

ISRANALYTICA 2025

14-15 JANUARY 2025

THE DAVID INTERCONTINENTAL HOTEL, TEL-AVIV, ISRAEL

THE 25TH ANNUAL MEETING OF THE ISRAEL ANALYTICAL CHEMISTRY SOCIETY

CONFERENCE & EXHIBITION

Day 2 – 15 January 2025



Registration
for Israeli participants



Registration
for non-Israeli participants



Group
registration

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| 08:00 – 09:15 | Registration | | | |
| 09:15 – 09:30 | Musical Interlude | | | |
| 09:30 - 10:20 Plenary Session | <p>Portable Methodologies for In-Situ Trace Detection of Explosives and Environmental Toxins Tomas Torroba, Department of Chemistry, University of Burgos, Burgos, Spain</p> <p>Chair: Israel Schechter</p> | | | |
| 10:20 - 10:50 | Coffee Break | | | |
| | Hall A | Hall B | Hall C | Hall D |
| | Session I | Session J | Session K | Session L |
| | Mass Spectrometry | Artificial intelligence (AI) in Analytical Chemistry | Laboratory Practice in Analytical Chemistry | Nanomaterials in Analytical Chemistry |
| | Chair: Aviv Amirav | Chair: Bianca Avramovitch | Chair: Zvi Naim | Chair: Daniel Mandler |
| 10:50 - 11:20 Keynote | <p>Pushing the Limits of Sample Identification by GC-MS with Cold EI Aviv Amirav Tel Aviv University, Israel</p> | <p>Timna: Bridging the Gap Between Ideas and Implementation in AI-Driven Medical Research Eli Melul Ministry of Health, Israel</p> | <p>Procedures, Standards and Guidelines: Who Publishes them and what are the Requirements? Orna Dreazen Chairperson of the Board of Directors of Nextar Ltd.</p> | <p>Electrochemical Sensor Array for Label-Free Detection of Oxidative Stress Hadar Ben-Yoav Ben-Gurion University of the Negev Israel</p> |
| 11:20 - 11:40 | <p>Pushing the Boundaries of Science with Multi Reflecting Time of Flight Technology Jayne Kirk Waters Corporation, UK</p> | <p>AI: A Catalyst for Analytical Innovation Michel Reich Teva Pharmaceuticals LTD, Israel</p> | <p>Proper Work in the Laboratory Using Different Standards Zvi Naim Yoel Naum Ltd.</p> | <p>The Role of Ammonia and Its Reduction Byproducts Analysis in Novel Electrocatalytic Processes Alex Schechter Ariel University, Israel</p> |
| 11:40 - 12:00 | <p>Discovering Medical Biomarkers and Drugs in Whole Blood using GC-MS with Cold EI and 'WIN' Software Benny Neumark Tel-Aviv University, Israel</p> | <p>AI, DI, Over Regulation: Impact on QMS Karen Taylor KT Consulting, Israel</p> | <p>Training for Laboratory Employees: Planning, Implementation, Effectiveness Follow-Up and Program Update Bianca Avramovitch Teva</p> | <p>The Effect of the Capping Agents of Nanoparticles on Their Redox Potential Pavel Savchenko The Hebrew University of Jerusalem, Israel</p> |
| 12:00 - 12:20 | <p>Leading Non-Targeted Analysis to the Next Level Using GC-MS with Cold EI Alex Yakovchuk Tel Aviv University, Israel</p> | <p>Big Data as a key component for Artificial Intelligence in Analytical Chemistry Ayelet Ofarim Arad-Ophir, Israel</p> | <p>Validation of Analytical Methods Orna Dreazen Chairperson of the Board of Directors of Nextar Ltd.</p> | <p>A Dual-Channel Biosensor Enables Concurrent Detection of Pathogens and Antibiotic Resistance Sefi Vernick ARO Volcani Institute, Israel</p> |

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| 12:20 – 12:40 | | <u>Context-Dependent Design of Induced-Fit Enzymes Using Deep Learning Generates Well-Expressed, Thermally Stable and Active Enzymes</u> Chen Brestel , Weizmann Institute of Science, Israel | | <u>Continuous Glucose Monitoring (CGM): From Research to Real-World Application</u> Yehonatan Ravenna Tingo Medical, Israel  |
| 12:40 - 13:45 |  Lunch Break and Poster Presentations | | | |
| 13:45 - 14:00 | Annual meeting of the IACS and Best poster award | | | |
| 14:00 - 14:45  Plenary Session |  | <u>How to Break the “Fundamental” Limits of Clinical and Wearable/Implantable Bio and Electrochemical Sensors</u> Muhammad A. Alam , School of Electrical and Computer Engineering, Purdue University, Indiana, USA  Chair: Daniel Mandler | | |
| 14:45-15:10 |  Coffee Break | | | |
| | Hall A | Hall B | Hall C | Hall D |
| | Session M | Session N | Session O | Session P |
| | Pharmaceutical and Bioanalysis | Environmental and Public Health Analysis | Regulatory Aspects in Analytical Chemistry | Analytical Spectroscopy |
| | Chair: Raphy Bar | Chair: Ishai Dror | Chair: Arina Ceausu | Chair: Israel Schechter |
| 15:10- 15:40  Keynote | <u>How reliable are your blood test results?: Uncertainty Approach versus Error Approach</u> Paulo Pereira Portuguese Institute of Blood and Transplantation, Portugal  | <u>The gold standard: understanding engineered gold nanoparticle (AuNP) interactions and fate in the soil-water environment</u> Ishai Dror Weizmann Institute of Science, Israel  | <u>Behind the scenes of analytical development and control strategy of generic complex GLP-1 peptides</u> Lior Stern TAPI, Israel  | <u>Bridging Supramolecular Chemistry and Practicality: Colorimetric Sensors for Real-World Challenges</u> Mindy Levine Ariel University, Israel  |
| 15:40 - 16:00 | <u>Finding Optimal Leuprorelin-Permeability Enhancer Complexes for Extended Release</u> Deborah Shalev Azrieli College of Engineering, Israel  | <u>Optical Solutions for the Precise Analysis of Oxygen in Hydrogen Environments: Challenges and Innovations</u> Ariel Kigel Modcon Systems, Israel  | <u>Identification and quantification of Fava bean in food</u> Shira Rosenwaig Ministry of Health, Israel  | <u>Compensation for Matrix Effects in High-Dimensional Data using Standard Addition</u> Itai Dattner University of Haifa, Israel  |
| 16:00- 16:20 | <u>Qualification of critical reagents in in-vitro potency bioassays using Curve Parameter Control Strategy</u> Debby Bartfeld Independent consultant, Israel  | <u>Removal of PFAS and other fluorinated organic compounds by electrochemistry in water</u> Phillip Vershinin Weizmann Institute of Science, Israel  | <u>Challenges of Generic Oligonucleotide Drug Substance Development</u> Michael Tikhonov TAPI, Israel  | <u>Dynamic Stark effect on Fraunhofer-type absorption in DP LIBS</u> Lev Nagli Ariel University, Israel  |
| 16:20– 16:40 | <u>Not Only Reverse Phase</u> Ronit Eliraz Amorphical Ltd, Israel  | | <u>Multiplex Pathogenic Bacteria Detection In Milk Using Nanoparticle-Assisted Porous Silicon-Based SERS Microarray Biosensor</u> Giorgi Shtenberg Volcani Institute, Israel  | <u>LIBS-MLIF for isotopic shift analysis</u> Michael Gaft Ariel University, Israel  |
| 16:40 - 17:00 | <u>Practical uses of AI and new technology in the Cleanroom industries</u> Josh Magnus Magnus Solutions, Israel  | | <u>Analytical Capabilities for Human Biomonitoring in Israel: State of the Art</u> Gal Zizelski Valenci Ministry of Health, Israel  | <u>Sub-PPB Detection with Gas-phase Multiphoton Electron Extraction Spectroscopy under Ambient Conditions</u> Tikhon Filippov Technion-Israel Institute of Technology, Israel  |

Day 1

14 January 2025

Poster Session