CAMBRIDGE CARES CAMBRIDGE CENTRE FOR ADVANCED RESEARCH AND EDUCATION IN SINGAPORE LTD.

SM3

Research Fellow (Chemist)

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 (SM_3)", funded by NRF CREATE programme within the Decarbonisation Grand Challenge. SM_3 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 technoeconomic analysis) are included in this large project.

Who are we looking for?

The Gaunt group are looking for passionate and creative scientist to join our team as postdoctoral researchers in synthetic chemistry based in Cambridge Centre for Advanced Research and Education in Singapore, and closely integrated with the Gaunt group @ the University of Cambridge. The successful candidate will join the dynamic and collaborative research group of Professor Matthew Gaunt, working at the forefront of cutting-edge synthetic methodologies and their applications (https://www.thegauntgroup.com/).

The synthetic chemist at CARES will be supervised by Prof. Gaunt and will join a "Synthesis Team" of the larger SM_3 project, which will involve close collaboration with Profs. Ming Joo KOH (NUS) and Shunsuke CHIBA (NTU). The "Synthesis Team" will be supported by the "AI team", co-led by Profs. Philippe Schwaller (EPFL), Alexei Lapkin and Markus Kraft (Cambridge/CARES).

Position Overview: As a postdoctoral researcher, you will be involved in designing and developing catalytic activation modes that lead to new synthetic transformations. Synthetic chemists are uniquely placed to leverage catalytic systems to design reactions that control structure and function at a molecular level in all types of bioactive complex molecules. We are looking for experts in synthetic chemistry who are interested in taking on new challenges and exploiting their experience to explore new areas of catalyst-controlled reactivity that lead to an expansion of accessible chemical space.

What skills do you have?

We are looking for passionate and creative scientists to work as part of a collaborative team. Excellent organisational and interpersonal skills are required to ensure success in liaising with a large and diverse research team. Essential requirements include: Ph.D. in Organic Chemistry, Strong background in synthetic organic chemistry, and Demonstrated track record of high-quality research.

When is the 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.
- 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-chemist-synthetic-chemistry-for-sm3-mg. 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: Prof. Matthew Gaunt (mjg32@cam.ac.uk).