

Postdoctoral Position

**Energy and Combustion Laboratory
Department of Mechanical Engineering
University of Manitoba
Winnipeg, Manitoba, Canada**

The Energy and Combustion Laboratory (ECL) led by Prof. Birouk invites applications for a postdoctoral in the field of turbulent combustion. The candidate must hold a recent PhD in Mechanical, Aerospace or Chemical Engineering. The position will involve developing experimental knowledge on the combustion of zero-carbon (biogas/hydrogen/ammonia) fuels in turbulent/swirling flows. The ECL is equipped with a range of test rigs and state-of-the-art measurements tools. It has a subsonic wind tunnel and a high-pressure turbulence chamber for studying spray formation, and droplets vaporization and combustion, and two atmospheric burners for studying turbulent/swirling flames. ECL has several diagnostics including PIV, LDV, Schlieren imaging, Chemiluminescence imaging, shadow sizing, gas analyzer, etc.

The postdoctoral will interact with graduate and undergraduate students as well as faculty members in the ECL research group. Previous experience in experimental turbulent reacting flows is strongly desired. However, the hired candidate will be supported to carry out parallel computational modeling. The start date is on May 1st 2024 or as soon as thereafter. The salary is CAD\$45k plus benefits. The appointment is for one year, renewable annually, based on satisfactory performance and available funding. The work location for this position is in the Faculty of Engineering Complex at the University of Manitoba.

Applications should send, by email, their CV, including a list of publications and presentations, and the names and contact information of at least two references to madjid.birouk@umanitoba.ca.