

George C. McBane

Department of Chemistry
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Degrees

Ph.D. Chemistry 1990, Cornell University (with P. L. Houston)

B.S. Chemistry *magna cum laude* 1984, North Carolina State University

Experience

Grand Valley State University. Assistant Professor of Chemistry, 2001–2003. Associate Professor, 2003–2010. Professor, since July 2010.

The Ohio State University. Assistant Professor of Chemistry and Chemical Physics, 1993–2001.

University of Minnesota. Postdoctoral Associate (with W. R. Gentry and C. F. Giese), 1990–1993.

Durham University, United Kingdom. Leverhulme Visiting Professor and Senior Research Fellow of the Institute for Advanced Study (with Jeremy Hutson), August 2012 – August 2013.

Max Planck Institute for Dynamics and Self-Organization, Göttingen, Germany. Visiting Scientist (with Reinhard Schinke), July–December 2005, June–July 2008, June–July 2011.

Phifer Smith Corporation. Consultant in chemical kinetics modeling, November 2006–April 2007.

University of Sydney. Visiting Scholar (with Scott Kable), May–July 2001.

Honors

Top Reviewer for 2014, Journal of Chemical Physics. (One of 20 awardees named in *J. Chem. Phys.* **142**, 200201 (2015).)

Distinguished Contribution in a Discipline Award, Grand Valley State University, 2009/2010.

Administrative assignments

Associate Dean for Facilities, Scheduling, Research and Analytics, GVSU College of Liberal Arts and Sciences (75% workload assignment), since July 2020.

Assistant Dean for Research, Facilities Planning, and High Impact Practices, GVSU College of Liberal Arts and Sciences (50% workload assignment), January 2018 – July 2019; Assistant Dean for Research, Facilities, and Analytics, GVSU College of Liberal Arts and Sciences (50% workload assignment), July 2019 – June 2020.

Unit Head, GVSU Department of Chemistry (50% workload assignment), August 2013–December 2017.

Chair, GVSU College of Liberal Arts and Sciences Personnel Committee (25% workload assignment), April 2010 – April 2012.

Grants

GVSU Teaching Innovation Grant, “Engineering Capstone Design of a Fluorescence Lifetime Spectrometer for Physical Chemistry Students”, with K. Brakora, 2020, \$6,000.

GVSU Student Summer Scholars program, four awards in 2002 (Amanda Hennip), 2003 (Tonya Leeuw), 2007 (Emily Jones), and 2018 (Tyrese Lillard), total \$18,625.

Michigan Space Grant Consortium, “Diode-laser Based Measurement of Molecular Parameters Relevant to Atmospheric Studies”, Undergraduate Fellowship to Catlin Schalk, 2014, \$2,500.

The Leverhulme Trust (UK), “Towards controlled ultracold chemistry”, Leverhulme Visiting Professor award to Durham University, submitted with Jeremy M. Hutson as host in support of sabbatical visit, 8/16/2012–8/15/2013, \$66,000.

National Science Foundation, “RUI: Theoretical study of the removal of triplet Herzberg states of oxygen by collisions with nitrogen”, 8/1/2010–7/31/2013, \$49,821.

Michigan Space Grant Consortium, “Computational exploration of the origin of slow oxygen atoms from UV photodissociation of ozone”, Undergraduate Fellowship to Luan Nguyen, 2009, \$2,500.

Partnership for Advanced Computational Infrastructure, “Quantum scattering calculations for Li_2 –Ne rovibrational excitation”, three awards 2004–2008 totaling 130,000 CPU hours.

Council on Undergraduate Research, “Diode Laser Spectrometer for use in *H. Pylori* diagnosis”, 2003, \$3,000.

GVSU Research Grant-in-Aid, “Development of a Diode Laser Spectrometer for Isotope Ratio Determination”, 2002, \$2,500.

Michigan Space Grant Consortium, “Diode Laser Spectrometer for Determination of C and N Isotope Ratios in the Upper Atmosphere”, Undergraduate Student Fellowship to Amanda Hennip, 2002, \$2,500.

The Batelle Endowment for Technology and Human Affairs. “An Extensible Electronic Chemistry Study Resource.” Philip J. Grandinetti, Christopher M. Hadad, C. Weldon Mathews, George C. McBane, Anne B. McCoy, Sherwin J. Singer, Robert J. Tatz, and Midori Kitigawa DeLeon, 1999–2000, \$53,280.

ACS-PRF, “State-to-State Dynamics of the Reactions of $\text{O}(^3P)$ with Acetylene, Formaldehyde, and Methane”, 1994–1996, \$20,000.

Invited seminars

Since 2001: Wayne State University, Indiana University-Purdue University at Fort Wayne, Texas A&M University, University of New Hampshire, University of Vermont, Wesleyan University, University of North Carolina at Greensboro, Free University of Amsterdam (Netherlands), Leiden University (Netherlands), Aquinas College, Southern Illinois University at Carbondale, Notre Dame University, Durham University (UK), University College London (UK), University of Bristol (UK), University of Warwick (UK), Heriot-Watt University, Edinburgh (UK), University of Nottingham (UK), University of Leeds (UK).

Memberships

American Chemical Society, American Physical Society

Publications

Please see separate publication list, provided with this vita or available at
<http://faculty.gvsu.edu/mcbaneg/mcbane-publist.pdf>