NEW DIRECTIONS FOR ELEMENTAL MS

Chair: Gary Hieftje
Room: Presidential Ballroom North

ThOFam 10:15 All the Signal All the Time (ASAT) Focal Plane Array Ion Detector for Mass Spectrometry – Second Generation Prototypes; Charles J. Barinaga; David W. Koppenaal; Gregory D. Schilling; Gary M. Hieftje; Roger P. Sperling; Meron Bonner Denton; Pacific Northwest National Laboratory, Richland, WA; Indiana University of Arizona, Tucson, AZ

ThOFam 10:35 Ionization and Hyphenation for Elemental Speciation; Christie G. Enke University of New Mexico, Albuquerque, NM

ThOFam 10:55 Detection of Metallicloproteins by Laser Ablation/ICP-MS on Blot Membranes after Separation by SDS-Page; Ingo Feldmann; Norbert Jakubowski; Wolf D. Lehmann; Christian Wolf; Andrea Richarz; Antonios Kyriakopoulos; Dietrich Behne; Institute of Spectrochemistry (ISAS), Dortmund, Germany; German Cancer Research Center (DKFZ), Heidelberg, Germany; Hahn-Meitner Institute (HMI), Berlin, Germany

ThOFam 11:15 A Dual-Source Inductively Coupled Plasma/Electrospray Ionization Time-of-Flight Mass Spectrometer for Simultaneous Atomic and Molecular Mass Spectrometry; Steven J. Ray; Duane A. Rogers; Gary M. Hieftje; Indiana University, Bloomington, IN

ThOFam 11:35 Proteome Analysis of Alzheimer’s Disease Brain Proteins by MALDI-FTICR-MS and Determination of Phosphorus and Metal Concentrations by LA-ICP-MS; J. Susanne Becker; Eugen Damoc; Myroslav Zoryi; J. Sabine Becker; Michael Przybylski; Department of Chemistry/University of Konstanz, Konstanz, Germany; Department of Analytical Chemistry, Research Center Juelich, Juelich, Germany

THURSDAY AFTERNOON ORALS

PROTEIN PHOSPHORYLATION ANALYZED BY MASS SPECTROMETRY
Chair: Yingming Zhao
Room: Delta Ballroom A

ThOapm 03:00 Chemoenzymatic Method for Phosphorylation Site Indentification; Bradford W Gibson; Birgit Schilling; Richard H Row; Buck institute for Age Research, Novato, CA

ThOapm 03:20 Comprehensive Analysis of Composition and Phosphorylation of Protein Complexes with an Integrated Platform of MALDI Mass Spectrometers; Andrew N. Krutchinsky; Xiaoting Zhang; Chao Zhang; Robert G. Roeder; Brian T. Chait; Rockefeller University, New York, NY; Xproteo, New York, NY

ThOapm 03:40 Automated Platforms for Wide-Scale Protein Phosphorylation Analysis; Scott B. Ficarro; Arthur R. Salomon; Shihmin Huang; Laurence M. Brill; Michelle Stettler-Gill; David M. Horn; Ansgar Brock; Eric C. Peters; Genomics Institute of the Novartis Research Foundation, San Diego, CA

ThOapm 04:00 Identification and Characterization of Phosphopeptide Using Mass Spectrometry; W. Andy Tao; Xiao-Jun Li; Bernd Wollscheid; Yong Chi; D.J. Pappin; S. Purkayastha; Eugene Yi; Jimmey Eng; Patrick Pedrioli; Ruedi Aebersold; Institute for Systems Biology, Seattle, WA; Applied Biosystems, Framingham, MA; Applied Biosystems, Foster City, CA

ThOapm 04:20 Identification and Characterization of over 2000 Human Phosphorylation Sites; Sean A. Beausoleil; Mark Jedrychowski; Daniel Schwartz; Joshua Eliau; Judit Villen; Martin A. Cohn; Lewis C. Canley; Steven P. Gygi; Harvard Medical School, Boston, MA; Dana-Farber Cancer Institute, Boston, MA; Israel Deaconess Medical Center, Boston, MA

ThOapm 04:40 Analysis of Phosphopeptides with Electron Transfer Dissociation on a Chromatographic Time Scale; Melanie J. Schroeder; Joshua J. Coon; John E. P. Polyethylene Glycol Ions Investigated via IMS-MS; Motoya Kohtani; Martin F. Jarrold; German Cancer Research Center (DKFZ), Heidelberg, Germany; German Cancer Research Center (DKFZ), Heidelberg, Germany; Buck institute for Age Research, Concord, Ontario, Canada

ION MOBILITY SPECTROMETRY
Chair: David Clemmer
Room: Delta Ballroom B

ThOBpm 03:20 TBD; David Clemmer

ThOBpm 03:20 High Temperature Ion Mobility Measurements; Motoya Kohtani; Martin F. Jarrold; Indiana University, Bloomington, IN

ThOBpm 03:40 Chemoenzymatic Method for Phosphorylation Site Indentification; Bradford W Gibson; Birgit Schilling; Richard H Row; Buck institute for Age Research, Novato, CA

ThOBpm 04:00 Selectivity in Ion Mobility Separations; Herbert Hill; Brain Clowers; Prabhia Dwiwed; Maggie Tam; Steve Klopsch; Brad Bendian; Washington State
ThOCpm 03:20 Studies of the Efficiency of Ion Transmission through FAIMS: Experimental Measurements and Ion Trajectory Modeling; Govindanuny Thakkadath; Roger Guevremont; Ionalytics Corporation, Ottawa, ON, Canada

ThODpm 03:20 Plastic Microchips for Mass Spectrometry; Wendy D. Dominick; April Dupre; Lianji Jin; Justin Meconner; Patrick A. Limbach; University of Cincinnati, Cincinnati, OH

ThODpm 03:20 Microfluidic Platforms for ESI and MALDI-MS Investigations of Proteomic and Metabolic Samples; Vladimir Shulaev; Nigel Deighton; Phichet Trisiriapal; Jianghong Qian; Julia M. Lazar; Virginia Bioinformatics Institute, Blacksburg, VA

ThODpm 03:40 Integrated Microsystems for Proteomic Applications and Dedicated to ESI-MS; Julien Carlier; Séverine Le Gac; Jean-Christophe Camart; Christian Rolando; "Chimie Organique et Macromoléculaire, USTL, Lille, France; "IEMN, USTL, Lille, France

ThOEpm 04:00 Chip-LC/MS: High Performance HPLC-MS Using a Polymer Microfluidic Device; Kevin Killen; Karsten Kraiczek; Karen Seaward; Dan Sobek; Jan Eickhoff; Patrik Mueller; Debbie Ritcehy; Agilent Technologies, Palo Alto, CA

ThOEpm 04:20 Integrating Microfluidics with MALDI TOF Mass Spectrometry; Harrison K. Musyimi; Damien A. Narcisse; Steven A. Soper; Kermit K. Murray; Louisiana state University, Baton Rouge, LA

ThOEpm 04:40 Compared of Different IMAC Kits Commonly Used for Enrichment of Phosphorylated Peptides; Maria Granberg; Rikard Kånge; Gunnar Ekstrand; Ulrika Selditz; Bo Ek; Magnus Gustafsson; Gyros AB, Uppsala, Sweden

ThOEpm 03:00 Recent Advances in Quantitative Synthetic-Polymer Mass Spectrometry at NIST; William E. Wallace National Inst. Stand. and Technology, Gaithersburg, MD

ThOEpm 03:20 Quantitative Determination of the Molecular Weight Composition of a Water-Dispersible Poly[(fluorooxetane); Chrys Wesdemiotis; Francesco Pingitore; Yongsin Kim; Robert E. Medsker; Richard R. Thomas; "The University of Akron, Akron, OH; "OMNOVA Solutions, Inc., Akron, OH

ThOEpm 03:40 Quantitative Analysis of Reactive Polymers and Impurities Using GPC and MALDI-TOF MS; Michael Lau; E. Peter Maziarz; Yu-Chin Lai; David J. Heiler; Bausch & Lomb, Rochester, NY

ThOEpm 04:00 The Optimization of MALDI-TOF-MS for Synthetic Polymer Characterization by Factorial Design; Stephanie J. Wetzel; Charles M Guttman; Kathleen M Flynn; James J Filliben; National Institute of Standards and Technology, Gaithersburg, MD

ThOEpm 04:20 Characterisation of Acrylic Homopolymers and Copolymers by means of Electrospray Ionisation-Tandem Mass Spectrometry (ESI-MS/MS); Anthony T. Jackson; James H. Scrivens; Susan Slade; William J. Simonsick; "ICI Measurement Science Group, Redcar, UK; "University of Warwick, Coventry, UK; "DuPont Marshall Research and Development Lab, Philadelphia, PA

ThOEpm 04:40 Characterization and Quantification of Ionenel Compounds by LC/MS and the Chemiluminescent Nitrogen Detector; Bing H Wang; Eva Budman; Andre J Bourque; Aharon S Cohen; Genzyme Corporation, Waltham, MA

ThOFpm 03:00 Computational Evidence for Direct Electron Attachment to the Peptide Backbone in ECD; Erik A. Syrstad; Frantisek Turecek; University of Washington, Seattle, WA

ThOFpm 03:20 A DFT Theoretical Investigation on the Fragmentation Mechanisms of Cysteine Radical Cation in the Gas Phase; Junfang Zhao; Alan C. Hopkins; K. W. Michael Stur; York university, Toronto, ON, Canada

ThOFpm 03:40 Gas-Phase Reactions between Urea and Ca2+: The Importance of Coulomb Explosions; Inés Corral; Otilia Mó; Manuel Yáñez; Jean-Yves Salpin; Jeanine Tortajada; Leo Radom; "Universidad Autónoma de Madrid, Madrid, Spain; "CNRS-UMR

ThOFpm 04:00 Chip-LC/MS: High Performance HPLC-MS Using a Polymer Microfluidic Device; Kevin Killen; Karsten Kraiczek; Karen Seaward; Dan Sobek; Jan Eickhoff; Patrik Mueller; Debbie Ritcehy; Agilent Technologies, Palo Alto, CA

ThOFpm 04:20 Integrating Microfluidics with MALDI TOF Mass Spectrometry; Harrison K. Musyimi; Damien A. Narcisse; Steven A. Soper; Kermit K. Murray; Louisiana state University, Baton Rouge, LA

ThOFpm 04:40 Compared of Different IMAC Kits Commonly Used for Enrichment of Phosphorylated Peptides; Maria Granberg; Rikard Kånge; Gunnar Ekstrand; Ulrika Selditz; Bo Ek; Magnus Gustafsson; Gyros AB, Uppsala, Sweden

Quantitative MS Analysis of Polymers: Chair: Kelsey Cook Room: Presidential Ballroom South

ThOEpm 04:00 ThODpm 03:20 ThOEpm 04:40
Potassium Cation Binding to α-Amino Acids and Dipeptides: A Combined Theoretical and Mass Spectrometric Kinetic Method Study; Chun-Wai Tsang¹; Yuet Tsang¹; Carrie Hoi-Shan Wong¹; Fung-Ming Siu¹; Jackie Man-Kit Cheng¹; Tracy Ho-Man Lee²; Seduraman Abirami²; Ngai-Ling Ma²; ¹The Hong Kong Polytechnic University, Hong Kong, China; ²Institute of High Performance Computing, The Capricorn, Singapore

Existence of Doubly Charged Lead Monohydrate: Experimental Evidence and Theoretical Examination; Tujin Shi; Galina Orlova; Jingzhong Guo; Diethard K. Bohme; Alan C. Hopkinson; K. W. Michael Siu; York University, Toronto, ON Canada

Distinguishing the Isomers of Phenylenediamine Using Ion Chemistry: Topology of Cucurbit[6]uril Complexes via Fourier Transform Ion Cyclotron Resonance Mass Spectrometry; David V. Dearden¹; Tyler A. Ferrell¹; Krzysztof E. Krakowiak²; ¹Brigham Young University, Provo, UT; ²IBC Advanced Technologies, American Fork, UT