

**MICHAEL A. GREEN** *Experimental Chemist, Software Developer* | 5601 Coffee Road, Bakersfield, CA  
+1 (907) 570-1506 | 1mikegrn@gmail.com | <https://linkedin.com/in/1mikegrn/> | <https://1mikegrn.github.io/>

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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 15 research manuscripts, 11 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. Lectured on pre-lab material. 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, 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.

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## 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. Published in *J. Open Source Sci.*

**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.

Technical skills: Python, MathCAD, SQL, HTML/CSS, C programming.

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## 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*