

Lisa McElwee-White

Colonel Allen R. and Margaret G. Crow Professor of Chemistry
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Professional Preparation

1979 B.S., Chemistry, with Highest Distinction and Honors in Chemistry, University of Kansas
1983 Ph.D., Chemistry, California Institute of Technology
1983-1985 Postdoctoral Research Affiliate, Stanford University

Academic Appointments

2017-2024 Chair, Department of Chemistry
2016-present Affiliate Professor of Chemical Engineering
2015-present Colonel Allen R. and Margaret G. Crow Professor of Chemistry
2014 TUBITAK Visiting Professor (Turkey)
2012-2013 Colonel Allen R. and Margaret G. Crow Term Professor
2007-2009 University of Florida Research Foundation Professor
1998-2002 Associate Dean for Administrative Affairs, College of Liberal Arts and Sciences,
University of Florida
1997-2015 Professor, University of Florida
1993-1997 Associate Professor, University of Florida
1985-1993 Assistant Professor, Stanford University

Leadership of Programs and Centers

2007-2017 Director, UF Beckman Scholars Program
2010-2014 Director, NSF-CCI Center for Nanostructured Electronic Materials

Awards and Recognition (Selected)

2024 Southern Chemist Award (Memphis Section, ACS)
2024 Paul G. Gassman Distinguished Service Award (ACS Organic Division)
2021 Plenary Lecture, Royal Society of Chemistry-UK Department for International Development
Chemistry to Functional Materials Conference
2019 Francis P. Garvan-John M. Olin Medal (ACS)
2019 Charles H. Herty Medal (Georgia Section, ACS)
2019 Castle Lecture, University of South Florida
2018 Plenary Lecture, 6th Int'l Conference on Chemistry and Chemical Engineering (Mongolia)
2017 Plenary Lecture, ANCON-Int'l Congress on Chemistry and Materials Science (Turkey)
2016 Fellow, International Union of Pure and Applied Chemistry
2016-2017 UF Technology Innovator Award
2016 Frost Lecture, Queens 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)
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 Int'l Symp. 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
1989 DuPont Young Faculty Award
1980-1983 National Science Foundation Predoctoral Fellowship
1979-1980 Institute Fellowship, California Institute of Technology
1975-1976 National Merit Scholarship

Professional Service/Synergistic Activities (Selected)

2024-2026	Member, ACS Committee on Publications
2018-2024	Editorial Advisory Board, <i>ACS Applied Materials and Interfaces</i>
2015	Search committee for NSF Chemistry Division Director
2015-2022	Steering Committee, NIH Mentoring Workshop for Young Faculty
2014-2023	Member, ACS Committee on Professional Training
2010	Member, ACS Task Force on Electronic Dissemination of Meeting Content
2009-2019	Mentor, NIH Mentoring Workshop for Junior Faculty
2009-2012	Member at Large, Executive Committee, ACS Division of Inorganic Chemistry
2008-2010	Chair, ACS Division of Organic Chemistry
2006-2024	Organizer, Academic Young Investigators Symposium (annual at ACS meetings)
2006-2007	Committee of Visitors, NSF Chemistry Division
2006-2014	Editorial Advisory Board, <i>Letters in Organic Chemistry</i>
2004-2007	Editorial Advisory Board, <i>Journal of Organic Chemistry</i>
2004-2006	Member at Large, Executive Committee, ACS Division of Organic Chemistry
2002-2005	Titular Member, IUPAC Organic and Biomolecular Chemistry Division Committee
2000-2003	National Program Chair, ACS Division of Organic Chemistry
2000-2002	Editorial Advisory Board, <i>Organometallics</i>
1995-1999	Member, Medicinal Chemistry Study Section, National Institutes of Health
1995-1998	Executive Guest Editor, <i>Current Organic Chemistry</i>

Ten Selected Publications

1. "Roadmap for focused ion beam technologies," Höflich, K.; Hobler, G.; Allen, F.I.; Wirtz, T.; Rius, G.; McElwee-White, L.; et al., *Appl. Phys. Rev.*, **2023**, *10*, 041311.
2. "AACVD of MoS₂ with a Thiourea Sulfur Source: Single-source Precursors vs. Coreactant Mixtures" Germaine, I.M.; Huttel, M.B.; Alderman, M.P.; McElwee-White, L., *ACS Appl. Mater. Interfaces*, **2023**, *15*, 37764-37774.
3. "Photoactivated Ru CVD Using (η^3 -Allyl)Ru(CO)₃X (X = Cl, Br, I): From Molecular Adsorption to Ru Thin Film Deposition," Salazar, B.G.; Brewer, C.R.; McElwee-White, L.; Walker, A.V., *J. Vac. Sci. Technol. A*, **2022**, *40*, 02340
4. "Nanoscale Ru-Containing Deposits from Ru(CO)₄l₂ via Simultaneous Focused Electron Beam Induced Deposition and Etching in UHV: Mask Repair in EUVL and Beyond," Bilgilişoy, E.; Yu, J.-C.; Preischl, C.; McElwee-White, L.; Steinrück, H.-P.; Marbach, H., *ACS Appl. Nano Mater.*, **2022**, *5*, 3855-3865.
5. "Photochemistry of (η^4 -diene)Ru(CO)₃ Complexes as Precursor Candidates for Photoassisted Chemical Vapor Deposition," Brewer, C.R.; Sheehan, N.C.; Herrera, J.; Walker, A.V.; McElwee-White, L., *Organometallics*, **2022**, *41*, 761-775.
6. "Charged Particle-Induced Surface Reactions of Organometallic Complexes as a Guide to Precursor Design for Electron and Ion Induced Deposition of Nanostructures," Yu, J.-C.; Abdel-Rahman, M.K.; Fairbrother, D.H.; McElwee-White, L., *ACS Appl. Mater. Interfaces*, **2021**, *13*, 48333-48348.
7. "Growth of WO_x from Tungsten (VI) Oxo-Fluoroalkoxide Complexes with Partially Fluorinated β -diketonate/ β -ketoesterate Ligands: Comparison of Chemical Vapor Deposition to Aerosol-Assisted CVD," Ou, N.C.; Bock, D.C.; Su, X.; Craciun, D.; Craciun, V.; McElwee-White, L., *ACS Appl. Mater. Interfaces*, **2019**, *11*, 28180-28188.
8. "Electron Induced Surface Reactions of cis-Pt(CO)₂Cl₂: a Route to Focused Electron Beam Induced Deposition of Pure Pt Nanostructures," Spencer, J.; Wu, Y.-C.; McElwee-White, L.; Fairbrother, D.H., *J. Am. Chem. Soc.*, **2016**, *138*, 9172-9182.
9. "Effect of Ligand Structure on Chemical Vapor Deposition of WN_xC_y Thin Films from Tungsten Nitrido Complexes of the type WN(NR₂)₃," Koley, A.; O'Donohue, C.; Nolan, M.M.; McClain, K.R.; Bonsu, R.O.; Korotkov, R.Y.; Anderson, T.J.; McElwee-White, L., *Chem. Mater.*, **2015**, *27*, 8326-8336.
10. "Tungsten Nitrido Complexes as Precursors for Low Temperature Chemical Vapor Deposition of WN_xC_y 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.

Other

233 invited lectures at conferences, universities, national laboratories and companies
74 graduate students and 25 postdoctoral fellows/visiting scholars supervised