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Education:

Lawrence University, Appleton, WI	B.A.	1982	Chemistry
Washington State University, Pullman, WA	Ph.D.	1987	Analytical Chemistry

Professional Experience:

2010-present	Joint Faculty, Bredesen Center for Interdisciplinary Research and Graduate Education, University of Tennessee, Knoxville (UTK)
2008-present	Group Leader and Distinguished Research Staff, Mass Spectrometry and Laser Spectroscopy Group, Oak Ridge National Laboratory
2006-2011	Adjunct Professor, Department of Physics and Astronomy, UTK
2001-2008	Group Leader and Senior Research Staff, Organic and Biological Mass Spectrometry Group, Oak Ridge National Laboratory
2000-2007	Adjunct Assistant Professor, Graduate Program of Genome Science and Technology, UTK
1999-2003	Courtesy Professor of Chemistry, Chemistry Department, Florida International University
1989-2001	Staff Research Scientist, Organic and Biological Mass Spectrometry Group, ORNL
1987-1989	Postdoctoral Research Assoc., Analytical Chemistry Division, ORNL
1983-1987	Teaching/Research Asst. Washington State University

Selected Recent Peer-Reviewed Publications from a Total of 161 (All BES Full or Partial Support):

Cahill, J.F.; Kertesz, V.; Van Berkel, G.J. Characterization and Application of a Hybrid Optical Microscopy/Laser Ablation Liquid Vortex Capture/Electrospray Ionization System for Mass Spectrometry Imaging with Sub-Micrometer Spatial Resolution. *Anal. Chem.*, in press.

Van Berkel, G.J.; Kertesz, V. An Open Port Sampling Interface for Liquid Introduction Atmospheric Pressure Ionization Mass Spectrometry. *Rapid Commun Mass Spectrom.* **2015**, *29*, 1749-1756.

Ovchinnikova, O.S.; Tamin, T.; Bocharova, V.; Okatan, M.B.; Belianinov, A.; Kertesz, V.; Jesse, S.; Van Berkel, G.J. Co-registered Topographical, Band Excitation Nanomechanical and Mass Spectral Imaging using a Combined Atomic Force Microscopy/Mass Spectrometry Platform. *ACSNano*, **2015**, *9*, 4260-4269.

Cahill, J.F.; Kertesz, V.; Ovchinnikova, O.S.; Van Berkel, G.J. Comparison of Internal Energy Distributions of Ions Created by Electrospray Ionization and Laser Ablation-Liquid Vortex Capture/Electrospray Ionization. *J. Am. Soc. Mass Spectrom.* **2105**, *26*, 1462-1468.

Ovchinnikova, O.S.; Bhandari, D.; Lorenz, M.; Van Berkel, G.J. Transmission Geometry Laser Ablation into a Non-Contact Liquid Vortex Capture Probe for Mass Spectrometry Imaging. *Rapid Commun Mass Spectrom.* **2014**, *28*, 1665-1673.

Kertesz, V.; Van Berkel, G.J. Sampling Reliability, Spatial Resolution, Spatial Precision, and Extraction Efficiency in Droplet-Based Liquid Microjunction Surface Sampling. *Rapid Commun Mass Spectrom.* **2014**, *28*, 1553-1560.

Lorenz, M.; Ovchinnikova, O.S.; Van Berkel, G.J. Fully Automated Laser Ablation Liquid Capture Surface Analysis using NanoElectrospray Ionization Mass Spectrometry. *Rapid Commun Mass Spectrom.* **2014**, *28*, 1312–1320.

Lorenz, M.; Ovchinnikova, O.S.; Kertesz, V.; Van Berkel, G.J. Controlled Resonant Surface Tapping-Mode Scanning Probe Electrospray Ionization Mass Spectrometry Imaging. *Anal. Chem.* **2014**, *86*, 3146-3152.

Ovchinnikova, O.S.; Kjoller, K.; Hurst, G.B.; Pelletier, D.A.; Van Berkel, G.J. Atomic Force Microscope Controlled Topographical Imaging and Proximal Probe Thermal Desorption/Ionization Mass Spectrometry Imaging. *Anal. Chem.* **2014**, *86*, 1083-1090.

Synergistic Activities:

- UT-Battelle Awards Night 2013 - Outstanding Individual Accomplishment in Science and Technology ("Scientist of the Year")
- 2013 RCM Beynon Prize Award for Best Paper published in Rapid Communication in Mass Spectrometry in 2011-2012
- R&D 100 Award, "Liquid Microjunction Surface Sampling Probe for Mass Spectrometry", July 2010
- Federal Laboratory Consortium Southeast Region 2009 Excellence in Technology Transfer Project of the Year – "Surface Sampling Probe for Mass Spectrometry", January 2010
- Treasurer, Division of Analytical Chemistry, American Chemical Society, 2009
- Editorial Board, Analytical Chemistry, 2008 - 2010
- Editorial Board, Journal of Chromatography B, 2006 - 2009.
- Biemann Medal – American Society for Mass Spectrometry, June 2005
- American Society for Mass Spectrometry Board of Directors – Treasurer, 2004 – 2006
- UT-Battelle Awards Night 2003 – Science Communicator, Oak Ridge National Laboratory, 2003
- Chair-Elect/Chair/Past Chair - East Tennessee Section of the American Chemical Society, 2003-2006
- Organized Conference Workshop, "A Major Role for Mass Spectrometry in Homeland Security", September 16-18, 2003 in Knoxville, TN.
- Organizer - Electrospray Fundamentals Symposium featuring 2002 Nobel Laureate John Fenn at the 225th ACS National Meeting, New Orleans, LA, March 23-27, 2003.
- Editorial Board, Journal of the American Society for Mass Spectrometry, 2001 - 2006.

Collaborators from Other Institutions:

Nathalie Y. R. Agar, Harvard Medical School; Jonathan I. Brauer, Anasys Instruments; Julian Burke, Leica; David Calligaris, Harvard Medical School; Steve Castillino, GlaxoSmithKline; Alexandre Catoire, Novartis; Armen Changelian, Harvard Medical School; Weiqi Chen, Bristol-Myers Squibb; Thomas R. Covey, Sciex; Tamam El-Elimat, University of North Carolina; Daniel R. Feldman, Harvard Medical School; Jimmy Flarakos, Novartis; Jinping Gan, Bristol-Myers Squibb; Kevin Kjoller, Anasys Instruments; Edward R. Laws, Harvard Medical School; Paul Moench, Novartis; Nicholas H. Oberlies, University of North Carolina; Cedric J. Pearce, Mycosynthetix, Inc.; Natasha Penner, Biogen; Chandra Prakash, Biogen; Huzefa A. Raja, University of North Carolina; Sandro Santagata, Harvard Medical School; Leandro Santos, GlaxoSmithKline; Bradley B. Schneider, Sciex; Roshan Shetty, Anasys Instruments; Vincent P. Sica, University of North Carolina; Marissa Vavrek, Merck; Lifei Wang, Bristol-Myers Squibb; Angela Wehr, Biogen; Justin M. Wiseman, Prosolia.

Graduate and Postdoctoral Advisors:

Ph.D. Advisor:	Professor Royston H. Filby, Washington State University, Retired
Postdoctoral Advisors:	Professor Gary L. Glish, University of North Carolina, Chapel Hill
	Professor Scott A. McLuckey, Purdue University

Thesis Advisor and Postgraduate-Scholar Sponsor:

Advisor (2): Olga Ovchinnikova (ORNL); Matthew J. Walworth (Eli Lilly).

Postdocs (7): Orsolya Karacsony (ORNL), John Cahill (ORNL), Tamin Tai (ORNL), Mathias Lorenz (National Physical Laboratory, UK), Deepak Bhandari (Centers for Disease Control and Prevention), Mariam S. ElNaggar (Prosolia, Inc.), Olga S. Ovchinnikova (ORNL).