Scientific Program

7TH EURO BIOSSENSORS AND BIOELECTRONICS CONFERENCE

JULY 10-11, 2017 | BERLIN, GERMANY
Day 1 | July 10, 2017

08:30-09:30 Registrations

Sylt 1-2

09:30-09:55 Opening Ceremony

Keynote Forum

09:55-10:00 Introduction

10:00-10:40 Title: A new optical high-resolution three-axis sensor for navigation of medical devices

Christian Baumgartner, Graz University of Technology, Austria

Networking & Refreshment Break 10:40-11:00 @ Sylt Foyer

11:00-11:40 Title: Establishing gene expression for early and high-throughput prediction of the hematological acute radiation syndrome

Michael Abend, Bundeswehr Institute of Radiobiology, Germany

11:40-12:20 Title: New ultrasensitive BDD-biosensor for influenza virus detection

Dawid Nidzworski, SensDx Ltd, Poland

Group Photo & Panel Discussion 12:20-12:30

Sessions: Biosensors | Bioelectronics | Types of Biosensors | Biosensing Technologies | Nanotechnology in Biosensors | Enzymatic Biosensors | Environmental Biosensors

Session Chair: Hiroyuki Takei, Toyo University, Japan
Session Co-chair: Chirasree Roy Chaudhuri, Indian Institute of Engineering Science and Technology, India

Session Introduction

12:30-13:00 Title: Multi-pores; controlling and measuring the flow of charged species through tunable nanopores producing a rapid, multiplex assay

Mark Platt, Loughborough University, UK

Lunch Break 13:00-13:45 @ Restaurant Rienacker

13:45-14:15 Title: Novel approach for multiplex detection of antibiotic residues in milk by means of electrochemical biosensors

Valérie Gaudin, ANSES-Laboratory of Fougères, France

14:15-14:45 Title: Three types of nanostructure platforms for plasmonics detection of target molecules on a solid surface or in a complex medium

Hiroyuki Takei, Toyo University, Japan

14:45-15:15 Title: An electrical model for silicon-nanowire electrodes in intracellular signal measurement in biological environments

Alex Hariz, University of South Australia, Australia

Networking & Refreshment Break 15:15-15:30 @ Sylt Foyer

15:30-16:00 Title: Point-of-care nanosensor applied to diagnosis of high morbimortality diseases

Rosa F Dutra, Federal University of Pernambuco, Brazil

16:00-16:30 Title: Water bodies pollutants screening by nanostructured optical biosensors

Giorgi Shtenberg, Agricultural Research Organization, Volcani Center, Israel

16:30-17:00 Title: Closed solid state nanopore array - A unique device for ultrasensitive label free impedance biosensors

Chirasree Roy Chaudhuri, Indian Institute of Engineering Science and Technology (IIEST), India
Panel Discussion
Day 2 | July 11, 2017

Sylt 1-2

Keynote Forum

09:00-09:40
Title: Microfluidic systems for pharma technology - the manipulation of cells, droplets and particles
Andreas Dietzel, Center for Pharmaceutical Engineering (PVZ), Germany

09:40-10:20
Title: Microfluidic chip ionization source coupling with mass spectrometry
Xiaohao Wang, Tsinghua-Berkeley Shenzhen Institute, China

Session Chair: Andreas Dietzel, Center for Pharmaceutical Engineering (PVZ), Germany
Session Co-chair: Sarmiza Elena Stanca, Leibniz Institute of Photonic Technology, Germany

Session Introduction

10:20-10:50
Title: Recent and upcoming potential spacecraft missions requiring biosensor technologies: Current examples, what are we looking for and remaining challenges
Ike Chi, California Institute of Technology, USA

Networking & Refreshment Break 10:50-11:10 @ Sylt Foyer

11:10-11:40
Title: Secure accuracy at increased precision of AFM-probe integrated biosensor
Sarmiza Elena Stanca, Leibniz Institute of Photonic Technology, Germany

11:40-12:10
Title: Detection of gold nanoparticles aggregation growth induced by nucleic acid through laser scanning confocal microscopy
Ramla Gary, University of Calabria, Italy

12:10-12:40
Title: Detection of pH/H₂O₂ and prostate/breast cancer biomarker by using nickel-oxide/iridium-oxide sensing membrane in electrolyte-insulator-semiconductor structure
Siddheswar Maikap, Chang Gung University, Taiwan

12:40-13:10
Title: Bi₁₂GeO₂₀ Faraday crystal application in magnetic field measurement
Slobodan J Petricevic, University of Belgrade, Serbia

Lunch Break 13:10-14:00 @ Restaurant Rienacker

Poster Presentations 14:00-14:45

EBB 01
Title: Palladium nanostructured single carbon fiber electrodes for detection of early-onset sepsis and oxidative stress
Aaron McConville, Ulster University, UK

EBB 02
Title: Towards practical bacterial biosensor assays for on-site applications
Elizabeth Salvo, McMaster University, Canada

EBB 03
Title: Effect of thermal oxidation on the performance of nanostructured porous Si optical biosensors
Giorgi Shtenberg, Agricultural Research Organization, Volcani Center, Israel

EBB 04
Title: Stabilization of gold and silver nanoparticles for LSPR sensing operating in both visible and near-IR regimes in high salt concentration environments
H Haraguchi, Toyo University, Japan

EBB 05
Title: Development of miniaturized uniaxial cell stretching device
Jaewon Kim, Sungkyunkwan University, South Korea

EBB 06
Title: A novel capacitive biosensor for the detection of small molecule S-nitrosothiols
James Seckler, Case Western Reserve University, USA

EBB 07
Title: Development of an Optimal Bio-Sensor with quantitative Real-time Monitoring of Microbial Hazards in Water Environment
Yoorae Noh, Yonsei University, Korea

EBB 08
Title: Yeast whole cell sensors for the detection of acetic acid in biogas production
Katja Hahne, Technische Universität Dresden, Germany
Title: Butterfly wing scales as a model template for SERS applications
K Nagata, Toyo University, Japan

Title: Cu²⁺ detection realized with silicon nanowire ion-sensitive field effect transistor based biosensor
Olena Synhaivska, University of Basel, Basel, Switzerland

Title: Synthesis of quantum dots conjugates with antibodies for immunochromatographic analysis
Ibragimova Sagila Aladdinovna, State University Dubna, Russia

Title: Surface modification of a microfluidic channel by a multiple metal layer coating method
Young Ho Kim, Daegu-Gyeongbuk Medical Innovation Foundation, South Korea

**Young Researchers Forum**

**14:45-15:05**
Title: Detection of β-thalassemia IVSI-110 mutation by using piezoelectric biosensor for non-invasive prenatal diagnosis
Umut Kokbas, Cukurova University, Turkey

**15:05-15:25**
Title: Application of twin-working electrode cell in characterizing biological electron mediators
Mahamudul Hassan, Murdoch University, Australia

**Closing Ceremony**

Networking & Refreshment Break 15:45-16:00 @ Sylt Foyer