



Mechanical, Automotive, and Materials Engineering

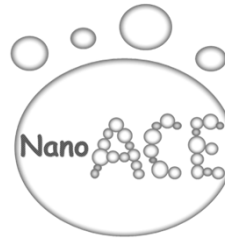
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<https://www.intelligentfuelsandenergy.com/>



A PhD Position in the Synthesis of Graphene & Hydrogen in a Microwave-Assisted Plasma Reactor Towards a Net-Zero CO₂ Economy

The NanoACE and I-FuELs research groups at the University of Windsor are hiring a doctoral student for a Winter 2024 start. The student will lead the implementation of a new microwave-assisted plasma reactor. They will investigate the synthesis of graphene & hydrogen for the decarbonization of fossil fuels towards a net-zero CO₂ economy. They will quantify the results using state of the art aerosol and gas-phase measurement devices.

Required Qualifications & Skills:

- A recent MASc degree in Mechanical Engineering or a related field
- Refined skills in technical writing, with at least one publication in a high quality journal
- A commitment to the values of Equity, Diversity, Inclusion, Decolonization, and Indigeneity (EDIDI)

Preferred Qualifications & Skills:

- Experience with conducting experiments, specifically implementation of new equipment
- Experience working with plasma reactors
- Experience operating aerosol size measurement and gas chromatography devices

About the NanoACE & I-FuELs Research groups:

The NanoACE Research group is led by Assistant Professor Dr. Nickolas Eaves with a focus on nanomaterial synthesis and decarbonization of fossil fuels. The I-FuELs research group is led by Associate Professor Dr. Ofelia A. Jianu, with a focus on heat, mass and momentum transport with applications to alternative fuels and energy conversion systems.

The Faculty of Engineering is committed to fostering an inclusive working and learning environment and to the diversification of ideas and perspectives. We seek qualified candidates who share our commitment to equity, diversity, inclusion, decolonization, and Indigenization (EDIDI, <https://www.uwindsor.ca/vp-equity-diversity-inclusion/>). We especially encourage applications from Indigenous persons, persons of Black/African descent, members of other racialized groups, persons with disabilities, women, nonbinary and gender-diverse persons, as well as persons identifying as members of 2SLGBTQ+ communities. Applicants are requested to provide a short (1-2 paragraph) statement on their commitment to EDIDI and how they can contribute towards building a diverse research team.

Interested candidates who meet the required qualifications should send a cover letter, CV, transcript(s), and EDIDI statement saved as pdfs to Profs. Nickolas Eaves (nickolas.eaves@uwindsor.ca) and Ofelia A. Jianu (ofelia.jianu@uwindsor.ca) by June 23, 2023, mentioning “PhD-Plasma” in the email subject. Reference letters are not required at this time, although they may be requested later.

The University of Windsor is situated on the traditional territory of the Three Fires Confederacy of First Nations: the Ojibwa, the Odawa, and the Potawatomie. <https://www.uwindsor.ca/indigenous-peoples/>