

Program

Room: 7039 (audio-video synchronization in 6040)		
13 August (Wed.)		
08:20-08:25	Opening Remarks for 20th ISEAC Weilin XU, Chairperson of 20th ISEAC	
08:25-08:30	Opening Remarks for Sino-France International Research Network (IRN) Neso SOJIC, Coordinator in France	
Plenary Lectures (audio-video synchronization in 6040)		
Chairs	Serge COSNIER, Neso SOJIC	
08:30-08:55	PL-1 (IRN)	Vesicular Neurotransmitters Exocytosis Monitored by Amperometry: Theoretical Quantitative Links Between Experimental Current Spikes Shapes and Intravesicular Structures Christian AMATORE Xiamen University, China PSL Université, Sorbonne Université, CNRS, France
08:55-09:20	PL-2 (IRN)	Oxidase-Like Rhodium Single-Atom Nanozymes: Performance and Application Shaojun DONG Changchun Institute of Applied Chemistry, CAS, China
09:20-9:45	PL-3 (IRN)	Bioelectrochemical Devices Based on Different Configurations of Carbon Nanotubes Serge COSNIER Univ. Grenoble Alpes, CNRS, France Silesian University of Technology, Poland
09:45-10:10	PL-4 (IRN)	Light conversion by combining electrochemiluminescence and photoelectrochemistry at semiconductor surfaces Neso SOJIC University of Bordeaux, CNRS, France
10:10-10:40	Photograph & Break	
Chairs	Fred LISDAT, Jianhua WANG, Yingfu LI	
10:40-10:55	I-1	Tip-enhanced Raman scattering using a Chemically-modified Tip Yukihiro OZAKI Kwansei Gakuin University, Japan
10:55-11:10	I-2	Fluorescent RNA Tools for Molecular Imaging Zhou NIE Hunan University, China
11:10-11:20	O-1	Atomically Dispersed Metal Interfaces for Analytical Chemistry Chengzhou ZHU Central China Normal University, China
11:20-11:30	O-2	Programmable DNA-Nanomaterials for Biosensing and Bioimaging Libing ZHANG Tianjin University, China
11:30-11:40	O-3	Carbon Dots: Separation strategy, photoluminescence mechanisms, and imaging analysis Yunsheng XIA Anhui Normal University, China
11:40-11:50	O-4	Biological reaction network-based high-performance biosensing Zhixin ZHOU Southeast University, China
11:50-12:00	O-5	The ATPase cycle of the AAA-ATPase protein transporter Bcs1 is highly concerted Yangang PAN Changchun Institute of Applied Chemistry, CAS, China
Lunch		

Session B: I&O Lectures		
Room: 6040		
13 August (Wed.)		
Chairs	Jiri BAREK, Wei QIN, Marcin KARBARZ, Weena SIANGPROH	
10:40-10:55	I-3	Biomedical Application of Boron-doped Diamond Electrodes Yasuaki EINAGA <i>Keio University, Japan</i>
10:55-11:10	I-4	The Development and Sensing Application of Antifouling Electrochemical Biosensors Based on Designed Peptides Xiliang LUO <i>Qingdao University of Science and Technology, China</i>
11:10-11:20	O-6	Additive Manufacturing Approaches for Advanced Boron-Doped Diamond Electrodes Simona BALUCHOVÁ <i>Charles University, Czech Republic</i>
11:20-11:30	O-7	Continuous In Vivo Pharmacokinetic Tracking via Implantable Aptamer-Based Sensors Kaiyu FU <i>University of Notre Dame, USA</i>
11:30-11:40	O-8	New Electroanalytical Method for Solid-Contact Ion-Selective Electrodes - Coulometry/Impedance/Mass changes Tingting HAN <i>Guangzhou University, China</i>
11:40-11:50	O-9	A portable micro coulometric titration on open-surface droplet-based microfluidics with potentiometric end-point detection Tinakorn KANYANEE <i>Chiang Mai University, Thailand</i>
11:50-12:00	O-10	Construction of Anti-Fouling Polymeric Membrane Potentiometric Sensors for Marine Environmental Monitoring Longbin QI <i>Yantai Institute of Coastal Zone Research, CAS, China</i>
Lunch		

Session C: I&O Lectures		
Room: 5040		
13 August (Wed.)		
Chairs	Daniel MANDLER, Xiaoquan LU, Guizheng ZOU, Shimeles Addisu KITTE	
10:40-10:55	I-55	Single-molecule chemiluminescence imaging Jiandong FENG <i>Zhejiang University, China</i>
10:55-11:10	I-6	Instrumentation for ECL Analysis Dmytro SNIZHKO <i>Kharkiv National University of Radio Electronics, Ukraine</i>
11:10-11:20		
11:20-11:30	O-12	Metal nanoparticles for sensitive colorimetric and electrochemiluminescent immunoassay Xiaoli QIN <i>Hunan Agricultural University, China</i>
11:30-11:40	O-13	Nanoconfinement-Enhanced Electrochemiluminescence for Machine Learning-Assisted Imaging Analysis of Biomarkers Chuanping LI <i>Anhui Polytechnic University, China</i>
11:40-11:50	O-14	Electrochemiluminescence of Atomically Precise Metal Nanoclusters and Their Biosensing Applications Ruizhong ZHANG <i>Tianjin University, China</i>
11:50-12:00	O-15	Peptide Sequence Modulating Analytical Performance of Electrogenerated Chemiluminescence Peptide-Based Biosensor for Matrix Metalloproteinase2 Meng LI <i>Shaanxi Normal University, China</i>
Lunch		

Session D: I&O Lectures		
Room: 4039		
13 August (Wed.)		
Chairs	Janine MAUZEROLL, Shen YE, Masahiro YAMAMOTO, Peter RODIČ	
10:40-10:55	I-7	Asymmetric Mass Transport in Polybromide Ionic Liquid Cathodes Taek Dong CHUNG <i>Seoul National University, Republic of Korea</i>
10:55-11:10	I-8	Electrochemical Properties of Highly Concentrated Electrolyte Phases Robert DRYFE <i>University of Manchester, United Kingdom</i>
11:10-11:20	O-16	Oxygen Vacancy-Tailored CDI Electrodes for Selective Phosphate Recovery from Aquatic Systems Jianyun LIU <i>Donghua University, China</i>
11:20-11:30	O-17	Development of Electrospun Fibrous Electrode Materials: Influence of Processing Parameters on Structure and Electrochemical Performance Ayaulym BELGIBAYEVA <i>National Laboratory Astana, Kazakhstan</i>
11:30-11:40	O-18	Enhanced Gas-Solid Mass Transfer and High-Efficiency Energy Conversion Mechanisms in Low-to-Intermediate Temperature Solid Oxide Cell Materials Meigui XU <i>Nanjing Tech University, China</i>
11:40-11:50	O-19	Nano-Impact Electrochemistry Reveals Kinetics Information of Metal-Ion Battery Materials Wei XU <i>Hunan University, China</i>
11:50-12:00	O-20	Elucidation of Formation Mechanism of Solid Electrolyte Interphase (SEI) in Alkali Metal Ion Batteries Puhan ZHANG <i>Tohoku University, Japan</i>
Lunch		

Session E: I&O Lectures		
Room: 4040		
13 August (Wed.)		
Chairs	, Yuko UENO, Hui WEI, Yun-Yee LOW	
10:40-10:55	I-9	High-performance nanozymes: rational design and biomedical applications Hui WEI <i>Nanjing University, China</i>
10:55-11:10	I-10	Enhanced Hydrogen Peroxide Synthesis and Antibacterial Action via Thermocatalytic Metal-Organic Frameworks Zong-Hong LIN <i>National Taiwan University, Taiwan, China</i>
11:10-11:20	O-21	Peroxidase-like nanozymes: peculiarities of redox catalysis and analytical applications Aleksandra SHNEIDERMAN <i>Moscow State University, Russia</i>
11:20-11:30	O-22	Nanozyme Sensing: Exploration of Microdisturbance Factors and Immobilization Study Baoji DU <i>Xi'an Jiaotong University, China</i>
11:30-11:40	O-23	Precise Biomimetic Construction of Atomic-scale Nanozymes for Biosensing Ying WANG <i>Harbin Engineering University, China</i>
11:40-11:50	O-24	Axial Oxygen Coordinated Iron Single-Atom Nanozyme: Highly Selective Peroxidase-Like Activity for Visual Biosensing Rong HUANG <i>Shanghai University, China</i>
11:50-12:00	O-25	Structural Regulation of Au-Pt Bimetallic Aerogels for Catalyzing the Glucose Cascade Reaction Cui WANG <i>Shandong University, China</i>
Lunch		

Session F: I&O Lectures		
Room: 4042		
13 August (Wed.)		
Chairs	Ali Hossein REZAYAN, Yuanhong XU, Elena V. SUPRUN, Slađana ĐURĐIĆ	
10:40-10:55	I-27	Neuroelectrochemistry: From Multi-Spatiotemporal Sensing to Neurofunctional Mimicking Lanqun MAO <i>Beijing Normal University, China</i>
10:55-11:10	I-79	Copper-doped strontium metal-organic framework for oxygen evolution reaction Khalid M. Omer <i>University of Sulaimani, Iraq</i>
11:10-11:20	O-107	Disordered hyperuniform two-dimensional materials Duyu CHEN <i>University of Science and Technology of China, China</i>
11:20-11:30	O-108	Low power conductometric Gas sensors based on p-type Semiconductors Vasileios BINAS <i>Institute of Electronic Structure & Laser & Aristotle University of Thessaloniki, Greece</i>
11:30-11:40	O-109	Precise Synthesis of Discrete Chiral Nanomaterials for Circularly Polarized Photocatalysis and Chiral Sensors Guangchao ZHENG <i>Zhengzhou University, China</i>
11:40-11:50	O-110	Electrochemical Chiral Recognition Based on Helical Chiral Gold Nanoparticles Fengxia WU <i>Changchun Institute of Applied Chemistry, CAS, China</i>
11:50-12:00	O-111	A Single-Electrode System for ZIF-67 Enhanced Luminol Electrochemiluminescence Detection of AQP4 Antibody Tadele ETICHA <i>Changchun Institute of Applied Chemistry & University of Science and Technology of China, China</i>
Lunch		

Plenary Lectures		
Room: 7039 (audio-video synchronization in 6040)		
13 August (Wed.)		
Chairs	Christian AMATORE, Erkang WANG	
14:00-14:25	PL-5	Nanoelectrochemical measurements of nano vesicular subcompartments and stress granules Andrew EWING <i>University of Gothenburg, Sweden</i>
14:25-14:50	PL-6 (IRN)	Real time label free study of biomolecule interactions in neuroscience Xiurong YANG <i>Changchun Institute of Applied Chemistry, CAS, China</i>
14:50-15:15	PL-7	(Bio)catalytic and chemosensitive materials for electrochemical biosensors Arkady A. KARYAKIN <i>M.V. Lomonosov Moscow State University, Russia</i>
15:15-15:40	PL-21	Anticipated Excellence in Chemical Measurement Science Yong WANG <i>National Natural Science Foundation of China, China</i>
15:40-15:55	Break	
Chairs	Hai-Long WU, Yasuaki EINAGA, Lanqun MAO, Irshad HUSSAIN	
15:55-16:10	I-11	Aptamer-Enabled Strategies for Sensitive and Versatile Detection of SARS-CoV-2 in Point-of-Care Settings Yingfu LI <i>McMaster University, Canada</i>
16:10-16:25		
16:25-16:40	I-13	Fundamental Studies of Aptamer Selection for Biosensors Juewen LIU <i>University of Waterloo, Canada</i>
16:40-16:50	O-26	MicroRNA Bioanalysis Haifeng DONG <i>Shenzhen University, China</i>
16:50-17:00	O-27	Boosting Nanopore Electrochemistry for Protein Posttranslational Modification Identification at the Single-Molecule Level Jie JIANG <i>University of Science and Technology of China, China</i>
17:00-17:10	O-28	Single Protein Study Based on Solid-State Nanonet Yueming ZHAI <i>Wuhan University, China</i>
17:10-17:20	O-29	Wearable Sweat Biosensors for Personalized Medicine Minqiang WANG <i>Shanghai Jiao Tong University, China</i>
17:20-17:30	O-30	Electrochemical aptamer-based biosensors for real-time monitoring of biomolecules in vivo in the living animals Hui LI <i>China University of Geosciences (Wuhan), China</i>
17:30-17:40	O-31	Individually-Addressable Multi-Channel Nanoelectrodes for Single-Cell Exocytosis Investigation Keke HU <i>Xiamen University, China</i>
Dinner		

Session B: I&O Lectures		
Room: 6040		
13 August (Wed.)		
Chairs	Zbigniew STOJEK, Ping YU, Kaiyu FU, Tinakorn KANYANEE	
15:55-16:10	I-14	Advanced voltammetric techniques derived from square-wave voltammetry Valentin MIRCESKI <i>University of Lodz, Poland</i> <i>University in Skopje & Research Center for Environment and Materials, Macedonian Academy of Sciences and Arts, North Macedonia</i>
16:10-16:25	I-15	Nanomaterial-Based Electrochemical Sensors and Biosensors for the Detection of Pharmaceuticals and Biomarkers Aicheng CHEN <i>University of Guelph, Canada</i>
16:25-16:40	I-16	Fabrication of Implantable Hydrogel Neural Probes and Their Applications in Brain-Computer Interfaces Qiang ZHANG <i>Changchun Institute of Applied Chemistry, CAS, China</i>
16:40-16:50	O-32	Electroactive and electroresponsive hydrogel materials for soft electrochemical actuators Marcin KARBARZ <i>University of Warsaw, Poland</i>
16:50-17:00	O-33	Graphitic Carbon Nitride: a promising material in electrochemical sensing Slađana ĐURĐIĆ <i>University of Belgrade, Serbia</i>
17:00-17:10	O-34	Co₃O₄ based materials for Enhanced Acetone Gas Sensing Performance Chunmei ZHANG <i>Suzhou University of Science and Technology, China</i>
17:10-17:20	O-35	Improved performance of Prussian blue solid contact allowing flow injection amperometric detection of potassium and sodium ions in biological fluids Vera SHAVOKSHINA <i>M.V. Lomonosov Moscow State University, Russia</i>
17:20-17:30	O-36	Development of Electrodes Modified by Gold Nanostructures for Sensitive Detection of Ovarian Cancer Biomarker CA125 in clinical samples Maryam NIKKHAH <i>Tarbiat Modares University, Iran</i>
17:30-17:40	O-37	Enhanced Voltammetric Detection of Tryptophan Using Nitrogen Defect-Rich Graphitic Carbon Nitride-Modified Electrodes Shimeles Addisu KITTE <i>Jimma University, Ethiopia</i>
Dinner		

Session C: I&O Lectures		
Room: 5040		
13 August (Wed.)		
Chairs	Junjie ZHU, Jiandong FENG, Simona BALUCHOVÁ, Yanfei SHEN	
15:55-16:10	I-17	Determining Electrochemiluminescence Reaction Rate Constants in Ru(bpy)₃²⁺/Tri-<i>n</i>-propylamine Coreactant System Zhifeng DING <i>The University of Western Ontario, Canada</i>
16:10-16:25	I-18	Electrochemiluminescence Biosensor Based on an Efficient Antifouling Cell Membrane Hydrogel for the Direct Detection of Alkaline Phosphatase in Human Serum and Cell Lysate Caifeng DING <i>Qingdao University of Science and Technology, China</i>
16:25-16:40	I-19	Heterogeneous Electrochemiluminescence in Film-modified Electrodes Yuriy ZHOLUDOV <i>Kharkiv National University of Radio Electronics, Ukraine</i>
16:40-16:50	O-38	Electrochemical Analysis of Single Nerve Vesicles Xianchan LI <i>Peking University, China</i>
16:50-17:00	O-39	Design and application of high-performance gold nanocluster-based electrochemiluminescence probes Huaping PENG <i>Fujian Medical University, China</i>
17:00-17:10	O-40	Multi-functional electrochemiluminescence biosensor for efficient capture, elimination, and sensitive monitoring of <i>Staphylococcus aureus</i> Longsheng JIN <i>Nanjing Agricultural University, China</i>
17:10-17:20	O-41	Endogenous and Exogenous Wireless Multimodal Light-Emitting Devices Miaoxia LIU <i>University of Bordeaux, France</i>
17:20-17:30	O-42	Water-responsive Xerogel-Based Flood Alarm Device Utilizing Smartphone Electrogenerated Chemiluminescence Imaging Xiaolin YANG <i>Shaanxi Normal University, China</i>
17:30-17:40	O-43	Modeling and cyclic voltammetry study of complicated electron transfer reactions: electrochemical oxidation of luminol and electrodeposition of copper Ran CHEN <i>Southeast University, China</i>
Dinner		

Session D: I&O Lectures		
Room: 4039		
13 August (Wed.)		
Chairs	Christine KRANZ, Zong-Hong LIN, Wei XIE, Rui HAO	
15:55-16:10	I-20	Electrical Catalysis of Forbidden Reactions in Single-Molecule Devices Josh HIHATH <i>Arizona State University, USA</i>
16:10-16:25	I-21	Microfabrication and devices for optoelectronic functional materials Yuchen WU <i>Technical Institute of Physics and Chemistry, CAS, China</i>
16:25-16:40	I-22	Regulation of the electrical double layer: Contact-electro-chemistry Di WEI <i>Beijing Institute of Nanoenergy and Nanosystems, CAS, China</i>
16:40-16:50	O-44	Non-covalent Interactions in Solid-State Molecular Charge Transport Cunlan GUO <i>Wuhan University, China</i>
16:50-17:00	O-45	Design and Measurement of Photoelectrochemical Interface Peiyao DU <i>Xi'an Jiaotong University, China</i>
17:00-17:10	O-46	In Situ Electrochemical Titration of Catalytic Intermediates Zhaoyu JIN <i>University of Electronic Science and Technology of China, China</i>
17:10-17:20	O-47	Electrospun nanofibers for energy-related electrocatalytic small molecules conversion Xiaofeng LU <i>Jilin University, China</i>
17:20-17:30	O-48	Electrocatalytic oxidation of protein amino acids by transition metal hexacyanoferrates Elena V. SUPRUN <i>M.V. Lomonosov Moscow State University, Russia</i>
17:30-17:40	O-49	Bioelectrocatalytic Carbon Dioxide Reduction by Formate Dehydrogenases Lingling ZHANG <i>Tianjin Institute of Industrial Biotechnology, CAS, China</i>
Dinner		

Session E: I&O Lectures		
Room: 4040		
13 August (Wed.)		
Chairs	Saman HOSSEINKHANI, Xiliang LUO, Baohong LIU, Egor ANDREEV	
15:55-16:10	I-23	Single Cell Analysis for the Elucidation of Intracellular Events & Interactions Jianhua WANG <i>Northeastern University, China</i>
16:10-16:25	I-24	Single-cell metabolomics platforms and their applications Yu BAI <i>Peking University, China</i>
16:25-16:40	I-25	Development and Application for Novel Functionalized Open-Tubular Capillary Microcolumn-Mass Spectrometry Online Coupling Technology Li YANG <i>Northeast Normal University, China</i>
16:40-16:50	O-51	Machine Learning-powered Theranostic Platform for Intelligent Periodontitis Management Lin XU <i>Jilin University, China</i>
16:50-17:00	O-52	Iron-Based MOF with Peroxidase-Like Activity Enhances Synergistic Therapeutic Efficacy of PDT/Ferroptosis/Starvation Therapy by Alleviating Tumor Hypoxia Zhanxia ZHANG <i>Shanghai University of Traditional Chinese Medicine, China</i>
17:00-17:10	O-53	Engineered Cryo-Shocked Cancer Cells Deliver Dual-Function Gene Medicines to Recruit and Activate T cells for Tumor Immunotherapy Yali LIU <i>Southwest University, China</i>
17:10-17:20	O-55	A Next-Generation Wearable Glucose Biosensor: Spore-Enabled Microbial Fuel Cells with Integrated Supercapacitor-Based Alert System Sara MORADI <i>University of Tehran, Iran</i>
17:20-17:30	O-56	Facet-Selective Zirconium Doping in LiLnF₄ Enables Controlled Biodegradation and Bright Upconversion Murad M.A ABUALREJAL <i>Sungkyunkwan University, Republic of Korea</i>
17:30-17:40	O-119	Electrochemical biosensors utilizing aptamers that are enhanced with MXenes nanoscale catalyst layers Hassan KARIMI-MALEH <i>Quzhou Affiliated Hospital, Wenzhou Medical University, China</i>
Dinner		

Session F: I&O Lectures		
Room: 4042		
13 August (Wed.)		
Chairs	Zerihun ASSEFA, Caifeng DING, Khalid OMER, Dativa Joseph SHILLA	
15:55-16:10	I-80	Development of Thin-Film Electrodes Using Shadow Masking for Precise Point-of-Care Measurement of C - Reactive Protein in Sepsis Diagnosis Ali Hossein REZAYAN <i>University of Tehran, Iran</i>
16:10-16:25	I-81	Tumor Marker Detection Technologies, Equipment, and Theranostic Integration Shusheng ZHANG <i>Linyi University, China</i>
16:25-16:40	I-82	Construction of functional artificial cells Xiaojun HAN <i>Harbin Institute of Technology, China</i>
16:40-16:50	O-97	Flexible Wearable Electronic Sensors for Proactive Health Management Cui YE <i>Shanghai Jiao Tong University, China</i>
16:50-17:00	O-118	The Interface Challenges of Solid State battery Wen YANG <i>Shenzhen University of Advanced Technology, China</i>
17:00-17:10	O-112	Applications of transition metal nanomaterials in the fast degradations and detections of antibiotics Ling ZHANG <i>Harbin Institute of Technology (Shenzhen), China</i>
17:10-17:20	O-113	Electrocatalytic glucose oxidation by AuNi bimetallic aerogel to promote diabetic wound healing Wei GAO <i>Northwestern Polytechnical University, China</i>
17:20-17:30	O-50	Confinement and Heterointerface Re-construction in 2D Materials for Water Oxidation Catalysis Kassa Belay IBRAHIM <i>Ca' Foscari University of Venice, Italy</i>
17:30-17:40	O-114	Ni-Co Layered Double Hydroxide Nanocages Mediated Reactive Oxygen Species Generation for Ultra-Sensitive Chemiluminescent Detection of Dopamine Solomon Sime TESSEMA <i>Changchun Institute of Applied Chemistry & University of Science and Technology of China, China</i>
17:40-17:50	O-115	Oxidation of 4-Aminophenylboronic Acid with Artesunate Accelerated by Ethanol for Artesunate Detection Ala'a Mhmoued Abdllh ALBOULL <i>Changchun Institute of Applied Chemistry & University of Science and Technology of China, China</i>
Dinner		

Plenary Lectures		
Room: 7039 (audio-video synchronization in 6040)		
14 August (Thur.)		
Chairs	Andrew EWING, Arkady KARYAKIN	
08:30-08:55	PL-9	Stimuli-Responsive Dynamic Electrochemical Systems Itamar WILLNER <i>The Hebrew University of Jerusalem, Israel</i>
08:55-09:20	PL-11	Spatial Engineering of Single-Atom Fe Adjacent to Cu-Assisted Nanozymes for Biomimetic O2 Activation Kwok-Yin WONG <i>The Hong Kong Polytechnic University, Hong Kong, China</i>
09:20-09:45	PL-12	Nucleic Acid Based Bioengineering for Diagnostics and Nature-derived Biomaterials for Chronic Wound Care I-Ming HSING <i>The Hong Kong University of Science and Technology, Hong Kong, China</i>
09:45-10:00	O-116	Introduction of Journal Advanced Sensor and Energy Materials Yuting CHEN <i>Advanced Sensor and Energy Materials, China</i>
10:10-10:30	Break	
Sino-France IRN		
Chairs	Xiurong YANG, Olivier BURIEZ, Huangxian JU	
10:30-10:45	I-26	Fine-Tuning the Optoelectronic and Redox Properties of an Electropolymerized Thiophene Derivative for Highly Selective OECT-Based Zinc Detection Alexander KUHN <i>University of Bordeaux, CNRS, France</i>
10:45-11:00	I-73	Nanoelectrochemical Monitoring of ROS/RNS Homeostasis During Macrophages Immune Stress Wei-Hua HUANG <i>Wuhan University & Zhongnan Hospital of Wuhan University, China</i>
11:00-11:15	I-28	Dual-Signal Electrochemical Biosensor Based on Aptamer Recognition and Cbago-Mediated Amplification for Ultrasensitive Detection of Cocksackievirus A6 Nicole JAFFREZIC-RENAULT <i>University of Franche-Comte, CNRS, France</i>
11:15-11:30	I-29	A Three-Biomarker Electrochemiluminescence immunoarray Coupled with Machine Learning for Diagnosis of Acute Myocardial Infarction Hua CUI <i>University of Science and Technology of China, China</i>
11:30-11:45	I-30	Coupled Scanning electrochemical and Fluorescence microscopies for analyzing plasmon driven chemistry Vitor BRASILIENSE <i>Université Paris Saclay, France</i>
11:45-12:00	I-31	Smart Hydrogel-Based Bioseparation and Biosensing Systems Weiwei GUO <i>Nankai University, China</i>
Lunch		

Session B: I&O Lectures		
Room: 6040		
14 August (Thur.)		
Chairs	Orawon CHAILAPAKUL, Yuming ZHAI, Jiawang DING, Klaudia KANIEWSKA	
10:30-10:45	I-32	Nanofluidic sensing and energy conversion systems Xing-Hua XIA <i>Nanjing University, China</i>
10:45-11:00	I-33	Exploiting Single Nanoparticle and Spectro-Electrochemistry to Explore the Solid/Liquid Interface at Electrocatalysts Kristina TSCHULIK <i>Ruhr University Bochum, Germany</i>
11:00-11:15	I-83	Electrochemical control and detection of pathogenic microorganisms Yuanhong XU <i>Qingdao University, China</i>
11:15-11:25		
11:25-11:35	O-58	Enhancing Signal-to-Noise Ratio in Nanopore Current Pulse Detection Using 3D DNA Nanostructures Jiahai WANG <i>Guangzhou University, China</i>
11:35-11:45	O-59	Lanthan's touch: designing GCE/La-Dy₂O₃/MWCNT sensor for electrochemical detection of metal in environmental and bio-fluids samples Dalibor STANKOVIĆ <i>University of Belgrade, Serbia</i>
11:45-11:55	O-60	Nanopore-based enzyme-linked immunosorbent assay Yakun YI <i>Institute of Chemistry, CAS, China</i>
Lunch		

Session C: I&O Lectures		
Room: 5040		
14 August (Thur.)		
Chairs	Yuanjian ZHANG, Kateryna MUZYKA, Naoya NISHI, Charoenkwan KRAIYA	
10:30-10:45	I-35	Electrochemiluminescence Microscopy for Analytical Application Jun-Jie ZHU <i>Nanjing University, China</i>
10:45-11:00	I-36	Coreactant-Free Electrochemiluminescence from Nanocluster and Its Immunoassay Application Guizheng ZOU <i>Shandong University, China</i>
11:00-11:15	I-37	Ultrasensitive Electrochemiluminescence Immunoassay via Cerasome within MXene-Modified Single Electrode Electrochemical Systems For the Multiplex Diagnosis of Circulating Tumor Cells Morteza HOSSEINI <i>University of Tehran, Iran</i>
11:15-11:25	O-61	Biofuel Cell-Based Self-Powered Biosensors Panpan GAI <i>Qingdao Agricultural University, China</i>
11:25-11:35	O-62	Cooling-free sampling of exhaled breath for respiratory diagnostics Egor A. ANDREEV <i>M.V. Lomonosov Moscow State University, Russia</i>
11:35-11:45	O-63	Multiplexed Nano-Flexible Electrochemical Biosensors for Point-of-Care Biomedical Applications Bey-Fen LEO <i>Universiti Malaya, Malaysia</i>
11:45-11:55	O-64	Enhanced luminol/H₂O₂ chemiluminescence sensor based on peroxidase-mimic activity of lattice-confined Ru single-atom anchored on ZIF-derived Co₉S₈ hollow polyhedron Tsegu LIJALEM <i>Changchun Institute of Applied Chemistry, CAS & University of Science and Technology of China, China</i>
Lunch		

Session D: I&O Lectures		
Room: 4039		
14 August (Thur.)		
Chairs	Aicheng CHEN, Xiaofeng LU, Wenlei ZHU, Isehaq Saif Mansoor Jaber AL-NAFAI	
10:30-10:45	I-38	Importance of Advanced Diagnostics for Unlocking Complexity of Electrocatalytic Water Splitting Aleksandar R. ZERADJANIN <i>Max Planck Institute for Chemical Energy Conversion, Germany</i>
10:45-11:00	I-39	Functional Nanomaterials – Tuning the Size and Surface Chemistry for Applications in Electrocatalysis Irshad HUSSAIN <i>Lahore University of Management Sciences, Pakistan</i>
11:00-11:15	I-40	Highly active sites of FeTe₂ nanosphere encapsulated with graphene nanosheets towards efficient electrocatalysts for overall water splitting applications Shahzad MURTAZA <i>Khwaja Fareed University of Engineering and information Technology, Pakistan</i>
11:15-11:30	I-41	Analysis, measurement and application of interfacial charge transfer Xiaoquan LU <i>Northwest Normal University, China</i>
11:30-11:40	O-65	Novel catalyst layer design with in-situ constructed cross-linked porous network towards high-performance PEMWE Zhao JIN <i>Changchun Institute of Applied Chemistry, CAS, China</i>
11:40-11:50	O-66	Tissue Papers Derived Scalable One-Pot Fabrication of Carbon-Nanofiber Supported Noble-Metal-Free Nanocrystals for Hydrogen Production Kamel EID <i>Qatar University, Qatar</i>
11:50-12:00	O-67	Reactivity of Anodically-Generated Stilbene Cation Radicals Yun-Yee LOW <i>Universiti Malaya, Malaysia</i>
Lunch		

Session E: I&O Lectures		
Room: 4040		
14 August (Thur.)		
Chairs	Zhou NIE, Juewen LIU, Xiaolei WANG, Jehad Khaled Ismail AbdelRahman ELDAMELLAWI	
10:30-10:45	I-42	NPY-based Nanoprobe in Cancer Boundaries Aiguo WU <i>Ningbo Institute of Materials Technology and Engineering, CAS, China</i>
10:45-11:00	I-43	Raman spectroscopy analysis of nanoplastics and the challenges Jinhua ZHAN <i>Shandong University, China</i>
11:00-11:15	I-44	A Fluorescence/Colorimetric Synergistic-Enhanced Type-I Heterostructured MOF@QDs for Both Multi-Depth Food-Freshness Prediction and Extra Preservation Xiaolei WANG <i>Nanchang University, China</i>
11:15-11:25	O-68	Biomimetic coacervates for cellular targeting and intervention Hui JIANG <i>Southeast University, China</i>
11:25-11:35	O-69	Image Recognition based Cell State Quantification and Environmental Pollutant Concentration Detection Xiaolong XU <i>Wuyi University, China</i>
11:45-11:55	O-70	Microplastic Pollution in Coastal Waters and Sediments of East Africa: Impacts on Fish Intestinal Health, Growth, and Reproduction Dativa Joseph SHILLA <i>University of Dar es Salaam, Tanzania</i>
11:55-12:05	O-71	Studying Stress Response Process of Cell during Electrical Stimulation Through Spectra Techniques Guohua QI <i>Shenzhen University, China</i>
Lunch		

Plenary Lectures		
Room: 7039 (audio-video synchronization in 6040)		
14 August (Thur.)		
Chairs	Itamar WILLNER, Kwok-Yin WONG	
14:00-14:25	PL-13	Electroanalytical aspects of the lithium-ion battery Hubert GIRAULT <i>École Polytechnique Fédérale de Lausanne, Switzerland</i>
14:25-14:50	PL-14	The Role of Electrocatalysis in Energy Storage and Conversion Shizhang QIAO <i>The University of Adelaide, Australia</i>
14:50-15:15	PL-16	Green Electrochemical Transformation of Carbon Dioxide: Challenges and Solutions Huijun ZHAO <i>Griffith University, Australia</i>
15:15-15:40	PL-8	Intelligent Soft Bioelectronics Wenlong CHENG <i>The University of Sydney, Australia</i>
15:40-15:55	Break	
Sino-France IRN		
Chairs	Alexander KUHN, Wei-Hua HUANG, Taek Dong CHUNG	
15:55-16:10	I-45	Nanobiosensing Promotes the Development of Life Analytical Chemistry Huangxian JU <i>Nanjing University, China</i>
16:10-16:25	I-46	Development of An Electrochemiluminescence Imaging Strategy To Analyse Giant Liposome Release Events Olivier BURIEZ <i>Ecole Normale Supérieure, PSL University, Sorbonne Université, CNRS, France</i>
16:25-16:40	I-47	Imaging and biosensing in the brain of freely behaving animals Yang TIAN <i>East China Normal University, China</i>
16:40-16:55	I-48	High-throughput biosensors with increased sensitivity and specificity Jean Louis MARTY <i>Université de Perpignan Via Domitia, France</i> <i>International Centre of Biodynamics, Romania</i>
16:55-17:10	I-49	Single Particle Electrochemiluminescence Imaging Baohong LIU <i>Fudan University, China</i>
17:10-17:25	I-50	Brain Chemistry in Vivo Iontronic Sensing Ping YU <i>Institute of Chemistry, CAS, China</i>
17:25-17:40	I-84	The design of implantable biosensor for in vivo Electrochemical Sensing Meining ZHANG <i>Renmin University of China, China</i>
Banquet in Redbuds Hotel		

Session B: I&O Lectures		
Room: 6040		
14 August (Thur.)		
Chairs	Josh HATH, Xing-Hua XIA, Aleksandar ZERADJANIN, Yuriy ZHOLUDOV	
15:55-16:10	I-52	Intelligent bio-imaging and monitoring of cancers via bio-responsive self-assembly and electrochemical nanointerface Xuemei WANG <i>Southeast University, China</i>
16:10-16:25	I-53	Size-selective Enzyme Adsorption Electrode Using Interlayer Distance Control of Monolayer Graphene and Graphene Oxide Yuko UENO <i>Chuo University, Japan</i>
16:25-16:40	I-54	Improving The Selectivity of Electrochemiluminescence-Based Sensors by Applying Molecularly Imprinted Polymers Tribidasari A. IVANDINI <i>University of Indonesia, Indonesia</i>
16:40-16:50	O-72	Single Nanoparticle Impact Electroanalytical Chemistry Yige ZHOU <i>Hunan University, China</i>
16:50-17:00	O-73	Fully Integrated Wearable Sweat Sensors Ming ZHOU <i>Northeast Normal University, China</i>
17:00-17:10	O-74	Fune-Tuned Nanomaterials for Electrochemical CO₂ Conversion Wenlei ZHU <i>Nanjing University, China</i>
17:10-17:20	O-75	Nanopore electrochemical decoding of single polymers for molecular information storage Zheng-Li HU <i>Nanjing University, China</i>
17:20-17:30	O-76	<i>Operando</i> Raman Insights into Pressure-Dependent Mechanisms of CO₂ Electroreduction Liang HUANG <i>Nankai University, China</i>
Banquet in Redbuds Hotel		

Session C: I&O Lectures		
Room: 5040		
14 August (Thur.)		
Chairs	Chenzhong LI, Haifeng DONG, Chengzhou ZHU, Dalibor STANKOVIĆ	
15:55-16:10	I-85	Double-layer capacitance properties suggestive of two-dimensional ice Jingyuan CHEN <i>University of Fukui, Japan</i>
16:10-16:25	I-56	Chemical Modulation of Carbon Nitride for Electrochemiluminescent Sensing Yuanjian ZHANG <i>Southeast University, China</i>
16:25-16:40	I-57	Electrically Modulated Calcium Nanodynamics in High-Speed AFM: Toward a New Paradigm for Imaging Stimulated Biointerfaces Kateryna MUZYKA <i>INSERM Marseille, France</i> <i>Kharkiv National University of Radio Electronics, Ukraine</i>
16:40-16:50	O-77	Electrochemiluminescence imaging for dynamic process on micro-interface reactions Cheng MA <i>Yangzhou University, China</i>
16:50-17:00	O-78	Ultra-stable transducer for oxidase-based biosensors Darya V. VOKHMYANINA <i>Moscow State University, Russia</i>
17:00-17:10	O-79	In Vivo Sensors for the Detection of Plant Metabolites Aixue LI <i>Beijing Academy of Agriculture and Forestry Sciences, China</i>
Banquet in Redbuds Hotel		

Session D: I&O Lectures		
Room: 4039		
14 August (Thur.)		
Chairs	Robert DRYFE, Zhijie WANG, Dmytro SNIZHKO, Ayaulym BELGIBAYEVA	
15:55-16:10	I-58	Reversibility of Disproportionation Reaction of Superoxide Species for Li-O₂ Batteries Shen YE <i>Tohoku University, Japan</i>
16:10-16:25	I-59	The structure and energetics of graphite intercalation compounds of alkaline metal: van der Waals DFT calculation Masahiro YAMAMOTO <i>Konan University, Japan</i>
16:25-16:40	I-60	KOVAR as a Promising Anode Material for Lithium-ion-Batteries Zia Ur REHMAN <i>Quaid-i-Azam University, Pakistan</i>
16:40-16:50	O-82	Enhanced Corrosion Inhibition of AA7075-T6 via Synergistic Action of Cerium Salts and Sodium Sulphate Peter RODIČ <i>Jožef Stefan Institute, Slovenia</i>
16:50-17:00	O-83	Electrochemical investigation of the corrosion inhibition efficiency of choline-based ionic liquids in protecting mild steel structures Isehaq Saif Mansoor Jaber AL-NAFAI <i>Sultan Qaboos University, Oman</i>
17:00-17:10	O-84	Scalable Synthesis of Hierarchal Porous Carbon Nanotubes Encapsulated Metal Nanocrystals with a Strong Metal-Carbon Interaction for High Performance Supercapacitors Hassan Idris ABDU <i>Shangluo University, China</i>
17:10-17:20	O-85	Determination of Environmental Polylactic Acid Microplastic Residues by Indirect Method using Single-atom Nickel Composite Electrode Hong ZHU <i>Beijing University of Agriculture, China</i>
17:20-17:30	O-86	Multilayered Graphene Prepared from LCO-Based Spent Battery Graphite as the Anode Material of Li-Ion Battery Fathima Ali KAYAKOOL <i>University of Hyderabad, India</i>
Banquet in Redbuds Hotel		

Session E: I&O Lectures		
Room: 4040		
14 August (Thur.)		
Chairs	Zhifeng DING, Shahzad MURTAZA, Kosuke INO, Xuan YANG	
15:55-16:10	I-61	In situ Monitoring of Photocatalytically Generated Species via Scanning Electrochemical Probe Microscopy Christine KRANZ <i>Ulm University, Germany</i>
16:10-16:25	I-62	In situ probing the electrochemical interfaces Yuanhua SHAO <i>Peking University, China</i>
16:25-16:40	I-63	Are all battery particles created equally?: How scanning electrochemical microscopy can help answer this question Janine MAUZEROLL <i>McGill University, Canada</i>
16:40-16:50	O-87	Effects of Mechanical Microenvironment on Cell Characteristics Investigated by Scanning Electrochemical Microscopy Fei LI <i>Xi'an Jiaotong University, China</i>
16:50-17:00	O-88	Multi-resolved Imaging of Electrochemical Interfaces Rui HAO <i>Southern University of Science and Technology, China</i>
17:00-17:10	O-89	Epitaxy Orientation and Kinetics Diagnosis for Zinc Electrodeposition Jingshu HUI <i>Soochow University, China</i>
17:10-17:20	O-90	A Thermosensitive α-Amino Acid Hydrogel Layer Deposited on an Electrode Surface: Actuator and Sensor Performance Klaudia KANIEWSKA <i>University of Warsaw, Poland</i>
17:20-17:30	O-91	Nanoelectrochemical Insight into the Single Polymersomes Activation for Drug Delivery Si-Min LU <i>Université Paris Cité, France</i>
Banquet in Redbuds Hotel		

Plenary Lectures		
Room: 7039 (audio-video synchronization in 6040)		
15 August (Fri.)		
Chairs	Hubert GIRAULT, Takashi KAKIUCHI	
08:30-08:55	PL-17	A New Potentiometric Estimate of the pKa of Acetic Acid in Water Based on the Electrochemical Cell Equipped with Ionic Liquid Salt Bridge Takashi KAKIUCHI <i>pH Science and Technology Laboratory, Japan</i>
08:55-09:20	PL-18	Nanofluidics in High-Density Pore Monolayer Membranes Zhiyong TANG <i>National Center for Nanoscience and Technology, China</i>
09:20-09:45	PL-19	Redox Mediation and the Role of Electrode Material for the Enhancement of Electrogenerated Chemiluminescence Francesco PAOLUCCI <i>University of Bologna, Italy</i>
09:45-10:10	PL-20	Electrochemical Biosensors Integrated Organ/Organ-on-a-Chip for Multidimensional Precision Measurement and Evaluation Chenzhong LI <i>Chinese University of Hong Kong (Shenzhen) & Juxintang (Chengdu) Biotechnology Inc., China</i>
10:20-10:50	Poster Award & Break	
Chairs	Yukihiro OZAKI, Kristina TSCHULIK, Minhua SHAO	
10:50-11:05	I-64	Photocurrents as analytical tool-principles and advancements based on semiconductor nanostructures Fred LISDAT <i>Technical University of Applied Sciences Wildau, Germany</i>
11:05-11:20	I-65	Development of Electrochemical Tip-enhanced Raman Spectroscopy for Nanoscale Characterization of Electrocatalytic Reactions Bin REN <i>Xiamen University, China</i>
11:20-11:35	I-51	The Electrode/Electrolyte Interface Study Using Rotating Ring Disk Electrode Minhua SHAO <i>Hong Kong University of Science and Technology, Hongkong, China</i>
11:35-11:45	O-92	Quantitative Study of the Stability of Colloidal Metallic Nanoparticles at an Atomic Level Xuan YANG <i>Huazhong University of Science and Technology, China</i>
11:45-11:55	O-93	Insights into the interfacial processes in Li-S batteries <i>via in situ/operando</i> methods Shuang-Yan LANG <i>Institute of Chemistry, CAS, China</i>
11:55-12:05	O-94	Understanding and Controlling Electrolyte-Induced Interfacial Side Reactions in Lithium Metal Batteries Zhijie WANG <i>Changchun Institute of Applied Chemistry, CAS, China</i>
Lunch		

Session B: I&O Lectures		
Room: 6040		
15 August (Fri.)		
Chairs	Nicole JAFFREZIC-RENAULT, Caifeng DING, Tribidasari A. IVANDINI, Vasileios BINAS	
10:50-11:05	I-67	Speciation of Nanoparticles: Nanoparticle-Imprinted Matrices (NAIM) Daniel MANDLER <i>The Hebrew University of Jerusalem, Isreal</i>
11:05-11:20	I-68	Electrochemical Detection of Organic Compounds in Flowing Systems Jiri BAREK <i>Charles University, Czech Republic</i>
11:20-11:35	I-69	Interfacial properties of non-conventional electrochemical liquid/liquid interfaces Naoya NISHI <i>Kyoto University, Japan</i>
11:35-11:45	O-95	Potentiometric Sensor with High Sensitivity for Peroxidase Jiawang DING <i>Yantai Institute of Coastal Zone Research, CAS, China</i>
11:45-11:55	O-96	Nanopore Approach for Single-Molecule Temporal Omics Meng-Yin LI <i>Nanjing University, China</i>
11:55-12:05	O-117	Multi-Principal-Element Nanoalloy Electrocatalysts: A Dual-Strategy Electrochemical Synthesis and Performance Investigation Xiuting LI <i>Shenzhen University, China</i>
Lunch		

Session C: I&O Lectures		
Room: 5040		
15 August (Fri.)		
Chairs	Jean Louis MARTY, Fei LI, Morteza HOSSEINI	
10:50-11:05	I-70	Modification and Functionalization of Hydrogel Materials for Motion Sensing Zbigniew STOJEK <i>University of Warsaw, Poland</i>
11:05-11:20	I-71	Surface Blocking-Based Potentiometric Biosensors Using Molecularly Imprinted Polymers as Receptors for Label-Free Detection Wei QIN <i>Yantai Institute of Coastal Zone Research, CAS, China</i>
11:20-11:35	I-72	Smart Electrochemical Platforms for Environmental and Biomedical Diagnostics: Toward Practical and Portable Analysis Orawon CHAILAPAKUL <i>Chulalongkorn University, Thailand</i>
11:35-11:45	O-98	Core-sheath braided yarn wearable bioelectronics for sweat capture and multimodal sensing Xueping ZHANG <i>Donghua University, China</i>
11:45-11:55	O-99	Interface Regulation for Photoelectrochemical Analysis Liuyong HU <i>Wuhan Institute of Technology, China</i>
11:55-12:05	O-100	Self-powered biosensor: from analysis to therapy Linlin WANG <i>Shaanxi University of Science and Technology, China</i>
Lunch		

Session D: I&O Lectures		
Room: 4039		
15 August (Fri.)		
Chairs	Yi-Tao LONG, Zoltán BENKŐ, Ming ZHOU	
10:50-11:05	I-66	Confinement Controlled Electrochemistry for Single Entity Analysis Yi-Tao LONG <i>Nanjing University, China</i>
11:05-11:20	I-74	Bioluminescence Biosensors for large protein complexes in programmed cell death modalities Saman HOSSEINKHANI <i>Tarbiat Modares University, Iran</i>
11:20-11:35	I-75	Porous Electrodes for Cell Analysis in Microphysiological Systems Kosuke INO <i>Tohoku University, Japan</i>
11:35-11:45	O-101	Monitoring Abundance and Activity of Electrochemically Inactive Protein in a Single Cell by an Atomically Precise Metal Cluster Based Electrochemical Sensor Liang GAO <i>Beijing University of Technology, China</i>
11:45-11:55	O-102	Single-entity resolution nanosensor reveals interfacial redox activity of stress granules Hui GU <i>Hunan University of Science and Technology, China</i> <i>University of Gothenburg, Sweden</i>
11:55-12:05	O-103	Real-Time Nanoscale Tracking of Single-Particle Anisotropy in Photoelectrochemistry Haowei WANG <i>Nanjing University, China</i>
Lunch		

Session E: I&O Lectures		
Room: 4040		
15 August (Fri.)		
Chairs	Yuanhua SHAO, Zia Ur REHMAN, Vitor BRASILIENSE	
10:50-11:05	I-76	Smart mathematical separation empowers rapid qualitative and quantitative analysis of complex systems Hai-Long WU <i>Hunan University, China</i>
11:05-11:20	I-77	Extending in situ Surface Enhanced Infrared Absorption Spectroscopy to Investigate Interfacial Adsorption and Functionality of Additives for Superconformal Copper Electrodeposition Wen-Bin CAI <i>Fudan University, China</i>
11:20-11:35	I-78	In situ monitoring of electrocatalytic hydrogen production reactions by using SERS Wei XIE <i>Nankai University, China</i>
11:35-11:45	O-104	Anion Modulated Reductive Proton-Coupled Electron Transfer Lie WU <i>Nankai University & Changchun Institute of Applied Chemistry, CAS, China</i>
11:45-11:55	O-105	Investigating enhanced ethanol selectivity on Ag-Based catalysts for CO₂ electroreduction by operando EC-SERS Ping-Ping FANG <i>Sun Yat-Sen University (Shenzhen), China</i>
11:55-12:05	O-106	Application of Chemometrics in Nanosensing Measurement Yong WANG <i>Nanchang University, China</i>
Lunch		