

**Cover image caption:** Determining the structure of a new psychoactive substance is possible on the basis of knowledge of characteristic fragment ions, see page 1941.

**ASMS NEWS & VIEWS**

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ASMS News & Views  
Edited by Gavin Reid

**FACES OF MASS SPECTROMETRY**

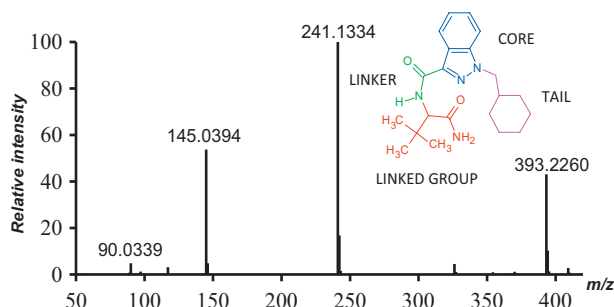
*iv-v*

Interview Series: Lisa Jenkins  
Kristen E. Phillips

**RESEARCH ARTICLES**

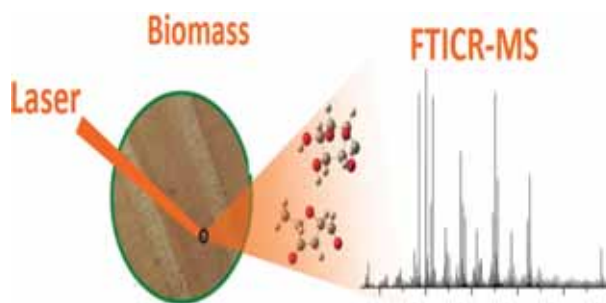
**1941–1950**

Analysis of Fragmentation Pathways  
of New-Type Synthetic Cannabinoids  
Using Electrospray Ionization  
K. Sekuła, D. Zuba, and K. Lorek



**1951–1962**

Characterization of biomass and biochar  
by LDI-FTICRMS Effect of the laser  
wavelength and biomass material  
F. Aubriet, T. Ghislain, J. Hertzog,  
A. Sonnette, A. Dufour, G. Mauviel,  
and V. Carré



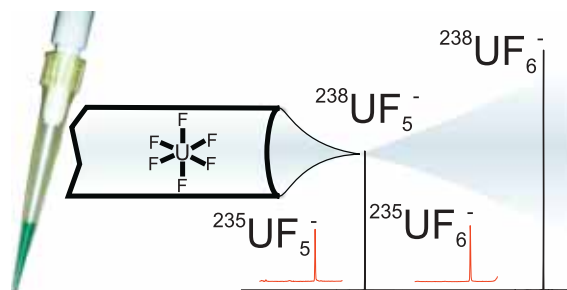
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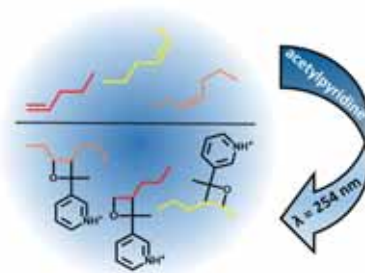
1963–1970

Production of Gas-Phase Uranium Fluoroanions Via Solubilization of Uranium Oxides in the [1-Ethyl-3-Methylimidazolium]+[F(HF)<sub>2,3</sub>]- Ionic Liquid  
 C.A. Zarzana, G.S. Groenewold, M.T. Benson, J.E. Delmore, T. Tsuda, and R. Hagiwara



1971–1980

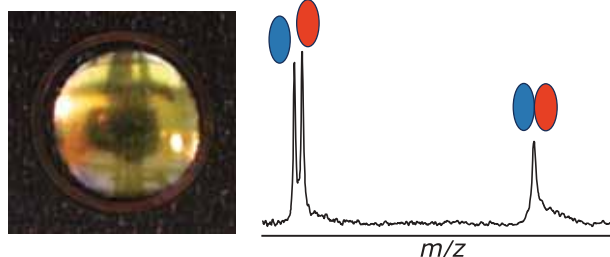
Charging and Charge Switching of Unsaturated Lipids and Apolar Compounds Using Paternò-Büchi Reactions  
 P. Esch and S. Heiles



1981–1994

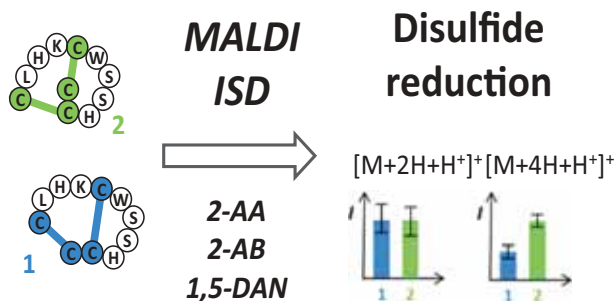
Liquid Native MALDI Mass Spectrometry for the Detection of Protein-Protein Complexes  
 M. Beaufour, D. Ginguené, R. Le Meur, B. Castaing, and M. Cadene

Liquid Native MALDI MS



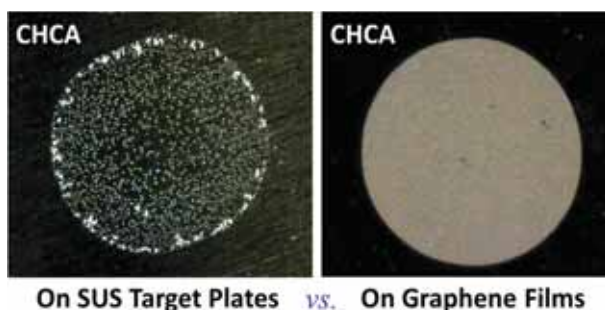
1995–2002

Disulfide Connectivity Analysis of Peptides Bearing Two Intramolecular Disulfide Bonds Using MALDI In-Source Decay  
 P. Massonnet, J.R.N. Haler, G. Upert, N. Smargiasso, G. Mourier, N. Gilles, L. Quinton, and E. De Pauw



2003–2011

Large-Area Graphene Films as Target Surfaces for Highly Reproducible Matrix-Assisted Laser Desorption Ionization Suitable for Quantitative Mass Spectrometry  
 Y.K. Choi, J.Y. Oh, and S.Y. Han

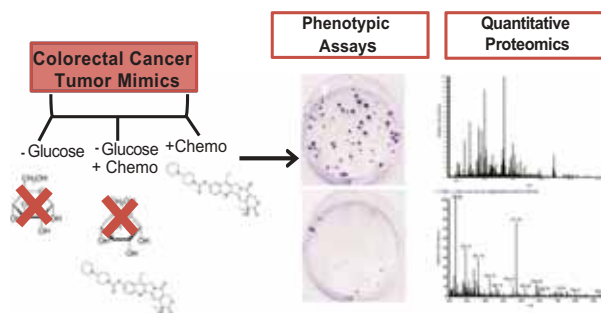


On SUS Target Plates vs. On Graphene Films

2012–2022

Combined Short-Term Glucose Starvation and Chemotherapy in 3D Colorectal Cancer Cell Culture Decreases 14-3-3 Family Protein Expression and Phenotypic Response to Therapy

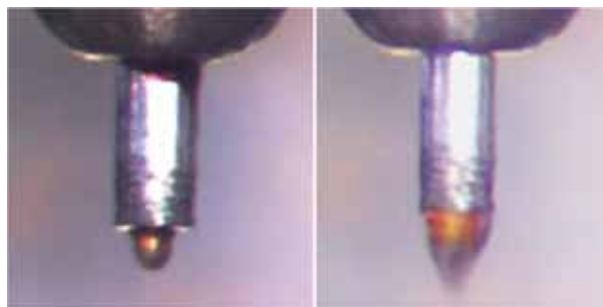
M.M. Schroll, K.R. Ludwig, G.J. LaBonia, E.L. Herring, and A.B. Hummon



2023–2029

Coaxial Electrospray Ionization for the Study of Rapid In-source Chemistry

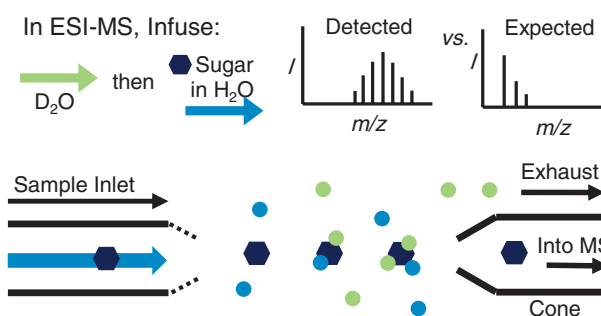
B.N. Sundberg and A.F. Lagalante



2030–2040

Mass Spectral Detection of Forward-and Reverse-Hydrogen/Deuterium Exchange Resulting from Residual Solvent Vapors in Electrospray Sources

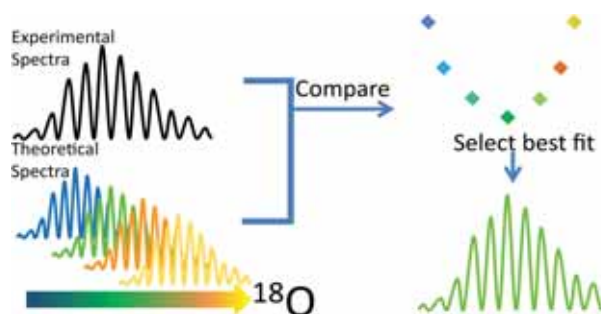
H.J. Kim, O.T. Liyanage, M.R. Mullen, and E.S. Gallagher



2041–2047

Method for Quantifying Oxidized Methionines and Application to HIV-1 Env

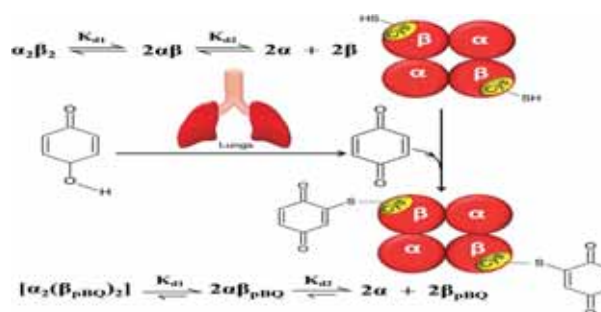
J.T. Shipman, E.P. Go, and H. Desaire



2048–2058

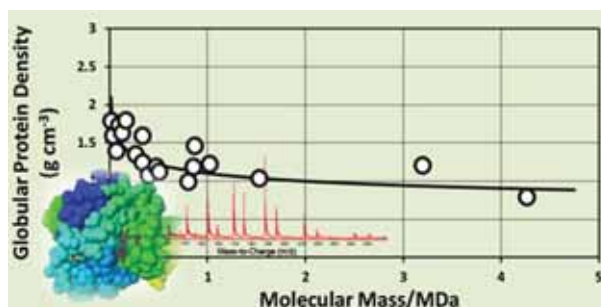
Conjugation of *para*-benzoquinone of Cigarette Smoke with Human Hemoglobin Leads to Unstable Tetramer and Reduced Cooperative Oxygen Binding

A. Mitra and A.K. Mandal

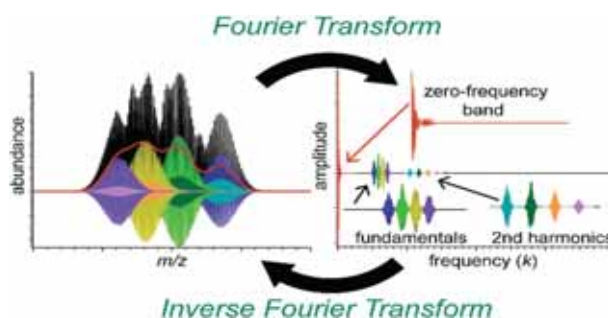


**2059–2066**

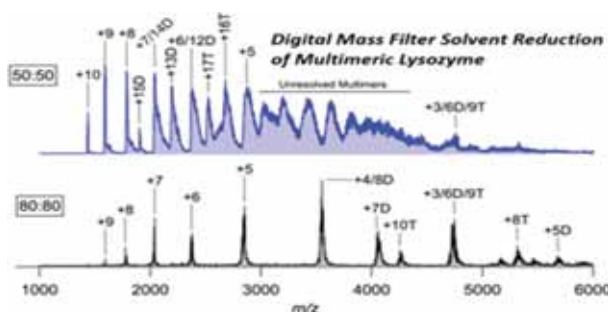
Resolving the Discrepancies Between Empirical and Rayleigh Charge Limiting Models for Globular Proteins  
K.C.B. De Freitas

**2067–2080**

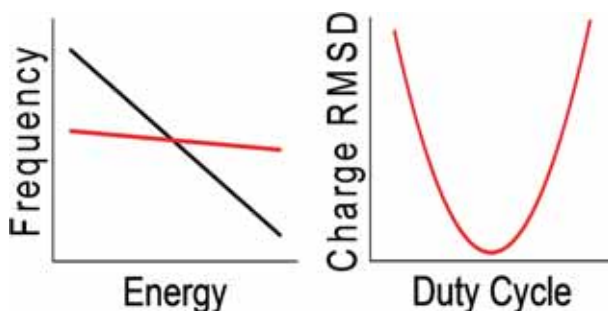
Extracting Charge and Mass Information from Highly Congested Mass Spectra Using Fourier-Domain Harmonics  
S.P. Cleary, H. Li, D. Bagal, J.A. Loo, I.D.G. Campuzano, and J.S. Prell

**2081–2085**

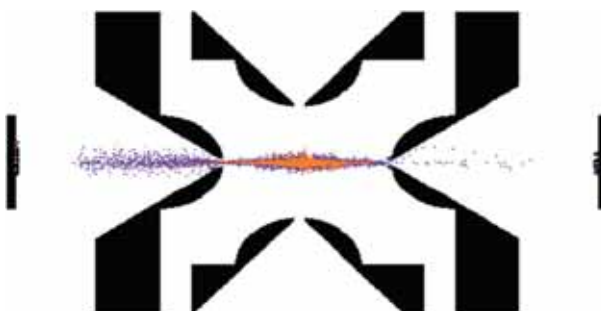
Using Digital Waveforms to Mitigate Solvent Clustering During Mass Filter Analysis of Proteins  
B. Opačić, N.M. Hoffman, Z.P. Gotlib, B.H. Clowers, and P.T.A. Reilly

**2086–2095**

Optimized Electrostatic Linear Ion Trap for Charge Detection Mass Spectrometry  
J.A. Hogan and M.F. Jarrold

**2096–2104**

Simulation of Unidirectional Ion Ejection in an Asymmetric Half-Round Rod Electrode Linear Ion Trap Mass Analyzer  
H. Wu, L. Zhang, Z. Zhang, J. Qian, S. Zhang, Y. Zhang, S. Ge, and X. Li

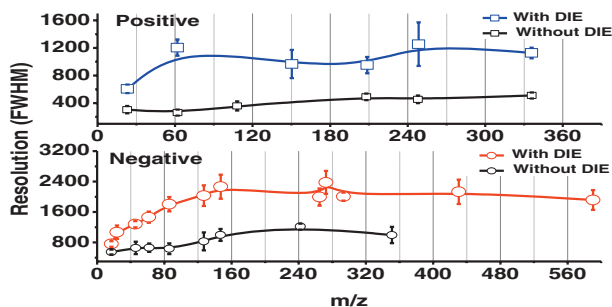


## APPLICATION NOTES

## 2105–2109

Improvement in the Mass Resolution of Single Particle Mass Spectrometry Using Delayed Ion Extraction

*L. Li, L. Liu, L. Xu, M. Li, X. Li, W. Gao, Z. Huang, and P. Cheng*



## 2110–2113

Resolution-Enhanced Kendrick Mass Defect Analysis of Polycyclic Aromatic Hydrocarbons and Fullerenes in the Diffusion Flame from a Butane Torch

*R.B. Cody and T. Fouquet*

