

**Post-doctoral research associate position in experimental combustion in
a National Research Council, Canada - University of Toronto
collaborative project**

We are pleased to announce the opening of a post-doc position in experimental combustion in a joint collaborative project between the University of Toronto Institute for Aerospace Studies and the National Research Council, Canada. The main purpose of the project is experimentally investigating the effect of alternative fuels on combustion instabilities. The experimental burner is comprised of two-stage combustors both of which can be operated independently. We are interested in finding out 1) the correlations between fuel properties and combustion instabilities, and 2) the effect on combustion instabilities by the interactions of two in-tandem combustors. Responsibilities include but are not limited to conducting experiments in moderately high flow rate combustion systems, setting up diagnostics, performing data analysis and interpretation, preparing yearly project reports and related academic documents. The initial appointment will be for a year.

Required Qualifications:

- Ph. D in Aerospace / Mechanical Engineering or related areas.
- Strong foundations in experimental combustion.
- Good knowledge and experimental research experience in combustion instabilities of multiphase reacting flow.
- Experience in optical diagnostics like PIV, PLIF, PDI, or experience with high pressure, high flow rate systems.
- Experience in handling data acquisition systems and data analysis.
- Fluency in oral and written English and the ability for high-quality technical writing.

Interested candidates are requested to email their complete CV containing publication records and contact details (email and phone number) of two references to Prof. Swetaprovo Chaudhuri: schaudhuri@utias.utoronto.ca and to Dr. Sean Yun Sean.Yun@nrc-cnrc.gc.ca.