VITA

PETER WILLIAMS

Education:

University of London, King's College	B.Sc. (Chemistry)	1963
University of London, King's College	Ph.D. (Physical Chemistry)	1966

Professional Experience

Argonne National Laboratory, Physics Division	
Research Associate	1966-67
University of Manitoba, Physics Dept.	
Faculty Associate	1967-73
Indiana University, Dept. of Chemistry	
Research Associate	1973-74
University of Illinois, Materials Research Lab.	
Research Chemist	1974-78
Senior Research Chemist and Head, Surface	
and Analytical Chemistry Group	1978-81
Arizona State University, Dept. of Chemistry	
Professor	1981-present

Honors, Awards and Service to the Profession:

US Delegate, International Organizing Committee,	
Conferences on Secondary Ion Mass Spectrometry	1989-2005
ASU Freshman Chemistry Teaching Award	1995
Department of Chemistry Blankenship Teaching Award	2008
DMSO Teaching Award (ASU SAACS Chapter)	2016

Service Activities

Intramural Service

Current Departmental Assignments

Chair, Graduate Programs Committee, 2009-present

Graduate Theses Mentored:

PhD: Richard Lareau, Steven Hues, Greg Gillen, Lori A. Streit, Ray-Chern Deng, Richard Alcorn, Randall Nelson, Stephen Schauer, Julie Pecore, David Schieltz, Chau-Wen Chou, Jennifer Krone, Kathleen Lewis, David Dogruel, Tommy Ashton III, Jennifer Firestine, Urban Kiernan, Eric Niederkofler, Raul Rivera, Richard Sobers, Jr., Teresa Gerrity, Adam Monroe, Jitao Zhang

M.S.: Cong-Wen Luo, Eileen Brown, Paul Oakey, Gideon Eckhouse, Christopher Kline, Miranda McFall, Jennifer Firestine,

Postdoctoral researchers:
Maitrayee Bose, Ph.D. Washington University (Asst. Prof., SESE starting August 2017)

US Patents (last 7 years) (19 total)

9,540,689 *Williams* , et al. January 10, 2017 Method of determining the nucleotide sequence of oligonucleotides and DNA molecules

9,458,500 *Williams* , et al. October 4, 2016 Method of determining the nucleotide sequence of oligonucleotides and DNA molecules

9,212,393 *Williams* , et al. December 15, 2015 Method of determining the nucleotide sequence of oligonucleotides and DNA molecules

9,096,898 *Williams* , et al. August 4, 2015 Method of determining the nucleotide sequence of oligonucleotides and DNA molecules

8,486,713 *Nelson* et. Al.July 16, 2013 Mass spectrometric immunoassay

8,263,365 *Williams* , et al. September 11, 2012 Method of determining the nucleotide sequence of oligonucleotides and DNA molecules

8,263,364 *Williams* , et al. September 11, 2012 Method of determining the nucleotide sequence of oligonucleotides and DNA molecules

8,216,514 *Williams* , et al. July 10, 2012
Method of determining the nucleotide sequence of Oligonucleotides and DNA molecules

7,875,440 *Williams* et al. January 2011
Method of determining the nucleotide sequence of oligonucleotides and DNA molecules

7,645,596 *Williams* et al. January 12, 2010
Method of determining the nucleotide sequence of oligonucleotides and DNA molecules

Publications (last 7 years):

139. "Identification at high mass resolution of the positive ion at m/z 19 produced by electron-stimulated desorption: F(+) (rather than H(3)O(+))" Williams P.; Franzreb K. *J. Vac, Sci. Technol A* **28 (2010)** 622-624

140. "On the effect of oxygen flooding on the detection of noble gas ions in a SIMS instrument", P. Williams, K. Franzreb, R. C. Sobers Jr., and J. Lorincik: *Nucl. Instrum.Methods Phys. Res. B* **268** (2010), 2758.

141. "Negative ion yield and sputter yield variations for Cs(+) bombardment of Si with O(2) gas flooding" Franzreb K.; Williams P. *Surf. Interf. Anal.* **43**(2011) 129-133

142. "Testing of a Micro Faraday Cup Array for Ion Detection in SIMS" Lorincik Jan; Denton M. Bonner; Sperline Roger P., Williams, P; et al. *Anal. Lett.* **44** (2011) 1050-1057

143. "High dynamic range isotope ratio measurements using an analog electron multiplier", Williams, P., Lorincik, J., Franzreb, K., Hervig, R.L. *Surf. Interface Anal.* **45** 549-552 (2013)

144. "Future Challenges and Prospects of Cluster SIMS", P Williams, CM Mahoney *Cluster Secondary Ion Mass Spectrometry: Principles and Applications,* CM Mahoney, Ed., John Wiley & Sons (2013) pp 313-327 (Invited chapter)

145. "Imaging with biomolecular ions generated by massive cluster impact in a time-of-flight secondary ion microscope", J Zhang, K Franzreb, P Williams, *Rapid Communications in Mass Spectrometry* 28, 2211-2216 (2014)

146. "Assessment of alteration processes on circumstellar and interstellar grains in Queen Alexandra Range 97416", M Bose, TJ Zega, P Williams, *Earth and Planetary Science Letters* 399, 128-138 (2014)

147. "Mass Spectra and Yields of Intact Charged Biomolecules Ejected by Massive Cluster Impact for Bioimaging in a Time-of-Flight Secondary Ion Microscope", J Zhang, K Franzreb, SA Aksyonov, P Williams, *Analytical chemistry* 87, 10779-10784 (2015))