

ABBREVIATED CURRICULUM VITAE OF MARK R. MASON (6/14/2022)

I. EMPLOYMENT HISTORY:

Research Assistant, Resident Research Program, summer 1985
E. I. Du Pont de Nemours & Co., Wilmington, DE
Assistant Professor of Chemistry, 8/93 – 6/98
University of Louisville, Louisville, KY
Assistant Professor of Chemistry, 7/98 – 5/03
University of Toledo, Toledo, OH
Associate Professor of Chemistry, 5/03 – 8/15
University of Toledo, Toledo, OH
Professor of Chemistry, 8/15 – present
University of Toledo, Toledo, OH
Founding Director, School of Green Chemistry and Engineering, 8/11 – 7/13
University of Toledo, Toledo, OH
Director, School of Green Chemistry and Engineering, 8/14 – 6/17, 7/18 – 6/20
University of Toledo, Toledo, OH

II. EDUCATIONAL HISTORY

B.S., 1985 (Chemistry)	Bowling Green State Univ.	Prof. Elliott Blinn
Ph.D., 1991 (Inorganic Chemistry)	Iowa State University	Prof. John G. Verkade
Postdoctoral Associate, 1991 – 1993	Harvard University	Prof. Andrew R. Barron

III. SELECTED GREEN CHEMISTRY ACTIVITIES

Green Chemistry and Engineering Conference Advisory Committee Member, 2020, 2021
Presidential Green Chemistry Challenge Awards Judge for 2 years
ACS Green Chemistry Institute's Kenneth G. Hancock Memorial Student Awards Judge
Organized, along with Mary Kirchhoff of the ACS Green Chemistry Institute, and Presided over Symposium in Memory of Dr. Nina McClelland for ACS Green Chemistry and Engineering Conference, 2021.
Served on an external advisory board for the chemistry department at the University of Michigan-Flint for the purpose of establishing an undergraduate program in green chemistry. 2017
Served on Steering Committee and helped organize the *Michigan Green Chemistry and Engineering Conference*, which was held on November 4, 2015 in Ann Arbor, MI.
Served on Steering Committee and helped organize the *Michigan Green Chemistry and Engineering Conference*, which was held on October 23-24, 2013 in Grand Rapids, MI.
Served on Steering Committee and attended the *Green Chemistry Tools Workshop, Safe Products, Made Safely: Tools for Business*, Ohio State University, Columbus, Ohio, May 30, 2013.
Chaired the student poster session and organized the poster session judging at the *17th Annual ACS Green Chemistry and Engineering Conference*, Bethesda, MD, June 18-20, 2013. Co-judges were David Constable, Director the ACS Green Chemistry Institute, and David Allen, Editor-in-Chief, ACS Sustainable Chemistry and Engineering.

IV. SELECTED GREEN CHEMISTRY CURRICULUM ACTIVITIES

Developing, along with collaborator Dan Waddell (University of Cincinnati) two green chemistry modules that will incorporate systems thinking into the General Chemistry curriculum. The modules will be available open access. The project is funded and led by the ACS Green Chemistry Institute. Modules should be accessible by the summer of 2023.
Developed a Quality Matters (QM) certified distance learning version of the *Green Chemistry* course for graduate students.

Worked with Glenn Lipscomb, Andy Jorgensen, Connie Schall and other colleagues to develop a *Professional Science Master's Degree in Green Chemistry and Engineering* at the University of Toledo. This degree program and affiliation was approved by the NPSMA in 2015 and the first student graduated from the program in 2017.

Worked with Andy Jorgensen, Dean Giolando, Kristi Mock, Claire Cohen and Rebecca Schneider to develop a distance learning version of the *Master in Education and Science in Chemistry* degree with a green chemistry and sustainability emphasis. With support of College Credit Plus funding by the State of Ohio, there were 17 high school teachers enrolled in the first cohort.

Worked with Glenn Lipscomb and other colleagues to develop an undergraduate *Minor in Green Chemistry and Engineering* at the University of Toledo.

Developed new course on *Green Chemistry* in 2013 for graduate and upper-level undergraduate chemistry, chemical engineering, pharmacy, and environmental sciences students. The course includes coverage of the 12 principles of green chemistry, UN Sustainable Development Goals, basic toxicology, green chemistry metrics (e.g., Process Mass Intensity), biomass conversions, chemical alternatives assessment (e.g., GreenScreen), value proposition, relevant legislation, and the US Safer Choice program.

V. TEACHING

Undergraduate Courses Taught

General Chemistry I
 General Chemistry II
 Inorganic Chemistry I
 Inorganic Chemistry II
 Inorganic Chemistry Lab
 Advanced Lab II
 Green Chemistry

Graduate Courses Taught

Advanced Coordination Chemistry	
Green Chemistry	Developed new course
Green Chemistry, Distance Learning	Developed DL version
Homogeneous and Heterogeneous Catalysis	Developed new course
Main Group Chemistry	
Organometallic Chemistry of Transition Elements	
Physical Inorganic Chemistry	
Structural Methods in Inorganic Chem.	

Graduate Student Advisory Committees

Served on more than 70 M.S. Thesis and Ph.D. Dissertation advisory committees and final defenses, excluding graduates from the Mason group.

Research

Advised and mentored 7 high school researchers, 31 undergraduate research students, 8 M.S. graduates, 15 Ph.D. graduates and 5 postdoctoral associates.

VI. SELECTED AWARDS SINCE 2000

Faculty Excellence Award, College of Natural Sciences and Mathematics, UT, 2010-11
 College of Arts and Sciences Master Teacher, University of Toledo, 2008-10

VII. UNIVERSITY SERVICE

at University of Louisville

Graduate Student Handbook Committee, member
revised all policies concerning graduate degree requirements and expectations
Chemistry Graduate Student Association Faculty Advisor
Personnel Committee, alternate
External Seminar Coordinator
Workload Committee, member
Committee on Departmental Resources, member
Graduate Admissions/Recruiting
Visiting Lecturers Program, Coordinator
Planning and Budget Committee, member
External Chair Search Committee, member

at University of Toledo

Academic Achievement Committee, Chair, 2004-06
Ad Hoc Faculty Search Committee, Chair, 2003-04
AIP Seminar Coordinator, 2001-02
Chair Advisory Committee, member, 2000-01, 2003-04, 2005-06, 2008-10, 2010-11,
2020-22
College Committee on Academic Personnel, member, 2006-08 (A&S), 2011-12 (NSM), 2015-17,
2022-24
Colloquium Coordinator, 1998-2000
Organized the Distinguished Lecturers Series on Advanced Materials Chemistry, 2000
Curriculum Committee, member, 2003-05, 2008-13, 2015-17, 2019-22
Department Personnel Committee, 2003-present; Co-Chair, 2005-06, 2009-10;
Chair, 2014-15; 2018-19
Merit Review Subcommittee, 2003-04; 2005-06, 2008-15; 2016-17; 2018-21
Director of General Chemistry, 2008-09
Director of Graduate Studies, Department of Chemistry, 2002-04; 1/20-6/20
Director (Founding), School of Green Chemistry and Engineering, 2011-2017; F18-June 2020
Faculty Search Committee, Analytical, member, 1998-99, 2002-03
Faculty Search Committee, Biochemistry, member, 1999-00
Faculty Search Committee, Thin-Films (Physics) and Materials Chemistry, member, 1999-01
Faculty Search Committee, Analytical and Organic, member, 2001-02
Faculty Search Committee, Green Chemistry, chair, 2015-16
Faculty Search Committee, External Chair, chair, 2014-15
Faculty Search Committee, Inorganic Chemistry, member, 2019-20
Faculty Search Committee, Organic, member, 2003-04
Faculty Search Committee, Organic, chair, 2009-10
Faculty Search Committee, Organic (SGCE), chair, 2011-12; 2012-13
Faculty Search Committee, Chemical Engineering (SGCE), 2011-12; 2012-13
Faculty Search Committee, Chemical Engineering, 2014-15
Faculty Search Committee, X-ray Crystallography, Chair, 2002-03
Faculty Senate, member, 2011-12
General Chemistry Committee, 2008-09 (chair), 2009-11, 2013-15, 2017-18
Graduate Examinations Committee, member, 2000-01; 2002-04; Chair, 2001-02
Graduate Admissions and Recruiting Committee, member, 1998-2008; 2015-16; 2020;
Chair, 2004-08
Graduate Student Standings Committee, Chair, 2002-04; 2020
Lake Erie Center's Education and Outreach Advisory Board Member, 2012

Search Committee, A&S Instrumentation Center Director, member, 2001
Search Committee, A&S Instrumentation Center Technical Staff, member, 2001
Search Committee, Visiting Assistant Professors, member, summer 2005, summer 2008
Undergraduate Recruiting Committee, Department of Chemistry, member, 2011-12
University Committee on Academic Programs, member, 2011-12

VIII. SELECTED EXTERNAL SERVICE

Reviewed manuscripts for the following journals:

<i>Accounts of Chemical Research</i>	<i>ACS Books Symposium Series</i>
<i>Advanced Synthesis and Catalysis</i>	<i>Angewandte Chemie</i>
<i>Chemical Communications</i>	<i>Chemistry- A European Journal</i>
<i>Chemistry of Materials</i>	<i>ChemSusChem</i>
<i>Collection of Czechoslovak Chem. Communications</i>	<i>Dalton Transactions</i>
<i>Energy and Environmental Science</i>	<i>European Journal Inorganic Chemistry</i>
<i>Industrial & Engineering Chem. Research</i>	<i>Inorganic Chemistry</i>
<i>Inorganic Chemistry Communications</i>	<i>Inorganica Chimica Acta</i>
<i>Journal of Chemical Education</i>	<i>Journal of Coordination Chemistry</i>
<i>Journal of the American Chemical Society</i>	<i>Journal of the Chemical Soc. Pakistan</i>
<i>Journal of Materials Chemistry</i>	<i>Journal of Organometallic Chemistry</i>
<i>Macromolecules</i>	<i>Main Group Chemistry</i>
<i>New Journal of Chemistry</i>	<i>Organometallics</i>
<i>Polyhedron</i>	<i>Tetrahedron Letters</i>

Reviewed proposals for the following funding agencies:

US Civilian Research & Development Fund
Department of Energy (EPSCoR)
European Research Council
Kentucky Science and Engineering Foundation
National Science Foundation
Petroleum Research Fund
Research Corporation

Sigma Xi, Secretary of the local chapter, 2001-03
Served as the UT Chapter delegate at the Sigma Xi Annual Meeting in Galveston, TX, 2002

External chemistry program reviewer for two universities and assisted with chemistry strategic planning for another university.
External tenure and promotion reviewer
Review of UT Lake Erie Center with Professor Lew Gibbons, College of Law, 2011

IX. PUBLICATIONS

Publications are listed on the publications page of the group website.

X. EXTERNAL FUNDING

Selected funding information is available on other pages of the group website.