

Research Fellow (Mechanical/Chemical Engineer)

Who are we?

We are the University of Cambridge's presence in Singapore, Cambridge CARES. Our activities are sponsored by the National Research Foundation's CREATE programme. Our first research programme, Cambridge Centre for Carbon Reduction in Chemical Technology (C4T), is a collaboration between University of Cambridge, Nanyang Technological University and National University of Singapore.

Our team is comprised of world-class scientists and engineers working in a vibrant, fast-paced environment with great opportunities for knowledge and skills development.

Who are we looking for?

We are looking to fill research positions in maritime decarbonisation modelling:

- 1) In the first, Computational Fluid Dynamics simulations of ammonia and methanol engines will be performed, leading to a better understanding of the pollutant-generation processes. In addition to excelling in handling turbulent combustion theory Extensive, experience in combustion CFD is necessary.
- 2) In the second, systems modelling of alternative fuels and application to real-world data from ship operations will be performed, to compare possible decarbonisation scenarios in view of realistic ship operations. A thorough understanding of lifecycle analysis, energy system modelling, and Techno-economic analysis is needed. The ability to program in languages such as Python programming would be a plus.

What skills will you need?

All positions require a PhD or equivalent research experience in a combustion topic relevant to the above areas, strong motivation to work in a multi-national collaborative team, and extensive experience with report writing, journal publications, and presentations to academic and industrial settings. Connections with industry are part of the project so the researchers will have the opportunity to collaborate with industrial R&D.

What can we offer you?

- A stimulating working environment with friendly, highly motivated colleagues
- A competitive salary in line with your skills and experience
- Comprehensive medical insurance coverage as part of your employment

Please note this post is mainly based in the CREATE Tower at NUS University Town, Singapore.

How to apply?

Please apply by uploading your CV and academic transcript to <https://jobs.swagapp.com/jobs/cambridge-cares-research-fellow-mechanicalchemical-engineer-for-c4t-cn14>. If you have any questions, please feel free to reach out to the HR team at recruitment@cares.cam.ac.uk.