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

Proposed period of employment: 1/08/2017 -- 31/10/2018
(extension is possible, depending on funding situation)

Scope and responsibilities

As part of a project team, the Research Engineer will be in charge of developing novel designs of a microscale heat exchanger via a range of possible fabrication methods. Using the existing setup, the Research Engineer is expected to conduct numerical studies to validate the developed designs while liaising with potential vendors to manufacture viable devices for experimental testing. Specifically, the duties and responsibilities include:

- To develop microscale heat-exchanger designs and study the feasibility of different fabrication methods through numerical studies.
- To liaise with suppliers and contractors, in order to facilitate bulk fabrication.
- To document findings and results in journal or conference papers, as either lead or secondary author while supporting administrative tasks of the project.

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 microscopy, heat transfer and fluid dynamics processes.
- Experience in microfabrication and operation of laboratory equipment.
- Competence 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.