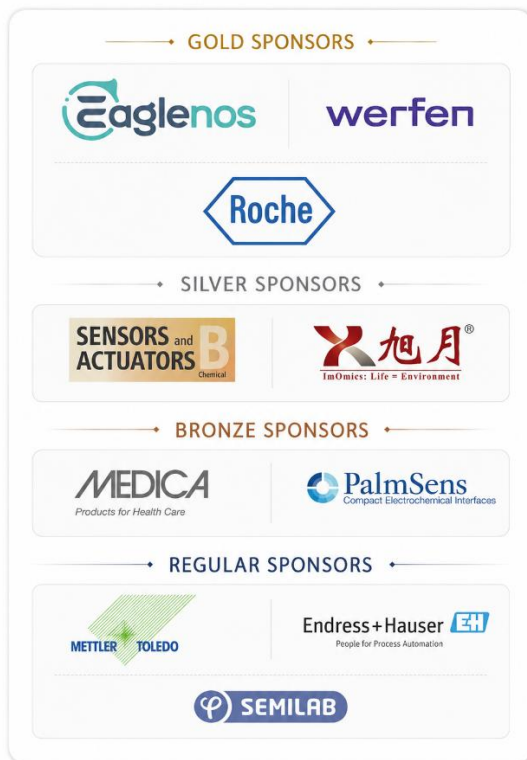


matrafured26 PROGRAM



Sunday evening, June 14

14.00- Registration

16.00-18.00 Coffee

18.00-18.15 Opening address

18.15-19.00 Csaba Szabó

University of Fribourg, Fribourg, Switzerland

The Reproducibility Crisis in Biomedical Research

19.30- Dinner (Grill party)

Monday morning, June 15

Chair: Eric Bakker

9.00–9.30	Joseph Wang University California San Diego (UCSD), La Jolla, CA, USA <i>Chem-Phys Hybrid Multimodal Wearable Sensor Systems</i>
9.30–10.00	Wei Gao California Institute of Technology, Pasadena, CA, USA <i>Body-Interfaced Biosensors</i>
10.00 –10.20	Muhammad A. Alam Purdue University, West Lafayette, Indiana, USA <i>Reliable Sensing with “Unreliable” Wearable Amperometric Sensors: Reassessing Michaelis-Menten Approximations and using EKG-analog, Physiological Inverse-Modeling to Monitor Organ Degradation</i>
10.20-10.40	Arkady A. Karyakin M.V. Lomonosov Moscow State University, Moscow, Russia. <i>Advanced (Bio)Sensing and Sampling for Noninvasive Diagnostics</i>
10.40–11.10	Coffee Break

Chair: Philippe Bühlmann

11.10–11.40	Maria Cuartero KTH Royal Institute of Technology, Stockholm, Sweden <i>Charge Transfer Networks for Electrochemical Ion Sensing and Nanoscale Actuation</i>
11.40–12.10	Maral Mousavi University of Southern California, Los Angeles, CA, USA <i>Wearable and Point-of-care Devices for Calibration-free Potentiometric Analysis of Ions in Biological Fluids</i>
12.10 –12.30	Hnin Yin Yin Nyein The Hong Kong University of Science and Technology, Clear Water Bay, Hong Kong SAR, China. <i>Beyond the Central Lab: Decentralizing Healthcare with Microfluidic Wearable Biosensors</i>
12.40	Lunch

Monday afternoon, June 15

15.30–16.00	Coffee
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Chair: Lisa Hall

16.00–16.30	Róbert Gyurcsányi Budapest University of Technology and Economics, Budapest, Hungary <i>Potentiometric Sensing with Ion-Exchanger Membranes: Modalities and Applications</i>
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16.30–17.00	Philippe Bühlmann University of Minnesota, Minneapolis, MN, USA <i>Solid-Contact ISEs: Ionophore Adsorption to High-Surface-Area Carbons</i>
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17.00–17.20	Tom Lindfors Åbo Akademi University, Turku/Åbo, Finland <i>Linseed Oil as a Sustainable Membrane Material for Ion-Selective Electrodes</i>
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17.20–17.30	Break
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Chair: Daniel Citterio

17.30–18.00	Eric Bakker University of Geneva, Geneva, Switzerland <i>Ion Imaging with Membrane Electrodes</i>
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18.00–18.30	Xiaojiang Xie The Hong Kong University of Science and Technology, Clear Water Bay, Hong Kong <i>Developing Novel Sensor Interfaces for Reliable Ion-Selective Chemical Sensing and Imaging</i>
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18.30–18.50	Renjie Wang Florida Atlantic University, Boca Raton, FL, USA <i>Ionophore-based Ion Selective SERS Sensor and Its Sensing Mechanism</i>
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18.50	Dinner
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20.00–22.00	Poster Session
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Tuesday morning, June 16

Chair: Jason Davis

9.00–9.30	Justin Gooding University of New South Wales, Sydney, Australia <i>Diagnostic Tools for Understanding the Liquid Biopsy: From 3D Cell Culture to Detecting Single Molecules</i>
9.30–10.00	Elizabeth (Lisa) A. H. Hall University of Cambridge, Cambridge, UK <i>Engineering Proteins for Structure-Function Materials in self-reporting Loop Mediated Isothermal Amplification (LAMP) of Nucleic Acids</i>
10.00–10.20	Miyuki Tabata Tokyo University of Agriculture and Technology, Tokyo, Japan <i>A Miniaturized Solid-State Irox/AgCl Electrode System for LAMP-Based Quantitative Nucleic Acid Detection</i>
10.20–10.40	Toshiya Sakata The University of Tokyo, Tokyo, Japan <i>Bioelectrical Interfaces for Field-Effect Transistor-Based Biosensors</i>
10.40–11.10	Coffee Break

Chair: Wei Qin

11.10–11.40	Xuwei Wang Virginia Commonwealth University, Richmond, Virginia, USA <i>Oil-Mediated Triphasic Transport Enables Matrix Effect-Free Optical Aptamer Sensing</i>
11.40–12.10	Daniel Citterio Keio University, Yokohama, Japan <i>Colorimetric Microfluidic Paper-Based Analytical Devices for Barcode-Enabled Semiquantitative Signal Readout</i>
12.10–12.30	Andrey Kalinichev Aarhus University and Aarhus Institute of Advanced Studies, Aarhus, C, Denmark <i>Rethinking Optical Chemical Imaging: New Platforms and Readout Strategies for Complex Systems</i>
12.40	Lunch

Tuesday afternoon, June 16

15.30–16.00 **Coffee**

Chair: Daniel Mandler

16.00–16.30 **Jason Davis**

University of Oxford, Oxford, UK

Capacitative and kinetic transduction of molecular recognition

16.30–17.00 **Jeffrey E. Dick**

Purdue University, West Lafayette, IN, USA

How Extending Light Emission in Space and Time Transforms

Electrochemiluminescence as a Powerful Chemical Imaging Platform

17.00–17.10 **Break**

Chair: Justin Gooding

17.10–17.40 **Francesco Ricci**

University of Rome Tor Vergata, Rome, Italy

DNA-based ultrasensitive immunoassays

17.40–18.10 **Philippe Dauphin-Ducharme**

Université de Sherbrook, Quebec, Canada

Exploiting Aptamer Cross-Reactivity for Selective Monitoring in an Electrochemical Biosensor

18.10–18.30 **Dan Bizotto**

University of British Columbia, Vancouver, BC, Canada

Characterizing the Heterogeneity in Redox-Active DNA SAMs Using EIS and in-situ Fluorescence Imaging

18.50 **Dinner**

20.00–22.00 **Poster session**

Wednesday morning, June 17

Chair: Xuewei Wang

9.00–9.30	Wei Qin Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences, Yantai, P. R. China <i>Leakage-Free Polymeric Membrane Ion-Selective Electrodes</i>
9.30–9.50	Soma Papp Budapest University of Technology and Economics, Budapest, Hungary <i>Redox-Modified Laser-Induced Graphene Electrodes for Calibration-Free Sensing in Sweat</i>
9.50–10.10	Dipankar Koley Oregon State University, Corvallis, OR, USA <i>Probing the “Invisible Zone”: SECM, pH, and Impedance Microsensor for Biofilm--Surface Interactions</i>
10.10-10.30	Águeda Molinero-Fernández UCAM-SENS, Universidad Católica San Antonio de Murcia,, Murcia Spain <i>Depth-Resolved Potentiometric Microneedle pH Sensing in Human Organs: Toward Surgical and Transplant Applications</i>
10.30–11.00	Coffee Break

Chair: Philippe Dauphin-Ducharme

11.00-11.20	Nikolai Tiuftiakov University of Geneva, Geneva, Switzerland <i>Optimal Salt Lipophilicity for Reference Electrodes based on Organic Electrolytes</i>
11.20–11.40	Maria Peshkova Saint Petersburg State University, Saint Petersburg, Russia <i>Partition Coefficients of Membrane Electrolytes: Lapis Angularis for Developing Reference Electrodes and Single Ion Optodes</i>
11.40-12.00	Lajos Höfler Budapest University of Technology and Economics, Budapest, Hungary <i>Understanding Reference Electrode Dynamics: Insights from Simplified Nernst-Planck Model Accelerated by Residual Neural Networks</i>
12:00-12.20	Sohrab Mansouri Werfen, Bedford MA, USA <i>Review of Electrochemical Sensor Miniaturization Technologies</i>
12.40	Lunch
14.15-22.30	Banquet

Thursday morning, June 18

Chair: Maral Mousavi

10.00–10.20	Fred Lisdat Technical University of Applied Sciences Wildau, Wildau, Germany <i>Electrode Materials for Photobiovoltaic Applications Bottlenecks and Recent Achievements</i>
10.20–10.40	László Simon Budapest University of Technology and Economics, Budapest, Hungary <i>Surface Wave-Based Multiparametric Biosensors for Comprehensive Analysis of Biomolecules</i>
10.40–11.10	Coffee Break

Chair: Jeffrey Dick

11.10–11.40	Daniel Mandler the Hebrew University of Jerusalem, Jerusalem, Israel <i>Increasing the Sensitivity of Electrochemical Detection by the Nanoparticle-Imprinted Matrix Approach</i>
11.40–12.10	Peter Lieberzeit University of Vienna, Vienna, Austria <i>Molecularly Imprinted Polymers for Sensing: Free vs. Controlled Radical Polymerization</i>
12.10–12.30	Gergely Solymosi Budapest University of Technology and Economics, Budapest, Hungary <i>Absence of Hofmeister Selectivity in Hydrophobic Ion-Exchange Nanopores</i>
12.40	Lunch

Thursday afternoon, June 18

15.30–16.00	Coffee
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Chair: Peter Lieberzeit

16.00–16.20	Todd R. Martz Scripps Institution of Oceanography, University of California San Diego, La Jolla, CA, USA <i>Reinvestigation of the Response and Surface Chemistry of the Iron Chalcogenide Glass Ion-Selective Electrode in Seawater</i>
16.20–16.40	Daniel Rojas UCAM-SENS, Universidad Católica San Antonio de Murcia, Murcia, Spain <i>Towards the Digitalization of Potentiometric Sensor Fabrication: A Roadmap for Automated, Monolithic, and High-Resolution Sensors</i>
16.40–17.00	Gregorio Laucirica GSI Helmholtzzentrum für Schwerionenforschung GmbH, Darmstadt, Germany <i>Open Carbon Nanopipettes as Nanoelectrochemical Probes: From Thin-Layer Coulometry to Iontronic Signals</i>
17.00–17.20	Hang Ren The University of Texas at Austin, Austin, Texas, USA <i>Predictive Nanopipette Chemical Delivery for Quantitative Nanoscale Electrochemical Measurements</i>
17.20–17.40	Closing
18.50	Dinner
20.00–22.00	Poster Session