

R. John Wilkins

Po Box 378 Raleigh, NC 28695
 919-376-3915 John.wilkins@gmail.com

Summary of Qualifications

- Experienced researcher with proficiency in a variety of advanced techniques
- Lecture and laboratory teaching experience
- Published researcher and presenter, both singularly and collaboratively
- Engaging, interactive teaching method

Education

University of Florida, Gainesville, FL

Ph.D. in Organic Chemistry

Expected Graduation, May 2016

University of Florida, Gainesville, FL

Master of Science in Organic Chemistry

May 2013

Gardner-Webb University, Boiling Springs, NC

Bachelor of Science in Chemistry

May 2009

Research Experience

Ph.D. Dissertation Research

2015-Present

University of Florida

Synthesis and Chemistry of Low Valent Fe and Cr Complexes Incorporating Chelating Perfluoroalkyl Phosphine Ligands: Synthetic Approaches to Alkane Complexes.

Research Advisor: Dr. Marcus E. Brooks

Thesis Research

2012-2013

University of Florida

The Substituent Effect of Iron Migration with Concomitant Carbene Formation.

Research Advisor: Dr. William Jones

Undergraduate Research

2009

Gardner-Webb University

The Effects of Rain-Water Depository on Ph levels for the Broad River

Research Advisor: Dr. Tom Jones

Research Assistant, Summer Internship

2008

University of Florida

Blood platelet integrity utilizing centrifuge techniques

Research Supervisor: Dr. Sandra Elliott

Technical Skills

- Extensive Knowledge of Schlenk and dry box techniques for the manipulation of highly air sensitive organometallic compounds
- Experiences in the use of high field multinuclear FT-NMR spectroscopy (400, 250, 200 MHz)
- Adapt in the use of GC, MS, and Transient Absorption Spectroscopy
- Proficient in the manipulation of gases in synthesis
- Knowledgeable in the use of high temperature and pressure reaction vessels

Teaching Experience

University of Florida, Gainesville, FL

Teaching Supervisor

August 2014-Present

- Train students in laboratory techniques for the synthesis and study of organometallic compounds
- Organize and direct and undergraduate research project involving the development of an improved method for the resolution of chiral iron acyl complexes
- Collaborate with student research assistance to ensure safety and standardization of laboratory practices

University of Florida, Gainesville, FL

Teaching Assistant

2012-2014

- Lectured one hour weekly for *Organic Chemistry* course for undergraduates
- Supervised juniors and seniors in the laboratory setting
- Prepared and graded exams and laboratory reports
- Served as head teaching assistant for *Advances Inorganic Chemistry* laboratory

Publications

Brooks, M.E, Kessler, R.J., Santos, C., **Wilkins, R.J.** (2014). *Matrix Isolation and Transient Absorption Studies of Bisethane Tetracaronyl Chromium: Intermolecular Alkane Complexes and Intramolecular F-Coordination*. *Journal of American Chemistry Society* 4(6) p.132-148.

Brooks, M.E, Santos, C., White, P.W. **Wilkins, R.J.** (2013). *Synthesis and Reactivity of FeCO₃ Organometallics*. *Journal of America Chemistry Society* 2(3) p. 96-108.

Presentations

Poster Presentations

Brooks, M.E, Kessler, R.J., Santos, C., **Wilkins, R.J.** *Matrix Isolation and Transient Absorption Studies of Bisethane Tetracaronyl Chromium: Intermolecular Alkane Complexes and Intramolecular F-Coordination*. American Chemical Society Regional Conference, Atlanta, GA, 2015.

Wilkins, R.J. *The Substituent Effect of Iron Migration with Concomitant Carbene Formation*. American Chemical Society Regional Conference, Raleigh, NC, 2013.

Oral Presentations

Brooks, M.E, Santos, C., White, P.W. **Wilkins, R.J.** *Synthesis and Reactivity of FeCO₃ Organometallics* American Chemical Society National Conference, Washington D.C., 2014

Wilkins, R.J. *The Rapid Introduction of Flourine into Organic Molecules: Applications in Positron Emission Tomography (PET)*. Departmental Seminar, University of Florida, November 2011.

Wilkins, R.J. *The Effects of Rain-Water Depository on Ph levels for the Broad River*. Life Of The Scholar (LOTS) Presentation, Gardner-Webb University, April 2009.

Wilkins, R.J. *The Effects of Rain-Water Depository on Ph levels for the Broad River*. Honors Student Research Presentation, Gardner-Webb University, November 2008.

Community Engagement

- Graduate Student Advisory Board, Chemistry Representative 2013
- Organized waste cardboard recycling effort in the Chemistry Department 2012
- Broad River Greenway conservation committee, Volunteer 2006-2009

References

Dr. Marcus Brooks
Research Advisor
Department of Chemistry
University of Florida
352-392-3262
mbrooks@uf.edu

Dr. William Jones
Thesis Advisor
Department of Chemistry
University of Florida
352-392-3280
wjones@uf.edu

Dr. Tom Jones
Undergraduate Research Advisor
Department of Natural Sciences
Gardner-Webb University
704-406-4000
tjones@gardner-webb.edu