Robin Lasey, Ph.D.

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Education

Ph.D. Photochemical Sciences, Bowling Green State University, Bowling Green, OH August 2002 Dissertation title: "Photophysics and Photochemistry of Synthetic Metallopeptides" Advisor: Dr. Michael Y. Ogawa

B.S. Chemistry (magna cum laude), Missouri University of Science and Technology (previously University of Missouri-Rolla), Rolla, MO
May 1994
Chemistry and math teaching certification

Professional Experience

2022-present Professor of Chemistry, Arkansas Tech University Director, Arkansas Governor's School (September 2018-present) Director, Center for Excellence in Teaching and Learning (January 2018-present)

2009-2022

Associate Professor of Chemistry, Arkansas Tech University Interim Head, Department of Physical Sciences (July 2017-June 2018) Chemistry Program Coordinator (August 2013-June 2017) Faculty Athletics Representative (August 2016-August 2022) College of Natural and Health Sciences Director of College Operations (January 2017-June 2017) Classes taught: Survey of Chemistry, Survey of Chemistry Lab, General Chemistry II, Principles of Biochemistry, Metabolic Biochemistry, Chemistry Seminar, Orientation to Physical Sciences, Orientation to Physical Sciences II Received the 2019 ATU Faculty Award of Excellence in the service category

2004-2009

Assistant Professor of Chemistry, Arkansas Tech University Classes taught: Survey of Chemistry, Principles of Biochemistry, Metabolic Biochemistry, Fundamentals of Organic Chemistry, Organic Physiological Chemistry, Chemistry Seminar

2002-2003

Postdoctoral Associate, Bowling Green State University

Dr. Michael Y. Ogawa

• Designed, synthesized, and characterized metallopeptides which self-assemble into nanostructures

Dr. W. Robert Midden

• Developed lessons for an inquiry-based general chemistry course

1997-2002

George S. Hammond Predoctoral Fellow, Bowling Green State University Advisor: Dr. Michael Y. Ogawa

- Designed, synthesized, and characterized novel metallopeptides for electron-transfer studies and DNA-binding metallopeptides
- Studied protein-protein interactions and DNA-protein binding; electron transfer between proteins; and DNA photocleavage reactions
- Modelled electron-transfer metallopeptide using energy minimization and molecular dynamics

Fall 1996-Spring 1998

Graduate Teaching Assistant, Bowling Green State University

- General Chemistry I and General Chemistry II, recitation leader
- General Chemistry I lab and General Chemistry II lab, Organic Chemistry I lab, lab assistant

August 1994-May 1996

Teacher, Olathe East High School, Olathe, KS

- Taught Chemistry, Physics, and Geometry
- Sophomore Girls Basketball Coach and Junior Varsity Girls Swimming Coach

<u>Grants</u>

\$640,000/year for 3 years from Arkansas Department of Education. "Arkansas Governor's School". Awarded Sept. 13, 2018. Renewed for a second 3-year cycle in September 2021. (Part of a multi-person committee that prepared the grant. Appointed Director of the program.)

\$907 from *Arkansas Tech University Faculty Professional Development Grant*. "Biennial Conference on Chemical Education." May 2008.

\$1900 from *POGIL Special Project Underwriting Request*. "Guided-Inquiry in a Physical Science Laboratory." June 2007.

\$2000 from *Arkansas Tech University Faculty Undergraduate Research Grant*. "Protein-protein interactions that influence specificity and stability of DNA recognition." Fall 2006.

\$1900 from Arkansas Tech University Faculty Undergraduate Research Grant. "Kinetics of MTS reduction by Cu(II)₂(3,5-DIPS)₄." Fall 2006.

\$2548 from *Arkansas Tech University Faculty Undergraduate Research Grant*. "Protein-protein interactions that influence specificity and stability of DNA recognition." Fall 2005.

Publications

Ogawa, M.Y.; Fan, J., Fedorova, A.; Hong, J.; Kharenko, O.A.; Kornilova, A.Y.; Lasey, R.C.; Xie, F. Electron-Transfer Functionality of Synthetic Colied-Coil Metalloproteins. *J. Braz. Chem. Soc.* **2006**, *17*, 1516-1521.

Lasey, R.C.; Liu, L.; Zang, L.; Ogawa, M.Y. Peptide-Protein Interactions: Photoinduced Electron-Transfer Within the Preformed and Encounter Complexes of a Negatively Charged Metallopeptide and Cytochrome c. *Biochemistry* **2003**, *42*(13), 3904-3910.

Ranatunga, A.; Lasey, R.C.; Ogawa, M.Y. The localization of hydrophilic sites within an osmium polypyridyl compound can produce a negative activation energy for emission decay. *Inorg. Chem. Commun.* **2001**, *4*(1), 30-32.

Kornilova, A.Y.; Wishart, J.F.; Xiao, W.Z.; Lasey, R.C.; Fedorova, A.; Shin, Y.-K.; Ogawa, M.Y. Design and characterization of a synthetic electron-transfer protein. *J. Amer. Chem. Soc.* **2000**, *122*(33), 7999-8006.

Lasey, R.C.; Banerji, S.S.; Ogawa, M.Y. Synthesis and characterization of a sequence-specific DNAbinding protein that contains ruthenium polypyridyl centers. *Inorg. Chim. Acta* **2000**, *300*, 822-828.

Oral Presentations

Lasey, R.C.; Combined POGIL/MoLEs activities for the General Chemistry II classroom. Presented at the American Chemical Society Southwest Regional Meeting 2018, Little Rock, AR.

Brummett, A.R.; Drevenak, M.A.; Lasey, R.C.; The Toledo Exam as a predictor of success in General Chemistry I. Presented at the 2018 Senior Honors and Undergraduate Research Symposium, Arkansas Tech University, Russellville, AR.

Lasey, R.C.; Process-Oriented Guided Inquiry (POGIL) in High School Science. Presented at the Arkansas Curriculum Conference 2010, Little Rock, AR.

Lasey, R.C.; Teaching Physical Science Using Guided-Inquiry. Presented at the Arkansas Curriculum Conference 2007, Little Rock, AR.

Lasey, R.C.; How to get students actively involved in class. Presented by invitation at a weekly Inorganic Seminar at the University of Arkansas, Fayetteville, AR, 2007.

Jackson, S.R.; Lasey, R.C.; Protein-protein interactions that influence the specificity and stability of DNA recognition. Presented at the 2007 Senior Honors and Undergraduate Research Symposium, Arkansas Tech University, Russellville, AR.

Scalia, A.A.; Lasey,R.C.; Purification of a His-tagged leucine zipper peptide. Presented at the 2007 Senior Honors and Undergraduate Research Symposium, Arkansas Tech University, Russellville, AR.

Lasey, R.C.; Non-majors can do inquiry too! Presented at the 19th Biennial Conference on Chemical Education, West Lafayette, IN, 2006.

Dougan, M.R.; Lasey, R.C.; Protein-protein interactions that influence the specificity and stability of DNA recognition. Presented at the 2006 Senior Honors and Undergraduate Research Symposium, Arkansas Tech University, Russellville, AR.

Lasey, R.C. Taking the cookbook out of the lab. Presented at the Arkansas Conference on Teaching 2005, Little Rock, AR.

Lasey, R.C.; Banerji, S.S.; Ogawa, M.Y. Design of a sequence-specific photonuclease from a synthetic bZip metalloprotein. Presented at the 31st Central Regional Meeting of the American Chemical Society, Columbus, OH, 1999.

Lasey, R.C.; Banerji, S.S.; Ogawa, M.Y. Design of a sequence-specific photonuclease from a synthetic bZip metalloprotein. Presented at the 14th Annual Center for Photochemical Sciences Scientific Advisory Board Meeting, Bowling Green, OH, 1999.

Poster Presentations

Lasey, R.C.; Guided Inquiry in a Physical Science Laboratory. Presented at the 6th POGIL National Meeting, Arlington, TX, 2008.

Presentation at a Workshop

New Faculty Orientation, August 3-7, 2020, Arkansas Tech University; Presented sessions on Student-Centered Learning and The Syllabus to faculty before their first year of employment at ATU.

New Faculty Orientation, August 5-9, 2019; Arkansas Tech University; Designed the New Faculty Orientation program and presented sessions on Student-Centered Learning, POGIL, and The Syllabus to faculty before their first year of employment at ATU.

New Faculty Academy, February 18, 2019; Arkansas Tech University; Presented a session on POGIL to faculty in their first-year of employment at ATU.

POGIL Introductory Workshop; November 10, 2018; American Chemical Society Southwest Regional Meeting, Little Rock, AR; part of a team of 2 that facilitated the workshop.

New Faculty Academy, September 25, 2017; Arkansas Tech University; Presented a session on POGIL to faculty in their first year of employment at ATU.

Teaching Innovation Conference; May 5, 2016; Arkansas Tech University; Presented two sessions on POGIL.

New Faculty Academy; October 3, 2016; Arkansas Tech University; Presented a session on POGIL to faculty in their first year of employment at ATU.

POGIL South Central Regional Meeting; June 28-30, 2011; Washington University, St. Louis, MO; Facilitated several sessions.

POGIL South Central Regional Meeting; July 7-9, 2010; University of Oklahoma, Oklahoma City, OK; Meeting chair and facilitated several sessions.

POGIL Advanced Workshop: Classroom Facilitation and Writing Activities; July 2009 (3 day workshop); Brigham Young University, Salt Lake City, UT; part of a team of 4 that facilitated the workshop.

POGIL Introductory Workshop; February 2009 (1 day workshop); Northwestern State University of Louisiana, Natchitoches, LA; part of a team of 3 that facilitated the workshop.

Redox Reactions for Secondary Chemistry; Nov. 1, Nov. 22, and Dec. 6, 2008; Arkansas Tech University, Russellville, AR; developed curriculum and facilitated workshop.

POGIL Advanced Workshop: Classroom Facilitation and Writing Activities; July 10-12, 2008; St. John Fisher College, Rochester, NY; part of a team of 4 that facilitated the workshop.

Kinetics and Energetics for Secondary Chemistry Teachers; June 9-12 and June 16-19, 2008; Arkansas Tech University, Russellville, AR; developed curriculum and facilitated workshop.

POGIL Introductory Workshop; Jan. 26, 2008; Lamar University, Beaumont, TX; part of a team of 3 that facilitated the workshop.

POGIL Introductory Workshop; Oct. 6, 2007; Arkansas Tech University, Russellville, AR; part of a team of 3 that facilitated the workshop.

POGIL Advanced Workshop: Classroom Facilitation and Writing Activities; June 21-23, 2007; University of St. Thomas, St. Paul, MN; part of a team of 4 that facilitated the workshop.

Force, Motion, and Astronomy for Grades 5-12; June 7-20, 2007; Russellville, AR; helped develop curriculum and facilitate workshop with Jeff Robertson.

Inquiry in 50 minutes; July 26, 2006; Russellville, AR; in conjunction with Arch Ford Educational Cooperative; developed curriculum and facilitated workshop.

Teaching Chemistry by Inquiry; July 10-14, and July 17-21, 2006; Russellville, AR; developed curriculum and facilitated course.

<u>Attendance at a Professional Meeting</u> 44th Annual POD Network Conference; November 14-17, 2019; Pittsburgh, PA.

43rd Annual POD Network Conference; November 15-18, 2018; Portland, OR.

2018 Faculty Athletics Representatives Association Annual Meeting; November 1-3, 2018; Baltimore, MD.

2018 National Conference of Governor's Schools Annual Meeting; October 11-13, 2018; Denver, CO.

2017 Faculty Athletics Representatives Association Annual Meeting; November 2-4, 2017; Atlanta, GA.

2016 Faculty Athletics Representatives Association Annual Meeting; November 3-5, 2016; Indianapolis, IN.

2016 Regional Rules Seminar; June 13-15, 2016; Dallas, TX.

9th POGIL National Meeting; June 4-7, 2011; Washington University; St. Louis, MO; attendance by invitation only.

8th POGIL National Meeting; June 5-8, 2010; Washington University; St. Louis, MO; attendance by invitation only.

7th POGIL National Meeting; May, 2009; University of St. Thomas; St. Paul, MN; attendance by invitation only.

20th Biennial Conference on Chemical Education; July 27-31, 2008; Indiana University, Bloomington, IN.

6th POGIL National Meeting; May 31-June 2, 2008; University of Texas at Arlington, Arlington, TX; attendance by invitation only.

5th POGIL National Meeting; May 19-22, 2007; Washington University, St. Louis, MO; attendance by invitation only.

Attendance at a Professional Development Workshop

POD Writes at the 44th Annual POD Network Conference; November 13-14, 2019; Pittsburgh, PA.

Getting Started: Workshop for New Faculty Developers at the 43rd Annual POD Network Conference; November 14-15, 2018; Portland, OR.

2017 Council of Colleges of Arts & Sciences Seminar for Department Chairs/Heads; October 1-3, 2017; San Diego, CA.

POGIL Advanced Workshop: Classroom Facilitation and Writing Activities; June 9-11, 2006; Grand Valley State University, Allendale, MI.

POGIL Advanced Workshop: Classroom Facilitation and Writing Activities; May 19-21, 2005; Grand Valley State University, Allendale, MI.

Academic Service

University Committee Memberships

- Academic Affairs Leadership Council Fall2019-present
- Academic Appeals Committee Fall 2007-Spring 2008
- Academic Council Fall 2017-Spring 2018
- Admissions, Academic Standards, and Student Honors Committee Fall 2006-Spring 2007
- Arkansas Governor's School Planning Committee Chairperson Fall 2018-present
- Arkansas JSHS planning committee Spring 2006-Fall 2007
- Assessment Committee Fall 2006-Spring 2015; General Education Assessment Sub-Committee, Fall 2007-Spring 2009
- Center for Excellence in Teaching and Learning Advisory Board Chairperson Fall 2019-present
- Committee on Low Enrollment Courses Spring 2017-Spring 2018
- Faculty Advising Task Force Spring 2021
- Faculty Athletics Committee Fall 2007-Spring 2008, Fall 2010-Spring 2013, Fall 2015-Spring 2022; Chairperson Fall 2016-Spring 2022
- Faculty Senate Fall 2010-Spring 2013
- Gender Equity Committee Fall 2016-Spring 2022
- General Education Committee Fall 2009-Spring 2011; Chair Fall 2009-Spring 2010
- Girls in STEM Planning Committee Fall 2017-Spring 2018

- Honor Code Taskforce Spring 2018
- Honors Council Fall 2008-Spring 2011
- Library Committee Fall 2005-Spring 2006
- NCAA Compliance Committee Fall 2016-Spring 2022
- Online Quality Committee Spring 2020-present
- Parks, Recreation, and Hospitality Administration Departmental Promotion and Tenure Committee, Spring 2020
- Pre-Medical Committee Fall 2006-Spring 2015
- Retention Taskforce Spring 2018

Departmental Committee Memberships

- Organic Faculty Search Committee, Spring 2005
- Inorganic Faculty Search Committee, Fall 2006-Spring 2007
- Service and Scholarship Peer Review Committee, Spring 2008
- Inorganic Faculty Search Committee, Fall 2008-Spring 2010
- Teaching Peer Review Committee, Fall 2009-Spring 2018; Chairperson Fall 2015-Spring 2017
- Organic Faculty Search Committee, Fall 2010-Spring 2011
- Department Head Search Committee, Fall 2011-Spring 2012
- Organic Faculty Search Committee, Fall 2011-Spring 2012
- Peer Review Study Committee, Chairperson, Fall 2012-Spring 2015
- Physical Science Faculty Search Committee, Fall 2012-Spring 2013
- Biochemistry Faculty Search Committee, Fall 2013-Spring 2014
- Emergency Management Faculty Search Committee, Fall 2013-Spring 2014
- Geology Faculty Search Committee, Spring 2015
- Visiting Instructor of Chemistry Search Committee, Summer 2017
- Administrative Assistant Search Committee, Fall 2017
- Chemistry Stockroom Coordinator Search Committee, Fall 2017
- Physical Sciences Department Head Search Committee, Fall 2017-Spring 2018
- STEM Center Director Search Committee, Spring 2018
- Chemistry Faculty Search Committee, Spring 2018
- Physical Sciences Departmental Promotion and Tenure Committee, Fall 2018-present

Service to Profession

- Central Arkansas Section of the American Chemical Society
 - o 2008 Southwest Regional ACS Meeting Printing and Publicity Chair, Fall 2005-Fall 2008
 - National Chemistry Week Chair, Spring 2006-Spring 2010
 - o Chair-elect, Fall 2007-Spring 2008
 - o Chair, Fall 2008-Spring 2009
- POGIL Regional Coordinator, May 2008-July 2010

- Community Science Network, founder, boardmember, daycamp director, Spring 2008-present
- ACS Science Coach for Shanna Bly at Pottsville High School, Fall 2014-Spring 2015
- STEAM Advisory Board for Sequoyah Elementary, Fall 2017-Spring 2018