

Julia Laskin, Ph.D.

Curriculum Vitae

William F. and Patty J. Miller Professor of Analytical Chemistry

Department of Chemistry

Purdue University

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EDUCATION

M.Sc. 1990 from Leningrad Polytechnic Institute, USSR.

Ph.D. 1998 from the Hebrew University of Jerusalem, Israel.

RESEARCH INTERESTS

My research is focused on obtaining a fundamental understanding of the physical and chemical phenomena underlying chemical analysis of complex molecules in complex mixtures. One area of research is focused on understanding interactions between ions and surfaces for controlling deposition of complex ions following collisions with specially prepared surfaces. To achieve this goal, we have developed unique mass spectrometry instrumentation for studying physical and chemical phenomena underlying ion-surface collisions. Our studies provide important information for understanding charge transfer, reactivity, and self-assembly at complex interfaces. Soft and reactive landing are promising approaches for highly selective surface modification, preparation of novel catalysts, supercapacitors, and biomaterials. Another area of research is focused on the development of new approaches for quantitative label-free imaging of biological systems using nanospray desorption electrospray ionization (nano-DESI) – a new ambient surface ionization technique developed by my group. Nano-DESI enables chemical imaging of biological systems in their native state and quantitative analysis of complex mixtures such as organic aerosols, petroleum, and biofuels directly from solid substrates. Nano-DESI imaging has been established as a robust analytical tool for the simultaneous detection and spatial localization of hundreds of biomolecules including lipids, metabolites, proteins, glycans, and peptides thereby providing detailed molecular snapshots of the biological processes in tissues and imaging of living microbial and yeast colonies. We have also developed new tools for the analysis of complex spectra obtained using high-resolution mass spectrometry. These tools have been used for understanding chemical transformations in organic aerosols providing insights into the relationship between the chemical composition of these complex systems and their possible effect on climate and human health.

ACADEMIC EXPERIENCE

Courses taught at Purdue University

Spring 2018, CHM 116 – general chemistry for science and engineering majors (~800 students)

Fall 2019, CHM 115– general chemistry for science and engineering majors (~660 students)

Spring 2018, CHM 116 – general chemistry for science and engineering majors (~800 students)

Fall 2018, CHM 115– general chemistry for science and engineering majors (~660 students)

Spring 2019, CHM 116– general chemistry for science and engineering majors (~800 students)

Fall 2019, CHM 115– general chemistry for science and engineering majors (~660 students)

Spring 2020, CHM 116– general chemistry for science and engineering majors (~800 students)

Fall 2020, CHM 321/323– quantitative analysis (120 students)

Spring 2021, CHM 116– general chemistry for science and engineering majors (~650 students)

Fall 2021, CHM 321/323– quantitative analysis (130 students)
Spring 2022, CHM 116– general chemistry for science and engineering majors (~650 students)
Fall 2022, CHM 321/323– quantitative analysis (140 students)
Spring 2023, CHM 116– general chemistry for science and engineering majors (~650 students)
Fall 2023, CHM 321– quantitative analysis (125 students)

APPOINTMENTS

2017-present	William F. and Patty J. Miller Professor of Analytical Chemistry, Purdue University
2011-2017	Laboratory Fellow, Pacific Northwest National Laboratory
2008-2011	Chief Scientist, Pacific Northwest National Laboratory
2004-2007	Senior Research Scientist, Pacific Northwest National Laboratory
2002-2004	Research Scientist, Pacific Northwest National Laboratory
1998-2002	Postdoctoral Research Associate with Professor Jean Futrell at the University of Delaware and Pacific Northwest National Laboratory.
1992-1998	Research Assistant with Professor Chava Lifshitz at the Hebrew University of Jerusalem.

HONORS AND AWARDS

NSF Special Creativity Award, 2023
Advances in Measurement Science Lectureship Award, 2023
Manuel Riveros Medal of the Brazilian Mass Spectrometry Society, 2022
Purdue University College of Science Research Award, 2022-23
Mercator Fellowship from the German Research Foundation (DFG), 2022
The Ron Hites Award for an exemplary paper published in the Journal of the American Society for Mass Spectrometry (JASMS), 2019
Innovators Hall of Fame, Purdue Research Foundation, 2018
William F. and Patty J. Miller Professorship, Purdue University, 2017
Medal of the Russian Society for Mass Spectrometry, 2017
PNNL Director's Science and Engineering Achievement Award, 2014
Wiley Research Fellow, EMSL, 2013
Inaugural Rising Star Award of the ACS Women Chemists Committee, 2011
Focus issue of the Journal of the American Society for Mass Spectrometry, 2009
Biemann Medal - American Society for Mass Spectrometry, 2008
DOE's Office of Science outstanding mentor award, 2008
Presidential Early Career Award (PECASE), 2007
DOE's Office of Science Early Career Scientist and Engineer Award, 2007
M.T. Thomas award for outstanding postdoctoral achievement, 2002
Award of the Farkas Center for Light Induced Processes, The Hebrew University of Jerusalem, 1997
Excellence Award of the Israel Chemical Society, 1996
Sara Wolf Foundation Award in Physical Chemistry, The Hebrew University of Jerusalem, 1995

PROFESSIONAL ACTIVITIES

President of the American Society for Mass Spectrometry, 2022-present
ASMS Representative for the International Mass Spectrometry Foundation, 2022-present
Councilor of the Imaging Mass Spectrometry Society (IMSS), 2021-2023

Vice-president for Programs, American Society for Mass Spectrometry, 2020-2022
Editor-in-Chief, International Journal of Mass Spectrometry, 2020-present
Editorial Board of Chemistry-Methods, 2020-present
Editorial Advisory Board, Analytical Chemistry, 2018-present
2019 ASMS Asilomar Conference on Mass Spectrometry, co-organizer with Lingjun Li and Jeffrey Spraggins
Chair of the ACS Publications Committee, 2019-2020
Editorial Board, C&E News, 2019-2021
Associate Editor, International Journal of Mass Spectrometry, 2017-2019
Panel co-chair, DOE/BES workshop on Basic Research Needs for Synthesis Science for Energy Relevant Technology, May 2-4, 2016, Rockville, Maryland
NSF Committee of Visitors Panel, 2016
NSF Review Panels, 2014, 2016
Gordon Research Conference "Gaseous Ions: Structures, Energetics & Reactions", Vice Chair, 2015; Chair, 2017.
ACS Publications Committee, 2014-2021
ASMS, Nominating Committee, 2012-13
DOE's Presidential Early Career Award Committee, 2011
Editorial Board, Journal of the American Society for Mass Spectrometry, 2011-2016
Advisory Board, Analyst, 2008-2015, 2019-2021
Editorial Board, Analyst, 2016-2018
Editorial Advisory Board, Mass Spectrometry Reviews, 2017-present
Editorial Board, Russian Mass Spectrometry Journal, 2012-present
Editorial Board, Frontiers in Microbiological Chemistry, 2011-present
Editorial Board, Advanced Structural and Chemical Imaging, 2014-present
American Society for Mass Spectrometry, Board of Directors, Treasurer, 2006-2008
Editor of a book "Principles of Mass Spectrometry Applied to Biomolecules" for John Wiley & Sons, 2006
Invited editor of a special issue of the Journal of Physical Chemistry A in memory of Prof. Chava Lifshitz, 2006
Reviewer for Journal of the American Chemical Society, Analytical Chemistry, Analyst, Analytica Chimica Acta, Journal of Physical Chemistry, Journal of the American Society for Mass Spectrometry, International Journal of Mass Spectrometry, Physical Chemistry Chemical Physics, and other.

PROFESSIONAL SOCIETIES

American Society for Mass Spectrometry, American Chemical Society, American Vacuum Society, American Association for the Advancement of Science.

MENTORING

Graduate Students: Hilary Brown (2017-2019), Pei Su (2017-2020), Daniela Mesa Sanchez (2017-2022), Daisy Unsihuay (2017-present), Hang Hu (2017-2022), Habib Gholipour (2018-2022), Hugo Samayoa Oviedo (2018-present), Courtney Rupert (2018-2021), Solita Wilson (2018-present), Miranda Weigand (2019-present), Manxi Yang (2019-present), Michael Espenship (2019-present), Emerson Hernly (2021-present), Nazifa Wali (2021-present), Sara Amer (2021-present), Mushfeqa Iqfath (2021-present), Arya Das (2022, SERB-OVDF program), Alyssa Moore (2022-present), Xilai Li (2022-present), Raquel Konzen (2022-present), Behnaz Akbari (summer 2023).

Postdoctoral fellows: Omar Hadjar (2005-2008), Peng Wang (2005-2008), Zhibo Yang (2005-2008), Qichi Hu (2009-2011), Grant Johnson (2009-2012), Patrick Roach (2009-2011), Ingela Lanekoff (2011-2014), Don Gunaratne (2012-2015), Dan Du (2012-2013), Venkateshkumar Prabhakaran (2014-2017), Peng Lin (2014-2018), Marshall Ligare (2015-2017), Son Nguyen (2015-2017), Ruichuan Yin (2016-2020), Jonas Warneke (2016-2018), Xiangtang Li (2018-2022), LiXue Jiang (2021-present).

Undergraduate students: John Hache (2001), Jeffrey Smith (2007), Olga Laskina (2008), Alexandra Chang Graham (2009), Michael Lysonski (2009), Ivy Fortmeyer (2010), Peter Eckert (2010, 2011), Thomas Priest (2011, 2012), Brandi Heath (2011), Josh Short (2011, 2012), Naila Al Hasan (2012), Evelyn Maris (2012), Astrid Olivarez (2013, 2014), Tram Ahn Pham (2013), David Kalb (2015), Mary King (2016), Zachary Norberg (2016), Joelle Romo (2017), Kyle George (2017), Steve Creger (2018), Harley Davidson (2018), Sneha Swaroop (2018-19), Amy Chegwiddden (2018-20), Andrew Smith (2018-19), D'Angelo Peters (2019), Ryan Lagacy (2019), Veerupaksh Singla (2019), Audra Seifert (2019-20), Chisa Zensho (2020-22), Danny Hristov (2020-present), Lidya Sertse (summer 2021, SURF), Dylan Forbes (2021-present), Josh Greener (2021), Alessandra Latorre Palomino (2022, Research Experience for Peruvian Undergraduates (REPU) program), Ajish Rosemary (summer 2022, SURF), Erik Sveen (2022-present), Holly Bohlin (2022-23), Yufan Hu (2022-23), Ronnie Cutler (2022-present), Liam Ryan (2023-present), Emma Hoffmann (summer 2023, SURF), Haven Wilson (2023-present), Taaran Sajalvinodh (2023-present), Anya Piarowski (2023-present).

High school students: Ranger Kuang (2018-19).

Postbachelor fellows: Brandi Heath (2011-2013), Josh Short (2012-2013).

COLLABORATIONS:

Soft landing of complex ions on self-assembled monolayer surfaces (Graham Cooks –Purdue, Grant Johnson, Venky Prabhakaran –PNNL, Jonas Warneke – U Leipzig, Ellen Matson – Rochester U); chemical and physical properties of secondary organic aerosols (Sergey Nizkorodov – UC Irvine, Alex Laskin –Purdue, Manabu Shiraiwa – UC Irvine, Yinon Rudich – Weizmann Institute of Science); mass spectrometry imaging of biological tissues (Jessie Ellis – East Carolina U, Shihuan Kuang – Purdue, Donghye Ye – Marquette U, James Carson – U Texas Austin, Susan Stevens and Mary Stenzel-Poore – OHSU, S. K. Dey – Cincinnati Children's Hospital Medical Center, Kristin Burnum-Johnson, Paul Piehowski – PNNL, Jeff Spraggins – Vanderbilt, Neil Kelleher – Northwestern, Gaurav Chopra – Purdue, Bingming Chen – Merck; David Wagner, Junhai Li, Andrew Bowden – Abbvie, Shane Tichy – Agilent; Jeff Gilbert – Corteva); development of microfluidic probes (Detlev Belder – U Leipzig).

RESEARCH SUPPORT

Current Projects

NIH RF1MH128866 “Development of a High Throughput System for Molecular Imaging of Different Cell Types in Mouse Brain Tissues”. J. Laskin (PI), G. Chopra (MPI) 9/15/2021-9/14/2024, \$ 1,551,972 total award amount.

NSF CHE 10001877 “Pushing the Frontiers of the Identification and Coverage in High-Resolution Spatially-Resolved Lipidomics”, 8/01/2021-7/31/2024, J. Laskin (PI), \$440,440 total cost.

NSF CHE Creativity extension for the award “Pushing the Frontiers of the Identification and Coverage in High-Resolution Spatially-Resolved Lipidomics”, 7/31/2024-7/31/2026, J. Laskin (PI), \$360,000 total cost.

AFOSR 13001293 “Coupling Gas-Phase and Condensed-Phase Chemistry using Deposition of Well-Defined Gaseous Ions”, J. Laskin (PI), 4/1/2023-3/31/2026, \$187k/yr.

AFOSR MURI “An Informatics Paradigm for Predicting Organic Chemical Stability”, Role: co-PI; B. Savoie (PI), 06/01/2021-05/31/2026, \$7,500,000, total award amount with \$100k/yr allocated to J. Laskin.

NIH R01MH136394 “Next-generation spatial -omics: High-throughput, single-molecule proteomic imaging with subcellular resolution”, Role: co-PI; M. Roukes (PI), 9/18/2023 - 07/31/2028, \$10M total award amount, \$1,501,555 total allocated to J. Laskin.

NSF/IUCRC: Center for Bioanalytic Metrology, 307915PU, “Sensitive Ambient Mass Spectrometry Imaging of Biomolecules in Tissues”, J. Laskin (PI), 01/01/2023-12/31/2023, \$50,000.

Corteva “Nano-DESI Mass Spectrometry Imaging Applied to Systems of Agricultural Interest” J. Laskin (PI), 6/5/2023-3/31/2025, \$158,655 total cost.

Completed Projects

NIH UG3HL145593 and UH3CA255132 “Novel Platform for Quantitative Subcellular Resolution Imaging of Human Tissues Using Mass Spectrometry”. J. Laskin (PI), 9/1/2018-8/31/2023, \$2,003,184 total direct cost.

NSF/IUCRC: Center for Bioanalytic Metrology, 307915PU, “Nano-DESI Mass Spectrometry Imaging of Low-Abundance Biomolecules”, J. Laskin (PI), 01/01/2022-12/31/2022, \$50,000.

NSF CHE 1808136 “Quantitative Ambient Imaging and Analysis at a Subcellular Level using Mass Spectrometry”, 8/15/2018-7/31/2021, J. Laskin (PI), \$420,000 total cost.

NSF/IUCRC: Center for Bioanalytic Metrology, 307915PU, “Enhancing the Sensitivity and Molecular Coverage of nano-DESI imaging”, J. Laskin (PI), 01/01/2021-12/31/2021, \$50,000.

CRDF Global OISE-20-66701-0 “Nanocatalyst-assisted pyrolysis for conversion of lignocellulose waste residues into sustainable biofuels using microwave treatment”, T. Kulyk (PI), role: co-PI, 10/01/2020-09/30/2021, \$15,000 to J. Laskin

Merck Sharp & Dohme Corp., 40002399. “Evaluation of nano-DESI system for quantitative mass spectrometry imaging and on tissue metabolite identification”, 08/15/2018–07/31/2020, J. Laskin (PI), \$75000.00 total cost. NIH UC4 DK10810 “Single Cell Resolution Omics Analysis of T1D islets”, 09/22/2015 – 9/23/2019, C. Ansong (PI), J. Laskin (co-PI), \$516k average annual direct cost.

NOAA Office of Climate and Global Change, “Studies of Atmospheric Brown Carbon Chemistry in Support of the FIREX Campaign”, 8/1/2016 – 7/31/2019, A. Laskin (PI), J. Laskin (co-PI), \$120k annual cost.

NIH 1U01HL122703-01 “Research Center for Spatiotemporal Lung Imaging and Omics”, 4/18/2014 – 3/31/2019, R. Corley (PI), J. Laskin (participant), \$607k average annual direct cost.

DOE BES, “Chemical Analysis“, 10/01/99-8/14/2017, J. Laskin (PI), \$1,080K/ year, time commitment 0.45 FTE.

NIH R21 HD084788 “Pan-omic characterization of the molecular determinants of uterine receptivity”, 9/13/2016 – 7/31/2018, K. Burnum-Johnson (PI), J. Laskin (co-PI), \$277k total direct costs.

DOE OBER “W. R. Wiley Environmental Molecular Sciences Laboratory Operations”, period covered 10/1/95 to ongoing, A.A. Campbell (PI), \$34M/year, time commitment of 0.45 FTE.

NIH 1R21ES02422901, “Mass spectrometry imaging: Linking neurodegeneration with environmental exposure”, 09/11/2014 – 09/30/2017, J. Laskin (PI), \$429k total direct cost. NOAA Office of Climate and Global Change, “Combined Laboratory and Field Characterization of Nitrogen-Containing Light-Absorbing Organic Compounds”, 8/1/2013 – 7/31/2016, A. Laskin (PI), J. Laskin (co-PI), \$121k annual cost.

PNNL LDRD, “Understanding Cellular Communication and Controlling Directional Flow of Nutrients”, 10/01/2014 - 9/31/2016, J. Laskin (PI), \$200K/year.

DOE Small Business Technology Transfer (STTR) Program, “Improved Ambient Ionization Source for Mass Spectrometry”, 2/18/2014 – 4/1/2015, G. Moskovets (PI), J. Laskin (consultant), \$12k to PNNL.

NSF via CRDF “Nanocatalyst-assisted Pyrolysis for Biofuel Production”, 12/4/2013 – 12/31/2015, T. Kulyk (PI), J. Laskin (co-PI), \$16k to PNNL.

PNNL LDRD, “Predicting the Response of Complex Biological Systems”, 10/1/2013-9/30/2014, J. Laskin (PI), \$50k.

PNNL LDRD program, “Development of New Soft Ionization Mass Spectrometry Approaches for Spatial Imaging of Complex Chemical and Biological Systems”, 10/01/2011 - 9/31/2013, J. Laskin (PI), \$280K/year.

DOE-BES, “Mass Spectrometry for Operando Catalysis Research (PECASE award)”, 2/14/2007 - 9/30/2012, J. Laskin (PI), \$50K/year.

PNNL Research & Development “Surface-Induced Dissociation on a Thermo LTQ/Orbitrap Instrument”, 3/30/2009 - 3/31/2010, J. Laskin (PI), \$95K

PNNL LDRD program, “Preparation and Characterization of Peptide Arrays Using Soft Landing”, 10/01/05 - 9/31/08, J. Laskin (PI), \$120K/year.

INVITED PRESENTATIONS:

1. Laskin J, Bailey T, Futrell JH. “Shattering of Peptide Ions on Surfaces.” 224th Conference of the American Chemical Society, Boston, MT, August 2002
2. Laskin J. “Collisional Activation of Peptide Ions”. 15th Sanibel Conference on Mass Spectrometry, Sanibel Island, FL, January 2003
3. Laskin J. “Activation and Dissociation of Large Molecules in the Gas Phase”. *M.T. Thomas Award presentation, PNNL, June 2003*
4. Laskin J “Interaction of Peptide Ions with Self-assembled Monolayer Surfaces”, The Hebrew University of Jerusalem, Israel, April, 2005
5. Laskin J, Futrell JH. “Entropy effects in the gas phase dissociation of peptides and proteins”. EURESCO Conference "Molecules of Biological Interest in the Gas Phase", Exeter, UK, April 2004
6. Laskin J, Hadjar O, Wang P, Futrell JH, Alvarez J, Green J, Cooks RG. “Interaction of hyperthermal peptide ions with self-assembled monolayer surfaces”, 16th International Workshop on Inelastic Ion-Surface Collisions (IISC-16), Schloss Hernstein, Austria, September, 2006
7. Laskin J, Chu IK. “The Energetics and Dynamics of Dissociation of Odd-Electron Peptide Ions”, Asilomar Conference on Mass Spectrometry, Pacific Grove, CA, October, 2006

8. Laskin J, Yang Z, Lam C, Chu IK. "Formation and Dissociation of Peptide Radical Cations", 4th International UPPCON Conference on ECD/ETD Mass Spectrometry, Hong Kong, China, December, 2006
9. Laskin J, Yang Z, Lam C, Chu IK. "Surface-Induced Dissociation of Even- and Odd-Electron Peptide Ions", Gordon Research Conference " Gaseous Ions: Structure, Energetics, and Reactions" Ventura, CA, February 2007
10. Wang P, Hadjar O and Laskin J "Surface Modification Using Reactive Landing of Peptides onto Self-Assembled Monolayer Surfaces", Invited Talk, "From Dynamics to Proteins by Mass Spectrometry: A Symposium Honoring Jean Futrell" 234th ACS meeting Boston, August 2007
11. Laskin J, Wang P, Hadjar O, Futrell JH, Alvarez J, Cooks RG. "Soft-Landing of Large Ions on Self-Assembled Monolayer Surfaces." Presented by Julia Laskin (Invited Speaker) at 18th International Conference on Ion Surface Interactions ISI-2007, Zvenigorod, Russian Federation, August 24-29, 2007
12. Laskin J, Hadjar O, Yang Z, Futrell JH, Alvarez J, Cooks RG. "Ion-Surface Collisions in FT-ICR Mass Spectrometry." International FT-ICR Meeting, Moscow, Russian Federation, August 2007.
13. Laskin J. "Ion-Surface Collisions in FT-ICR Mass Spectrometry." Centre for Research in Mass Spectrometry, Toronto, ON, Canada, January 2008.
14. Laskin J. "Collisions of Large Ions with Self-Assembled Monolayer Surfaces." University of Toronto, Toronto, ON, Canada, January 2008.
15. Laskin J. "Formation and Dissociation of Odd-Electron Peptide Ions." York University, Toronto, ON, Canada, January 2008.
16. Laskin J. "Soft-Landing of Mass-Selected Ions on Surfaces: A Tool for Studying Reactions at Interfaces." AirUCI Annual Workshop, Irvine, CA January 2008
17. "Interaction of Large Ions with Surfaces: Activation, Dissociation, and Soft Landing." PECASE award lecture, Pacific Northwest National Laboratory on February, 2008.
18. Laskin J. "Ion-Surface Collisions in Mass Spectrometry." Invited tutorial lecture, American Society for Mass Spectrometry Conference (ASMS), Denver, CO, June 2008.
19. Laskin J. "Interactions of Ions with Surfaces." Biemann award lecture, American Society for Mass Spectrometry Conference (ASMS), Denver, CO, June 2008.
20. Laskin J. 2008. "Ion-Surface Collisions in FT-ICR Mass Spectrometry." Presented by Julia Laskin (Invited Speaker) at Centre for Research in Mass Spectrometry, Toronto, ON, Canada on January 9, 2008
21. Laskin J. 2008. "Collisions of Large Ions with Self-Assembled Monolayer Surfaces." Presented by Julia Laskin (Invited Speaker) at Toronto University, Toronto, ON, Canada on January 11, 2008
22. Laskin J. 2008. "Formation and Dissociation of Odd-Electron Peptide Ions." Presented by Julia Laskin (Invited Speaker) at York University, Toronto, ON, Canada on January 10, 2008.
23. Laskin J. 2008. "Soft-Landing of Mass-Selected Ions on Surfaces: A Tool for Studying Reactions at Interfaces." Presented by Julia Laskin (Invited Speaker) at AirUCI Annual Workshop, Irvine, CA on January 23, 2008
24. Dessiaterik Y, J Laskin, A Laskin, ML Walser, and S Nizkorodov. "High-Resolution Mass Spectrometric Analysis of Oligomers Formed in Ozonation of Selected Monoterpenes." Presented by Yury Dessiaterik at AGU Annual Conference, San Francisco, CA on December 13, 2007. Laskin J. 2008.
25. "Interaction of Large Ions with Surfaces: Activation, Dissociation, and Soft Landing." PECASE award lecture presented by Julia Laskin (Invited Speaker) at Pacific Northwest National Laboratory on February 1, 2008.

26. Laskin J. "Ion-Surface Collisions in Mass Spectrometry." Invited tutorial lecture presented by Julia Laskin (Invited Speaker) at American Society for Mass Spectrometry Conference (ASMS), Denver, CO on June 2, 2008.
27. Laskin J. "Interactions of Ions with Surfaces." Biemann award plenary lecture presented by Julia Laskin (Invited Speaker) at American Society for Mass Spectrometry Conference (ASMS), Denver, CO on June 4, 2008.
28. Laskin J., Hadjar O., Wang P. "Modification of Self-Assembled Monolayer Surfaces Using Hyperthermal Ion Beams", Presented by Julia Laskin (Invited Speaker) at National AVS Meeting, Boston, MA on October 21, 2008
29. Laskin J. "Ion-Surface Collisions in Mass Spectrometry." Invited seminar presented by Julia Laskin at the University of Delaware, February 8, 2009
30. Laskin J. "Soft- and Reactive Landing of Biomolecular Ions on Surfaces." Invited talk presented by Julia Laskin at the Desorption Induced by Electronic Transitions (DIET XII) workshop, Pine Mountain, ID, April 2009
31. Laskin J. "Energetics and Dynamics of Peptide Fragmentation from Surface-Induced Dissociation Studies", Invited talk presented by Julia Laskin at the Peptide Fragmentation Workshop, 18th International Mass Spectrometry Conference, Bremen, Germany. August 29, 2009
32. Laskin J, P Wang, O Hadjar, and Q Hu. 2009. "Soft-Landing of Complex Ions on Surfaces." Invited talk presented by Julia Laskin at the 18th International Mass Spectrometry Conference, Bremen, Germany. August 30- September 4, 2009
33. Laskin J, O Hadjar, P Wang, Q Hu, and GE Johnson. 2009. "Soft-landing of Complex Ions onto Self-Assembled Monolayer Surfaces." Plenary Lecture presented by J. Laskin at the 43rd Annual Meeting of German Society for Mass Spectrometry, Halle / Saale, Germany, March 2010
34. Laskin J, O Hadjar, P Wang, Q Hu, and GE Johnson. 2010. "Selective Deposition of Complex Ions onto Self-Assembled Monolayer Surfaces Using Soft- and Reactive-Landing." Invited talk presented by J. Laskin at the Max Planck Institute, Stuttgart, Germany.
35. Laskin J. 2010. "Energetics of Gas Phase Dissociation of Large Molecules from Surface Induced Dissociation Studies in FT ICR MS." Invited talk presented by J. Laskin at the 9th European FTMS Workshop, Lausanne, Switzerland, April 2010.
36. Laskin J, Z Yang, C Lam, and IK Chu. 2010. "The Energetics and Dynamics of Dissociation of Peptide Radical Anions." Invited talk presented by J. Laskin at the Fall 2010 ACS National Exposition, Boston, MA, August 2010
37. Laskin J, O Hadjar, P Wang, Q Hu, and GE Johnson. 2010. "Soft-landing of Complex Ions on Surfaces." Invited seminar presented by J. Laskin at the Hebrew University of Jerusalem, Jerusalem, Israel, October 2010
38. Laskin J, O Hadjar, P Wang, Q Hu, and GE Johnson. 2010. "Selective Deposition of Complex Ions onto Self-Assembled Monolayer Surfaces Using Soft- and Reactive-Landing." Invited seminar presented by J. Laskin at the Weizmann Institute Seminar, Rehovot, Israel, October 2010.
39. Laskin J. 2010. "Ion-Surface Collisions in Mass Spectrometry." Invited talk presented by J. Laskin at the 1st Middle Eastern and Mediterranean Sea Region Countries Mass Spectrometry Workshop, Rehovot, Israel, October 2010.
40. Laskin J. "Ion-Surface Collisions in Mass Spectrometry." Invited seminar presented by J. Laskin at Wayne State University, April 19, 2011.
41. Laskin J. 2011. "Secondary Ion Mass Spectrometry in FT-ICR: A New Tool for Studying Soft-Landing of Mass-Selected Ions", Invited talk presented by J. Laskin at the 8th North American FTMS Conference, Key West, FL, May 2011

42. Laskin J. 2011." Collisions of Biomolecules with Surfaces: Activation, Dissociation and Deposition." ." Invited talk presented by J. Laskin at the Gordon Research Conference, Biological Molecules in the Gas Phase & in Solution, Andover, NH, August 3, 2011
43. Laskin J, Hu Q, Johnson GE, Wang P, Hadjar O. 2011. "Preparation of Novel Materials Using Soft- and Reactive Landing of Mass-Selected Ions", Invited talk presented by J. Laskin at the ACS symposium honoring the 100th Year Anniversary of Marie Curie's Nobel Prize, August 27, 2011
44. Laskin J. 2011. "Preparation of Novel Materials Using Soft- and Reactive Landing of Mass-Selected Ions." Invited seminar presented by J. Laskin at the University of Florida, September 20, 2011
45. Laskin J. 2011. "Ion-Surface Collisions for Studying Interactions of Biomolecules with Surfaces." Department seminar presented by Julia Laskin (Invited Speaker) at the Max Planck Institute for Biophysical Chemistry, November 8, 2011
46. Laskin J, T Song, PW Kong, and IK Chu. 2012. "Energetics, Dynamics and Mechanisms of Dissociation of Peptide Radical Cations." Presented by Julia Laskin (Invited Speaker) at Pittcon Conference and Expo 2012, March 11-15, 2012, Orlando, GA.
47. Laskin J, BS Heath, IT Lanekoff, PJ Roach, JD Watrous, and PC Dorrestein. 2011. "Chemical Imaging of Biological Systems Using Nanospray Desorption Electrospray Ionization Mass Spectrometry." Presented by Julia Laskin (Invited Speaker) at the WCC Rising Star Award Symposium at the American Chemical Society (ACS) Spring 2012 National Meeting & Exposition, March 25-29, 2012, San Diego, CA.
48. Laskin J, BS Heath, IT Lanekoff, and PJ Roach. 2012. "Spatial Profiling and Imaging of Biological Systems Using Nanospray Desorption Electrospray Ionization Mass Spectrometry." Invited talk presented by Julia Laskin at the European FTMS Workshop, Warwick, United Kingdom. April 1-5, 2012
49. Laskin J, BS Heath, IT Lanekoff, PA Eckert, PJ Roach, M Thomas, JP Carson, and A Laskin. 2012. "Chemical Imaging and Analysis Using Nanospray Desorption Electrospray Ionization Mass Spectrometry." Invited talk presented by Julia Laskin at the FCSD Directorate Advisory Committee Meeting Poster session, Richland, WA on June 12, 2012.
50. Laskin J. 2012. "Ion-Surface Collisions in Mass Spectrometry: Activation, Dissociation and Soft-Landing ." Keynote lecture presented by Julia Laskin at the 19th International Mass Spectrometry Conference IMSC2012, Kyoto, Japan. September 15-21, 2012.
51. Laskin J. 2012. "Preparatory Mass Spectrometry – an Emerging Tool for Controlled Preparation of Novel Materials." Invited plenary lecture presented by Julia Laskin at the 24th meeting of the Australian and New Zealand Society for Mass Spectrometry, February 2-6, Melbourne, Australia.
52. Laskin J, Johnson GE, Priest TA. 2013. "Large Metal and Metal-Oxide Clusters in the Gas Phase and on Surfaces." Invited talk presented by Julia Laskin at a Gordon Research Conference on Gaseous Ions: Structures, Energetics & Reactions, February 24 - March 1, 2013, Galveston, TX.
53. Laskin J, IT Lanekoff, BS Heath, M Thomas, and JP Carson. 2013. "Ambient Imaging Using Nanospray Desorption Electrospray Ionization Mass Spectrometry." Invited talk presented by Julia Laskin at the 2013 Pittcon Conference and Expo, March 16-21, 2013, Philadelphia, PA.
54. Laskin J, GE Johnson, KDD Gunaratne, and Q Hu. 2013. "Soft- and Reactive-Landing of Complex Ions on Surfaces." Presented by Julia Laskin (Invited Speaker) at the ACS National meeting and exposition, April 7-11, 2013, New Orleans, LA.
55. Laskin J, IT Lanekoff, BS Heath, M Thomas, and JP Carson. 2013. "Ambient Imaging Using Nanospray Desorption Electrospray Ionization ." Presented by Julia Laskin (Invited Speaker)

- at the InnMassSpec 2013 Conference, July, 14-18, 2013, Saint Petersburg, Russian Federation.
56. Laskin J, A Laskin, S Nizkorodov, and IT Lanekoff. 2013. "Reactive Nanospray Desorption Electrospray Ionization Mass Spectrometry for Quantitative Analysis and Imaging of Complex Samples." Presented by Julia Laskin (Invited Speaker) at the 246th ACS National Meeting & Exposition, Indianapolis, IN, September 8-12, 2013.
 57. Laskin J, GE Johnson, and KDD Gunaratne. 2013. "Ion Soft-Landing – a Unique Tool for Controlled Preparation of Nanomaterials." Presented by Julia Laskin (Invited Speaker) at Symposium on Bimetallic Complexes, Karlsruhe, Germany on September 24, 2013.
 58. Laskin J. 2014. "Activation and Dissociation of Non-covalent Complexes Using Ion-Surface Collisions", Presented by Julia Laskin (Invited Speaker) at the 26th Sanibel Conference of Mass Spectrometry, Clearwater Beach, FL, January 30 - February 2, 2014
 59. Laskin J. 2014. "Ion-Surface Collisions in Mass Spectrometry: Activation, Dissociation and Soft-Landing". Invited seminar presented by Julia Laskin at Purdue University, West Lafayette, IN, April 16, 2014.
 60. Laskin J. 2014. "New Developments in Preparative and Imaging Mass Spectrometry". Invited seminar presented by Julia Laskin at University of Indiana, Bloomington, IN. October 14, 2014.
 61. Laskin J. 2015. "Energetics and Kinetics of Peptide Fragmentation Using Surface-Induced Dissociation", Mesilla Chemistry Workshop, Mesilla, NM. February 7-10, 2015.
 62. Laskin J, Johnson GE, Priest T, Olivarez A. 2015. "Stability of Phosphine-Ligated Gold Cluster Ions toward Dissociation: Effect of Ligand and Cluster Size", American Physical Society Meeting, San Antonio, TX. March 2-6, 2015
 63. Laskin J. 2015. "Preparatory Mass Spectrometry – an Emerging Tool for Controlled Preparation of Novel Materials." Invited seminar presented by Julia Laskin at Ohio State University, Columbus, OH, April 13, 2015.
 64. Laskin J. 2015. "New Developments in Preparative and Imaging Mass Spectrometry". Invited seminar presented by Julia Laskin at Ohio University. April 14, 2015.
 65. Laskin J. 2015. "Controlled Preparation of Novel Materials Using Ion Soft-Landing". Presented by Julia Laskin (Invited Speaker) at the Bright Ion Source Workshop, Richland, WA. August 4, 2015.
 66. Laskin J. 2015. "Nanospray desorption electrospray ionization (nano-DESI) imaging of biological systems." Presented by Julia Laskin (Invited Speaker) at the Theo Murphy scientific meeting, Kavli Royal Society, Buckinghamshire, United Kingdom. November 20-23, 2015.
 67. Laskin J, Lanekoff I, Thomas M. 2015. "Tandem Mass Spectrometry Imaging of Lipids and Metabolites in Tissue Sections." Presented by Julia Laskin (Invited Speaker) at Pacificchem, Honolulu, HI. December 15-20, 2015.
 68. Laskin J, Lanekoff I, Nguyen S. 2016. "Nanospray desorption electrospray ionization (nano-DESI) imaging of biological systems." Presented by Julia Laskin (Invited Speaker) at a Workshop on Emerging Technologies to Study the Human Pancreas and Islet: from the Whole Organ to a Single Cell, Miami, FL. February 21, 2016.
 69. Laskin J, Johnson GE, Prabhakaran V. 2016. "Soft-Landing of Mass-Selected Cluster Ions for Studies in Catalysis and Energy Storage." Presented by Julia Laskin (Invited Speaker) at the Cluster Surface Interaction Workshop, Argonne National Laboratory. May 31-June 3, 2016.
 70. Laskin J, Lanekoff I. 2016. "Quantification and Matrix Effects in Mass Spectrometry Imaging." Presented by Julia Laskin (Invited Speaker) at a Gordon Research Conference: Molecular Structure Elucidation, Mount Snow, VT. August 14-19, 2016.

71. Laskin J. 2016. "Nanospray desorption electrospray ionization (nano-DESI) imaging of biological systems." Presented by Julia Laskin (Invited Speaker) at the 21st International Mass Spectrometry Conference, Toronto, Canada. August 20-26, 2016.
72. Laskin J. 2016. "New Approaches for Imaging Biological Systems Using Nanospray Desorption Electrospray Ionization Mass Spectrometry." Presented by Julia Laskin (Invited Speaker) at ASMS Asilomar Conference, Pacific Grove, CA, October 14-18, 2016.
73. Laskin J. 2016. "Nanospray Desorption Electrospray Ionization (nano-DESI) Imaging of Biological Systems." Presented by Julia Laskin (Invited Speaker) at Merck, Rahway, NJ, on November 9, 2016.
74. Laskin J., S Nguyen, V Prabhakaran, A Liyu, R Yin, P El Khoury. 2017. "New Approaches for Multimodal Ambient Imaging of Biological Samples." Presented by Julia Laskin (Invited Speaker) at PITTCON, Chicago, IL, March 5-9, 2017.
75. Laskin J., S Nguyen, V Prabhakaran, A Liyu, R Yin, P El Khoury. 2017. "Towards Coupling Mass Spectrometry and Electrochemical Microscopy for Imaging of Live Biological Systems." Presented by Julia Laskin (Invited Speaker) at PITTCON, Chicago, IL, March 5-9, 2017.
76. Laskin J. 2017. "Soft-Landing of Mass Selected Ions for Studies in Materials Synthesis, Energy Storage, and Catalysis". Invited seminar presented by J. Laskin at Texas Tech, May 4, 2017.
77. Laskin J. 2017. "New Developments in Preparative and Imaging Mass Spectrometry". Invited seminar presented by J. Laskin at Indiana University Purdue University (IUPUI), Indianapolis, September 19, 2017.
78. Laskin J. 2017. "New Developments in Preparative and Imaging Mass Spectrometry". Invited seminar presented by J. Laskin at St. Olaf College, Northfield, MN, September 22, 2017.
79. Laskin J. 2017. "New Developments in Preparative and Imaging Mass Spectrometry". Presented by J. Laskin (Invited Speaker) at the Russian Mass Spectrometry Conference, Moscow, Russia, October 9-12, 2017.
80. Laskin J, S Nguyen, V Prabhakaran, A Liyu, R Yin, P El Khoury. 2017. "New Approaches for Multimodal Ambient Imaging of Biological Samples." Presented by Julia Laskin (Invited Speaker) at the Imaging Mass Spectrometry Conference, Boston, MA, October 15-18, 2017.
81. Laskin J, GE Johnson, V Prabhakaran, J Warneke. 2018. "Rational Design of Solid Interfaces using Soft-Landing of Mass-Selected Ions". Presented by Julia Laskin (Invited Speaker) at the XXI Symposium on Atomic, Cluster and Surface Physics, Obergurgl, Austria, February 11 - 16, 2018.
82. Laskin J, R Yin, H Brown, S Nguyen, V Prabhakaran, C Ansong, J Carson, K Burnum-Johnson. 2018. "Ambient Imaging of Biological Samples using Nanospray Desorption Electrospray Ionization (nano-DESI) Mass Spectrometry". Presented by Julia Laskin (Invited Speaker) at PITTCON, Orlando, FL, Feb 26-Mar 1, 2018.
83. Laskin J. 2018. "New Approaches for Multimodal Ambient Imaging of Biological Samples." Presented by Julia Laskin (Invited Speaker) at the AFOSR Workshop on "Chemical Tools for Biological Processes", Dayton, OH, March 13, 2018.
84. Laskin J, R Yin, V Prabhakaran. 2018. "Metabolite Analysis on a Subcellular Level using Mass Spectrometry." Webinar presented by Julia Laskin at the HIRN Consortium on Beta Cell Death & Survival (CBDS), June 11, 2018.
85. Laskin J, R Yin, H Brown, S Nguyen, V Prabhakaran, C Ansong, J Carson, K Burnum-Johnson. 2018. "Ambient Imaging of Biological Samples Using Nanospray Desorption Electrospray Ionization (nano-DESI) Mass Spectrometry." Invited seminar presented by J. Laskin at the University of Leipzig, Germany, June 15, 2018.

86. Laskin J, V Prabhakaran, P Su, GE Johnson, J Warneke. 2018. "Rational Design of Solid Interfaces using Soft-Landing of Mass-Selected Ions". Invited seminar presented by J. Laskin at the University of Leipzig, Germany, June 15, 2018.
87. Laskin J, V Prabhakaran, P Su, GE Johnson, J Warneke. 2018. "High-Coverage Deposition of Mass-Selected Cluster Anions: Fundamentals and Applications." Presented by Julia Laskin (Invited Speaker) at the Cluster-Surface Interaction Workshop, Trondheim, Norway, June 19-21, 2018
88. Laskin J, V Prabhakaran, P Su, GE Johnson, J Warneke, Z Lang, A Clotet, JM Poblet. 2018. "High-Coverage Deposition of Mass-Selected Cluster Anions: Fundamentals and Applications." Presented by Julia Laskin (Invited Speaker) at the Fall 2018 ACS National Meeting & Exposition, Boston, MA, August 19-23, 2018.
89. Laskin J. 2018. "Understanding fragmentation of complex ions using Surface-Induced Dissociation Experiments". Presented by Julia Laskin (Invited Speaker) at the XXII International Mass Spectrometry Conference, Florence, Italy, August 26-31, 2018.
90. Laskin J. 2018. "Ambient Imaging of Biological Samples Using Nanospray Desorption Electrospray Ionization (nano-DESI) Mass Spectrometry", Invited seminar presented by J. Laskin at the Indiana University Medical School, Indianapolis, September, 23, 2018.
91. Laskin J. 2018. "New Developments in Preparative and Imaging Mass Spectrometry: From Materials Science to Biology", Invited seminar presented by J. Laskin at Baylor University, Vaco, TX, October, 10, 2018.
92. Laskin J., V. Prabhakaran, P. Su, G. E. Johnson, J. Warneke, Z. Lang, A. Clotet, J. M. Poblet. 2018. "Rational Design of Solid Interfaces Using Soft-Landing of Mass-Selected Ions", Presented by Julia Laskin (Invited Speaker) at the 34th Waterloo Symposium on Chemical Physics, Waterloo, Canada, November 4-6, 2018.
93. Laskin J., J. Warneke, V. Prabhakaran, P. Su, G. E. Johnson. 2018. "Connecting Gas Phase and Condensed Phase Chemistry Using Ion Soft-Landing". Presented by Julia Laskin (Invited Speaker) at Gordon Research Conference "Gordon Research Conference: Gaseous Ions: Structure, Energetics, and Reactions" Ventura, CA, February 18-22, 2019.
94. Laskin, J. 2019. "Mass Spectrometry: From Materials Science to Biology", Presented by Julia Laskin (Keynote Speaker) at the University at Buffalo 37th Annual Graduate Student Symposium (GSS), Buffalo, NY, May 20-22, 2019.
95. Laskin J., P. Su, J. Warneke, V. Prabhakaran, H. Hu, G. E. Johnson. 2019. "Interactions of Soft-Landed Molecules and Clusters with Surfaces", Presented by Julia Laskin (Invited Speaker) at the 2019 "Clusters and Nanostructures" Gordon Research Conference, Les Diablerets Conference Center in Les Diablerets, Switzerland, June 16- 21, 2019.
96. Laskin J., P. Su, J. Warneke, V. Prabhakaran, H. Hu, G. E. Johnson. 2019. "Rational Design of Interfaces Using Ion Soft-Landing", Presented by Julia Laskin (Invited Seminar) at the Leibniz Institute of Surface Modification (IOM), Leipzig, Germany, June 22, 2019.
97. Laskin, J., P. Su, V. Prabhakaran, G. E. Johnson. 2019. "Soft-Landing of Mass-Selected Polyoxometalate Anions onto Surfaces: Fundamentals and Applications". Presented by Julia Laskin (Invited Speaker) at the 6th International Symposium of "Frontiers in Metal Oxide Cluster Science" (FMOCS VI), Corvallis, OR, August 19-22, 2019.
98. Laskin J. 2019. "Ambient Imaging of Biological Samples Using Nanospray Desorption Electrospray Ionization (nano-DESI) Mass Spectrometry", Presented by Julia Laskin (Invited Speaker) at Corteva Agriscience, Indianapolis, IN, September 5, 2019.
99. J. Laskin, P. Su, J. Warneke, V. Prabhakaran H. Hu, G.E. Johnson. 2019. "Selective Preparation of Novel Layered Architectures Using Soft-Landing of Mass-Selected Ions", Invited seminar presented by Julia Laskin at the Advanced Photon Source, Argonne, IL September 11, 2019.

100. J. Laskin, P. Su, H. Hu, J. Warneke, G.E. Johnson, V. Prabhakaran. 2019. "Gaseous Cluster Ions as Building Blocks for Multilayer Functional Materials", Presented by Julia Laskin (Invited Speaker) at the 76th Fujihara Seminar: Designer Nanocluster Materials – From Gas Phase to Condensed Phase, Tomakomai, Hokkaido, Japan, September 29-October 2, 2019.
101. Laskin J. 2019. "Imaging of lipids and metabolites using liquid extraction-based ionization techniques", Presented by Julia Laskin (Invited Speaker) at the ASMS Fall Workshop, Philadelphia, November 15, 2019.
102. Laskin J. 2020. "Nanospray Desorption Electrospray Ionization Mass Spectrometry Tissue Imaging", Presented by Julia Laskin (Invited Speaker) at the Land O'Lakes Annual Bioanalytical Conference, July 13-15, 2020
103. Laskin J. 2020. "Ambient Imaging of Biological Samples Using Nanospray Desorption Electrospray Ionization Mass Spectrometry", Presented by Julia Laskin (Invited Speaker) at the 24-Hr Imaging Mass Spectrometry Conference, November 19, 2020.
104. Laskin J. 2020. "Ambient Imaging of Biological Samples Using Nanospray Desorption Electrospray Ionization (nano-DESI) Mass Spectrometry", Presented by Julia Laskin (Invited Speaker) at the Central Ohio Mass Spec Discussion Group (MSDG), Dec 8, 2020
105. Laskin J. 2021. "Rational Design of Solid Interfaces Using Soft-landing of Mass-Selected Ions", Invited seminar presented by Julia Laskin at the University of New Hampshire, March 2, 2021
106. Laskin J. 2021. "Ambient Imaging of Biological Samples Using Nanospray Desorption Electrospray Ionization (nano-DESI) Mass Spectrometry", McElvain Seminar presented by Julia Laskin (Invited Speaker) at the University of Wisconsin-Madison, March 4, 2021
107. Laskin J. 2021. "Soft Landing of Complex Ions on Surfaces: Synergy between Experiments and Theory", Presented by Julia Laskin (Invited Speaker) at the Spring ACS National Meeting, April 14, 2021
108. Laskin J. 2021. "Rational Design of Solid Interfaces Using Soft-landing of Mass-Selected Ions", Invited seminar presented by Julia Laskin at the University of Innsbruck, June 2, 2021
109. Laskin J. 2021. "Ambient Imaging of Biological Samples Using Nanospray Desorption Electrospray Ionization (nano-DESI) Mass Spectrometry", Plenary lecture presented by Julia Laskin (Invited Speaker) at Annual Meeting of the French Society for Mass Spectrometry, June 17, 2021
110. Laskin J. 2021. "Quantitative Mass Spectrometry Imaging of Biological Tissues Using Nanospray Desorption Electrospray Ionization (nano-DESI)", Presented by Julia Laskin (Invited Speaker) at the 24th North American ISSX (International Society for the Study of Xenobiotics) Meeting, September 15, 2021
111. Laskin J. 2021. "Ambient Imaging of Biological Samples Using Nanospray Desorption Electrospray Ionization (nano-DESI) Mass Spectrometry", Presented by Julia Laskin (Invited Speaker) at the Pacifichem Conference (virtual), December 15-20, 2021
112. Laskin J. 2022. "Mass Spectrometry: From Materials Science to Biology", Seminar presented by Julia Laskin (Invited Speaker) at the Florida International University, February 4, 2022
113. Laskin J., Li X., Yin R., Unsihuay D., Weigand M., Yang M. 2022. "Ambient Mass Spectrometry Imaging Omics Using Nanospray Desorption Electrospray Ionization (nano-DESI) Mass Spectrometry", Presented by Julia Laskin (Invited Speaker) at the US HUPO Conference, Charleston, SC, March , 2022
114. Laskin J. 2022. "Mass Spectrometry: From Materials Science to Biology", Seminar presented by Julia Laskin (Invited Speaker) at the Indiana State University, April 4, 2022

115. Laskin J. 2022. "Ambient Imaging of Biological Samples Using Nanospray Desorption Electrospray Ionization (nano-DESI) Mass Spectrometry." Seminar presented by Julia Laskin (Invited Speaker) at the Weizmann Institute of Science, Rehovot, Israel, May 10, 2022
116. Laskin J. 2022. "Ambient Imaging of Biological Samples Using Nanospray Desorption Electrospray Ionization (nano-DESI) Mass Spectrometry." Seminar presented by Julia Laskin (Invited Speaker) at the Hebrew University of Jerusalem, Jerusalem, Israel, May 12, 2022
117. Laskin J. 2022. "Design of functional interfaces using ion soft landing", Presented by Julia Laskin (Invited Speaker) at the ^{123}H Colloquium, University of Leipzig, Leipzig, Germany, June 27, 2022
118. Laskin J. 2022. "Rational Design of Interfaces Using Soft-landing of Mass-Selected Ions." Seminar presented by Julia Laskin (Invited Speaker) at Karlsruhe Institute of Technology, Karlsruhe, Germany, July 4, 2022
119. Laskin J. 2022. "Rational Design of Interfaces Using Soft-landing of Mass-Selected Ions." Seminar presented by Julia Laskin (Invited Speaker) at the University of Kaiserslautern, Kaiserslautern, Germany, July 6, 2022
120. Laskin J. 2022. "Ambient Imaging of Biological Samples Using Nanospray Desorption Electrospray Ionization (nano-DESI) Mass Spectrometry." Seminar presented by Julia Laskin (Invited Speaker) at Thermo Scientific, Bremen, Germany, July 8, 2022
121. Laskin J. 2022. "Ambient Imaging of Biological Samples Using Nanospray Desorption Electrospray Ionization (nano-DESI) Mass Spectrometry." Seminar presented by Julia Laskin (Invited Speaker) at the Martin-Luther University Halle-Wittenberg, Halle, Germany, July 12, 2022
122. Laskin J. 2022. "Designing Functional Interfaces using Ion Soft Landing". Presented remotely by Julia Laskin (Invited Speaker) at Frontiers in Native Mass Spectrometry and Single-Molecule Imaging Conference, Oxford, UK, August 14-17, 2022
123. Laskin J., Unsihuay D., Weigand M., Yin R., Li X. 2022. "Lipid imaging using nanospray desorption electrospray ionization (nano-DESI) mass spectrometry", Keynote lecture presented by Julia Laskin (Invited Speaker) at the International Mass Spectrometry Conference in Maastricht, Netherlands, August 27-September 2, 2022
124. Laskin J., 2022. "High-Resolution Imaging of Biological Tissues using Nano-DESI Mass Spectrometry". Presented by Julia Laskin (Invited Speaker) at ASMS Asilomar Conference, Pacific Grove, CA, October 7-11, 2022
125. Laskin J., 2022. "Ambient Mass Spectrometry Imaging: Recent Developments and Opportunities", Presented by Julia Laskin (Invited Speaker) at the 3rd Iberoamerican Conference on Mass Spectrometry, Rio de Janeiro, Brazil, December 10-15, 2022
126. Laskin J., 2023. "Spatial Omics using Ambient Mass Spectrometry Imaging". Presented by Julia Laskin (Invited Speaker) at the US HUPO Educational Seminar Series "Frontiers in Spatial Omics", January 9, 2022
127. Laskin J., 2023. "Ambient Imaging of Biological Tissues Using Nanospray Desorption Electrospray Ionization (nano-DESI) Mass Spectrometry", Seminar presented by Julia Laskin (Invited Speaker) at Osaka University, January 28, 2023
128. Laskin J., 2023. "Recent developments in imaging of biological tissues using nanospray desorption electrospray ionization (nano-DESI) mass spectrometry", Presented by Julia Laskin (Invited Speaker) at the International Symposium on Mass Spectrometry Imaging, Kyoto, Japan, January 29-31, 2023
129. Laskin J., 2023. "Mass Spectrometry: From Materials Science to Biology", Seminar presented by Julia Laskin (Invited Speaker) at Penn State University, February 14, 2023
130. Laskin J., H. Gholipour-Ranjbar, L. Sertse, 2023. "Gas-Phase Ion Chemistry Guides the Design of Cluster-Based Materials", Presented by Julia Laskin (poster) at a Gordon Research

- Conference“, Gaseous Ions: Structure, Energetics, and Reactions” Ventura, CA, February 2023
131. Laskin J., 2023. “Mass Spectrometry: From Materials Science to Biology”, College of Science Research Award Presentation by Julia Laskin (Invited Speaker) at Purdue University, March 9, 2023
 132. Laskin J., 2023. “Bringing Ambient Nano-DESI Mass Spectrometry Imaging to the Single-Cell Level”, Presented by Manxi yang (substitution for Julia Laskin, Invited Speaker) at the 2023 Spring ACS Conference, March 2023
 133. Laskin J., 2023. “Ambient Imaging of Biological Tissues Using Nanospray Desorption Electrospray Ionization (nano-DESI) Mass Spectrometry”, Seminar presented by Julia Laskin (Invited Speaker) at Texas A&M University, May 2, 2023
 134. Laskin J., 2023. “Gas-Phase Ion Chemistry Guides the Design of Cluster-Based Materials”, Presented by Julia Laskin (Invited Speaker) at the AFOSR Molecular Dynamics/Theoretical Chemistry Program Review, Arlington, May 16-18, 2023
 135. Laskin J., 2023. “Celebrating Jean Futrell's Career as a Mass Spectrometry Pioneer”, Presented by Julia Laskin (Invited Speaker) at the American Society for Mass Spectrometry Conference (ASMS), Houston, TX, June 4-9, 2023
 136. Laskin J., 2023. “Pushing the frontiers of ambient imaging using nanospray desorption electrospray ionization mass spectrometry”, Presented by Julia Laskin (Invited Speaker) at Advancing Mass Spectrometry for Biophysics and Structural Biology, Austin, TX, July 23-26, 2023
 137. Laskin J., 2023. “High-resolution Imaging of Biological Samples Using Nanospray Desorption Electrospray Ionization (nano-DESI) Mass Spectrometry”, Presented by Julia Laskin (Invited Speaker) at Gordon Research Conference: Chemical Imaging, Stonehill College, Easton, MA, July 30-August 4, 2023.
 138. Laskin J., 2023. “Advances in nanospray desorption electrospray ionization (nano-DESI) mass spectrometry imaging”, Presented by Julia Laskin (Invited Speaker) at the Advances in Measurement Science Lectureship Award Session, at the ACS National meeting and exposition, San Francisco, CA, August 13-17, 2023.
 139. Laskin J., 2023. “Ambient nano-DESI mass spectrometry imaging at the single-cell level”, Presented by Julia Laskin (Invited Speaker) at the 1st International Symposium on Single Cell Mass Spectrometry (iSCMS), Provo, UT, October 4-7, 2023.

PEER-REVIEWED PUBLICATIONS

ResearcherID: <http://www.researcherid.com/rid/H-9974-2012>;

ORCID ID: orcid.org/0000-0002-4533-9644

Scopus Author ID: 7102409836

(ISI statistics: total citations – over 16,500; h-index – 71).

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1. C. Lifshitz, I. Gotkis, P. Sandler and J. Laskin “Is the resilience of C_{60}^+ towards decomposition a question of time?” *Chem. Phys. Lett.* **200**, 406-410 (1992)
2. C. Lifshitz, Y. Gotkis, A. Ioffe, J. Laskin and S. Shaik “Is Tr^+ Formed from Toluene at its Thermochemical Threshold? *Int. J. Mass Spectrom. & Ion Processes* **125**, R7-R11 (1993)
3. Y. Gotkis, M. Naor, J. Laskin, C. Lifshitz, J.D. Faulk and R.C. Dunbar “Time-resolved Dissociation of Bromonaphthalene Ion Studied by TPIMS and TRPD. Heat of Formation of Naphthyl Ion” *J. Am. Chem. Soc.* **115**, 7402-7406 (1993)

4. C. Lifshitz, Y. Gotkis, J. Laskin, A. Ioffe and S. Shaik "Threshold Formation of Benzylum (Bz^+) and Tropylium (Tr^+) from toluene. Non-statistical Behavior in Franck Condon Gaps" *J. Phys. Chem.* **97**, 12291-12295 (1993)
5. C. Lifshitz, J. Laskin and T. Peres "Metastable Fractions of Fullerenes" *Org. Mass Spectrom.* **28**, 1001-1003 (1993)
6. J. Laskin and C. Lifshitz "Is $n=60$ a Magic Number for C_n^+ Clusters or Part of a Magic Shell?" *Int. J. Mass Spectrom. & Ion Processes* **138**, 95-106 (1994)
7. C. Lifshitz, E. Nadav, M. Peres, T. Peres, J. Laskin, B. Karsenty and M. Shaked "Ion Source Trapping in Conjunction with Two Sector Mass Spectrometry : Time Resolved CAD" *Int. J. Mass Spectrom. Ion Processes* **133**, L11-L14 (1994)
8. J. Laskin, H.A. Jimenez-Vazquez, R. Shimshi, M. Saunders, M.S. de Vries and C. Lifshitz "Kinetic Energy Releases Upon Dissociation of Endohedral Fullerene Cations" *Chem. Phys. Lett.* **242**, 249-252 (1995)
9. R. Wörgötter, B. Dünser, P. Scheier, T.D. Märk, M. Foltin, C.E. Klotz, J. Laskin and C. Lifshitz "Self Consistent Determination of Fullerene Binding Energies $BE(C_n^+-C_2)$ $n=58...44$ " *J. Chem. Phys.* **104**, 1225-1231 (1996)
10. J. Laskin, J.M. Behm, K.R. Lykke and C. Lifshitz "Time-resolved Appearance Energies for Fragment Ions from C_{60} " *Chem. Phys. Lett.* **252**, 277-280 (1996)
11. J. Laskin, C. Weickhardt and C. Lifshitz "Time-resolved kinetic energy releases for $C_{60}^+ \rightarrow C_{58}^+ + C_2$ " *Int. J. Mass Spectrom. & Ion Processes* **161**, L7-L11 (1997)
12. J. Laskin and C. Lifshitz "Time-resolved Metastable Fractions of Fullerenes" *Chem. Phys. Lett.* **277**, 564-570 (1997)
13. J. Laskin and C. Lifshitz "Mass Spectrometric Studies of Fullerene Ion Beams" *Israel Journal of Chemistry*, **37**, 467-474 (1997)
14. J.Laskin, T.Peres, C.Lifshitz, M.Saunders, R.J.Cross and A.Khong "An Artificial Molecule of Ne_2 inside C_{70} " *Chem. Phys. Lett.*, **285**, 7-9 (1998)
15. A.Khong, H.A. Jimenez-Vazquez, M. Saunders, R.J. Cross, J.Laskin, T. Peres, C. Lifshitz, R. Strongin and A.B. Smith "An NMR Study of He_2 Trapped Inside C_{70} " *J. Am. Chem. Soc.*, **120**, 6380-6383 (1998)
16. J.Laskin, B. Hadas, C. Lifshitz and T.D. Märk "New Experimental Evidence in Favor of a High (10 eV) C_2 Binding Energy in C_{60} " *Int. J. Mass Spectrom. & Ion Processes*, **177**, L1-L6 (1998)
17. J.Laskin, T.Peres, A.Khong, H.A. Jimenez-Vazquez, R.J. Cross, M. Saunders, D.S. Bethune, M.S. de Vries and C. Lifshitz "A Mass Spectrometric Study of Unimolecular Decompositions of Endohedral Fullerenes" *Int. J. Mass Spectrom.*, **185-187**, 61-73 (1999)
18. S. Matt, M. Sonderegger, R. David, O. Echt, P. Scheier, J.Laskin, C. Lifshitz and T.D. Märk "Kinetic Energy Release for Metastable Fullerene Ions" *Int. J. Mass Spectrom.*, **185/186/187**, 813-823 (1999)
19. S. Matt, O. Echt, M. Sonderegger, R. David, P. Scheier, J.Laskin, C. Lifshitz and T.D. Märk "Kinetic Energy Release Distributions and Evaporation Energies for Metastable Fullerene Ions" *Chem. Phys. Lett.*, **303**, 379-386 (1999)
20. S. Matt, R. Parajuli, A. Stamatovic, P. Scheier, T. D. Maerk, J. Laskin and C. Lifshitz "Kinetic Energy Releases and Electron Induced Decay of C_{60}^{z+} " *Eur. Mass Spectrom.*, **5**, 477 (1999)

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21. J. Laskin*, M. Byrd and J. Futrell "Internal Energy Distributions Resulting from Sustained Off-Resonance Excitation in FTMS: I. Fragmentation of the Bromobenzene Radical Cation" *Int. J. Mass Spectrom.*, Bob Squires Sp. Issue, **195/196**, 285-302 (2000)
22. J. Laskin* and J. Futrell "Internal Energy Distributions Resulting from Sustained Off-Resonance Excitation in FT-ICR MS: II. Fragmentation of the 1-Bromonaphthalene Radical Cation" *J. Phys. Chem. A*, **104**, 5484 (2000)
23. J. Laskin* and J. H. Futrell "The Theoretical Basis of the Kinetic Method from the Point of View of Finite Heat Bath Theory" *J. Phys. Chem. A*, **104**, 8829-8837 (2000)
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