

Kaci Lee Kuntz, PhD

CONTACT INFORMATION	Department of Chemistry University of Utah	<i>E-mail:</i> kaci.kuntz@utah.edu <i>Phone:</i> (801) 585-3419
EDUCATION	PhD in Chemistry , University of North Carolina at Chapel Hill “ <i>Altering the Surface and Interlayer Composition of 2D Materials</i> ” Advisor: Dr. Scott Warren	July 2019
	B.S. in Chemistry , New Mexico Institute of Mining and Technology “ <i>Detecting Elemental Mercury using Reduced Silver Nanoparticle Polymer Suspensions</i> ” Advisor: Dr. Peng Zhang	Dec. 2009
	B.S. in Mathematics , New Mexico Institute of Mining and Technology Concentration: Probability and Statistics	Dec. 2009
SELECT TEACHING EXPERIENCE	University of Utah , Salt Lake City, UT Assistant Professor - Lecturer General Chemistry I Lecture & Lab, General Chemistry II Lab	Aug. 2021 - Present
	University of Utah , Salt Lake City, UT Associate Instructor Quantitative Analysis & Lab	Summer 2020, Summer 2021
	Rowland Hall Upper School , Salt Lake City, UT Science Educator Research Science, Advanced Topics Chemistry, Honors Chemistry, Physics	Aug. 2019 to July 2021
	University of North Carolina at Chapel Hill , Chapel Hill, NC Instructor General Chemistry II	Jan. 2019 to May 2019
GUEST LECTURER	General Chemistry II—UNC General Chemistry I—UNC Coursera Course: Nanomakers—Optical Spectroscopy Demonstration Analytical Chemistry—UNM	Spring 2018 Spring 2017 Filmed Oct. 2016 Spring 2011
CHEMISTRY DEPARTMENT SERVICE	Member — UoU Teaching Lab Renovation Committee Member — UoU VR & AI Teaching Mission Committee Faculty Advisor — UoU ACS Student Chapter <i>Sustainability Committee</i> Chair — UoU TA Training Committee Member — UoU Chemistry Department Safety Committee Member — UoU Chemistry Undergraduate Curriculum Committee	Spring 2023 - Present Spring 2023 - Present Fall 2022 - Present Spring 2022 - Present Spring 2022 - Present Spring 2022 - Present
STUDENT & SUSTAINABILITY INITIATIVES	Shared Lab Coat Program <ul style="list-style-type: none">Developed and piloted a lab coat program for CHEM 1130, 1215, and 1225 students. This program allows 1000 lab coats to be shared among 1600 students each semester, saving each student \$30 and preventing lab coats entering landfills after lab requirements are completed. Faculty Advisor for the ACS Student Chapter Green Chemistry Glove Recycling Initiative <ul style="list-style-type: none">Grant awarded from the Sustainable Campus Initiative Fund Retrofit of CHEM 1130, 1215, and 1225 Lab Equipment <ul style="list-style-type: none">Grant awarded by the Center for Teaching and Learning	Fall 2022 - Present Dec. 2022 Spring 2022

SELECT PRESENTATIONS & INVITED TALKS	<p>“Reading Between the Numbers (ACT, GRE, GPA)” Presented at</p> <ul style="list-style-type: none"> • University of Utah. Presented at the <i>First Generation Conference</i> April 14, 2023 <p>“Exploring the Current Applications & Research of General Chemistry Topics” Presented at</p> <ul style="list-style-type: none"> • University of Utah High School Chemistry Teachers Workshop Oct. 8, 2022 <p>“Improving General Chemistry Labs: The Stop Light Reaction” Presented at</p> <ul style="list-style-type: none"> • University of Utah ACCESS Scholars Program June 29, 2022 <p>“Improving General Chemistry Labs through Green Chemistry” Presented at</p> <ul style="list-style-type: none"> • University of Utah ACS Student Chapter Green Chemistry Event April 8, 2022 <p>“Teaching high school materials science through research” Presented virtually at</p> <ul style="list-style-type: none"> • Materials Research Symposium April 18, 2021
MENTORSHIP	<p><i>Rowland Hall Research Science</i> Aug. 2022 - May 2023</p> <p>O. Milavetz, S. Lehman, Z. Baughman, M. Dagar, F. Hodgkins, H. Hunt, D. Lang, F. Hodgkins <i>Rowland Hall Research Science</i> Jan. 2020 - May 2022</p> <p>Y. Yang, M. Eatchel, , M. Dagar, D. Carlebach, A. Jiricko, E. Barker, T. Gerstein</p> <p><i>UNC Undergraduate Research Mentor—C. Chen</i> May 2017 to July 2019</p> <p><i>UNC Undergraduate Research Mentor—E. Kovalik</i> Mar. 2016 to May 2018</p> <p><i>Pre-Graduate Education Advising Program—Advisor</i> Aug. 2016 to Dec. 2017</p> <p><i>UNC Undergraduate Research Mentor—B. Lee</i> Mar. 2015 to May 2016</p> <p><i>NCSSM/UNC Mentorship Program Mentor—J. Zou</i> June 2015 to Oct. 2015</p> <p><i>NMT Peer Facilitator for Physical Sciences—Course Instructor</i> Aug. 2008 to Dec. 2009</p> <p><i>Upward Bound Summer Program—Course Instructor</i> Summer 2008</p>
EDUCATOR TRAINING	<p>International Learning Assistant Conference Oct. 2023</p> <p>Utah Pathways to STEM Initiative Fall 2022 - Spring 2023</p> <p>Mentor Training (MRS) May 2022</p> <p>Anti-racism Training (Rowland Hall) July 2020</p> <p>QPR Training Nov. 2019</p> <p>Morehead Science Ambassador (UNC) May 2017</p> <p>Mental Health First Aid Oct. 2016</p> <p>Morehead Science IMPACTS (UNC) Oct. 2016</p> <p>Safe Zone Ally (UNC) Oct. 2016</p> <p>Green Zone Training (UNC) Sept. 2016</p>
RECENT SCIENCE OUTREACH	<p>ACCESS Scholars Program (UoU) Summer 2022, 2023</p> <p>Science Sneak Peak – Rowland Hall* April 2021</p> <p>Chemistry Club Advisor – Rowland Hall Jan 2021 - May 2021</p> <p>NC Museum of Life & Science–Adult Space Camp* April 2019</p> <p>Wonder Connection – Visiting Scientist* April 2019</p> <p>NC Museum of Life & Science–Science of Beer Oct. 2018</p> <p>UNC Science Exposition April 2018</p> <p>NC Museum of Life & Science–Science of Wine* Feb. 2018</p> <p>*Developed demonstration</p>

HONORS AND AWARDS	National Society of Leadership and Success Impact Leader Award	Nov 2022
	Thomas L. Isenhour and E. A. Booth Chemistry Graduate Excellence Award	April 2019
	Teaching/Research Assistantship, UNC	Aug. 2014 to July 2019
	Teaching/Research Assistantship, UNM	Aug. 2010 to May 2011
	New Mexico Tech High Honors Graduate, NMT	Dec. 2009
	Kay Brower Outstanding Junior Chemist of the Year, NMT	May 2008
	Tech Scholar, NMT	May 2008

PATENTS Two-dimensional Electride Nanomaterials. US Patent 62/344774. **2015**.

SELECT PUBLICATIONS Habibi, S. C.; Sjoblom, A. E.; Schmitz, O. W.; Edwards, A.; Croasmun-Adams, Z. R.; DeLuca, R. J.; Smith, J. S.; **Kuntz, K.** Teaching Kinetics of the Traffic Light Reaction. *J. Chem. Educ.*, **2023**, *In Review*.

Kuntz, K.; Smith, J. S.; Sjoblom, A. E.; Edwards, A. General Chemistry II Lab Manual. *University of Utah*, **2022**.

Kuntz, K.; Smith, J. S.; Sjoblom, A. E.; Edwards, A. General Chemistry I Lab Manual. *University of Utah*, **2022**.

Stark, M. S.; Cheng, J.; Kim, H.; **Kuntz, K. L.**; Warren, S. C. Electrolyte-free spectroscopy and imaging of graphite intercalation. *Small*, **2020**, 2004823.

Stark, M. S.; **Kuntz, K.**; Martens, S. J., Warren, S. C. Intercalation of layered materials from bulk to 2D. *ACS Adv. Mater.*, **2019**, 31, 1808213.

Alcorn, F. A.; **Kuntz, K.**; Druffel, D.; Warren, S. C. Aqueous intercalation of graphite at a near-neutral pH. *ACS Applied Energy Materials*, **2018**, 1 (9) 5062–5067.

Druffel, D. L., Woomer, A. H.; **Kuntz, K. L.**; Pawlik, J. T.; Warren, S. C. Electrons on the surface of 2D materials: From layered electrides to 2D electrenes. *Journal of Materials Chemistry C*, **2017**, 5 (43) 11196–11213.

Kuntz, K. L.; Wells, R.; Hu, J.; Yang, T.; Dong, B.; Guo, H.; Woomer, A.; Druffel, D.; Alabanza, A.; Tománek, D.; Warren, S. C. Control of surface and edge oxidation on phosphorene. *ACS Appl. Mater. Interfaces*, **2017**, 9 (10) 9126–9135.

- *Featured in Carolina Scientific, April 2017*

Druffel, D. L. ; **Kuntz, K. L.**; Woomer, A. H.; Alcorn, F. M.; Hu, J.; Donley, C. L.; Warren, S. C. Experimental demonstration of an electride as a 2D material. *JACS*. **2016**, 138 (49) 16089–16094.

- *Featured in C&EN, Dec. 2016*

Yang, T.; Dong, B.; Wang, J.; Zhang, Z.; Guan, J.; **Kuntz, K.**; Warren, S. C.; Tománek, D. Interpreting core-level spectra of oxidizing phosphorene: Theory and experiment. *Phys. Rev. B*. **2015**, 92 (12) 125412.

Kuntz, K.; Smith, M.; Wedeward, K.; Collins, M. Detecting, locating, & quantifying false data injections utilizing grid topology through optimized D-FACTS device placement. *46th North Amer. Power Symp. (NAPS)*, **2014**.

Li, W.; Guo, Y.; **McGill, K.**; Zhang, P. A facile synthesis of Ag nanoparticles for mercury ion detection with high sensitivity and selectivity. *New J. of Chem.*, **2010**, 34 (6) 1148-1152.