G.B. FROST MEMORIAL LECTURE

The Grenville Frost Visiting Lectureship in Chemistry was established in 1966 by a bequest from the estate of the Honourable Leslie M. Frost, Premier of Ontario, in memory of his brother, Grenville. This fund is used to invite a Visiting Lecturer to Queen's.

Grenville Frost completed his education at the University of Toronto and, after graduating, went on to the University of California where he worked under the famous G.N. Lewis. Dr. Frost was appointed Lecturer at Queen's in 1924 and Full Professor in 1944. He became Head of the Department of Chemistry in 1956 and served in this post until retirement in 1961.

Dr. Frost was also the Supervisor to H.G. McAdie, who was the first Ph.D. Graduate in the Department of Chemistry

SELECTED RECENT PUBLICATIONS

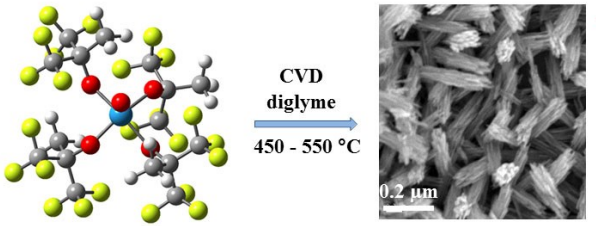
- "Surface Plasmon Mediated Chemical Solution Deposition of Gold Nanoparticles on a Nanostructured Silver Surface," Qiu, J.; Wu, Y.-C.; Wang, Y.-C.; Engelhard, M.H.; McElwee-White, L.; Wei, W.D., *J. Am. Chem. Soc.* **2013**, 135, 38-41. DOI: 10.1021/ja309392x
- "Tungsten Nitrido Complexes as Precursors for Low Temperature Chemical Vapor Deposition of WNxCy Films as Diffusion Barriers for Cu Metallization," McClain, K.R.; O'Donohue, C.; Koley, A.; Bonsu, R.O.; Abboud, K.A.; Revelli, J.C.; Anderson, T.J.; McElwee-White, L., J. *Am. Chem. Soc.* **2014**, 136, 1650-1662. DOI: 10.1021/ja4117582.
- "Understanding the Electron Stimulated Surface Reactions of Organometallic Complexes to Enable Design of Precursors for Electron Beam Induced Deposition," Spencer, J.; Rosenberg, S.; Barclay, M.; Wu, Y.-C.; McElwee-White, L.; Fairbrother, D.H., *Appl. Phys. A.,* **2014**, 117, 1631-1644. DOI 10.1007/s00339-014-8570-5.
- "Aerosol-Assisted Chemical Vapor Deposition of Tungsten Oxide Films and Nanorods from Oxo Tungsten(VI) Fluoroalkoxide Precursors," Kim, H.; Bonsu, R.O.; O'Donohue, C.; Korotkov, R.Y.; McElwee-White, L.; Anderson, T.J., *ACS Appl. Mater. Interfaces*, **2015**, 7, 2660–2667. DOI: 10.1021/am507706e.
- "Electron Induced Surface Reactions of η3-Allyl Ruthenium Tricarbonyl Bromide [η3-(C3H5)Ru(CO)3Br]: Contrasting the Behavior of Different Ligands," Spencer, J.; Brannaka, J.A.; Barclay, M.; McElwee-White, L.; Fairbrother, D.H., *J. Phys. Chem C.,* **2015**, 119, 15349–15359. DOI: 10.1021/acs.jpcc.5b03775.

Queen's Chemistry

Department of Chemistry
Queen's University

is honoured to host the
2016 Frost Lecturer:

Dr. Lisa McElwee-White
University of Florida



"A Physical Organic Chemist's Approach to Precursors for the Deposition of Inorganic Nanostructures"

Friday, March 4, 2016
11:30 AM
Room 117, Chernoff Hall

DR. LISA MCELWEE-WHITE

Lisa McElwee-White
Department of Chemistry
University of Florida
Gainesville, FL

Lisa McElwee-White is the Colonel Allen R. and Margaret G. Crow Professor of Chemistry at the University of Florida. She received a B.S. degree from the University of Kansas and completed her Ph.D. at the California Institute of Technology. After two years of postdoctoral work at Stanford University, she joined the Stanford faculty as an Assistant Professor in 1985. She moved to the University of Florida as an Associate Professor in 1993 and was promoted to Professor in 1997. Following a term as Associate Dean for Administrative Affairs in the College of Liberal Arts and Sciences, she returned to full time research and teaching. She serves as director of the UF Beckman Scholars Program and recently served as the Director of the NSF-CCI Center for Nanostructured Electronic Materials. Prof. McElwee-White's research interests center around the applications of organometallic chemistry in catalysis and materials science. Her work has been funded by a variety of federal agencies, foundations, and companies including NSF, DOE, ARO, ONR, NASA, ACS-PRF, the Beckman Foundation, HHMI and FEI. She is the author of 132 refereed publications and has presented 177 invited lectures. Her Editorial Board service includes Organometallics, the Journal of Organic Chemistry, Letters in Organic Chemistry and Current Organic Chemistry. She has recently served as Chair of the Division of Organic Chemistry of the American Chemical Society and was named as a Fellow of the American Chemical Society in 2010. Her recent awards include the Florida Award (2015) and the Charles H. Stone Award (2012).

SELECTED HONOURS & AWARDS

- 2016 Frost Lecture, Queen's University
- 2015 Florida Award (Florida Section, ACS)
- 2015 Keynote Lecture, Advanced Materials & Nanotechnology 7 (New Zealand)
- 2013 Frontiers in Science Lecture, Florida Atlantic University
- 2012 Charles H. Stone Award (Carolina-Piedmont Section, ACS)
- 2011 Melbourne University Chemical Society Lecture (Australia)
- 2011 Plenary Lecture, Zing Chemistry Conference on Coordination Chemistry (Mexico)
- 2010 Fellow, American Chemical Society
- 2009 UF Doctoral Dissertation Mentoring Award
- 2007 HHMI Distinguished Mentor Award
- 2005 Frontiers in Chemistry Lecture, Wayne State University
- 1999 Plenary Lecture, 4th International Symposium on Organo-Metals, Metal Complexes and Catalysis (China)
- 1996-2014 Anderson Scholar Faculty Honoree, University of Florida (honored nine times)
- 1996 Teaching Improvement Program Award, University of Florida
- 1995 Plenary Lecture, Fifteenth Conference on Coordination Chemistry (Slovakia)
- 1980-1983 National Science Foundation Predoctoral Fellowship
- 1989 DuPont Young Faculty Award