Ryan P. McLaughlin

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CURRENT POSITION

Associate Professor
Department of Chemistry, Seattle University, Seattle, WA
Research Interests: Atmospheric and Environmental Chemistry, Molecular Spectroscopy and Microscopy, Laser-Induced Breakdown Spectroscopy

EDUCATION and PROFESSIONAL EXPERIENCE

Interim Department Chair, Department of Chemistry, Seattle University, Seattle, WA (2020)
Department Chair, Department of Chemistry, Seattle University, Seattle, WA (2014-2017)
Associate Professor of Chemistry, Department of Chemistry, Seattle University, Seattle, WA (2007-present)

Fulbright Scholar and Visiting Professor
Department of Chemistry and Center for Research in Atmospheric Chemistry (CRAC), University College Cork, Cork, Ireland (2009)

Assistant Professor of Chemistry
Department of Chemistry, Seattle University, Seattle, WA (2001-2007)

Postdoctoral Fellow
Teacher-Scholar Program in Environmental/Physical Chemistry
Department of Chemistry, University of Washington, Seattle, WA (2000-2001)
Research Project: Phase Dependent Photodissociation Dynamics of NO_2 Reservoir Compounds
Advisor: Philip J. Reid

Doctor of Philosophy, Physical Chemistry (1999)
University of California, Berkeley, CA
Thesis Title: Laser Absorption Spe oPh1c 0.005 Tw 0.4Ps6o

10) NSF Major Research Instrumentation (MRI) Grant (# CHE-1229760), "Acquisition of a Raman LIBS Microscope for Interdisciplinary Research and Research Training at Seattle University," National Science Foundation; August 2012 – 2014; $275,809.
9) Summer Faculty Fellowship, "Conformationally Dependent Photochemical Reaction Rates and Environmental Impact of Alkyl Nitrite Compounds," Seattle University, 2012, $7
8) Fulbright Scholar Grant, "Ice surface photochemistry of organic nitrates and the integration of novel atmospheric science with guided inquiry learning," Fulbright Program, 2009-10, $56,750
7) Hewlett-Packard Technology in Teaching Leadership Grant, "T[illegible]

27) J.D. Rarick,* I. Gerbec,* M.W. Prier,* G.S. Mason, A. Miller, C.B. Stipe and R.P. McLaughlin, "Laser Induced Breakdown Spectroscopy (LIBS) as a Tool for Real-time Analysis of Airborne Silica," Oral presentation, Seattle University Undergraduate Research Association (SUURA) Celebration of Student Scholarship Conference, Seattle University, Seattle, WA (May, 2015)

26) J.D. Rarick,* I. Gerbec,* M.W. Prier,* G.S. Mason, A. Miller, C.B. Stipe and R.P. McLaughlin, "Laser Induced Breakdown Spectroscopy (LIBS) as a Tool for Real-time Analysis of Airborne Silica," Poster presentation, American Chemical Society Undergraduate Research Symposium, Pacific Lutheran College, Tacoma, WA (April, 2015)

25) J. Rarick,* P. McD

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12) W. Donald,* Y. Zhang* and R.P. McLaughlin, "Vibrational Analysis of n-butyl, iso-butyl and tert-butyl nitrite," Posterpresentation, American Chemical Society, Puget Sound Section Undergraduate Research Symposium, Seattle Pacific University, Seattle, WA (2005).

11) W. Donald,* Y. Zhang* and R.P. McLaughlin, "Vibrational Analysis of NO_x Reservoir Compounds," Posterpresentation, 13th Regional Conference on Undergraduate Research, University of Portland, Portland, OR (November, 2004)

10) R.P. McLaughlin, "How We Describe Things We Can't See: Using Laser Spectroscopy to Watch Dissociative Reactions," Invited seminar, Bannan School, Seattle University, Seattle, WA (November, 2004)

9) R.P. McLaughlin, "Thermal Imaging Technology and Limitations," Invited talk, CRIM 305, School of Law, Seattle University, Seattle, WA (October, 2004)

8) R.P. McLaughlin, C. Capacci,* B. Nyholm and P. Rai,* "Resonance Raman Intensity Analysis of Isopropyl Nitrate in the Condensed Phase," Posterpresentation, 12th Regional Conference on Undergraduate Research, Pacific Lutheran University, Tacoma, WA (November, 2003).

7) C. Capacci* and R.P. McLaughlin, "Alkyl Nitrate Photochemistry," Posterpresentation, American Chemical Society Undergraduate Research Symposium, Seattle University, Seattle, WA (May, 2003)

6) R.P. McLaughlin and C. Capacci,* "Vibrational Analysis of Atmospheric Alkyl Nitrates," Posterpresentation, Celebration of Faculty Scholarship, Seattle University, Seattle, WA (May, 2003)

10) External Tenure Review – Requested by Associate Dean Christopher Brooks, University of San Francisco, Department of Arts and Sciences (2012)
11) Grant Reviewer, American Chemical Society Petroleum Research Fund, "Investigating the Molecular Interactions Between Solute and Cosolvent Molecules in Supercritical CO_2," PRF # 44487-B4 (2005).
12) Textbook Review, Levine, Quantum Chemistry, 5th Ed, Chapt. 5 and 6, Prentice Hall (2005)
13) Manuscript Review, J. Lewins, "A New Calculation of the Work of Formation of Bubbles and Drops," Paper # 04PA0340, Proceedings of the Royal Society A (2005).
14) Grant Reviewer, American Chemical Society Petroleum Research Fund, "Atmospheric Dicarbonyl Photoproducts in Urban Air Pollution," Grant proposal # 38314-GB4 (2002)

PROFESSIONAL DEVELOPMENT

1) American Chemical Society Workshop participant, "Empowering Academic Researchers to Strengthen Safety Culture" (2022).
2) Science & Engineering Diversity Reading and Discussion Group participant, Seattle University (2020)
3) Faculty Learning Community: The Department Chair as Transformative Diversity Leader: Building Inclusive Learning Environments in Higher Education, Center for Faculty Development, Seattle University, Seattle, WA (2017)
4) New Chair and Director Institute, Talaris Conference Center, Seattle, WA (2014)
5) Faculty Training – New Health Professions Evaluation Process, Seattle University, Seattle WA (2014)
6) Panel Discussion, "The Short Straw? Pros and Cons of becoming a Department Chair, Seattle University, Seattle, WA (2013)
7) Pre-Medical Advisor Conference, University of Washington, Seattle, WA (2013)
8) Advanced Process Oriented Guided Inquiry Learning (POGIL) Workshop, Seattle University, Seattle, WA (2006).
9) Process Oriented Guided Inquiry Learning (POGIL) Workshop, Linfield College, McMinnville, OR (2005)
10) Washington College Chemistry Teachers Association Conference, Leavenworth, WA (2003 and 2006).
11) Biennial Conference on Chemical Education, Western Washington University, Bellingham, WA (2002).

SERVICE

1) Member, Department Review Committee, Dr. Chrostopher Whidbey Mid-Tenure File, Department of Chemistry, Seattle University (2022)
2) Member, Chemistry Instrumentation Committee, Chemistry Department Seattle University (FQ 2021)
3) Interim Department Chair, Department of Chemistry, Seattle University (FQ 2020)
4) Alternate, Academic Grievance Board Review Committee, College of Science & Engineering (2020)
5) Chair, Department Review Committee, Dr. Katherine Frato Tenure and Promotion, Department of Chemistry, Seattle University (2019)
6) Member, Departmental Safety Committee, Chemistry Department Seattle University (2019-present)
7) Member, College Review Committee, Dr. Andrea Verdan Senior Instructor Promotion File, Department of Chemistry, Seattle University (2019-2020)
8) Member, Hiring Committee for Senior Administrative Assistant, Department of Chemistry, Seattle University (2018)
9) General Chemistry Committee, Co-Chair, Seattle University (2016)
10) Department Chair, Department of Chemistry, Seattle University (2014-17)
11) College of Science and Engineering Curriculum Committee, Seattle University – (2014)

12) Faculty Library Representative, Chemistry Department, Seattle University (2015-16)
13) Academic Dismissal Committee (ad hoc) Member, College of Science and Engineering, Seattle University (2014)
14) Master Teaching Schedule Committee, Member, Chemistry Department, Seattle University (2013-14)
15) Member, Search Committee, Pre-Health Advisor, Seattle University (2013)
16) University Core Curriculum Committee, Seattle University (2013-2017)
17) General Chemistry Curriculum Committee, Member, Department of Chemistry, Seattle University (2012-present)
18) Safety Committee, Chair, Department of Chemistry, Seattle University (2012-13)
19) Accepted Student Department Reception Leader, College of Science and Engineering (2013)
20) Graduate Fellowship and Scholarship Review Committee, College of Science and Engineering (2012-13)
21) Core Curriculum Review Committee, Seattle University (2012-13)
22) Curriculum Committee, College of Science and Engineering (2012)
23) Safety Committee, Member, Department of Chemistry, Seattle University (2011)
24) Pre-Health Interview Panel, College of Science and Engineering, Seattle University (2010-2013)
25) Science and Engineering Facilities Planning Committee, Department of Chemistry Representative, Seattle University (2010-11)
26) Academic Assembly 945l0 T70.293 (c)(E)-1 Tw 1.772 0 Td [(,)-1 (C)10.3 (o)-6.6 (lle)-3 (g)2.6 (e)-3 ( )10.6
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