

TENTATIVE PROGRAM

III International Conference on Analytical and Bioanalytical Methods

October 18-20, 2021



Last Updated: September 15, 2021

Last minute changes due to functional, private, or organizational needs can be necessary. The event organizer accepts no liability for any additional costs caused by a change of program.

Program is subject to change

Keynote Session

Least-Squares Methods for Analyzing Data with Uncertainty in X and Y

Joel Tellinghuisen, Vanderbilt University, Nashville, TN

Unexpected Drug Clearance Pathway: Identification of a Covalently Modified Protein in Rat Blood

Linlin Dong, Takeda Pharmaceuticals, Cambridge, MA

Plasmonic Nanostructures for Optical Sensing, Point-of-Care Testing and Photodynamic Therapy

Nianqiang Wu, University of Massachusetts, Amherst, MA

LC-MS/MS of Glycan and Glycopeptide Isomers Using Mesoporous Graphitized Carbon Nanotubes

Yehia Mechref, Texas Tech University, Lubbock, TX

Photochemical Vapor Generation: A Tool Supporting Ultratrace Analysis

Ralph Sturgeon, National Research Council Canada, Canada

Automated Analysis of Wine and Beer by NMR Spectroscopy

David S Wishart, University of Alberta, Canada

Oral Presentations

Bio-Analysis

Array-Based Sensors for Analysis of DNA Folding

Wenwan Zhong, University of California, Riverside, CA

Dual Amplification Enabled Counting Based Ultrasensitive Enzyme-Linked Immunosorbent Assay

Yu Lei, University of Connecticut - Storrs, Mansfield, CT

Applications of SPR in Characterization of Biological Binary and Ternary Complexes

Qing Chen, Amgen Inc, CA

Advanced Materials Based Optical Biosensors for Bio-Detections

Xianfeng Chen, Nottingham Trent University, UK

Directed Selection of Aptamers for More Specific Cancer Diagnosis

Noemi de los Santos Alvarez, University of Oviedo, Spain

Biosensors Based on Nanochannels for Applications in Diagnostics

Alfredo de la Escosura-Muniz, University of Oviedo, Spain

3D-Interdigitated Electrode Array Impedimetric Transducers for Bacteria Detection

Andrey Bratov, Barcelona Institute of Microelectronics - CSIC, Spain

Real-Time pH Monitoring in Sweat by Using a Wireless Wristband

Miguel M Erenas, University of Granada, Spain

Digital Sensing of Substances in Water Using a Single-DNA Biochip

Laurence Salome, CNRS, France

Portable Chemiluminescence-Based Biosensors: Innovative Strategies for Combining Highly Sensitive Quantitative Analysis with Point-of-Care Approach

Martina Zangheri, University of Bologna, Italy

Effect-Based Analysis of Bio-Based Products with Low-Cost Biosensors and Nanotools

Elisa Micheli, University of Bologna, Italy

Split G-Quadruplex Chemiluminescent DNAzyme for Antibodies Detection

Donato Calabria, University of Bologna, Italy

Paper-Based Biosensors for Global Security Threats

Maria Maddalena Calabretta, University of Bologna, Italy

Magnetic Levitation-Based Sandwich Immunoassay

Seren Kecili, Izmir Institute of Technology, Turkey

Rapid Bacteria Detection in Drinking Water Samples with On-Chip Mach-Zehnder Interferometers

Michailia Angelopoulou, NCSR "DEMOKRITOS", Greece

Ultrafast Quantitative Polymerase Chain Reaction via Nanoparticle Enabled Efficient Photothermal Modulation

Dar-Bin Shieh, National Cheng Kung University, Taiwan

Development of fast and accurate electrochemical tests for early diagnosis of COVID-19

Talita Mazon, Center for Information Technology Renato Archer, Brazil

Wearable Mouthguard Biosensor for In Vivo Salivary Glucose Measurement

Takahiro Arakawa, Tokyo Medical and Dental University, Japan

cDNA Display-Mediated Immuno-PCR (cD-IPCR): An Ultrasensitive Immunoassay for Biomolecular Detection

Chathuni Jayathilake, University of Sri Jayewardenepura, Sri Lanka

Bioanalysis on chip: nanofluidics and graphene sensors

HAGHIRI-GOSNET, C2N, France

Applications of Analytical and Bioanalytical Chemistry

A Novel High Throughput Solid Phase Extraction Method for Lipidomics Analysis in Biological Matrices Using Liquid Chromatography Mass Spectrometry

Limian Zhao, Agilent Technologies Inc, Santa Clara, CA

Rapid and Efficient Analyte Enrichment with Electrokinetic Microfluidic/Nanofluidic Systems for Proteome Analysis

Aaron Timperman, University of Illinois, Chicago, IL

Innovative LCMS platform for Antibody Drug Conjugate (ADC) Characterization under Native Conditions: Drug-to-Antibody Ratio (DAR) distribution monitoring in biological samples

Shuai Niu, AbbVie Inc, MA

Development of Quantitative Analysis Methods for Transition Metal Oxide Nanoparticles in Water Treatment

Edward P.C. Lai, Carleton University, Canada

Monitoring of Emerging Mycotoxins in Paprika Using Cellulose-Ferrite Nanocomposite

Maria Garcia Nicolas, University of Murcia, Spain

Analytical methods for the nanoworld: Analytical Nanometrology

Angel Rios, La Mancha University, Spain

Screening Assay for Directed Evolution of Chitin Deacetylases. Application to Mutant Libraries for Engineered Specificity

Antoni Planas, University Ramon Llull, Spain, Spain

Application of metallomics and metabolomics to environmental metal toxicity assessment

Jose Luis Gomez Ariza, University of Huelva, Spain

Exploring Possibilities of Isotopic Analysis in Ocular Fluids in the Scope of Ophthalmological Disorders

Lara Lobo Revilla, University of Oviedo, Spain

Recent Achievements in All Solid State Ion-Selective Electrodes

Cecylia Wardak, Maria Curie Skłodowska University, Poland

Analytical Capabilities of Bulk Acoustic Wave Sensors: From Selective Sensors to Odor Evaluation Using a Single Sensor or an Array

Maria Teresa Seabra dos Reis Gomes, University of Aveiro, Portugal

Analytical methods for the nanoworld: Analytical Nanometrology

Angel Rios, University of Castilla-La Mancha, Spain

Relevant hyphenated techniques to study Volatile Organic Compounds for the development of agromaterials

Bertheau Elise, University of Toulouse, France

Protein-Probe – A Versatile Luminescent Tool for Label-Free Protein Property and Interaction Characterization

Kari Kopra, University of Turku, Finland

Fabric Phase Sorptive Extraction of Selected Polycyclic Aromatic Hydrocarbons in Human Plasma Followed by High Performance Liquid Chromatography-Fluorescence

Isil Gazioglu, Bezmialem Vakif University, Turkey

Pure Shift NMR: A New Tool for Studying Polymers and Complex Mixtures

Juan Manuel Lopez Smith, Pontifical Catholic University of Peru, Peru

New Approaches to Sensing Platforms Improvement through Printing Technologies

Franc Pare Estalella, Autonomous University of Barcelona, Spain

Digital Colorimetry: Raspberry Pi-Based Sensors for Air and Water Quality Monitoring

Aleksandar Radu, Keele University, UK

Membrane Nanoscopic Organization of D₂L Dopamine Receptor Probed by Single Quantum Dot Tracking

Oleg Kovtun, Vanderbilt University, Nashville, TN

Pharmaceutical & Biomedical-Forensic Analysis

UHPLC-QqQ-MS/MS Method Development and Validation for Analysis of Raspberry Ketone Metabolites in Mice Plasma, Brain and Adipose Tissue

Bo Yuan, Harvard University, Cambridge, MA

Whole Slide Imaging for High-throughput Monitoring Pathogenic Fungal Growth at Single-Cell Level and Its Application to Rapid Antifungal Susceptibility Testing

Yu Lei, University of Connecticut - Storrs, Mansfield, CT

Development of a selective marker-based quantification of polysorbate 20 in biopharmaceutical formulations using UPLC QDa detection

Torsten Schultz-Fademrecht, La Mancha University, Spain

Precise Point-of-Care Technique for Early Diagnosis and Prognosis of Ovarian Cancer

Michael Thompson, University of Toronto, Canada

Chemical Proteomics for Determination of Drug Targets and Action Mechanisms

Roman Zubarev, Karolinska Institute, Sweden

Lifecycle and Risk-Based Management of Analytical Methods

Jose C Menezes, 4Tune Engineering, Portugal

Data-independent acquisition mass spectrometry (DIA-MS) for exploring off-targets in early drug discovery

Dhiman Ghosh, Takeda Pharmaceuticals, Inc, Boston, MA

Extraction of Drugs from Biological Samples: Theory and Applications

Charise Dallazem Bertol, University of Passo Fundo, Brazil

Analysis of near-infrared dye IR780 in formulation and tissues

Xiaowei Dong, University of North Texas Health Science Center, Texas

SERS of Metalloporphyrins and Heme Proteins: Metal dependence and Forensic Applications

Harrison M. Ingraham, Boston University, Boston, MA

Pre-Analytical Considerations Are Important In The Pharmacological Assessment Of Enzyme Therapeutics

Jennifer Ohayon, Aeglea Biotherapeutics, Austin, TX

Development, Validation, and Application of a Primer-Only Inorganic Gunshot Residue (pGSR) Standard

Tatiana Trejos, West Virginia University, Morgantown, WV

Characterization of Drug-Protein Binding by Ultrafast Affinity Extraction

David S. Hage, University of Nebraska-Lincoln, Lincoln, NE

Design and Synthesis of Triazole-Linked Quinoline Appended Derivatives for Detection of Cu²⁺ and Ni²⁺ Ions in Aqueous Medium

Ananta Kumar Atta, National Institute of Technology Arunachal Pradesh, India

Nanoplasmonic Quantification of Tumor-derived Extracellular Vesicles in Plasma

Tony Hu, Tulane University, Louisiana

Chromatographic & Spectroscopic Methods

Developing Robust Reversed-Phase LC Methods with Column Screening, Chromatographic Modeling and Risk Assessment Tools

Brian He, Bristol Myers Squibb, New York, NY

Consideration of Biological Activity in Terms of Chromatographic Relationships between Retention and Structure via New Generation of Stationary Phases

Boguslaw Buszewski, Nicolaus Copernicus University, Poland

At-Line Monitoring Principles via Reversed Phase: A Case-Study for Inclusion Body Solubilization

Julian Ebner, TU Wien, Austria

Structural Analysis of Biologically Active Compounds by Artificial Neural Networks Applied to Chromatographic Retentions and Interactions

Jean-Christophe Garrigues, CNRS IMRCP Laboratory, France

Characterization of Saccharide Conformational Equilibria and Dynamics in Solution by MA'AT Analysis

Anthony Serianni, University of Notre Dame, Notre Dame, IN

Comprehensive Carbohydrate Sequencing with Spectral Documentation

Vernon N Reinhold, University of New Hampshire, Durham, NH

Online Acetylcholinesterase Inhibition Evaluation by High-Performance Liquid Chromatography–Mass Spectrometry Hyphenated with an Immobilized Enzyme

Eric Marchioni, IPHC Strasbourg, France

Sample Preparation Methods and Direct Analysis by ICP-MS for the Determination of Rare Earth Elements in High Carbon Content Matrices

Erico Marlon Moraes Flores, Federal University of Santa Maria, Brasil

Monitoring of cerebral metabolites via mid-infrared spectroscopy for traumatic brain injury

Tanya Hutter, University of Texas, Austin, TX

Quantitative analysis of biological compounds using a pillar array column

Makoto Tsunoda, University of Tokyo, Japan

Product Ion and Neutral Loss Database and Software of the Non-target Environmental Analysis by Liquid Chromatography / High Resolution Mass Spectrometry

Shigeru Suzuki, Chubu University, Japan

Separation Techniques | Voltametry & Electrophoresis

Pervaporation Recovery of Ethanol from Organic Solutions Using Cellulose Acetate Propionate Membranes

Rafael Amarante, Dalhousie University, Canada

Fiber–Sample Distance, an Important Parameter to be Considered in Headspace Solid Phase MicroExtraction Applications

Franks Astride Kamgang Nzekoue, University of Camerino, Italy

To be Announced

Charise Dallazem Bertol, Universidade de Passo Fundo, Brazil

Functionalization of Magnetized Cellulose with Polyethyleneimine for Removal of RB5 Dye in Aqueous Solution

Norzita Ngadi, Universiti Teknologi Malaysia, Malaysia

Removal of Ethyl Orange Dye Using Hybrid Chitosan and Titanium-Dioxide

Norzita Ngadi, Universiti Teknologi Malaysia, Malaysia

Study of the activity of antibodies after their immobilization on gold nanoparticles

Dmitriy Sotnikov, Research Center of Biotechnology RAS, Russia

Cocaine-Induced Changes of Nucleus Accumbens Dopamine Concentration Using Multiple Cyclic Square Wave Voltammetry

Yoonbae Oh, Mayo Clinic, Rochester, MN

Voltammetric Analysis of Rare Earth Based Chemical Markers in Gunshot Residues

Marcelo Firmino de Oliveira, University of Sao Paulo, Brazil

Wireless Dielectrophoretic System Using Tesla Coil

Faisal Budiman, Telkom University, Indonesia

Microfluidic paper-based analytical devices for chemical composition analysis of particulate

Jaruwan Mettakoonpitak, Rambhai Barni Rajabhat University, Thailand

DNA Concentration in a Concentric Discontinuous Electrophoresis Device

Frantisek Foret, Charles University, Czech Republic

Silver Amalgam Particles in Electrochemical Detection of Biopolymers

Ales Danhel, Institute of Biophysics CAS, Czech Republic

Optoelectronic Nose Based on Surface Plasmon Resonance Imaging for the Gas-Phase Detection of Volatile Organic Compounds

Yanxia HOU, Interdisciplinary Research Institute of Grenoble (IRIG), France

Portable, in-situ determination of soil nutrients

Ernesto Saiz, Keele University, UK

Microwave-Assisted Extraction Coupled with Microextraction Techniques as an Eco-Friendly Strategy for the Quantification of Target Environmental Contaminants

Attilio Naccarato, CNR-Institute of Atmospheric Pollution Research, Rende, Italy

Food Analysis

Detection of Bacterial Pathogens in Low Moisture Foods with Dual Immunological Raman-Enabled Crosschecking Test (DIRECT) and Raman Mapping

Chenxu Yu, Iowa State University, Ames, IA

Determination of Spiciness in Habanero Pepper by Electronic Tongue

Julio Enrique Oney Montalvo, CIATEJ Guadalajara, Mexico

Deep Eutectic Solvent-Based Headspace Single-Drop Microextraction for the Quantification of Terpenes in Spices

Marcic Christophe, University of Strasbourg, France

Advances for the Determination of Non-Metals in Food and Biological Samples
Using Mass Spectrometry Detection

Marcia Foster Mesko, Federal University of Pelotas, Brazil

Selected Ion Flow Tube Mass Spectrometry (SIFT-MS) and chemometrics: a
reliable tool for grapevine varieties fast discrimination and authentication

Thomas Baerenzung, Purpan Engineering school, France

Determination of $87\text{Sr}/86\text{Sr}$ Isotopic Ratio in Olive Oil by Means of Multicollector-ICP MS

Emna Nasr, Institut National de Recherche et d'Analyse Physico-chimique, Tunisia

Poster Presentations

Assessment of the New Parameter Fiber Penetration Effect in HS-SPME Experiments in Pre-Equilibrium Conditions

Sauro Vittori, University of Camerino, Italy

Ultrafast Quantitative Polymerase Chain Reaction via Nanoparticle Enabled Efficient
Photothermal Modulation

Dar-Bin Shieh, Deputy Minister of Ministry of Science and Technology, Taiwan

Handheld Near-Infrared Spectrometers: On-Site Quality Control and Protection Against
Product Counterfeiting

Heinz Siesler, University of Duisburg-Essen, Germany

Electrochemical Sensing of 6-Mercaptopurine in Pharmaceutical Tablets and Human Urine
Using Anodically Pretreated Boron-Doped Diamond Electrode

Michal Hanko, University of Bratislava, Slovakia

Pharmacokinetic Study of an Anti-Trypanosome Agent with Different Formulations and
Administration Routes in Mice by HPLC-MS/MS

Yaxin Li, Cleveland State University, Cleveland, OH

Determination of Ferric Cations by Potentiometric Sensors Modified with Different Metal
Oxides and Oxyhydroxides Nanoparticles

Ante Prkic, University of Split, Croatia

Titles to be Announced

Lars M. Blank, RWTH Aachen University, Germany

Joachim Jankowski, Institute for Molecular Cardiovascular Research, Germany

Nico Lubcker, University of New Mexico, Albuquerque, NM

Stefan Seeger, University of Zurich, Switzerland

Lisa Hall, University of Cambridge, England

Thomas Walczyk, National University of Singapore, Singapore

Alexander R. Ivanov, Northeastern University, Boston, MA

Haishan Zeng, BC Cancer, Canada

Serena Dao, Endless West, San Francisco, CA

Christoph Borchers, McGill University, Canada

Armando R. Hernandez, Nutcracker Therapeutics, Inc., Emeryville, CA

Cormac Elias Hally, Nutcracker Therapeutics, Emeryville, CA

Yoon Junghyo, Massachusetts Institute of Technology, Cambridge, MA

Sofia Santos, 4Tune Engineering, Portugal