Stanford



Amanda K. Nelson

Chemistry and Chemical Engineering Librarian, Science Library

Curriculum Vitae available Online

Bio

BIO

My academic background includes an interdisciplinary focus on law, psychology, and chemistry. I developed new organic synthesis methods during my Ph.D. program at Virginia Tech, which culminated an international collaboration as a Fulbright Scholar. Thereafter, I came to Stanford as Manager of the Undergraduate Laboratory Program, where I packaged our chemistry experiments and shipped them worldwide during the pandemic. Embracing my new career as the Chemistry and Chemical Engineering Librarian, I now turn my attention to curating information and teaching information literacy in science.

CURRENT ROLE AT STANFORD

I am a science librarian for Chemistry and Chemical Engineering. I work closely with these departments to provide services and resources for students, researchers, postdocs, staff, and faculty. I manage our chemistry and chemical engineering collections, as well as the science software privileges for Stanford affiliates.

HONORS AND AWARDS

- STAR (Safety in Training and Research) Award, Stanford University (2019)
- Fulbright Fellowship, U.S. Department of State (2015-2016)
- Graduate Research Development Program Funded Research Proposal, Virginia Tech (2015-2016)
- Graduate Research Development Program Funded Research Proposal, Virginia Tech (2013-2014)
- Magna Cum Laude Distinction, University of North Carolina at Charlotte (2010)
- The Robert Lassiter Outstanding Undergraduate Paper, University of North Carolina at Charlotte (2010)
- Cecil Prince Memorial Scholarship, University of North Carolina at Charlotte (2009-2010)

EDUCATION AND CERTIFICATIONS

- PhD, Virginia Tech, Chemistry (2016)
- BA, University of North Carolina at Charlotte , Chemistry (2010)
- BS, University of North Carolina at Charlotte, Psychology (2010)
- BA, University of North Carolina at Charlotte, Criminal Justice (2010)

PROJECTS

• Hands-on Laboratory Kits for Remote Learning - Stanford University (6/2020 - 6/2021)

Teaching

COURSES

2020-21

• Understanding the Natural and Unnatural World through Chemistry: CHEM 121 (Aut, Spr)

Professional

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

- Chair, ACS Local Section (2024 present)
- Programming Co-Chair, CINF Division ACS (2023 present)
- Alternate Councilor, American Chemical Society (2022 present)
- Chapter Advisor, Alpha Chi Sigma (2019 present)
- Laboratory Safety Committee, Stanford EH&S (2017 present)

Publications

PUBLICATIONS

- Photoactivated cell-killing involving a low molecular weight, donor-acceptor diphenylacetylene CHEMICAL SCIENCE
 Chisholm, D. R., Lamb, R., Pallett, T., Affleck, V., Holden, C., Marrison, J., O'Toole, P., Ashton, P. D., Newling, K., Steffen, A., Nelson, A. K., Mahler, C., Valentine, et al
 2019; 10 (17): 4673-4683
- Tandem fluorescence and Raman (fluoRaman) characterisation of a novel photosensitiser in colorectal cancer cell line SW480 ANALYST Gala de Pablo, J., Chisholm, D. R., Steffen, A., Nelson, A. K., Mahler, C., Marder, T. B., Peyman, S. A., Girkin, J. M., Ambler, C. A., Whiting, A., Evans, S. D. 2018; 143 (24): 6113-6120
- Chemo-, Regio-, and Stereoselective Copper(II)-Catalyzed Boron Addition to Acetylenic Esters and Amides in Aqueous Media JOURNAL OF ORGANIC CHEMISTRY

Nelson, A. K., Peck, C. L., Rafferty, S. M., Santos, W. L. 2016; 81 (10): 4269-4279

• Regio- and Chemoselective Diboration of Allenes with Unsymmetrical Diboron: Formation of Vinyl and Allyl Boronic Acid Derivatives ACS CATALYSIS Guo, X., Nelson, A. K., Slebodnick, C., Santos, W. L. 2015; 5 (4): 2172-2176