Mike T. Springer, Ph.D. 1250 Siskiyou Blvd Ashland, OR 97520 541-552-6410 springerm@sou.edu

Education

 University of Colorado, Boulder Doctor of Philosophy: Chemistry and Materials Science Science and Technology Policy Graduate Certificat College Teaching Graduate Certificate (CIRTL) 	Boulder, CO 2014 te
 University of Nevada, Reno Bachelor of Arts: Philosophy and Sociology Bachelor of Science: Biology (with Distinction) Thesis: The Bioavailability of Dissolved Organ Wastewater Effluent Bachelor of Science: Chemistry (with Distinction) Thesis: Toward a Synthetic Pathway to Preparation Helicenes 	Reno, NV 2005 2008 nic Nitrogen in 2009 on of Polymeric
Masaryk University Brno, • No degree received, grant-funded project Teaching Experience	Czech Republic 2008-2009
Southwestern Oregon Community College Department of Chemistry Assistant Professor Associate Professor STEM Division Chair Supervisor: Michael Winston; Dean of LDC (Michael.Winston@socc.edu)	Coos Bay, OR 015 – June 2018 st 2018 - Present t 2020 – Present
College of the Sequoias Department of Chemistry Assistant Professor Supervisor: Dr. Robert Urtecho; Dean of Science, Math, and E (RobertUr@cos.edu)	Visalia, CA 4 – August 2015 Engineering
University of Colorado, Boulder Graduate Teacher Program (CIRTL) Lead Graduate Teacher August 2012 Supervisor: Dr. Laura Border; Director of Graduate Teacher P	Boulder, CO 2 – August 2013

University of Colorado, Boulder

Department of Chemistry and Biochemistry Graduate Teaching Assistant Supervisor: Dr. Jacqueline Richardson; Director of Chemistry Labs (Jacqueline.Richardson@colorado.edu)

Research Experience

University of Colorado, Boulder

Department of Chemistry and Biochemistry August 2009 – August 2014 Project: Organic synthesis of liquid crystal materials for organic electronics; characterization of thermal and photophysical properties. Supervisor: Dr. David Walba (walba@colorado.edu)

Masaryk University

Brno, Czech Republic

Department of Chemistry Project: Organic synthesis of polymeric propellane materials. Supervisor: Dr. Ctibor Mazal (mazal@chemi.muni.cz)

University of Nevada, Reno

Department of Chemistry January 2008 – June 2009 Project: Organic synthesis of polycyclic aromatic hydrocarbons. Supervisor: Dr. Ben King (king@chem.unr.edu)

University of Nevada, Reno

Department of Biology January 2006 – June 2008 Project: Determination of the bioavailability of dissolved organic nitrogen in wastewater effluent Supervisor: Dr. Ben King (king@chem.unr.edu)

Publications

Bertrando, N., Qualls, R. G., Dean, K. L., Brisbin, M., Springer, M. T., Bioavailability of Dissolved Organic Nitrogen Originating from Natural Sources and Wastewater Effluent in the Truckee River, Doctoral Dissertation of Neil Bertrando, 2009

Springer, M. T., Improving Students' Understanding of Molecular Structure through Broad-based Use of Computer Models in the Undergraduate Organic Chemistry Lecture, *J. Chem. Ed.*, **2014**, 91 (8), pp 1162-1168

Springer, M. T., Utilizing Liquid Crystal Phases to Obtain Highly Ordered Thin Films for Organic Electronics, *Doctoral Dissertation*, **2014**

Springer, M. T., Adapting and Adopting Open Educational Resources: An Analysis of Student Performance, Use, and Perception, *International Journal of Open Educational Resources*, **2019**, 1 (2), pp 9-32

Boulder, CO

Reno, NV

Boulder, CO August 2014

Reno, NV

Presentations

Liquid Crystals for Organic Photovoltaics Conference; Boulder, CO; Poster presentation: *The "B4" Liquid Crystal Phase* (**2010**)

Energy Frontiers Conference; Boulder, CO; Poster presentation: *Creating* Ordered Heterojunctions from Liquid Crystals (2011)

Inter-Continental Advanced Materials and Photonics Seminar; Boulder, CO; Poster presentation: *Toward Bent-Core Materials with Favorable Electronic Properties* (**2012**)

University of Colorado at Boulder, Chemistry department teaching assistant training: Oral presentation: *The Heart, Head, Hand Theory of Learning and Applications to Achieve Effective Chemistry Education* (2012)

University of Colorado at Boulder, Graduate Teacher Program: Oral presentation: *The Nuts and Bolts of Teaching Science Recitations* (2013)

Southwestern Oregon Community College, in-service conference: Oral presentation: *Guided Pathways and Community Colleges* (2016)

Southwestern Oregon Community College, general faculty meeting: Oral presentation: *Formal and Informal Assessment Strategies* (2017)

<u>Grants</u>

National Science Foundation; Energy and Nanoscience Student Exchange (2008) **Amount:** \$20000 **Project**: Organic synthesis of polymeric propellane materials. **Publications**: None Graduate Teacher Program (CIRTL); Teaching-As-Research Grant; (2012) **Amount**: \$5000 Project: Improving Students' Understanding of Molecular Structure through Broad-based Use of Computer Models in the Undergraduate Organic Chemistry Lecture. Publications: https://doi.org/10.1021/ed400054a SURGE: Science Undergraduate Research Group Experience; an internal grant from the College of the Sequoias; (2014) **Amount**: \$5000 **Project**: Synthesis of thieno[3,2-b]thiophene Derivatives for Organic Electronics **Publications**: None Open Oregon Educational Resources; OER Remix Grant; (2016) **Amount:** \$1500 **Project**: Creating a customized Open Educational Resource (OER) using module content from the OpenStax platform. **Publications**: None *Open Oregon* Educational Resources; OER Research Group Grant; (2017)

Amount: \$4500

Project: Creating a customized Open Educational Resource (OER) using module content from the OpenStax platform.

Publications: <u>https://www.ijoer.org/adapting-and-adopting-open-educational-resources/</u>

NASA – Oregon Space Grant Consortium Undergraduate Team Project (2018) Amount: \$12000

Project: Analyzing the Chemical Composition of a Fresh Water Lake using Atomic Absorption Spectroscopy

Publications: None

Open Oregon Educational Resources; OER Remix Grant; (2019)

Amount: \$1500

Project: Creating a customized Open Educational Resource (OER) using module content from the OpenStax platform.

Publications: None

NASA – Oregon Space Grant Consortium Undergraduate Team Project (2019) Amount: \$12000

Project: Isolation of Plant Pigments for use in Dye-Sensitized Solar Cells **Publications**: None

National Science Foundation; S-STEM Grant; (2020)

Amount: \$645,000

- **Project**: The PRISE Program: Preparing Rural students to Identify as Scientists and Engineers
- **Publications**: None; Southwestern Oregon Community College failed the Administrative and Financial review so, although the proposal was selected for funding, we did not receive the award
- NASA Oregon Space Grant Consortium Undergraduate Team Project (2021) Amount: \$8000

Project: Aligning Thin Films of Liquid-Crystalline Organic Semiconductors

Publications: None

NASA – Oregon Space Grant Consortium Undergraduate Team Project (**2022**) Amount: \$123,280

Project: PRISMS: Providing Research Infrastructure for Space and Materials Science **Publications**: None

Publications: N

<u>Service</u>

Tutor for AP chemistry Skyline High School; Longmont, CO; (**2010-2012**) Undergraduate Honors Research Mentor; Boulder, CO; (**2010-2012**) SMART Colorado Diversity Initiative Mentor; Boulder, CO; (**2011**) Eco-Leader for Sustainable Chemistry; Boulder, CO; (**2009-2014**) ACS Student Club Co-Advisor; Visalia, CA; (**2014-2015**) SACNAS Conference Faculty Judge; Los Angeles, CA; (**2014**) COS STEM Advisory Board Member; Visalia, CA; (**2014-2015**) Oregon Coast STEM Hub Liaison; Coos Bay, OR (**2016-present**) SWOCCFT Local 3190 Vice President; Coos Bay, OR (**2016-2019**) SWOCCFT Local 3190 President; Coos Bay, OR (**2020-2021**) SWOCCFT Local 3190 Treasurer; Coos Bay, OR (**2021-2022**) STEM Division Chair; Coos Bay, OR (**2020-present**)

Awards and Fellowships

Joe E. Moose Biology Scholarship Recipient (2007) Hans R. Wolfe Chemistry Scholarship Recipient (2007) General Undergraduate Research Award Recipient (2008) ACS Analytical Chemistry Undergraduate of the Year (2008) Promising New Chemistry Graduate Student Fellowship (2009) Excellence in General Chemistry Teaching Award (2010) Best Should Teach Silver Award (2012) John Meek Organic Chemistry Teaching Award (2012) Patty Feist Organic Chemistry Laboratory Teaching Award (2013) SOCC Staff Member of the Year Award (2016-2017)

Professional Organizations

American Chemical Society (ACS) Member 2-Year College Chemistry Consortium (2YC₃) Member NASA Affiliate – Oregon Space Grant Consortium (OSGC) Member