

Positions are open for PhD students in Surface Science and Interface Chemistry in the group of Dr. Kathryn A. Perrine in the Department of Chemistry at Michigan Technological University, in Houghton, MI.

The research studies will involve experimental physical chemistry, analytical chemistry, and materials science, that address challenges in CO<sub>2</sub> capture, surface catalysis, and environmental science. Topics are focused on surface chemical reactions on iron, metals, and oxide surfaces at the gas/solid and liquid/solid interface using surface analytical spectroscopy and microscopy.

Students will learn practical skills, analysis, and interpretation in applying infrared reflection absorption spectroscopy (IRRAS), X-ray photoelectron spectroscopy (XPS), atomic force microscopy (AFM), and other surface analysis techniques.

More information about the Perrine group's research projects can be found at:  
<http://chem.sites.mtu.edu/perrine/>

The ideal applicants should demonstrate the following experience and interests:

- BSc in Chemistry or related discipline
- Excellence and dedication in completion of a prior research project
- Some background and strong motivation for research in surface chemistry and spectroscopy
- A growth mindset and ability to overcome adversity

Students are funded by the Department of Chemistry through Graduate Teaching Assistants or Research Assistantships for up to 5 years with the satisfactory progress to degree. It is expected they will work with and teach undergraduate students. International applicants should demonstrate English proficiency via TOEFL or IELTS test scores. Fill out the Michigan Tech Graduate School application at

<https://www.mtu.edu/gradschool/prospective/apply-now/>

Application procedures in the Department of Chemistry are found at

<https://www.mtu.edu/chemistry/graduate/program/>

Michigan Technological University is an Equal Opportunity Educational Institution/Equal Opportunity Employer, which includes providing equal opportunity for protected veterans and individuals with disabilities.

**The positions are open until filled.** Interested applicants should contact Dr. Perrine by email at [kaperrin@mtu.edu](mailto:kaperrin@mtu.edu) and send a current CV with a brief description of research interests and experience.