

Research Fellow (Mechanical Engineering/Material  
Science & Engineering)  
Nanyang Technological University

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Posted Apr. 12, 2024, set to expire Apr. 1, 2025

<b>Job Title</b>	Research Fellow (Mechanical Engineering/Material Science & Engineering)
<b>Department</b>	School of Mechanical & Aerospace Engineering (MAE)
<b>Institution</b>	Nanyang Technological University Singapore, , Singapore
<b>Date Posted</b>	Apr. 12, 2024
<b>Application Deadline</b>	Open until filled
<b>Position Start Date</b>	Available Immediately
<b>Job Categories</b>	Professional Staff
<b>Academic Field(s)</b>	Mechanical Engineering
<b>Job Website</b>	<a href="https://ntu.wd3.myworkdayjobs.com/en-US/Careers/details/Research-Fellow--Mechanical-Engineering-Material-Science---Engineering-_R00016743">https://ntu.wd3.myworkdayjobs.com/en-US/Careers/details/Research-Fellow--Mechanical-Engineering-Material-Science---Engineering-_R00016743</a>
<b>Apply Online Here</b>	<a href="https://ntu.wd3.myworkdayjobs.com/en-US/Careers/details/Research-Fellow--Mechanical-Engineering-Material-Science---Engineering-_R00016743">https://ntu.wd3.myworkdayjobs.com/en-US/Careers/details/Research-Fellow--Mechanical-Engineering-Material-Science---Engineering-_R00016743</a>
<b>Apply By Email</b>	
<b>Job Description</b>	

The School of Mechanical & Aerospace Engineering (MAE) invites applications for the position of Research Fellow. The Research Fellow will conduct both experimental and numerical research to

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develop more efficient lithium-ion batteries (LIBs) with enhanced thermoresponse capability

Key Responsibilities:

- Development of new LIB fabrication, electrochemical characterization and thermal characterization facilities,
- Development of new composite phase change materials (PCM) with enhanced thermoregulation capabilities for LIB and associated fabrication facilities,
- Carry out LIB and composite PCM fabrication and perform electrochemical and thermal characterization of new libs,
- Develop numerical models and/or analytical formulations to predict electro-thermo process in conventional and new libs,
- Work closely with other graduate students and researchers on experimental and numerical investigations,
- Assisting the preparation of the necessary research reports and technical papers, and
- Work closely with researchers, graduate and undergraduate students performing research such as URECA or final year projects.
- Assist the Principal Investigator (PI) and his co-investigators in the supervision of graduate and undergraduate students in the research team
- Perform all related assignments and studies as directed by the PI from time to time

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Job Requirements:

- PhD degree in Mechanical Engineering, Material Science and Engineering, or related field,
- Experience in carrying out lithium-ion battery (LIB) fabrication and LIB electrochemical and thermal characterization,
- Experience in developing LIB fabrication and electrochemical characterization facilities,
- Experience in heat transfer experiments and measurements related to composite phase change materials,
- Relevant knowledge in material development related to LIB components including separators, electrodes and electrolytes,
- Expertise in numerical simulation and analytical formulations of electro-thermo processes in LIBs,
- Proficiency in written and spoken English

We regret that only shortlisted candidates will be notified.

**Contact Information**

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

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**Contact**

Singapore