Research Engineer Position

Applications are invited for the following position in a multi-disciplinary research project to develop a novel energy recovery system utilizing leading-edge microsystem and microfluidic technologies, with a strong emphasis on the potential of its commercialization.

Research Engineer in Micro-scale Heat Exchange and Fluid Mechanics

Initial period of employment: 27/09/2016 -- 31/10/2017
(One-year extension possible depending on performance)

Scope and responsibilities

As part of a project team to investigate the viability and optimization of a novel design of a polymer-based micro-channel heat exchanger, the Research Engineer will be in charge of an existing experimental test-bed, and conduct experiments (covering a range of system-performance variables and for different test devices) to characterize the thermal performance of a prototype heat-exchanger for its eventual optimization. Specifically, the duties and responsibilities include:

- To maintain the current test-bed, conduct experiments, report results, and make changes and improvements where necessary.
- To liaise with suppliers and contractors, in order to source and ensure proper delivery of suitable equipment for the test-bed.
- To document findings and results in journal or conference papers as the lead or a co-author.

Qualification and experience

Applicants should possess a BEng or MEng/MSc from a reputable university, preferably in Mechanical Engineering with an emphasis on thermal science and technology. The following aspects are highly valued:

- Strong understanding of heat transfer and fluid dynamics processes.
- Experience in experimental design and operation of laboratory equipment.
- Competence in using LabVIEW and in scientific and technical writing.
- Ability to function well as part of a team, particularly in the communication of ideas.

Applications are to be submitted electronically to: Associate Professor Peter C. Y. Chen (mpechenp@nus.edu.sg) and Associate Professor PS Lee (mpelps@nus.edu.sg).

Only shortlisted applicants will be notified. Remuneration will be very competitive, and commensurate with qualifications and experience.