

**Funded PhD Opportunity**  
**(Start Date: Summer 2026)**  
**(Applicants based in Canada will be prioritized)**

**Project Description:** The [Circular Process Engineering Laboratory \(CPEL\)](#) at Dalhousie University is seeking a highly motivated PhD student for a fully funded research program in **catalytic pyrolysis for sustainable biofuel production**. The successful candidate will work on designing, synthesizing, and characterizing novel catalysts, optimizing pyrolysis reaction pathways, and advancing thermochemical conversion strategies for upgrading biomass and waste-derived feedstocks into value-added fuels and chemicals. This project includes catalyst development, catalytic pyrolysis experiments, product characterization, and optional modeling or sustainability assessments to support efficient and sustainable biofuel production.

If you are motivated to contribute to innovative clean-technology solutions and thrive in collaborative, interdisciplinary research environments, we encourage you to apply. This opportunity is open to Canadian citizens, permanent residents, and international applicants who hold relevant backgrounds in engineering or related fields. We are committed to promoting Equity, Diversity, Inclusion, and Accessibility (EDIA) as a cornerstone of our research and community. We strive to create and sustain an equitable, diverse, and inclusive environment that fosters innovation through a wide range of ideas and experiences. We encourage individuals from underrepresented groups, including women, Indigenous peoples, visible minorities, and people with disabilities, to apply.

**What We Offer:** Successful candidate will join a supportive and dynamic research environment that fosters both academic and professional growth. Our team offers tailored technical and professional development opportunities aligned with each student's career aspirations. In addition to attending academic conferences and networking events, students will engage with industry partners to gain practical experience and explore real-world applications of their research. At Dalhousie University's Faculty of Engineering, PhD students are required to complete a minimum of four courses, a comprehensive examination, and a thesis defense over a period of about 4 years. Graduate students also have access to [health and dental plans, subsidized local transit, and other services](#). For more information about graduate programs, benefits, and services, please visit the [Faculty of Graduate Studies](#), [Faculty of Engineering](#), and [Dalhousie University International Centre](#) webpages.

**Required Qualifications:**

- MAsc/MSc degree in Chemical Engineering, Environmental Engineering, Materials Engineering, Chemistry, or a closely related field
- Strong academic performance and demonstrated research ability
- Interest in catalysis, thermochemical conversion, bioenergy, or related fields
- Proof of English language proficiency (if applicable, please see [here](#))

**Preferred Qualifications (considered assets):**

- Catalyst synthesis and materials characterization (e.g., BET, XRD, SEM, TGA)
- Pyrolysis experiments or thermochemical conversion processes
- Reactor operation, analytical instrumentation (e.g., GC-MS)
- Process modeling or simulation tools
- Sustainability assessments, circular-economy concepts, or TEA/LCA

**How to Apply:** Please submit the following in a single PDF file:

1. Curriculum vitae (CV)
2. Unofficial transcripts (undergraduate + graduate)
3. Statement of research interest (max. 1 page)
4. Contact information for two references

**Email applications to:** [khaled.benis@dal.ca](mailto:khaled.benis@dal.ca)

**Subject line:** PhD Application – Catalytic Pyrolysis & Biofuel Research

**Please note that only shortlisted candidates will be contacted.**