physikon Epistemon 'Demokritos', Greece, ²Wageningen Food Safety Research, The Netherlands

[P1.62]

GRADual thin film Interferometry (GRADE): A novel label-free optical biosensing method for application at the Point-of Need

Grigorios Zisis, Vasileios Anastasiadis, Georgios Papageorgiou, Lambros Patsiouras, Anastasia Kanioura, Panagiota Petrou*, Ioannis Raptis, Nikolaos Pananikolaou, *Ethniko Kentro Ereunas Physikon Epistemon 'Demokritos', Greece*

[P1.63]

Electrical impedance sensor with reference electrodes for integrated monitoring of biomass concentration in a capillary wave micro-bioreactor

Sven Meinen*^{1,2}, Steffen Brinkmann^{1,2}, Kevin Viebrock^{3,4}, Henning Menzel⁵, Rainer Krull^{6,4}, Andreas Dietzel^{1,4}, ¹TU Braunschweig, Institute for Microtechnology, Germany, ²TU Braunschweig, Center of Pharmaceutical Engineering, Braunschweig, Germany, ³TU Braunschweig, TU Braunschweig, Institute of biochemical engineering, Germany, ⁴TU Braunschweig Center of Pharmaceutical Engineering, Germany, ⁵TU Braunschweig, Institute for Technical Chemistry, Germany, ⁶TU Braunschweig, Institute of biochemical engineering, Germany

[P1.64]

Ultra-sensitive real-time in-vivo detection of enzymatic activity in *N. tabacum* using redox cycling

Tali Dotan*, *Tel Aviv University Iby and Aladar Fleischman Faculty of Engineering, Israel*

[P1.65]

Development of a contactless capacitive sensor for real-time cell culture monitoring

David Rios Santini*^{1,2}, Alan Champneys¹, Janice Kiely², Richard Luxton², ¹Department of Engineering Mathematics, University of Bristol, UK, ²Institute of Bio-Sensing Technology (IBST), University of the West of England, UK

[P1.66]

Single-step and instrument-free sample preparation for nucleic acid diagnostics

Georgios Chondrogiannis*, Pedro Réu, Mahiar Hamedi, *KTH, Sweden*

Poster Session 2:

[P2.01]

Micro electrical impedance tomography for live monitoring on chip

David Metz*, Iordania Constantinou, *TU Braunschweig Institute for Microtechnology, Germany*

[P2.02]

Microfluidics based electrochemical platform to study plant root-rhizosphere microbe interactions

Buddhadev Purohit*¹, Kaspar Jürgensen², Saqib Saleem Akhtar³, Thomas Georg Roitsch³, Jan Madsen², Winnie E. Svendsen¹, ¹DTU Bioengineering, Building 221, Technical University of Denmark, 2800 Kongens Lyngby, Denmark, ²DTU Compute, Building 324, Technical University of Denmark, 2800 Kongens Lyngby, Denmark, ³Department of Plant and Environmental Sciences, Copenhagen Plant Science Centre, University of Copenhagen, Denmark

[P2.03]

Microfluidics combined with fluorescence in situ hybridization (FISH) for *Candida tropicalis* detection

Violina B. Barbosa¹, Célia F. Rodrigues¹, Laura Cerqueira¹, João M. Miranda², Nuno F. Azevedo¹, ¹University of Porto, LEPABE - Faculty of Engineering, Portugal,²University of Porto Transport Phenomena Research Center, Portugal

[P2.04]

Electroactive biofilm capacitance for organic matter and microbial activity assessment in freshwater ecosystems

Marta Fernandez-Gatell¹, Xavier Sanchez-Vila^{1,2}, Jaume Puigagut¹, ¹Universitat Politècnica de Catalunya (UPC), Spain,²Associated Unit: Hydrogeology Group (UPC-CSIC), Spain

[P2.05]

Novel electrogravimetric biosensors as a ultra-sensitive and fast activity control tool of matrix metalloproteinase-2, prognostic tumor biomarker in blood samples

Monika K. Nisiewicz^{1,2}, Aleksandra Gajda¹, Agata Kowalczyk³, Aleksandra Cupriak³, Artur Kasprzak⁴, Magdalena Bamburowicz-Klimkowska⁵, Ireneusz P. Grudziński⁵, Anna M. Nowicka³, ¹Faculty of Chemistry, University of Warsaw, Pasteura Str. 1, PL 02-093, Warsaw, Poland, Poland,²Faculty of Chemistry, Warsaw University of Technology, Noakowskiego Str. 3, PL 00-664, Warsaw, Poland, Poland,³Faculty of Chemistry, University of Warsaw, Pasteura Str. 1, PL 02-093, Warsaw, Poland, Poland,⁴Faculty of Chemistry, Warsaw University of Technology, Noakowskiego Str. 3, PL 00-664, Warsaw, Poland, Poland,⁵Faculty of Pharmacy, Medical University of Warsaw, Banacha Str. 1, PL-02-097, Warsaw, Poland, Poland

[P2.06]

Evaluation of surface properties of aluminium thin film sensors during binding process using molecular dynamics simulations

Fatemeh Shahbazi¹, Mohammad Nasr Esfahani², Masoud Jabbari¹, Amir Keshmiri^{1,3}, ¹The University of Manchester, UK,²University of York, UK,³Manchester University NHS Foundation Trust, UK

[P2.07]

Wearable wristband-based electrochemical sensor for the detection of phenylalanine in biofluids

Marc Parrilla^{*}, Andres Vanhooydonck, Regan Watts, Karolien De Wael, University of Antwerp, Belgium

[P2.09]

Biofilm Growth Monitoring Using Guided Wave-Long Range Surface Plasmon Resonance (GW-LRSPR): A Proof of Concept

Aabha Baja¹, Mohammad Abutoama¹, Karin Yaniv¹, Martina Modic², Ariel Kushamaro¹, Uroš Cvelbar², Ibrahim Abdulhalim¹, ¹Ben-Gurion University of the Negev, Israel,²Jozef Stefan Institute, Slovenia

[P2.10]

Novel carbonized mesoporous silicon-based biosensor for the label-free electrochemical detection of infectious agents

Anandapadmanabhan A. Rajendran¹, Marina Bujaldon-Velasco¹, Kandeel Shafique¹, Pilar Formentín¹, Lluís F. Marsal¹, Hedieh Hajji-Hashem¹, Xavier Cetó^{1,2}, Beatriz Prieto-Simón^{1,3}, ¹Department of Electronic Engineering, Universitat Rovira i Virgili, Spain,²Department of Chemistry, Faculty of Sciences, Universitat Autònoma de Barcelona, Spain,³ICREA, Pg. Lluís Companys 23, 08010, Barcelona, Spain

[P2.12]

Use of the fusion protein hydrophobin-laccase for enzyme immobilization on micropipette tips and application to the determination of caffeic acid in tea samples

Ilaria Stanzione^{1,2}, Anna Pennacchio¹, Pablo Rioboó Legaspi^{3,1}, Alessandra Piscitelli¹, Paola Giardina¹, Estefanía Costa-Rama², M. Teresa Fernández-Abedul², ¹University of Naples "Federico II", Italy,²University of Oviedo, Spain,³University of Oviedo, Spain

[P2.15]

Real-time monitoring of a small-volume HS-5 cell culture with microcavity in-line optical fiber Mach-Zehnder interferometer

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[P2.16]

Optical and electrochemical label-free detection of *Borrelia* using ITO-coated lossy-mode resonance optical fiber sensor

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[P2.17]

Anti-resonant hollow core fiber for low-volume investigations of green fluorescent protein

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[P2.18]

Indium-tin-oxide-coated optical fiber tip for both optical and electrochemical label-free biosensing

Katarzyna Lechowicz¹, Jakub Warszewski¹, Monika Janik¹, Robert Bogdanowicz², Marcin Koba¹, Mateusz Śmietana¹, ¹Warsaw University of Technology, Poland,²Gdańsk University of Technology, Poland

[P2.19]

Sleep stage classification using IR-UWB radar and deep learning

Shahzad Ahmed*, Sung Ho Cho, Hanyang University, Republic of Korea

[P2.20]

Nanotrenches-Based Flexible Platform for Surface-Enhanced Raman Scattering Trace Level Detection

Alia Colniță, Daniel Marconi, Ioana Brezeștean, Nicoleta Elena Dina*, Ioan Turcu, National Institute for Research and Development of Isotopic and Molecular Technologies, Romania

[P2.21]

SPION modification for simultaneous monitoring of MGP and NF-κB in osteoclasts using QDs and electrochemical and fluorometric detection

Jakub Petrus¹, Jana Cepova², Katerina Dunovska², Bozena Hosnedlova³, Milan Jakubek³, Richard Prusa², Geir Bjørklund⁴, Eva Klapkova², Marta Kepinska⁵, Rene Kizek³, Tomas Grondzak⁶, ¹Charles University in Prague and Motol University Hospital, Czech Republic,²Charles University in Prague and Motol University Hospital, V Úvalu 84, 150 06 Prague 5, Czech Republic,³BIOCEV, First Faculty of Medicine, Charles University, 252 50 Vestec, Czech Republic,⁴Council for Nutritional and Environmental Medicine,

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[P2.23]

Glucose and pH dual-responsive Hybrid polymeric nanoparticles for insulin delivery

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[P2.24]

Electrochemical decoration of ZnO nanostructures with noble metal for bio-sensing applications

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[P2.25]

Quantification of plasma fibrinogen using a paper-based lateral flow assay device

Jerro Saidykhan¹, Laura Selevic¹, Stefano Cinti², Jennifer E. May¹, Anthony J. Killard¹, ¹University of the West of England, UK,²University of Naples Federico II, Italy

[P2.26]

Development of a Prothrombin assay using lateral flow on paper-based devices

Jerro Saidykhan¹, Stefano Cinti², Jennifer E. May¹, Anthony J. Killard¹, ¹University of the West of England, UK,²University of Naples Federico II, Italy

[P2.27]

Nafion, gold nanoparticles and graphene nanoribbons modified carbon paste electrodes for sensitive electrochemical determination of nitric oxide

Nadine Wenninger¹, Christina Bernhart¹, Urška Bračič¹, Alexander Kollau², Kurt Kalcher³, Astrid Ortner¹, ¹University of Graz, Institute of Pharmaceutical Sciences, Department of Pharmaceutical Chemistry, Austria,²University of Graz, Institute of Pharmaceutical Sciences, Department of Pharmacology and Toxicology, Austria,³University of Graz, Institute of Chemistry, Department of Analytical Chemistry, Austria

[P2.28]

Molecularly imprinted polypyrrole application for the detection of sars-cov-2 spike glycoprotein

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[P2.29]

An user-friendly hand-held biosensor for detection of water pollutants

Yolanda Alacid Martínez¹, Andrés Felipe Quintero-Jaime², María José Martínez-Tomé³, C. Reyes Mateo Martínez¹, Francisco Montilla Jiménez², ¹Miguel Hernandez University of Elche Institute of Research, Development, and Innovation in Healthcare Biotechnology in Elche, Elche, Spain,²University of Alicante University Materials Institute of Alicante, Spain,³Miguel Hernandez

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[P2.31]

Development of a carbon nanotube-based sensor array platform for specific detection of nucleic acids

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[P2.32]

Upconversion immunoassay with magnetic separation for the detection of cancer biomarkers

Ekaterina Makhneva*¹, Dorota Sklenářová^{1,2}, Julian C. Brandmeier¹, Hans H. Gorris¹, Petr Skládal^{1,2}, Zdeněk Farka^{1,2}, ¹Masaryk University, Czech Republic, ²Central European Institute of Technology, Czech Republic

[P2.34]

Development of a non-invasive wearable biosensor device for physiological monitoring of first responders

Javier Lou-Franco*¹, Marina Peña-Díaz¹, Javier Barroso¹, V. Kojić², M. Kostić², G. Jobst³, M.B. González-García⁴, P. Fanjul-Bolado⁴, Nerea Briz¹, Goran Bijelić¹, ¹Tecnalia Research & Innovation Foundation, Spain, ²Tecnalia Serbia, Serbia, ³Jobst Technologies GmbH, Germany, ⁴Metrohm DropSens, Spain

[P2.35]

Chemically-modified oligonucleotide microarrays: molecular platforms for aptamer, enzymatic and encryption assays

Jory Lietard*¹, Mark Somoza², ¹University of Vienna, Austria, ²Leibniz-Institute for Food Systems Biology at the Technical University of Munich, Germany

[P2.36]

Oriented Antibody Coupling to a Low Fouling Polymer for Continuous Biomarker Monitoring by Particle Mobility

Maud Linssen*¹, Sebastian van den Wildenberg¹, Yu-Ting Lin¹, Arthur de Jong¹, Menno Prins^{1,2}, ¹Eindhoven University of Technology, The Netherlands, ²Helia Biomonitoring, Eindhoven, The Netherlands

[P2.37]

Studying anti-fouling coatings in real-time over long durations with single-molecule resolution using particle motion

Wei Shan (Helen) Tan*, Arthur de Jong, Menno Prins, Eindhoven University of Technology, The Netherlands

[P2.38]

Continuous monitoring of small molecules for industrial process control

Chris Vu*¹, Yu-Ting Lin², Junhong Yan², Julia Marshall³, Annemarie Hummel³, Simone Wouters³, Jos Raats³, Arthur de Jong¹, Menno Prins^{1,2}, ¹Eindhoven University of Technology, The Netherlands, ²Helia Biomonitoring, The Netherlands, ³AbSano, The Netherlands

[P2.39]

Continuous monitoring of Lactoferrin for real-time process control

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[P2.40]

Microfluidic Paper-based Plasmonic Chip: towards Efficient Near-Infrared Metal Enhanced Fluorescence Biosensing and Imaging

Andreea Campu¹, Ilina Muresan¹, Ana-Maria Craciun¹, Adriana Vulpoi², Simion Astilean^{1,3}, Monica Focsan¹, ¹Nanobiophotonics and Laser Microspectroscopy Center, Interdisciplinary Research Institute in Bio-Nano-Sciences, Babes-Bolyai University, Romania,²Nanostructured Materials and Bio-Nano-Interfaces Center, Interdisciplinary Research Institute in Bio-Nano-Sciences, Babes-Bolyai University, Romania,³Biomolecular Physics Department, Faculty of Physics, Babes-Bolyai University, Romania

[P2.41]

In-depth insight into the possible influence of electrode blocking agents on the stem-loop based electrochemical DNA sensor parameters

Anna Szymczyk¹, Karolina Soliwodzka¹, Magdalena Moskal¹, Krzysztof Rózanowski², Robert Ziótkowski¹, ¹Warsaw University of Technology, Poland,²CEZAMAT PW sp. z o. o., Poland

[P2.42]

Targeting Quorum Sensing pqs system for Diagnosing Pseudomonas aeruginosa Infections

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[P2.43]

Paper-based screening tool for Tuberculosis 'rule-out' test

Alice Iles^{*}, University of Southampton, UK

[P2.44]

Holographic Sensors for Biochemical Diagnostics

Yubing Hu^{*}, Ali Yetisen, Imperial College London Department of Chemical Engineering, UK

[P2.45]

Quorum sensing autoinducer peptides as biomarkers for the diagnosis of Staphylococcus aureus infections

Carla Ferrero^{1,2}, Enrique J. Montagut^{1,2}, Nerea Castro^{1,2}, Nuria Pascual^{1,2}, Gerardo Acosta^{2,3}, Fernando Albericio^{2,3,4}, Miriam Royo^{2,5}, Alicia Lacomada^{6,7}, Cristina Prat^{6,7,8}, J.-Pablo Salvador^{1,2}, M.-Pilar Marco^{1,2}, ¹Instituto de Química Avanzada de Cataluña (IQAC-CSIC), Spain,²Consorcio Centro de Investigación Biomédica en Red de Bioingeniería, Biomateriales y Nanomedicina (CIBER-BBN), Spain,³Department of Organic Chemistry, University of Barcelona, 08028 Barcelona, Spain Hospital Universitari Germans Trias i Pujol, Spain,⁴School of Chemistry and Physics, University of KwaZulu-Natal, Durban 4001, South Africa,⁵Multivalent systems for Nanomedicine (NS4N) Institute for Advanced Chemistry of Catalonia (IQAC) of the Spanish Council for Scientific Research (CSIC), Jordi Girona 18-26, 08034 Barcelona, Spain,⁶Hospital Universitari Germans Trias i Pujol, Badalona, Spain. Institut Germans Trias i Pujol, Badalona, Spain,⁷Centro de Investigación Biomédica en Red de Enfermedades Respiratorias (CIBERES),

Badalona, Spain,⁸Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht University, Utrecht, The Netherlands

[P2.46]

DNA electrochemical biosensor for plasmodium falciparum and plasmodium vivax differential detection

Rodney Lopez Loja^{*1,2}, Ceili Zuta Chamoli¹, Katherine Lozano Untiveros¹, Stella M. Chenet¹, Juan R. Tejedo^{1,3,4}, Rafael Tapia-Limonchi¹, ¹National University Toribio Rodriguez de Mendoza of Amazonas, Peru,²National University of Engineering, Peru,³Pablo de Olavide University, Spain,⁴Diabetes and Associated Metabolic Diseases Networking Biomedical Research Centre, Spain

[P2.47]

Development of a rapid swab-based bioaerosol sampling and sensing device based on Adenosine Triphosphate (ATP) bioluminescence measurement

Jaeho Oh¹, MILAD MASSOUDIFARID¹, Jisoo Choi¹, Do Heon Kim¹, Jung-ho Hwang¹, Jung Hoon Byeon², ¹Yonsei University School of Mechanical Engineering, Republic of Korea,²Yeungnam University School of Mechanical Engineering, Republic of Korea

[P2.48]

An enhanced architecture for digital microfluidic devices that optimizes the driving effectiveness of biological samples

Jon Zabalo^{*1,2}, Maite Mujika^{1,2}, Eva Pérez-Lorenzo^{1,2}, Sergio Arana^{1,2}, ¹CEIT-Basque Research and Technology Alliance (BRTA), Manuel Lardizabal 15, 20018, Spain,²Universidad de Navarra, Tecnun, Manuel Lardizabal 13, 20018, Donostia-San Sebastián, Spain

[P2.49]

Autonomous DNA sample preparation in an integrated microfluidic device for specific nucleic acid biomarker detection

Elisa Erice-Ainciburu^{*1,2}, Oihane Mitxelena-Iribarren^{1,2}, María Sanromán Iglesias³, Marek Grzelczak^{4,3}, Sergio Arana^{1,2}, Charles Lawrie⁵, Maite Mujika^{1,2}, ¹Gipuzkoa Centre of Technical Studies and Research, Spain,²Engineering School TECNUN, Spain,³Material Physics Center, Spain,⁴Donostia International Physics Center, Spain,⁵Biodonostia Health Research Institute, Spain

[P2.50]

Optimization of an on-bead loop-mediated isothermal amplification assay for rapid detection of viable *Listeria monocytogenes* cells in food matrices

Claúdia Maciel¹, Nádia F.D. Silva¹, Paula Teixeira², Júlia M. C. S. Magalhães¹, ¹REQUIMTE/LAQV, Departamento de Engenharia Química, Faculdade de Engenharia, Universidade Do Porto, Rua Dr. Roberto Frias, 4200-465, Porto, Portugal,²Universidade Católica Portuguesa, CBQF - Centro de Biotecnologia e Química Fina – Laboratório Associado, Escola Superior de Biotecnologia, Rua Diogo Botelho 1327, 4169-005 Porto, Portugal

[P2.51]

Immunosensory integrated system for a fast and efficient detection of the coronavirus SARS-CoV-2 – the SENSECOR project

Catarina R. Marques^{*1}, Filipe Silva², Petia G. Georgieva¹, M. Fátima Domingues³, Paulo André⁴, João Milheiro⁵, Igor Ferreira⁵, Tiago Magalhães⁵, Elmano Ramalheira⁶, Filomena Freitas⁶, Amadeu M.V.M. Soares¹, ¹CESAM & Department of Biology, University of Aveiro, Campus Universitário de Santiago, 3810-193 Aveiro, Portugal,²CESAM & Department of Biology, University of Aveiro, Campus Universitário de Santiago, 3810-193 Aveiro, Portugal,³Instituto de Telecomunicações & University of Aveiro, Campus Universitário de Santiago, 3810-193 Aveiro, Portugal,⁴Instituto de Telecomunicações e Departamento de Engenharia Electrotécnica e de Computadores, Instituto Superior Técnico, Universidade de Lisboa, Av. Rovisco Pais, 1049-001 Lisboa, Portugal,⁵Wavecom – Soluções Rádio S.A., Rua das Cardadeiras, Lugar Agra de Cima no. 107, 3800-125 Aveiro, Portugal,⁶Centro Hospitalar do Baixo Vouga, E.P.E. (CHBV), Av. Artur Ravara, 3810-164 Aveiro, Portugal

[P2.52]

Neurotransmitters-derived imprinted polymers for future abiotic diagnostics

Francesca Torrini*, Pasquale Palladino, Simna Scarano, Maria Minunni, *Department of Chemistry 'Ugo Schiff', University of Florence, Sesto Fiorentino (FI), Italy*

[P2.53]

Biosensing of lung cancer biomarkers PDL1 and HER2 using miniaturized Lab-on-a-Foil immunoassays

Marcin Drozd*¹, Polina Ivanova^{1,2}, Katarzyna Tokarska¹, Adrian Duszczyk¹, Elżbieta Malinowska¹, ¹*Warsaw University of Technology, Poland,*²*University of Warsaw, Poland*

[P2.54]

Selective bio-imaging of Gram positive pathogens in eye infection clinical samples using a novel fluorescence probe

Richa Sharma*¹, Maxime Klausen¹, Mohammed Üçüncü¹, Appakkudal R Anand², Harinee Rajagopalan², Mani V Jeyalatha², Mithun Santra¹, Seshasailam Venkateswaran¹, Mark Bradley¹, ¹*The University of Edinburgh, UK,*²*Sankara Nethralaya, India*

[P2.55]

Organic room temperature phosphors for bioimaging

Rasa Keruckiene*, Nerijus Kusas, Juozas Grazulevicius, *Kaunas University of Technology, Lithuania*

[P2.56]

Carbon/metal-oxide nanocomposite sensor for propofol monitoring

David Ferrier*, Janice Kiely, Richard Luxton, *University of the West of England, UK*

[P2.57]

SEEBug - development of a SENSOR for the fast and effective detection of pathogenic bacteria in Bivalves

Catarina R. Marques*¹, Ulisses M. Azeiteiro¹, António J.A. Nogueira¹, Filipe Silva², Petia G. Georgieva², Paulo André³, Amadeu M.V.M. Soares¹, ¹*CESAM & Department of Biology, University of Aveiro, Campus Universitário de Santiago, 3810-193 Aveiro, Portugal,*²*IEETA & Department of Electronics, Telecommunications and Informatics, University of Aveiro, Campus Universitário de Santiago, 3810-193 Aveiro, Portugal,*³*Instituto de Telecomunicações e Departamento de Engenharia Electrotécnica e de Computadores, Instituto Superior Técnico, Universidade de Lisboa, Av. Rovisco Pais, 1049-001 Lisboa, Portugal*

[P2.58]

High performance copper based microfeathers for glucose detection

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[P2.59]

Synthesis of graphene quantum dots from anthracite and bituminous coals with Mn nano-sensor for GSH sensing

Aayushi Kundu*, Banibrata Maity, Soumen Basu, *Thapar Institute of Engineering and Technology, India*

[P2.60]

High-throughput nuclear delivery of biosensing particles for intracellular detection via mechanical nuclear-membrane disruptions with viscoelastic in-flow compression

Maria Isabella Maremonti*, Valeria Panzetta, David Dannhauser, Paolo Antonio Netti, Filippo Causa, *Università Federico II di Napoli, Italy*

[P2.61]

Different vertical axial positions in-flow for advanced label-free cell biomarkers identification

MARIA ISABELLA MAREMONTI*, DAVID DANNHAUSER, PAOLO ANTONIO NETTI, FILIPPO CAUSA, *Università Federico II di Napoli, Italy*

[P2.62]

Rapid Detection of Aflatoxin M1 in Milk Using an Immersible Silicon Photonic Immunosensor Based on Mach-Zehnder Interferometry

Michailia Angelopoulou¹, Dimitra Kourti¹, Panagiota Petrou¹, Alexandros Salapatas², Eleni Makarona², Konstantinos Misiakos², Sotirios Kakabakos¹, ¹*Institute of Nuclear & Radiological Sciences & Technology, Energy & Safety, NCSR "Demokritos", Greece,* ²*Institute of Nanoscience & Nanotechnology, NCSR "Demokritos", Greece*

[P2.63]

Application of an immersible optical immunosensor to detect adulteration of goat milk with cow milk

Dimitra Kourti*, Michailia Angelopoulou, Alexandros Salapatas, Eleni Makarona, Panagiota Petrou, Konstantinos Misiakos, Sotirios Kakabakos, *Ethniko Kentro Ereunas Physikou Epistemon "Demokritos", Greece*

[P2.64]

Optical biosensing of DNA based on isothermal techniques and specific hybridization

Luis A. Tortajada-Genaro*, Ana Lazaro, Sara Martorell, Angel Maquieira, *Polytechnic University of Valencia, Spain*

[P2.65]

Commercialization of a plasmonic fiber-optic absorbance biosensor to detect recent cannabis consumption

Joseph Seimetz¹, Elana Ederly¹, Gautam Batra¹, M. Divagar², V.L.S. Vonumu², V.V.R. Sai², Himanshu Bhatia¹, ¹*Ricovr Healthcare, USA,* ²*IIT Madras, India*

[P2.66]

Induced-morphological alteration and activation of cleaved intrinsic caspases in human cancer cells by staurosporine and gambogic acid.

Ibidapo Williams*, Richard Luxton, Janice Kiely, *University of the West of England, UK*

[P2.67]

Rapid and inexpensive tools for the detection and surveillance of viruses in insect vectors and hosts in Africa.

Jacqueline.M. Barnett^{1,2}, Joel Allainguillaume², Jeff Davy¹, Richard Luxton¹, Janice Kiely¹, Dami Oresanya³, Patricia Ogunsanya³, Lava Kumar³, ¹*Institute of Bio-sensing Technology, University of the West of England (UWE), UK,*²*Department of Applied Science, University of the West of England, UK,*³*Institute of Tropical Agriculture (IITA), Nigeria*