

PhD or Master's Position in Chemical Engineering: Risks, Barriers, and Opportunities of Wood-Based Bioenergy for Tribal Nations and Rural Communities in Michigan

Description:

The Ong Lab at Michigan Technological University (<https://pages.mtu.edu/~rgong1>) is recruiting a PhD or Master's student in chemical engineering or a related field for a funded project. This research is focused on analysis of risks, barriers, and opportunities for near-term wood-based bioenergy systems in Tribal Nations and rural communities in Michigan.

This project is part of an NSF-funded transdisciplinary project (MICARES: Michigan Community & Anishinaabe Renewable Energy Sovereignty) that is focused on developing tools to support communities in making decisions about renewable energy implementation. For this project, the research will focus on modeling sustainability (economic, social, and environmental) of woody bioenergy systems and identifying key risks, barriers and opportunities associated with community implementation of these systems. Training will be provided on modeling, as needed.

The student will be part of a large, transdisciplinary team, which will provide numerous opportunities to network and collaborate with team members from Tribal Nations, various academic disciplines, regional non-profits, and local communities.

Support and Timeline:

A research assistantship will be provided that will cover tuition and stipend for the duration of the project. The preferred start date is spring (January) 2021, however exceptional candidates will be considered with a summer (May) or fall (August) 2021 start date.

Essential Qualifications:

- Coursework in mathematics (calculus, linear algebra, and differential equations), chemistry, and physics (e.g. fluid dynamics) and a bachelor's degree in a related technical or scientific field
- Ability to communicate effectively, both in terms of written documents, oral presentations, and informal communication with supervisors and colleagues
- Initiative and willingness to learn and try new things

Desired Qualifications:

- BS degree in chemical engineering or a related field (environmental engineering, chemistry, etc.), with sufficient mathematics coursework
- Experience working with and/or living among Indigenous and rural communities is highly preferred.

If interested, please email Dr. Rebecca Ong (rgong1 at mtu dot edu):

- A detailed resume or CV
- A cover letter describing your qualifications and interest
- Contact information for three references

Suitable candidates will be contacted for an interview and will be encouraged to submit a formal application to the graduate school at Michigan Technological University:

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