	Posters Monday
1	**Direct Covalent Attachment of Ion-Selective PVC Membrane Onto the Substrate for Improved Characteristics** Yupu Zhang, Tara Forrest, Eric Bakker* Department of Inorganic and Analytical Chemistry, University of Geneva, Quai Ernest-Ansermet 30, CH-1211 Geneva, Switzerland
2	**Self-Powered Smart Potentiometric Sensor with Relational Operation Function** Yaotian Wu and Eric Bakker Department of Inorganic and Analytical Chemistry, University of Geneva, Quai Ernest-Ansermet 30, CH-1211 Geneva, Switzerland.
3	**Efficient Thiol-Click Reaction for the Study and Application of an Anion-Selective Electrode and pH Electrode** Xinqi Luo, Xiaojiang Xie* Department of Chemistry, Southern University of Science and Technology, Shenzhen, 518055, China. 12232767@mail.sustech.edu.cn
4	**Simple systems for electrochemical ion sensing** Martyna Durka, Elżbieta Jarosińska Emilia Witkowska Nery Institute of Physical Chemistry Polish Academy of Sciences, Warsaw, Poland ewitkowskanery@ichf.edu.pl
5	**Wafer scale fabrication of miniaturized ion sensors for healthcare applications** Van Anh T. Dam, Marcel A.G. Zevenbergen Holst Centre / imec, 5656 AE Eindhoven, The Netherlands Van.Anh.Dam@imec.nl
6	**Ion-exchange and Lipophilicity Limitations of Ionic Liquid Reference Electrodes** Nikolai Yu. Tiuftiakov, Elena Zdrachek and Eric Bakker Department of Inorganic and Analytical Chemistry, University of Geneva, Quai Ernest-Ansermet 30, CH-1211, Geneva, Switzerland
7	**Tailoring the response of polymeric optical sensors for individual ionic activities by varying the composition of their sensing layer** Nadezhda V. Pokhvishcheva, Darya A. Chetverikova, Viktor G. Nosov, Maria A. Peshkova Saint Petersburg State University, Institute of Chemistry, St. Petersburg, Russia n.v.pokhvishcheva@gmail.com; n.pokhvishcheva@spbu.ru
8	**Constant Potential Coulometry for Ion-Selective Electrodes at Zero Current** Robin Nussbaum, Stéphane Jeanneret, Eric Bakker Department of Inorganic and Analytical Chemistry, University of Geneva Robin.Nussbaum@unige.ch
9	**Lipophilicity Criteria for Ionic Liquids Used in Liquid Junction Free Reference Electrodes** Andrei D. Navakouski, Vladimir V. Egorov Belarusian State University, Chemistry Department, 220030, Minsk, Republic of Belarus Navakouski@bsu.by

10	**Comparative study of potassium ion-selective electrodes with a solid contact. Temperature resistance of electrodes depending on the type of solid contact material.** Klaudia Morawska, Cecylia Wardak, Hubert Wólczyński Department of Analytical Chemistry, Institute of Chemical Sciences, Faculty of Chemistry, Maria Curie-Sklodowska University, Maria Curie-Sklodowska Sq. 3, 20-031 Lublin, Poland, klaudia.morawska@mail.umcs.pl
11	**Transfer of Hydrophobic Ions Between Immiscible Liquids at the Three-Phase Junction Using a Squaramide Ion Pair Receptor** Julia Maciejewska-Komorowska[a], Karolina Peret[a], Jan Romański[b], Marcin Karbarz[b], Martin Jönsson-Niedziółka[a] [a] Institute of Physical Chemistry, Polish Academy of Sciences, Kasprzaka 44/52, 01-224 Warsaw, Poland [b] Faculty of Chemistry, University of Warsaw, Pasteura 1, 02-093 Warsaw, Poland martinj@ichf.edu.pl
12	**Towards Mass-Production of Ion-selective Electrodes: Optimization of Membrane Composition and Novel Water Layer Stability Testing** Sara Krivačić[a,b], Petar Kassal[a], Eric Bakker[b] [a]Department of General and Inorganic Chemistry, University of Zagreb, Faculty of Chemical Engineering and Technology, Trg Marka Marulića 19, HR-10000 Zagreb. [b]Department of Inorganic and Analytical Chemistry, University of Geneva, Quai Ernest-Ansermet 30, 1221 Genève, Switzerland. skrivacic@fkit.unizg.hr
13	**A simple and sensitive method for Ga(III) determination using a friendly electrochemical sensor** Edyta Wlazłowska*, Małgorzata Grabarczyk, Marzena Fiałek Department of Analytical Chemistry, Institute of Chemical Sciences, Faculty of Chemistry, Maria Curie–Skłodowska University, Maria Curie–Skłodowska Sq. 3, 20–031 Lublin, Poland * Corresponding author: edyta.wlazlowska@mail.umcs.pl
14	**Towards Rational Design of Ion-Selective Electrode Arrays for Environmental Applications: Is Bigger Really Better?** M. Ben Eck, Amy V. Mueller Northeastern University, 360 Huntington Ave, Boston, MA 02115 eck.m@northeastern.edu
15	**A New Discovery about Potentiometric Stability of Ion-Selective Membrane: Impurities in Tetrahydrofuran** Canwei Mao, Grzegorz Lisak* Residues and Resource Reclamation Centre, Nanyang Environment and Water Research Institute, Nanyang Technological University, 1 Cleantech Loop, CleanTech One, 637141, Singapore. canwei.mao@ntu.edu.sg, g.lisak@ntu.edu.sg.
16	**Visualization of Latent Fingerprints on Fired Cartridges Using Electrochemical Dye Deposition** Sára Hermochová[a], Petr Hlavín[b], Michal Novotný[c] and Gabriela Broncová[a] [a]University of Chemistry and Technology, Prague, Technická 5, 166 28 Prague 6, Czech Republic [b]Criminalistics Institute Prague Police of the Czech Republic, Bartolomějská 310/12, 110 00 Prague, Czech Republic [c]Institute of Physics of the Czech Academy of Sciences, Na Slovance 1999/2, 182 00 Prague 8, Czech Republic Sara.Hermochova@vscht.cz and Gabriela.Broncova@vscht.cz

	Posters Tuesday
1	**A High-throughput Electrochemical Instrument for Single Entity Analysis** Cheng-bing Zhong[1], Lin-lin Zhang[1], Yi-lun Ying[1,2], Yi-tao Long[1*] [1]State Key Laboratory of Analytical Chemistry for Life Science Nanjing University Nanjing 210023, P. R. CHINA [2]Chemistry and Biomedicine Innovation Center Nanjing University, Nanjing 210023, P. R. CHINA
2	**Naphthopyran-Based Photoswitching with Phase-Sensitive Detection for High-Contrast Selective Imaging and Nanoscale Chemical Sensing** Yu Cheng, Yifu Wang, Jingying Zhai, Xiaojiang Xie[*] Department of Chemistry, Southern University of Science and Technology, Shenzhen, 518055, China.
3	**Development of Paper-based Analytical Device for Point-of-care Nucleic Acid Quantification Combining CRISPR/Cas12a and Personal Glucose Meter** Yohei Tanifuji, Guodong Tong, Yuki Hiruta, Daniel Citterio Department of Applied Chemistry, Keio University, 3-14-1 Hiyoshi, Kohoku-ku,
4	**Fluorescent and colorimetric RT-LAMP as a rapid, reliable, and specific qualitative method for POCT** Petra Voparilova[1], Jiri Kudr[1], Zbynek Splichal[1], Vojtech Adam[1,2], Pavel Neuzil[2,3], Ondrej Zitka[1,2] [1]Department of Chemistry and Biochemistry, Mendel University in Brno, Zemedelska 1, CZ-61300, Brno, Czech Republic [2]Ministry of Education Key Laboratory of Micro/Nano Systems for Aerospace, School of Mechanical Engineering, Northwestern Polytechnical University, Xi'an 710072, PR China [3]Department of Microelectronics Faculty of Electrical Engineering and Communication, Brno University of Technology, 616, Brno, Czech Republic petravoparilova@seznam.cz
5	**Study of the interaction of lipopolysaccharides incorporated in lipid vesicles with the concanavalin A and DNA aptamers using QCM-D method** Marek Tatarko, Tibor Hianik Department of Nuclear Physics and Biophysics, Faculty of Mathematics, Physics and Informatics, Comenius University, Mlynská dolina F1, 842 48 Bratislava, Slovakia
6	**The Potentiometric Response of Hydrophilic Ion-Exchanger Gold Nanopore-Based Membranes** Gergely T. Solymosi, Róbert E. Gyurcsányi Chemical Nanosensors Research Group, Department of Inorganic and Analytical Chemistry, Budapest University of Technology and Economics, Műegyetem rkp. 3, H-1111 Budapest, Hungary gergely.solymosi@edu.bme.hu
7	**Multiarray Sensor Platform for Non-Invasive Diagnosis of Early-Stage Esophageal Cancer** Soma Papp[1,2], Emie Marin[1], Maxwell Bridges[1], Charles S. Henry[1] [1]Department of Chemistry, Colorado State University, Fort Collins, Colorado, 80523-1872, USA [2] Lendület Chemical Nanosensors Research Group, Department of Inorganic and Analytical Chemistry, Budapest University of Technology and Economics, Szt. Gellért tér 4, H-1111 Budapest, Hungary. papp.soma@vbk.bme.hu

8	**Visualizing molecularly imprinted cavities in electrically insulating polymer nanofilms** Norbert Kovács[a], Róbert E. Gyurcsányi[a,b] [a] BME "Lendület" Chemical Nanosensors Research Group, Department of Inorganic and Analytical Chemistry, Budapest University of Technology and Economics, Múegyetem rkp. 3., H-1111 Budapest, Hungary [b] ELKH-BME Computation Driven Chemistry Research Group, Műegyetem rkp. 3, H-1111 Budapest, Hungary kovacs.norbert@edu.bme.hu
9	**Zero-Current Chronopotentiometry with Wired Biosensors** Andrea Nonis, Polyxeni Damala, Eric Bakker Department of Inorganic and Analytical Chemistry, University of Geneva, Geneva, Quai Ernest-Ansermet 30, 1211 Geneva, 4, Switzerland Andrea.Nonis@unige.ch
10	**Single-use sensor card for smartphone based home monitoring of potassium in whole blood** Martin Hajnsek[1], Nastasia Okulova[2], Conor O´Sullivan[2], Christoph Feichtinger[3], Carolin Kollegger[4], Gerald Holweg[4] [1] Erba Technologies Austria GmbH, Graz, Austria [2] Inmold A/S, Hørsholm, Denmark [3] bionic surface technologies GmbH, Graz, Austria [4] Infineon Technologies Austria AG, Graz Austria m.hajnsek@erba.com
11	**Multiwell plate-based pH-assay using Responsive Triangulenium Dyes and ATTO-647** Magnus Christian Wied* and Thomas Just Sørensen Nano-Science Center & Department of Chemistry, University of Copenhagen, Denmark mcw@chem.ku.dk
12	**Enhancing the binding avidity of aptamers for virus recognition: a proof of principle approach** László F. Simon, Róbert E. Gyurcsányi Department of Inorganic and Analytical Chemistry, Faculty of Chemical Technology and Biotechnology, Budapest University of Technology and Economics, Műegyetem rkp. 3., H-1111 Budapest, Hungary simon.laszlo.ferenc@vbk.bme.hu
13	**Rational Design and Development of Electron Mediators for Enzyme-based Biosensors: Advancing Clinical Diagnostics Through Computational Exploration** Jinxu Gao,[1] Tara Forrest,[2] You Qin[1] [1]Eaglenos Sciences Inc, Nanjing, Jiangsu 210032, China [2]Eaglenos Sciences (Switzerland), 8810 Horgen, Switzerland gao_jinxu@eaglenos.com, forrest_tara@eaglenos.com
14	**Polymer inclusion membrane based separation method for milk sample pre-treatment preceding aptamer based sensing** Kristóf Jakab[1,2], Zsófia Keresztes[1], Viola Horváth[2,3] [1]Functional Interfaces Research Group, Institute of Materials and Environmental Chemistry, HUN-REN Research Centre for Natural Sciences, Magyar tudósok krt. 2, 1117 Budapest, Hungary

15	**DNA nanocube SAM scaffolds for FRET based biosensing** Adrian Jan Grzedowski and Dan Bizzotto AMPEL and Dept of Chemistry, University of British Columbia, Vancouver, BC CANADA bizzotto@chem.ubc.ca
16	**A generic approach based on long-lifetime fluorophores for the assessment of protein binding to polymer nanoparticles by fluorescence anisotropy** Marwa A. Ahmed[1,2], Dóra Hessz[3,4], Benjámin Gyarmati[3], Mirkó Páncsics[1], Norbert Kovács[1], Róbert E. Gyurcsányi[1,5,6], Miklós Kubinyi[3], Viola Horváth[1,6] [1]Department of Inorganic and Analytical Chemistry, Budapest University of Technology and Economics, Műegyetem rkp. 3. 1111 Budapest, Hungary [2]Department of Chemistry, Arish University, 45511 El-Arish, North Sinai, Egypt [3]Department of Physical Chemistry and Materials Science, Budapest University of Technology and Economics, Műegyetem rkp. 3., 1111 Budapest, Hungary [4]HUN-REN-BME "Lendület" Quantum Chemistry Research Group, Műegyetem rkp. 3. 1111 Budapest, Hungary [5]HUN-REN-BME "Lendület" Chemical Nanosensors Research Group, Műegyetem rkp. 3. 1111 Budapest, Hungary [6]HUN-REN-BME Computation Driven Chemistry Research Group, Műegyetem rkp. 3. 1111 Budapest, Hungary
17	**Novel Electrochemical Sensor Based on Fe Decorated f-MWCNTs Modified CPE for Determination of Estradiol** Ana D. Đurović[1], Zorica S. Stojanović[1], Sanja N. Panić[1], Snežana Ž. Kravić[1], Lukáš Richtera[2, 3] [1] University of Novi Sad, Faculty of Technology Novi Sad, Bul. cara Lazara 1, Novi Sad, Serbia [2] Mendel University in Brno, Department of Chemistry and Biochemistry, Zemědělská 1, Brno, Czech Republic **[3] Central European Institute of Technology, Brno University of Technology, Purkyňova 123, Brno, Czech Republic**
18	**MWCNTs Supported Ni and Fe Based Electrocatalysts for Selective Determination of Ibuprofen** Zorica S. Stojanović[1], Ana D. Đurović[1], Sanja N. Panić[1], Snežana Ž. Kravić[1], Lukáš Richtera[2,3] [1] University of Novi Sad, Faculty of Technology Novi Sad, Bulevar cara Lazara 1, Novi Sad, Serbia [2] Mendel University in Brno, Department of Chemistry and Biochemistry, Zemědělská 1, Brno, Czech Republic [3] Central European Institute of Technology, Brno University of Technology, Purkyňova 123, Brno, Czech Republic **zorica.stojanovic@uns.ac.rs**

	Posters Thursday
1	**Electrochemical pH Control for On-Site Detection of Lead Traces** Amira Mahmoud, Julius Gajdár, Mariela Brites Helú, Mathieu Etienne, Grégoire Herzog Université de Lorraine, CNRS, LCPME, F-54000 Nancy, France.
2	**Characterisation of Titanium-Oxide Layers for Low-power pH Sensors** Zsombor Szomor[1,2], Lilia Bató[1,2], Zsófia Baji[1], János M. Bozorádi[1,2], Katalin Balázsi[1], Erzsébet Dodony[1], Zoltán Kovács[1], Attila Sulyok[1], Péter Fürjes[1] [1]Inst. of Technical Physics and Materials Science, HUN-REN Centre for Energy Research [2]Doctoral School on Materials Sciences and Technologies, Óbuda University, Budapest, Hungary
3	**Nanocomposite-Based Electrochemical Sensors for Biomedical Applications** Peng Lei[a,b], Shaomin Shuang[b], Yang Liu[a] [a] College of Science and Engineering, James Cook University, Townsville, Australia [b] School of Chemistry and Chemical Engineering, Shanxi University, Taiyuan, China
4	**Fabricated Microelectrode Sensors for Environmental Monitoring** Tarun Narayan, Pierre Lovera, Alan O'Riordan Nanotechnology Group, Tyndall National Institute, University College Cork, Dyke Parade, Cork, Ireland Tarun.narayan@tyndall.ie
5	**Electrochemical and adsorptive properties of laser-treated boron doped diamond electrodes for biosensing** Michal Zelenský[a], Andrew Taylor[b], Jan Hrabovský[b], Lukáš Fojt[c], Miroslav Fojta[c], Jan Hrabovský[d], Karolina Schwarzová-Pecková[a] [a]Charles University, Faculty of Science, Department of Analytical Chemistry, Albertov 2038/6, 128 00 Prague 2, Czech Republic [b]FZU – Institute of Physics of the Czech Academy of Sciences, Na Slovance 1999/2, 182 21 Prague 8, Czech Republic [c]Institute of Biophysics of the Czech Academy of Sciences, Královopolská 135, CZ-61200, Brno, Czech Republic [d]HiLASE Centre, Institute of Physics of the Czech Academy of Sciences, Za Radnicí 828, 252 41 Dolní Břežany, Czech Republic karolina.schwarzova@natur.cuni.cz
6	**Analysis of quasi-reversible CVs and dEIS data: transformation to potential-program independent forms** Tamás Pajkossy Institute of Materials and Environmental Chemistry, Research Centre for Natural Sciences, H-1117 Budapest, Magyar tudósok körútja 2, Hungary pajkossy.tamas@ttk.mta.hu
7	**A novel use of perinone polymer as an intermediate layer - a new design of potassium solid contact ion-selective electrodes.** Klaudia Morawska[1], Cecylia Wardak[1], Małgorzata Czichy[2], Patryk Janasik[2] [1]Department of Analytical Chemistry, Institute of Chemical Sciences, Faculty of Chemistry, Maria Curie-Sklodowska University, Maria Curie-Sklodowska Sq. 3, 20-031 Lublin, Poland,[2]Faculty of Chemistry, Silesian University of Technology, M. Strzody 9, 44-100 Gliwice, Poland klaudia.morawska@mail.umcs.pl

8	**Unveiling the Kinetic Adsorption and Desorption of Heavy Metals On/Off Nanoplastics by Real-Time In-Situ Potentiometric Sensing** Longbin Qi [1], Wei Qin [1,*] [1] Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences, Yantai, Shandong 264003, P. R. China wqin@yic.ac.cn
9	**Microfluidic device for impedance tomography** Lilia Bató[1,2], J.M. Bozorádi[1,2], Zoltán Vizvári[3], Péter Fürjes[1] 1. Microsystems Lab., Inst. of Technical Physics and Materials Science, HUN-REN Centre for Energy Research, Budapest, Hungary 2. Óbuda University Doctoral School on Materials Sciences and Technologies, Budapest, Hungary 3. Symbolic Methods in Material Analysis and Tomography Research Group, Faculty of Engineering and Information Technology, University of Pecs, Pecs, Hungary Corresponding author: Lilia Bató, bato.lilia@ek.hun-ren.hu
10	**Doped Carbon Thin Films Produced Using Laser-Arc PVD Process as a Versatile Electrode Material in Electrochemistry** Frank Kaulfuss, Volker Weihnacht Fraunhofer IWS - Institute for Material and Beam Technology, Winterbergstrasse 28, 01277 Dresden, Germany frank.kaulfuss@iws.fraunhofer.de
11	**Electrochemical sensor based on a lead film generated on the surface of a multiwall carbon nanotubes/spherical glassy carbon electrode for the determination of trace amounts of europium(III)** Edyta Wlazłowska*, Małgorzata Grabarczyk, Marzena Fiałek Department of Analytical Chemistry, Institute of Chemical Sciences, Faculty of Chemistry, Maria Curie–Skłodowska University, Maria Curie–Skłodowska Sq. 3, 20–031 Lublin, Poland
12	**Direct printed RVC-based biocathode for the construction of enzymatic biofuel cells** Kornelia Bobrowska[1], Marcin Urbanowicz[1], Marek Dawgul[1], Krzysztof Stolarczyk[2], Renata Bilewicz[2], Kamila Sadowska[1] [1]Nalecz Institute of Biocybernetics and Biomedical Engineering Polish Academy of Sciences, Ks. Trojdena 4, 02–109 Warsaw, Poland [2]Faculty of Chemistry, University of Warsaw, Pasteura 1, 02-093 Warsaw, Poland kbobrowska@ibib.waw.pl
13	**Utilization of Carbon Nanotubes for Antibody Conjugation in a Sensor for Estradiol Detection** Eliška Birgusová[1*], Zuzana Bytešníková[1], Antonín Šimek[2], Lukáš Richtera[1], Vojtěch Adam[1] [1] Department of Chemistry and Biochemistry, Mendel University in Brno, Zemědělská 1665/1, 613 00 Brno, Czech Republic. [*]eliska.birgusova@mendelu.cz [2] Department of Electrical and Electronic Technology, Brno University of Technology, Technická 3058/10, Královo Pole, 61600, Brno, Czech Republic.
14	**Evaluation of Prussian Blue deposition methods on carbon-based substrates for use in printed lactate biosensors** Željka Boček, Marko Zubak, Petar Kassal University of Zagreb, Faculty of Chemical Engineering and Technology, Trg Marka Marulića 19, Zagreb, Croatia zbocek@fkit.unizg.hr

15	**Single Solid-State Ion-Channels as Potentiometric Ion Sensors** *Gyula Jágerszki*[1], Gergely T. Solymosi[1], Péter Fürjes[2], Róbert E. Gyurcsányi[1] [1] Chemical Nanosensors Research Group, Department of Inorganic and Analytical Chemistry, Budapest University of Technology and Economics, Műegyetem rkp. 3, 1111 Budapest, Hungary [2] Centre for Energy Research, Institute of Technical Physics and Materials Science, Hungarian Research Network, Konkoly Thege Miklós út 29-33, 1121 Budapest, Hungary