

Project title: Experimental and numerical evaluation of ceiling fan performance

Degrees on offer: MSc (research 1 year) or MPhil (2 years)

Institute: Department of Mechanical Engineering, University of Moratuwa

Supervisor: Dr. Chathura Ranasinghe

Degree starting date: Early 2017

Abstract:

Ceiling fans of various designs are extensively used for ventilation purposes. However their exact performance characteristics under different operating conditions are not yet well understood. Thus the aim of this project is to investigate ceiling fan performances in various configurations, both numerically: using state of the art computational fluid dynamics (CFD) tools, and experimentally: using the test set up available in the Mechanical Engineering department.

The student is required to upgrade the existing test setup with LabVIEW based automatic data acquisition system and conduct experiments and also to do CFD simulations for comparisons.

Stipend: Successful candidate is eligible for a monthly stipend up to Rs 40,000/=

Tuition fee: A tuition fee waiver can be obtained up to 80 %.

Minimum entry qualification: An honours degree specialised in Mechanical / Manufacturing engineering. Other related fields of specialisations can also be considered.

Funding: Senate Research Council of University of Moratuwa – Rs. 2.1 Million

To apply: Please send a copy of your CV to chathurar@uom.lk