

Poster program overview

All posters will be displayed throughout the whole symposium in the groundflour of building 6. Attendance of poster presenters is required during the poster session on Tuesday (for posters P1 – P48) or Wednesday (for posters P49 – P91) for queries and discussion.

Poster session 1 – Tuesday, March 21	
Authors present 1:30-2:30pm	
P1	Gas diffusion biocathode for oxygen reduction based on direct electron transfer between carbon nanotubes and laccase Martin HÄMMERLE, Karin HILGERT, Ralf MOOS University of Bayreuth, Germany
P2	Supramolecular biocatalyst electrodes: A potential-controlled reaction switch for dual-analyte detection Sven Christian FEIFEL (1), Andreas KAPP (1), Roland LUDWIG (2), Fred LISDAT (1) 1: University of Applied Sciences Wildau, Germany; 2: University of Nat. Resources & Life Sciences, Vienna, Austria
P3	Polymer-enzyme interaction as basis for the construction of bioelectrocatalytic sensing electrodes David SARAULI (1), Daniel SCHÄFER (1), B. SCHULZ (2), S. LEIMKÜHLER (2), D. FATTAKHOVA-ROHLFING (3), Fred LISDAT (1) 1: Technical University of Applied Sciences Wildau, Germany; 2: University of Potsdam, Germany; 3: University of Munich (LMU), Germany
P4	Performance characteristic of a CNT-based enzymatic glucose/oxygen biofuel cell in physiological liquids Gero GÖBEL (1), Jennifer MUNDHENK (1), Matias LARA BELTRAM (1), Thorsten HEINLEIN (2), Jörg SCHNEIDER (2), Fred LISDAT (1) 1: University of Applied Sciences Wildau, Germany; 2: Technical University Darmstadt, Germany
P5	Carboxylated graphene as a sensing material for electrochemical uranyl ion detection Robert ZIÓŁKOWSKI (1), Łukasz GÓRSKI (1), Agnieszka BALA (1), Elżbieta MALINOWSKA (1,2) 1: Warsaw University of Technology, Warsaw, Poland; 2: CEZAMAT PW, Warsaw, Poland
P6	Quenching of Graphene quantum dots fluorescence by alkaline phosphatase activity in presence of hydroquinone diphosphate Marta NEVES, María Begoña GONZÁLEZ GARCÍA, David HERNÁNDEZ SANTOS, Pablo FANJUL BOLADO, Laura FERNÁNDEZ LLANO DropSens S.L., Spain
P7	Immobilization and Detection of single Nanoobjects on Nanoelectrodes Xenia KNIGGE (1), Christian WENGER (2), Frank F. BIER (1), Ralph HÖLZEL (1) 1: Fraunhofer Institute for Cell Therapy and Immunology IZI, Branch Bioanalysis and Bioprocesses, Potsdam (IZI-BB), Germany; 2: IHP GmbH - Leibniz Institute for Innovative Microelectronics, Frankfurt (Oder), Germany
P8	Self-assembly of alpha lipoic acid monolayers on Germanium surfaces for THz biosensing applications Marcin KAZMIERCZAK (1), Jördis MITZLOFF (1), Julia FLESCH (2), Changjiang YOU (2), Jacob PIEHLER (2), Subhajit GUHA (1), Thomas SCHRÖDER (1) 1: IHP GmbH, Germany; 2: University of Osnabrück, Germany

P9	<p>Carbon Nanotube-based Photoelectrodes based on assembled Photosystem I Dimitri CIORNII (1), Sven C. FEIFEL (1), Kai R. STIEGER (1), Heiko LOKSTEIN (2), Mahdi HEJAZI (3), Athina ZOUNI (3), Fred LISDAT (1) 1 Technical University of Applied Sciences Wildau; 2 Charles University in Prague, Czech Republic; 3 Humboldt University of Berlin, Germany</p>
P10	<p>DNA self-assembly for signal enhancement in nucleic acids biosensors Andrea MITI (1), Giampaolo ZUCCHERI (1,2,3) 1: University of Bologna, Italy; 2: S3 Center of the NanoScience Institute, Italian Research Council (CNR); 3: Italian National Interuniversity Consortium of Materials Science and Technology</p>
P11	<p>Sulfonated polythiophenes for the electrochemical coupling of glucose dehydrogenase Giovanni FUSCO (1), Gero GÖBEL (2), Gabriele FAVERO (3), Franco MAZZEI (3), Fred LISDAT (2) 1: University of Rome, Italy; 2: University of Applied Sciences Wildau, Germany.; 3: Sapienza - University of Rome, Italy</p>
P12	<p>Electrically controlled Michael addition: addressing of covalent immobilization of biological receptors Arwa LAROUBSI (1,2), Asma HAMMAMI (1), Nouredine RAOUAFI (1), Vladimir MIRSKY (2) 1: Campus Universitaire de Tunis El-Manar, Tunisia.; 2: Brandenburgische Technische Universität Cottbus-Senftenberg, Germany</p>
P13	<p>A new nanocomposite-based gelling oligopeptide for biosensors development Giovanni FUSCO (1,2), Luciano GALANTINI (2), Andrea ZERILLO (1), Riccarda ANTIOCHIA (1), Gabriele FAVERO (2), Laura CHRONOPOULOU (2), Cleofe PALOCCI (2), Franco MAZZEI (1) 1,2: Sapienza University of Rome, Italy</p>
P14	<p>Nanodiscs: a novel technology for functional reconstitution and characterization of membrane proteins Stefanie MAK, Michael SCHMALENBERG, Peter B. LUPPA, Ruoyu SUN Klinikum rechts der Isar der TU München, Munich, Germany</p>
P15	<p>A Polymeric Nanosensor for Sensing of Broad pH Changes in Biofilm as Tool for the Investigation of Microbial Induced Corrosion Harald Rune TSCHICHE, Katrin HOFFMANN, Sebastian RADUNZ, Karin SCHWIBBERT, Janin SAMEITH, Jörg TOEPEL, Ute RESCH-GENGER Bundesanstalt für Materialforschung und-prüfung, Germany</p>
P16	<p>Biosensor based on the inhibition of the acetylcholinesterase activity and gold nanoparticles for the determination of pesticides in aqueous medium Kelvin QUESADA (1), Roy ZAMORA (1), Esteban AVENDAÑO (2), Oscar ROJAS-CARRILLO (3), Ricardo STARBIRD (1) 1: Costa Rica Institute of Technology, Costa Rica; 2: University of Costa Rica, Costa Rica; 3: National University, Costa Rica</p>
P17	<p>Nanofunctionalized interfaces for SPR based immunosensors Sunita KUMBHAT Jai Narain Vyas University, Jodhpur, India</p>
P18	<p>Magnetic Nanocomposites for Rapid Biosensing of Staphylococcal Enterotoxins (SET) in Complex Food Matrices Angelika Maria NISTLER (1), Brigitte DORNER (2), Reinhard NIESSNER (1), Michael SEIDEL (1) 1: Analytical Chemistry, TUM; 2: Robert Koch Institute, Berlin</p>

P19	<p>Using DNA origami nanostructures for amplifying signals generated in microbead-based assay for microRNA detection</p> <p>Youngeun CHOI (1,3,4), Stefan RÖDIGER (2), Ilko BALD (1,3,4) 1: University of Potsdam, Germany; 2: Brandenburg University of Technology Cottbus-Senftenberg, Germany; 3: BAM Federal Institute for Materials Research and Testing, Germany; 4: SALSA School of Analytical Sciences Adlershof, Humboldt University of Berlin, Germany</p>
P20	<p>Substrate recycling principles for the detection of adrenaline to support adrenal vein sampling</p> <p>Denise MOLINNUS (1,2), Larissa KÄVER (1), Petra SIEGERT (1), Holger S. WILLENBERG (3), Fred LISDAT (4), Arshak POGHOSSIAN (1,5), Michael KEUSGEN (2), Michael J. SCHÖNING (1,5) 1: FH Aachen, Campus Jülich, Germany; 2: Philipps-University Marburg, Germany; 3: Rostock University Medical Center, Germany; 4: Technical University of Applied Sciences Wildau, Germany; 5: Forschungszentrum Jülich GmbH, Germany</p>
P21	<p>Dielectric spectroscopy of bovine serum albumin up to 110 GHz</p> <p>Eva-Maria LAUX, Jessica GIBBONS, Elena ERMILOVA, Frank F. BIER, Ralph HÖLZEL Fraunhofer Institute for Cell Therapy and Immunology, Germany</p>
P22	<p>AC electrically functionalised sensor array for influenza virus detection</p> <p>Sandra STANKE (1), Christian WENGER (2), Frank F. BIER (1), Ralph HÖLZEL (1) 1: Fraunhofer Institute for Cell Therapy and Immunology, Germany; 2: IHP GmbH - Leibniz Institute for Innovative Microelectronics</p>
P23	<p>Comparison of Biotin Binding Proteins for PCR Applications</p> <p>Carsten SCHMIDT (1), Claudia LIEBSCH (1), Christian SCHRÖDER (1), Werner LEHMANN (2), Peter SCHIERACK (1), Stefan RÖDIGER (1) 1: BTU Cottbus-Senftenberg, Germany; 2: Attomol GmbH, Germany</p>
P24	<p>Blister-Actuated Laser Induced Forward Transfer as a novel approach for immobilisation of bio-active detection materials</p> <p>Lars HECHT (1), Korbinian RAGER (1), Patricia WEBER (2), Andreas DIETZEL (1) 1: Technische Universität Braunschweig, Germany; 2: Eberhard Karls Universität Tübingen, Germany</p>
P25	<p>Layered spray-coated nanostructured and enzyme modified electrodes for utilisation in self-powered biosensor units</p> <p>Tim BOBROWSKI, Sabine ALSAUB, Kirill SLOZBERG, Adrian RUFF, Wolfgang SCHUHMANN Ruhr-Universität Bochum, Germany</p>
P26	<p>From insights into the potential-pulse assisted surface modification to fast and reproducible multi-probe DNA chip preparation</p> <p>Daliborka JAMBREC (1), Yasin Uğur KAYRAN (1), Felipe CONZUELO (1), Arturo ESTRADA-VARGAS (2), Wolfgang SCHUHMANN (1) 1: Ruhr University Bochum, Germany; 2: Universidad de Guadalajara, México</p>
P27	<p>Carbon nanoparticles as colorimetric labels in on-chip immunoassays</p> <p>Leena MATTSSON, Selma GOGALIC, Sara DOPPLER, Ursula SAUER, Claudia PREININGER AIT Austrian Institute of Technology, Austria</p>
P28	<p>SERS characterization of metal ions-induced dimerization of p-Aminothiophenol on gold nanoparticles</p> <p>Zhiyang ZHANG (1,2), Virginia MERK (1) Ulrich PANNE (1,2), Merwe BUURMAN (2), Janina KNEIPP (1,2) 1: Humboldt-Universität zu Berlin, Germany; 2: BAM Federal Institute for Materials Research and Testing, Germany</p>

P29	DNA immobilization strategy and hybridization kinetic measurement on gold SPRI sensorchip László Ferenc SIMON, E. Róbert GYURCSÁNYI Budapest University of Technology and Economics, Hungary
P30	Peptide-modified nanoporous gold membranes for potentiometric sensing of copper(II) ions Soma PAPP, Róbert E. GYURCSÁNYI Budapest University of Technology, Hungary
P31	High-throughput R2R production of disposable, low-cost electrodes for EIS, biosensors and electrochemical immunoassays Thorsten KNOLL (1), Nenad GAJOVIC-EICHELMANN (2), Thomas VELTEN (1) 1: Fraunhofer IBMT, Germany; 2: Fraunhofer IZI-BB, Germany
P32	UV/Vis-Spectroelectrochemical Investigation of Cellobiose Dehydrogenases (CDHs) from different ascomycetes Vogt STEPHAN, Gilbert NÖLL University of Siegen, Germany
P33	Batteryless pH and Lactate sensing Salzitsa ANASTASOVA, Henry IP, Guang-Zhong YANG Imperial College, United Kingdom
P34	Development of a phosphorescence sensor based on surface molecularly imprinted Mn-doped ZnS quantum dots for selective recognition of cefdinir Hasan BASAN, Hüma YILMAZ University of Gazi Faculty of Pharmacy, Turkey
P35	Paper-based detection of C-reactive protein for point-of-care diagnostics Jennifer Tabea ADAM, Patricia WEBER, Günter GAUGLITZ Eberhard Karls Universität Tübingen, Germany
P36	Responsive polymer electrodes – Influence of temperature, pH and peptide binding Artur FANDRICH (1), Daniel SCHÄFER (1), E. WISCHERHOFF (2), B. SCHULZ (3), A. LASCHEWSKY (2), F. LISDAT (1) 1: Technical University of Applied Sciences Wildau, Germany; 2: Fraunhofer Institute for Applied Polymer Research, Germany; 3: University of Potsdam, Germany
P37	Synthesis of Xylitol-stabilized gold nanoparticles: a quantitative and sensitive method for xylitol detection in oral fluid by means of colorimetric assay Simona SCARANO, Maria MINUNNI University of Florence, Italy
P38	Hyperspectral imaging of plasmon resonances for biosensing David ZOPF, Jacqueline JATSCHKA, Sophie THAMM, André DATHE, Andrea CSÁKI, Wolfgang FRITZSCHE, Ondrej STRANIK Leibniz Institute of Photonic Technology, Germany
P39	Introduction to wide field surface plasmon microscopy of nano- and microparticles: features benchmarking, limitations, and bioanalytical applications Shavkat NIZAMOV, Vitali SCHERBAHN, Vladimir MIRSKY Brandenburgische Technische Universität Cottbus - Senftenberg, Germany
P40	A piezoelectric single spot cell printing technique in the picoliter range for different mammalian cell types Michelle BIERMANN (1), Christian WARMT (2), Jörg HENKEL (2), Jacqueline FRANKE (2), Frank BIER (2) 1: University of Applied Science, Berlin, Germany; 2: Fraunhofer Institute for Cell Therapy and Immunology IZI, Branch Bioanalysis and Bioprocesses (IZI-BB), Germany

P41	<p>Application of scanning photoelectrochemical microscopy for the characterization of photosynthetic enzyme complexes</p> <p>Fangyuan ZHAO (1), Felipe CONZUELO (1), Volker HARTMANN (2), Huaiguang LI (3), Marc M. NOWACZYK (2), Matthias RÖGNER (2), Nicolas PLUMERÉ (3), Wolfgang LUBITZ (4), Wolfgang SCHUHMANN (1)</p> <p>1: Ruhr-Universität Bochum, Germany; 2: Ruhr-Universität Bochum, Germany; 3: Ruhr-Universität Bochum, Germany; 4: Max Planck Institut für Chemische Energiekonversion, Germany</p>
P42	<p>Development of microarray-based assays for the detection of circular RNAs in clinical research</p> <p>Christian WARMT (1), Henry MEMCZAK (2), Sebastian MEMCZAK (3), Jörg HENKEL (1), Nikolaus RAJEWSKY (3), Frank BIER (1,2)</p> <p>1: Fraunhofer IZI-BB, Germany; 2: University of Potsdam, Germany; 3: Max Delbrück Center for Molecular Medicine, Germany</p>
P43	<p>Dye-stained lifetime-encoded polymer microbeads for time-resolved flow cytometry application</p> <p>Daniel KAGE (1), Katrin HOFFMANN (1), Marc WITTKAMP (2), Jens AMESKAMP (2), Wolfgang GÖHDE (2), Thomas THIELE (3), Uwe SCHEDLER (3), Ute RESCH-GENGER (1)</p> <p>1: Bundesanstalt für Materialforschung und -prüfung (BAM), Germany; 2: Quantum Analysis GmbH, Germany; 3: PolyAn GmbH, Germany</p>
P44	<p>Highly-integrated Lab-on-a-chip System for Multiparameter Analysis</p> <p>Harald PETER, Julia WIENKE, Frank F. BIER</p> <p>Fraunhofer Institute for Cell Therapy and Immunology, Branch Bioanalytics and Bioprocesses (IZI-BB), Germany</p>
P45	<p>Lab-on-a-chip proteomic assays for psychiatric disorders</p> <p>Harald PETER (1), Julia WIENKE (1), Paul C GUEST (2), Nikitas BISTOLAS (1), Frank F. BIER (1)</p> <p>1: Fraunhofer Institute for Cell Therapy and Immunology, Branch Bioanalytics and Bioprocesses (IZI-BB), Germany; 2: University of Campinas, Brazil</p>
P46	<p>Multifunction paper-based analytical device for bacterial cultivation and determination of nitrite</p> <p>Julaluk NOIPHUNG (1), Wanida LAIWATTANAPAISAL (2)</p> <p>1: Chulalongkorn University, Thailand; 2: Chulalongkorn University, Thailand</p>
P47	<p>Stability monitoring of casein layer on hydrophilic SiO₂ surface using Quartz Crystal Microbalance with Dissipation</p> <p>Marek TATARKO (1), Ilia IVANOV (2), Tibor HIANIK (1)</p> <p>1: Comenius University in Bratislava, Slovak Republic; 2: Oak Ridge National Laboratory, USA</p>
P48	<p>Polyelectrolyte microcapsules based sandwich assay: A more sensitive tool to commercial beads for the detection of proteins and nucleic acids</p> <p>Sujit Kumar VERMA, Tatiana A KOLESNIKOVA, Sebastian SPRINGER</p> <p>Jacobs University Bremen, Germany</p>

Poster session 2 – Wednesday, March 22**Authors present 1:30-2:30pm**

P49	Piezoelectric immunosensing sensing for detecting of the Alzheimer Tau protein biomarker Dujuan LI (1,2), Samuele LISI (2), Simona SCARANO (2), Maria MINUNNI (2) 1: Hangzhou Dianzi University, China; 2: Università degli Studi di Firenze, Italy
P50	A wash-free, multiplex microbead assay for determination of emerging bioactive compounds in wastewater Peter CARL (1,2), Dominik SARMA (1,2), Knut RURACK (1), Rudolf J. SCHNEIDER (1,3) 1: Bundesanstalt für Materialforschung und –prüfung (BAM), Germany; 2: Humboldt Universität zu Berlin, Germany; 3: Technische Universität Berlin, Germany
P51	Liposome-based ECL Detection Strategies for Microfluidic Biosensors Christian GRIESCHE, Michael MAYER, Axel DUERKOP, Antje J. BAEUMNER University of Regensburg, Germany
P52	Therapeutic drug monitoring of immunosuppressants in a novel laser induced fluorescence based miniaturized setup Urs HILBIG (1), Kathrin FREUDENBERGER (1), Marcel BERNER (2), Markus SCHUBERT (2), Julia STÄB (1), Günter GAUGLITZ (1) 1: University of Tübingen, Germany; 2: University of Stuttgart, Germany
P53	Fabrication of Biosensors Based on Chemically Modified Colloidal AFM Probes Sven DABOSS, Jing LIN, Peter KNITTEL, Christine KRANZ Ulm University, Germany
P54	Development of a quick test for screening Bisphenol A from polymer materials Anna RAYSAN, Rudolf J. SCHNEIDER Bundesanstalt für Materialforschung und -prüfung (BAM), Germany
P55	Covalent anchoring of human transferrin to carbon-encapsulated iron nanoparticles in presence of magnetic field as a way of preservation of its conformational integrity and electroactivity Agata KOWALCZYK (1), Edyta MATYSIAK-BRYNDA (1), Michal BYSTRZEJEWSKI (1), Duncan S. SUTHERLAND (2), Zbigniew STOJEK (1), Anna M. NOWICKA (1) 1: University of Warsaw, Poland; 2: iNANO, Aarhus University, Denmark
P56	Detection of diclofenac molecules by means of a plasmonic sensor substrate Nadja STEINKE (1), Marisa RIO (2), Roland WUCHRER (1), Thomas HÄRTLING (1,2) 1: Fraunhofer IKTS, Germany; 2: Technische Universität Dresden, Germany
P57	Development of multiplexed binding inhibition assays for the screening of food contaminants Konstanze GIER, Claudia PREININGER, Ursula SAUER Austrian Institute of Technology, Austria
P58	Rapid Prototyping using 3-D-Printer Technology for Development of Breath-Test-Analysers Gunther BECHER (1), Stefan DIETZE (1), Jens LEHMANN (2), Jörg HENKEL (2), Hans-Jürgen SMITH (3), Harold SMEETS (3) 1: BecherConsult, Germany; 2: Fraunhofer IZI; 3: CareFusion GmbH
P59	New application for an old concept: A disposable optical biosensor for long-term continuous glucose monitoring in bioreactors Mircea TRIC (1), Mario LEDERLE (1), Philipp WIEDEMANN (1), Stefan WOELFL (2), Tobias WERNER (1) 1: Mannheim University of Applied Sciences, Germany; 2: University of Heidelberg, Germany

P60	Study of biological barriers by electrochemistry: intestine covered electrode Grzegorz DEBOWSKI, Kinga HUSZNO, Javier SOTRES, Tautgirdas RUZGAS Malmö University, Sweden
P61	Detection of the metabolic activity of Saccharomyces cerevisiae using impedance spectroscopy Juliane POSSECKARDT (1), Christine SCHIRMER (1), Wolfgang FICHTNER (1), Michael MERTIG (1,2) 1: Kurt-Schwabe-Institut Meinsberg e.V., Germany; 2: Technische Universität Dresden, Germany.
P62	Microfluidic system for the dielectrophoretic enrichment, characterization and manipulation of suspended cells Katharin SCHIEKE (1), Danny ECHTERMEYER (1), Steffen HOWITZ (2), Dieter FRENSE (1), Dieter BECKMANN (1) 1: Institut für Bioprozess- und Analysenmesstechnik e.V., Germany; 2: GeSiM mbH, Germany
P63	Simple approach to pKA-tunable BODIPY-based fluorescent pH sensors Sebastian RADUNZ, Harald Rune TSCHICHE, Ute RESCH-GENGER BAM - Bundesanstalt für Materialforschung und -prüfung, Germany
P64	3D pyrolytic carbon microelectrodes for electrochemical sensing Suhith HEMANTH, Claudia CAVIGLIA, Yasmin Mohamed HASSAN, Jenny EMNÉUS, Stephan Sylvest KELLER DTU Nanotech, Technical University of Denmark, Denmark
P65	Integration of Radio-Frequency Permittivity Sensors into Microwell Plates for Cell Concentration Measurements Raphael Marius MGELADSE (1), Farabi Ibne JAMAL (1), Brigitte BURCKHARDT (2), Peter NEUBAUER (2), Mario BIRKHOLZ (1,2), Dietmar KISSINGER (1,3), Jan WESSEL (1) 1: IHP, Germany; 2: Technische Universität Berlin, Germany; 3: Technische Universität Berlin, Germany
P66	Improving the sensitivity of ATP microbiosensors Jing LIN (1), Oliver KUCHLER (1), Wolfgang SCHUHMANN (2), Christine KRANZ (1) 1: Ulm University, Germany; 2: Universität Bochum, Germany
P67	Development of a mobile monitoring system based on potentiometric and amperometric biosensors for evaluations in biogas processes Shahriar DANTISM (1,2), Johanna PILAS (1,4), Desiree RÖHLEN (1), Thorsten SELMER (1), Michael KEUSGEN (4), Patrick WAGNER (2), Torsten WAGNER (1,3), Michael Josef SCHÖNING (1,3) 1: FH Aachen, Germany; 2: KU Leuven, Belgium; 3: Research Centre Jülich GmbH, Germany; 4: Philipps-University MARburg, Germany
P68	Early detection of cancer diseases using DNA aptamers Alexandra POTURNAYOVA (1,2), Lenka BABELOVA (1), Maja SNEJDARKOVA (1), Monika BURIKOVA (3,1), Jozef BIZIK (3), Tibor HIANIK (2) 1: Slovak Academy of Sciences, Slovakia; 2: FMFI Comenius University, Slovakia; 3: Slovak Academy of Sciences, Slovakia
P69	An optical imaging system capable of monitoring oxygen consumption and oxygen gradients within live tumor spheroids Carina SCHMITTLEIN (1), Robert Johannes MEIER (2), Christina HUPF (1), Joachim WEGENER (1) 1: University of Regensburg, Germany; 2: PreSens GmbH, Germany
P70	Nano- and Micro-Patterns of PEG-based Hydrogels with Gold Nanoparticles for Biosensor Applications Cigdem YESILDAG, Zhenfang ZHANG, Marga Cornelia LENSEN TU Berlin, Germany

P71	<p>Multimodal, Impedance-Based Monitoring of Chemosensitivity Assays for Tumor Cells Using a Lab-on-a-Chip Platform</p> <p>Stefanie MICHAELIS (1), Michael SKIBA (1), Melanie BÜTTNER (2), Bernd BÜTTNER (2), Karl-Heinz FELLER (2), Joachim WEGENER (1)</p> <p>1: University of Regensburg, Germany; 2: Ernst-Abbe-University of Applied Sciences Jena, Germany</p>
P72	<p>Engineered bioinspired hydrogel for the real-time monitoring of cell-growth by mirosensor technology</p> <p>Anayancy OSORIO-MADRAZO (1), Gerald URBAN (1), Peter FRATZL (2), Laurent DAVID (4), Alexandra MONTEMBAULT (4), Christian GORZELANNY (3), Laurent HEUX (5), Yael POLITI (2)</p> <p>1: University of Freiburg, Germany; 2: Max Planck Institute of Colloids and Interfaces, Germany; 3: Université Claude Bernard Lyon, France; 4: University of Heidelberg, Germany; 5: Université Grenoble Alpes, France</p>
P73	<p>A novel biosensor platform for inflammation analysis - assessment of platform feasibility</p> <p>Julia METZNER (1), K. LUCKERT (1), R. MOOS (2), M. HÄMMERLE (2)</p> <p>1: University Bayreuth, Germany; 2: University of Bayreuth, Germany</p>
P74	<p>Heme-peptides on Transparent Electrodes</p> <p>Bettina NEUMANN (1), Patrycja KIELB (2), Anna FISCHER (3), Arne THOMAS (2), Matthias SSHWALBE (4), Frieder W. SCHELLER (1), Inez M. WEIDINGER (2), Ulla WOLLENBERGER (1)</p> <p>1: University Potsdam, Germany; 2: Technical University Berlin, Germany; 3: University Freiburg, Germany; 4: Humboldt University Berlin, Germany</p>
P75	<p>Integration of platelet membrane antigens into nanodiscs for the detection of antibodies associated with autoimmune thrombocytopenia</p> <p>Stefanie MAK, Ruoyu SUN, Michael SCHMALENBERG, Peter B. LUPPA</p> <p>Klinikum rechts der Isar der TU München, Germany</p>
P76	<p>Optimizing specificity and reproducibility of a biomimetic SPR-biosensor for acquired anti-factor VIII</p> <p>Christine SCHÖNMANN (1), Michael SCHMALENBERG (1), Peter LUPPA (1), Michael SPANNAGL (2)</p> <p>1: Klinikum rechts der Isar, TUM, Germany; 2: Klinikum der Universität München, LMU, Germany</p>
P77	<p>An aptamer-based biosensor for doxorubicin by means of electrochemical impedance spectroscopy</p> <p>Nicole BAHNER (1), Marcus MENGER (2), Katharin SCHIEKE (1), Peggy REICH (1), Dieter FRENSE (1), Dieter BECKMANN (1)</p> <p>1: Institut für Bioprocess- und Analysenmesstechnik e.V., Germany; 2: Fraunhofer Institute for Cell Therapy and Immunology (IZI-BB)</p>
P78	<p>Electrochemical biosensor based on CYP17A1 for screening of potential anticancer drugs</p> <p>Rami MASAMREKH (1,2), Alexey KUZIKOV (1,2), Vladimir KOSTIN (1), Maria ZAVIALOVA (1), Alexander MISHARIN (1), Alexander ARCHAKOV (1,2), Victoria SHUMYANTSEVA (1,2)</p> <p>1: Institute of Biomedical Chemistry (IBMC), Russian Federation; 2: Pirogov Russian National Research Medical University (RNRMU), Russian Federation</p>
P79	<p>First results and challenges for a transferrin MIP</p> <p>Xiaorong ZHANG (1), Aysu YARMAN (2), Katharina JETZSCHMANN (1), Ulla WOLLENBERGER (1), Frieder SCHELLER (1)</p> <p>1: Universitaet Potsdam, Germany; 2: Türkisch-Deutsche Universität, Türkei</p>
P80	<p>Molecularly-imprinted polymer on paper-based scaffold for cotinine microextraction</p> <p>Nutchal LARPANT, Yaneenart SUWANWONG, Wanida LAIWATTANAPAISAL</p> <p>Chulalongkorn University, Thailand</p>

P81	Binding of Staphylococcus aureus cells to aptamer-modified gold electrodes measured with impedance Peggy REICH, Dieter BECKMANN Institut für Bioprocess- und Analysenmesstechnik e.V. Heilbad Heiligenstadt, Germany
P82	Miniaturisation of an Electrochemical Peptide-Based Biosensor for the Detection of Trypsin Ahmet UCAR (1), Eva GONZÁLEZ-FERNÁNDEZ (2), Matteo STADERINI (2), Nicolaos AVLONITIS (2), Alan F. MURRAY (1), Andrew R. MOUNT (2), Mark BRADLEY (2) 1,2: The University of Edinburgh, United Kingdom
P83	Molecularly imprinted polymer chemosensor for selective determination of N-nitroso-L-proline in food products of animal origin Patrycja LACH (1), Piyush Sindhu SHARMA (1), Karolina GOLEBIEWSKA (1), Maciej CIEPLAK (1), Francis D'SOUZA (2), Włodzimierz KUTNER (1,3) 1: Polish Academy of Sciences, Poland; 2: University of North Texas, USA; 3: Cardinal Stefan Wyszyński University in Warsaw, Poland
P84	A New Flow Cell for Pencil Graphite Electrode and Its Using Biosensing of Glucose in FIA System Didem GIRAY DILGIN (1), Yusuf DILGIN (2) 1,2: Çanakkale Onsekiz Mart University, Turkey
P85	Flow Injection Analysis of H₂O₂ Using Pd Nanoparticles Modified Pencil Graphite Electrode Serkan KARAKAYA, Yusuf DILGIN Çanakkale Onsekiz Mart University, Turkey
P86	Development of acoustic sensor for detection chymotrypsin activity at surfaces Ivan PIOVARCI (1), Alexandra POTURNAYOVA (1,2), Janos NAGY (3), Reka SAROK (3), Attila HUCKER (3), Katalin SZABO (3), Tibor HIANIK (1) 1: FMFI UK, Slovakia; 2, Slovak Academy of Sciences, Slovakia 3: Hungarian Dairy Research Institute, Hungary
P87	Non-enzymatic ethanol sensor based on a nanostructured disposable screen-printed electrode Sandro HAUG (1), P. Fanjul BOLADO (2), M.M.P.S. NEVES (2), M. B. GONZÁLEZ-GARCÍA (2), D. HERNÁNDEZ SANTOS (2) 1: Deutsche Metrohm GmbH & Co. KG, Germany; 2 DropSens, S.L., Spain
P88	Development of artificial receptor for computationally simulated disease biomarkers for sensing application Z. ALTINTAS (1), A. TAKIDEN (1), B. SCHMID (1), M.A. MROGINSKI (1), R. SCHOMÄCKER (1), P. HILDEBRANDT (1), R. SUSSMUTH (1), U. WOLLENBERGER (2), F.W. SCHELLER (2) 1: Technical University of Berlin, Germany; 2: University of Potsdam, Germany
P89	Virtual sensor array consisting of a single sensor element with variable affinity: an application for analysis of fish freshness Yulia EFREMENKO, Vladimir M. MIRSKY Brandenburgische Technische Universität Cottbus-Senftenberg
P90	Lab-on-a-chip based on electrochemical biosensors for malolactic fermentation monitoring of red wines Pablo GIMÉNEZ-GÓMEZ (1), Manuel GUTIÉRREZ-CAPITÁN (1), Fina CAPDEVILA (2), Anna PUIG-PUJOL (2), César FERNÁNDEZ-SÁNCHEZ (1), Cecilia JIMÉNEZ-JORQUERA (1) 1: Institute of Microelectronics of Barcelona IMB-CNM, Spain; 2: Institut Català de la Vinya i el Vi (IRTA-INCAVI), Spain
P91	Electrochemical biosensors based on DNA and DNA analogues Agnieszka BALA (1), Łukasz GÓRSKI (1), Elżbieta MALINOWSKA (1,2) 1: Warsaw University of Technology, Warsaw, Poland; 2: CEZAMAT PW, Warsaw, Poland