

Research Fellow (Data Scientist)

Who are we?

We are the University of Cambridge presence in Singapore called Cambridge CARES, sponsored by the NRF CREATE program CAM.CREATE. CARES also hosts industry-funded and other agencies funded projects. 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.

CARES is leading a new project “Sustainable Manufacture of Molecules and Materials (SM₃)”, funded by NRF CREATE programme within the Decarbonisation Grand Challenge. SM₃ project is a collaboration with NTU, NUS, CARES & the University of Cambridge and EPFL. The broad aim of the project is to develop novel approaches and technologies for fully de-fossilised routes to complex functional molecules and molecular materials. The project will explore novel chemical transformations for conversion of net-zero feedstocks to building blocks typically used in pharma, agrochem and other end applications. The project will also explore novel synthetic methods for conversion of the building blocks into end-use functional molecules. Novel synthesis technologies (photoelectrochemistry, sonochemistry, mechanochemistry, etc), as well as advanced research methods (AI, chemoinformatics, high-throughput synthesis) and process metrics (LCA and techno-economic analysis) are included in this large project.

Who are we looking for?

We are looking to fill a vacancy of a Research Fellow with a **PhD in a relevant field** of Computer Science / Chemical Engineering / Chemistry, who combines **strong ML/AI expertise with chemical knowledge**.

What skills do you have?

The ideal candidate should be skilled in **Python programming, experienced with LLMs and chemical reaction databases**, and **capable of handling reaction data analysis**. They should be able to work across disciplines and have a track record of published research.

When is position available and for how long?

The position is available from January 2025 for 1 year in the first instance and up to 4 years in total.

What can we offer you?

- A stimulating working-environment with friendly, highly motivated colleagues.
- Close interaction with the home group of lead academic at EPFL
- Opportunities to develop and implement new ideas in a creative environment.
- A competitive salary in line with your skills and experience.
- A one-year contract in the first instance, extendable following satisfactory performance.
- A comprehensive medical insurance cover as part of your employment.

Please apply by uploading your CV and academic transcript to <https://jobs.swagapp.com/jobs/cambridge-cares-research-fellow-data-scientist-chemical-engineering-for-sm3-ps>. Please note that this post is mainly based in the CREATE Tower at NUS University Town, Singapore. Informal enquiries could be sent to the academic lead of the project: Professor Philippe Schwaller (philippe.schwaller@epfl.ch).