

Kaleigh M. Margita

Margita@mailbox.sc.edu (803) 576-7888

EDUCATION

M.S. Biophysical Chemistry

North Carolina State University, Raleigh, NC

August 2017

B.S. Chemistry with a Concentration in Biochemistry/ Spanish Minor

Newberry College, Newberry, SC

May 2014

GRADUATE COURSEWORK

- Advanced Physical Chemistry in Biology
- Spectroscopic Methods in Chemical Biology
- Analytical Spectroscopy
- Mass Spectrometry
- Chemical Separations
- Magnetic Resonance in Chemistry

LABORATORY SKILLS

- Transmission Electron Microscope
- Nuclear Magnetic Resonance Spectroscopy
- Scanning Electron Microscope
- High Performance Liquid Chromatography
- Electron Paramagnetic Resonance
- LECO
- Infrared Spectroscopy
- Dynamic Light Scattering
- UV-Vis
- Metal Deposition
- Microplate Reader
- VIDAS
- Plasma Etching
- Photolithography
- Fluorometer
- Microbiological Assays
- ICP Spectroscopy
- Mass Spectrometry

RESEARCH

- “Effect of solution ionic strength on the pKa of the nitroxide pH EPR probe 2,2,3,4,5,5-hexamethylimidazolidin-1-oxyl” Principal Investigator: Alex I. Smirnov, Biophysical Chemistry, North Carolina State University, Raleigh, North Carolina
- “Influence of Planar Organic Electrochemical Transistor Device Geometry in the Characterization of Barrier Tissue” Principal Investigator: George Malliaras, Bioelectronics, Ecole Nationale Supérieure des Mines, France
- “Monitoring and Imaging Hypoxic Cells and Tissues Using Perfluorinated Near-Infrared Fluorescent Micelles” Principal Investigator: Dr. Sam Achilefu, Biochemistry, Washington University, St. Louis, Missouri

PUBLICATIONS

- Margita, K.; Voynov, M.; Smirnov, I. Effect of Solution Ionic Strength on the pKa of the Nitroxide pH EPR Probe 2,2,3,4,5,5Hexamethylimidazolidin-1-oxyl. *Cell Biochemistry and Biophysics*. **2017**, *75*, 185-193.
- Ramuz, M.; Margita, K.; Hama, A.; Leleux, P.; Rivnay, J.; Bazin, I.; Owens, R. M. Optimization of a Planar All-Polymer Transistor for Characterization of Barrier Tissue. *ChemPhysChem*. **2015**, *16*, 1210–1216.

Kaleigh M. Margita

Margita@mailbox.sc.edu (803) 576-7888

PRESENTATIONS

- “Effect of solution ionic strength on the pKa of the nitroxide pH EPR probe 2,2,3,4,5,5-hexamethylimidazolidin-1-oxyl”
 - Southeastern Regional Meeting of the American Chemical Society in Columbia, SC, *October 2016*
- “Influence of Planar Organic Electrochemical Transistor Device Geometry in the Characterization of Barrier Tissue”
 - National Nanotechnology Infrastructure Network Conference in Atlanta, GA, *August 10-15, 2013*
 - Newberry College Research Day, 1st Place Award Winner, *October 2013*
 - Southeastern Regional Meeting of the American Chemical Society in Atlanta, GA, *November 2013*
 - Western Carolina Chapter of American Chemical Society at Furman University, *April 2014*
- “Monitoring and Imaging Hypoxic Cells and Tissues Using Perfluorinated Near-Infrared Fluorescent Micelles”
 - National Nanotechnology Infrastructure Network Conference in Washington DC, *August 11-16, 2012*
 - Newberry College Research Day, 1st Place Award Winner, *October 2012*
 - Southeastern Regional Meeting of the American Chemical Society in Raleigh, NC, *November 2012*

RELATED EXPERIENCE

- **Adjunct Chemistry Instructor**, University of South Carolina *2022-2023*
 - Teaching General Chemistry Lectures, Recitations, and Laboratory classes
- **Adjunct Chemistry Instructor**, Newberry College *2022*
 - Taught a combination General, Organic, and Biochemistry class
- **Environmental Manager II**, *South Carolina Department of Health and Environmental Control* *2018-2021*
 - Ensured compliance of water systems with regulations through sampling and inspections
- **Research Assistant/Graduate Student**, *North Carolina State University Chemistry Department* *2016-2017*
 - Conducted biophysical research under the guidance of Dr. Alex I. Smirnov
- **Graduate Student/Teaching Assistant**, *North Carolina State University Chemistry Department* *2015*
 - General Chemistry Lab and Recitation instructor
- **Physical Science Technician**, *USDA-ARS, Florence* *2015*
 - Performed soil and cotton research with agronomist Dr. Phil Bauer
- **Quality Control Laboratory Technician**, *ISE, Newberry* *2014-2015*
 - Performed microbiological testing and prevented industrial contamination
- **Work Study Student**, *Newberry College Math and Science Department* *2010-2014*
 - Organic/General Chemistry Teaching Assistant, Office Work and Laboratory Preparation