
RESEARCH FELLOW POSITIONS AVAILABLE,

- 1. Institute of High Performance Computing (IHPC), Singapore
- 2. School of Materials Science and Engineering, Nanyang Technological University of Singapore (NTU)

The Materials Science and Engineering (MSE) department of the Institute of High Performance Computing (IHPC) together with School of Materials Science and Engineering of Nanyang Technological University of Singapore (NTU), invite applications for the position of Research Fellow (4 post-doctor positions available). Successful applicants will conduct research on a project titled "Hybrid Thermoelectric (TE) Materials for Ambient Applications". The main work in NTU are focused on TM material synthesis and characterization.

1. IHPC recruitment (1 positions):

The objectives of IHPC in current project are to theoretically predict and understand the properties of TE materials based on designed structures, and provide suggestions to our experimental partners who will design new polymer-based TE materials with high zT. In addition, we will validate the experimental results and uncover the TE material working mechanism behind the experimental observation and propose promising, efficient and reliable approaches for synthesis and characterization. Candidates should possess a PhD degree in Materials Science, Physics, Solid Mechanics or a closely related discipline. Applicants must be skilled or familiar with at least one of following techniques: first principle calculations, molecular dynamics, non-equilibrium Green's function and Boltzmann transport equation methods. Preference will be given to applicants with computer programming experience with C/C++ or Fortran. The remuneration, relocation, and travel budgets are competitive. International candidates are encouraged to apply.

2. NTU recruitment (2 positions):

The main work in NTU are focused on TM material synthesis and characterization. We are requiring candidates possess Ph.D in chemistry/physics/Materials Science area with strong background in Materials chemistry/Physical chemistry/physics and familiar with different synthesis techniques on solid-state chemistry. *Candidates may be required the experience on thermoelectric materials characterization and fundamental principles and good command of oral and written English. Candidates with strong publication/patents will be preferred. Candidates with good background will have exchanged to Prof. Kanatzidis group in Northwestern University for 2-3 years for join research work on thermoelectric materials. Salary: \$\$\\$4500-5000 per month. There will be extra bonus per year depend on performance.*

Evaluation of applications will commence immediately, and will continue until all positions are filled. Applicants should submit his/her curriculum vitae including education records, working experience, list of publications to Dr. YANG Shuo-Wang (yangsw@ihpc.a-star.edu.sg) with Job

Reference (IHPC), and Prof. Alex Yan (<u>alexyan@ntu.edu.sq</u>) with Job Reference (NTU). We expect applicants to provide a brief statement of research interests and electronic copies of up to five relevant publications.