

PhD and MS teaching/research assistantships in Environmental and Analytical Chemistry

Our Program

- NSF, NASA, NOAA, DOE, and NIH funded scientists to investigate global and regional environmental issues highly relevant to society
- Internationally recognized for outstanding research in biomass burning, environmental sensor development, and beyond
- Recent research includes: aircraft, ship, and ground-based field research in the Arctic, Bermuda, Nepal, Indonesia, Australia, and U.S.
- Many opportunities for student fellowships
- Strong faculty-student interactions

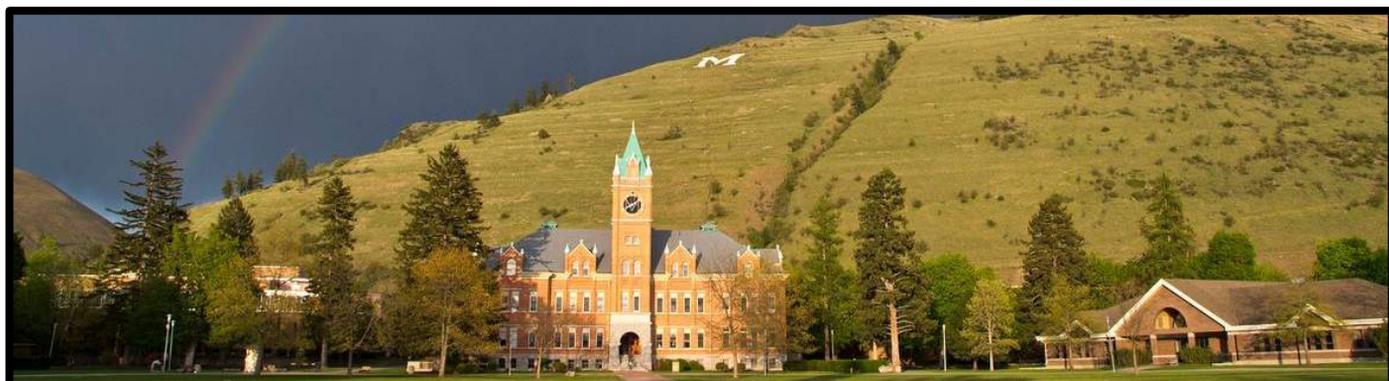


About Missoula, MT

- Lively city of about 70,000 surrounded by breathtaking mountain scenery
- Easy access to world-class outdoor recreation facilities: skiing, biking, kayak, fishing, hiking, climbing, and many more
- Cool art, culture, food, microbrewing
- Frequently ranked among the top places in the U.S. to live
- Close to Yellowstone and Glacier National Parks
- <https://youtu.be/jOxVwvxjPtk>

About UM

- 12,000 undergraduate and graduate students and 500+ faculty members
- “Top rated for combining academic quality and outdoor recreation, The University of Montana boasts one of the most scenic campuses in America.” *
- Excellent research reputation: Ranked nationally #122 in Chemistry, #78 in Earth Sciences; globally #81 in Environment/Ecology*



Our Faculty

Mike DeGrandpre

<http://hs.umt.edu/chemistry/people/default.php?s=DeGrandpre>

Chemical sensor development for applications in aquatic chemistry, chemical limnology and oceanography

Lu Hu

<http://hs.umt.edu/luhu/>

Atmospheric chemistry, volatile organic compounds, source attribution of air pollutants, mass spectrometry, chemical transport model

Chris Palmer

<http://hs.umt.edu/chemistry/people/faculty.php?s=Palmer>

Development of materials for microscale analytical separations, separation and detection of compounds of environmental interest

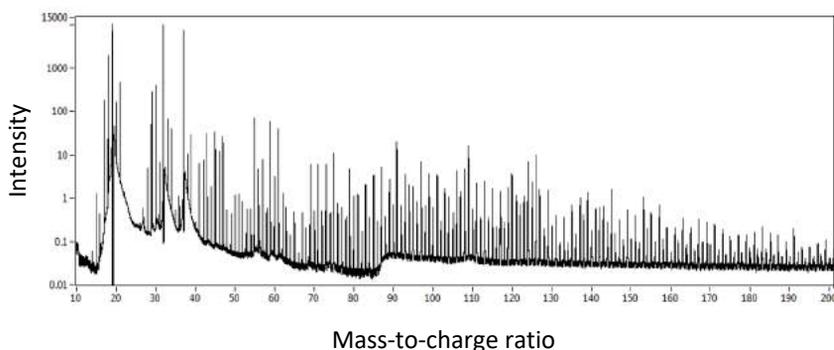
Robert Yokelson

<http://hs.umt.edu/chemistry/people/researchFaculty.php?s=Yokelson>

Atmospheric chemistry, remote spectroscopic studies of biomass burning



Examples of Recent Student Research



- Wade Permar: Mass spectrum from smoke plume measurements using UM's new mass spectrometer aboard the NSF C-130 airborne research lab, 2017 American Geophysical Union Fall Meeting presentation



- Vanessa Selimovic, Aerosol optical properties and trace gas emissions by PAX and OP-FTIR for laboratory-simulated western US wildfires during FIREX, *Atmos. Chem. Phys.*, doi:10.5194/acp-18-2929-2018
- Fakhrul Islam, Sea surface $p\text{CO}_2$ and O_2 dynamics in the partially ice-covered Arctic Ocean, *J. Geophys. Res.*, doi:10.1002/2016JC012162
- Brittany Busby, Comparison and Evaluation of Methods to Apportion Ambient $\text{PM}_{2.5}$ to Residential Wood Heating in Fairbanks, AK, *Aerosol Air Qual. Res.*, doi:10.4209/aaqr.2015.04.0235



Applications deadline is the 15th of December. Applicants are strongly encouraged to contact individual faculty to discuss research interests. More information at <http://hs.umt.edu/chemistry/>.