MICHAEL A. GREEN   *Experimental Chemist, Software Developer*
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Experience

University of Missouri–Kansas City   Kansas City, MO

Graduate Research Assistant   *Aug 2016-present*

Developed micro- and nanoscale materials for application in clean energy systems, photocatalysis, water photolysis, physical adsorption, and microwave absorption. Developed expertise in materials synthesis and characterization. Built state-of-the-art library code to accurately characterize and simulate materials performance. Managed teams of undergraduate researchers over the summer semesters. Established laboratory protocols for EH&S, EPA, and State of Missouri environmental protection compliance. Published 14 research manuscripts, 10 as first-author. Presented 4 research seminars for the American Chemical Society.

Graduate Teaching Assistant   *Jan 2017-May 2018; Jan 2019-May 2019*

Created and presented in-depth chemistry material for Phys. Chem. and Gen. Chem. labs, and supervised in-lab experimental procedures. Maintained/repaired legacy laboratory equipment. Wrote software to automate experimental analysis and revamped experimental procedures. Interacted with students via small group and one-on-one tutoring on a weekly basis.

Chemistry Instructor   *Aug 2016-Aug 2019*

Taught diversity outreach programs with the School of Medicine. Consisted of 1 hr and 2.5 hr lectures which included experimental demonstrations and discussion into the chemistry observed. Topics focused on general chemistry, environmental chemistry, organic chemistry fundamentals, and biochemistry.

University of Idaho   Moscow, ID

Undergraduate Research Assistant   *Jan 2014-Aug 2016*

Studied the physical adsorption of volatile radionuclei onto high-porosity materials. Engineered/constructed experimental apparatuses and miscellaneous devices for general laboratory use. Published 3 research manuscripts, 3 as co-author.

Software Development

libRL – A python library for the characterization of Microwave Absorption

As a state-of-the-art characterization library for the field of radar-absorbing materials, libRL is a python/cython implementation which allows users to automate both routine and novel characterization techniques found in the current research literature.

CompGen – A python library for simulating composite performance

CompGen is a novel, alpha-stage library development which simulates the composite response used for radar-absorbing materials.

pyGC – A desktop application for gas chromatography analysis

pyGC is a deconvolution tool for extracting GC distributions from experimental data.

Education

Ph.D. Chemistry, University of Missouri–Kansas City, *Expected 2020*
M.Sc. Chemistry, University of Missouri–Kansas City, *2019*
B.Sc. Chemistry, Minor of Mathematics, University of Idaho, *2016*