

PhD Position Available

Description

The School of Chemical Sciences (Food Science Programme) at the University of Auckland is seeking a highly motivated PhD student to join Prof. Siew-Young Quek's research group. This PhD in Food Science project is funded by the MBIE New Zealand–Singapore Future Food Research Programme, which focuses on transforming fruit and agricultural residues into high-value functional food ingredients. The successful candidate will work on optimising bacterial cellulose (BC) fermentation using diverse agricultural substrates and developing scalable BC-based systems for probiotic encapsulation and delivery.

Candidate Requirements

- A Master's degree (or equivalent) in Food and Fermentation Science, Biotechnology, Bioprocess Engineering, Microbiology, or related field (GPA or GPE > 6.5; IELTS at least 6.5 with no bands lower than 6.0 for international applicants).
- Demonstrated research experience in microbial fermentation, bio-processing, or related laboratory techniques.
- Strong interest in sustainable food production and functional food innovation.
- Excellent written and verbal communication skills.
- Ability to work collaboratively across disciplines and international teams.
- Experience with biopolymer characterisation, probiotic microbiology, or techno-economic modelling would be advantageous but not essential.

What We Offer

- Full PhD scholarship for 3 years (fees + stipend, subject to funding conditions).
- Access to state-of-the-art fermentation, analytical, and pilot-scale facilities.
- Opportunities to collaborate with leading researchers in New Zealand and Singapore.
- Engagement with industry partners in New Zealand and Singapore, including Māori enterprises.
- International conference travel support.

Application Process

Interested applicants should send the following to Prof. Siew-Young Quek (email: sy.quek@auckland.ac.nz):

1. A cover letter outlining your motivation and relevant experience.
2. Curriculum Vitae (including publications, if any).
3. Full academic transcripts.
4. Two academic reference letters

Closing Date: 15 November 2025