

Research Fellow / Engineer (Microbial Engineering for Sustainable Chemical Production) - ZK1 Singapore Institute of Technology

Direct Link: https://www.AcademicKeys.com/r?job=259960 Downloaded On: Jul. 21, 2025 11:13pm Posted Jul. 21, 2025, set to expire Jul. 5, 2026

Job Title Research Fellow / Engineer (Microbial Engineering for Sustainable Chemical Production) - ZK1

Department Engineering

Institution Singapore Institute of Technology Singapore, , Singapore

Date Posted Jul. 21, 2025

Application Deadline Open until filled Position Start Date Available immediately

Job Categories Research Scientist/Associate

Academic Field(s) Chemical/Petroleum Bioengineering (all Bio-related fields)

> Job Website https://careers.singaporetech.edu.sg/cw/en/job/498969/researchfellow-engineer-microbial-engineering-for-sustainable-chemicalproduction-zk1

Apply By Email

Job Description

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Job no: 498969 Department: Engineering Contract type: Contract APPLY NOW

As a University of Applied Learning, SIT works closely with industry in our research pursuits. Our research staff will have the opportunity to be equipped with applied research skill sets that are relevant to industry demands while working on research projects in SIT.

Zhou Kang Group at the Singapore Institute of Technology (SIT) is looking for a Research Fellow (Postdoctoral Associate) passionate about sustainability and innovation. We welcome applications from candidates eager to shape next-generation biotechnologies. The successful candidate will join our team focused on engineering microbial platforms to convert formate—derived from CO?—into high-value sustainable chemicals. This project supports Singapore's vision for a low-carbon future and a thriving circular bioeconomy. This project is funded by the Ministry of Education (MOE) Singapore and is based on the unique strains and devices we have developed in the past five years. This position offers the opportunity to contribute to impactful research at the forefront of microbial biotechnology and carbon utilization.

Key Responsibilities

- Design and construct microbial strains capable of efficient formate assimilation.
- Develop metabolic engineering strategies to enhance production yields of target chemicals.
- Conduct lab-scale fermentation, analytics, and process optimization.
- Publish research findings in high-impact journals and present at international conferences.
- Mentor undergraduate and graduate students involved in the project.
- Any other ad-hoc duties assigned.

Job Requirements

- A Ph.D. in Chemical Engineering, Bioengineering, Biochemistry, or related fields.
- Proven track record in synthetic biology, metabolic engineering, or microbial fermentation.
- Experience working with C1 feedstocks (e.g., formate, methanol) is advantageous.
- Excellent communication and teamwork skills.

Key Competencies



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- Able to build and maintain strong working relationships with people within and external to the university.
- Self-directed learner who believes in continuous learning and development
- Proficient in technical writing and presentation
- Possess strong analytical and critical thinking skills
- Show strong initiative and take ownership of work

Contact Information

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

Contact

Singapore