

Abdelrahman Lab

Dr. Omar Abdelrahman

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Type of Research Position:

- Graduate RA at the PhD level
- Summer REU for undergraduates

Description of Research Project:

Understanding the movement of molecular adsorbates on a catalyst surface comes in two flavors, enthalpy and entropy. While enthalpic interactions are better understood, entropic effects relating to adsorption and other surface phenomena remain relatively unknown. Deciphering the effects of entropy on surface-based phenomena can potentially unlock the ability to accurately and rapidly screen for new catalytic materials that would otherwise go unnoticed or unimagined.



- **Interdisciplinary** – Work on this project will bring together research expertise involving surface science, catalysis, theoretical modelling and materials design.
- **Diversity welcoming/friendly research group** – The Abdelrahman lab welcomes all people from all groups into the lab. The most successful science comes from diverse groups of people!

Desired Qualifications and/or Background:

Students with a background in chemical engineering, materials science or chemistry are encouraged to apply for these positions.