POSITION DESCRIPTION

THE UNIVERSITY OF MELBOURNE

School of Chemical and Biomedical Engineering jointly with the School of Computing and Information Systems
Faculty of Engineering and Information Technology

Technical Research Support – Digital Pharma and Food Manufacturing (2 positions available)

POSITION NO	0053530
CLASSIFICATION	UOM 4
SALARY	$69,365 - $73,618 pa (pro rata for part-time)
SUPERANNUATION	Employer contribution of 10%
WORKING HOURS	Part time (0.5 FTE) *Applications for part-time, full-time or other flexible working arrangements will be welcomed and will be fully considered subject to meeting the inherent requirements of the position*
BASIS OF EMPLOYMENT	Fixed Term for up to 18 months
OTHER BENEFITS	https://about.unimelb.edu.au/careers/staff-benefits
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers, select the relevant option ('Current Opportunities' or 'Jobs available to current staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Professor Sally Gras (Chemical Engineering) Email sgras@unimelb.edu.au Professor Uwe Aickelin (Computing and Information Systems) email uwe.aickelin@unimelb.edu.au *Please do not send your application to this contact*

For information about working for the University of Melbourne, visit our website:
about.unimelb.edu.au/careers

Acknowledgement of Country

The University of Melbourne acknowledges the Traditional Owners of country throughout Australia. The University recognises the unique place held by Aboriginal and Torres Strait Islander peoples as the original custodians of country and their continued connection to the land, waterways, songlines and culture. The University respects all Aboriginal and Torres Strait Islander People and warmly embrace those students, staff, Elders and collaborators who identify as First Nations.

Commitment to Diversity and Inclusion

The Faculty of Engineering and Information Technology (FEIT) is committed to creating a diverse and inclusive environment that welcomes and values all people. We recognise that diversity is essential in contributing to the success of FEIT. Women, Aboriginal and Torres Strait Islanders, the LGBTIQ+ community, people living with disability and those from a culturally and linguistically diverse background, are strongly encouraged to apply. Those seeking support in submitting an application are welcome to contact the Faculty HR team at feit-hr@unimelb.edu.au

Position Summary

Digitisation and AI will transform the manufacture of medicine and food. Victoria needs to develop skills and tools to realise the benefits of this transformation.

The University of Melbourne has partnered with industry to develop a program to transform food and pharma manufacturing, with new tools and platforms, custom education and a more digitally skilled workforce. Engineers, scientists and computing specialists to ensure that the laboratories are run smoothly, keeping chemical safety records up to date whilst ensuring that supplies are in place. The lead industry partner is CSL and positions will be co-located at the University's Parkville campus as well as the CSL Parkville premises.

The positions available through this program are as follows:

- Technical Research Support (Experimental) (up to 18-month appointment):

The Technical Research Support will aid experimental laboratory work including mammalian cell culture and membrane separations. Working alongside a team, the Assistant will be responsible for assisting with general laboratory duties including maintenance of the laboratory and equipment, ordering of supplies and ensuring that safety systems are in place and consistent with standards within the pharma industry. The Technical Research Support will work under the supervision of other laboratory staff.

- Technical Research Support (Digital) (up to 18-month appointment):

The Technical Research Support will provide support to postdoctoral fellows in code development. The position will work alongside a team, providing researchers with equipment operation and sample preparation and ensuring the smooth running of the laboratory.

1. Selection Criteria

1.1 ESSENTIAL

- Completion of a tertiary level qualification with relevant work-related experience and/or an equivalent combination of relevant experience and/or education/ training. Specifically:
    - Technical Research Support (Experimental) - microbiology, mammalian cell culture, biochemistry or chemical engineering
    - Technical Research Support (Digital) - computer science, data science or software engineering.
- Evidence of:
    - Technical Research Support (Experimental) – strong practical laboratory skills.
    - Technical Research Support (Digital) **-** strong coding skills.
- Experience and ability to prioritise tasks and manage competing priorities to achieve project objectives within timelines.
- Excellent record keeping skills.
- Excellent written and verbal communication skills, demonstrated by presentation of research results at conferences, internal forums and manuscript submissions.

- Excellent interpersonal skills, including an ability to interact with internal and external stakeholders (academic, administrative and support staff) in a courteous and effective manner.

1.2 DESIRABLE

- Experience interacting with industry partners.
- Specifically, for: Technical Research Support (Experimental)
    - Experience in in cell culture.
- Specifically, for: Technical Research Support (Digital)
    - Experience in data preparation, cleansing, and analysis using Python.
    - Experience in algorithms development and knowledge of Java (scientific programmer).

2. Key Responsibilities

- Undertake general laboratory duties including maintenance of the laboratory and equipment and ordering of supplies and ensure the smooth operation of the laboratory.
- Assist in the maintenance of safety records and labelling and other documentation in the laboratory including, chemical handling and storage, routine inspections, inductions and risk assessments.
- Provide support for researchers with equipment operation and sample preparation.
- Act as a support for new users in the laboratory and on use of instruments and equipment.
- Assist with cleaning and maintenance of equipment and the laboratory.
- Provide administrative duties and stock control such as ordering chemicals and consumables, and billing instrument users.
- Maintain accurate and detailed records of all experiments conducted, assist in the preparation of data for analysis and be able to effectively communicate outcomes to project staff as required.
- Participate in preparation of manuscripts for publication in peer-reviewed journals.
- Liaise effectively with internal and external collaborators and stakeholders.
- Undertake Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in Section 4.

2.1 OTHER JOB RELATED INFORMATION

- This position requires the incumbent to hold a current and valid Working with Children Check.
- Occasional work out of ordinary hours, travel, and work at other sites.

3. Equal Opportunity, Diversity and Inclusion

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the University's People Strategy and policies that address diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

All FEIT employees are required to behave in a manner that creates; supports and encourages an inclusive and safe work environment for all.

https://eng.unimelb.edu.au/diversity

4. Occupational Health and Safety (OHS)

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

https://safety.unimelb.edu.au/people/community/responsibilities-of-personnel

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

5. Other Information

5.1 SCHOOL OF CHEMICAL AND BIOMEDICAL ENGINEERING

https://eng.unimelb.edu.au/about/departments/school-of-chemical-and-biomedical-engineering

The School of Chemical and Biomedical Engineering encompasses both the Department of Chemical Engineering and the Department of Biomedical Engineering. This fusion of engineering disciplines provides a dynamic and interdisciplinary environment that is world leading in both research and teaching.

5.2 DEPARTMENT OF CHEMICAL ENGINEERING

http://www.chemeng.unimelb.edu.au

The Department of Chemical Engineering hosts several Research Centres including the Peter Cook Centre for Carbon Capture and Research, the ARC Dairy Innovation Research Hub, the Particulate Fluids Processing Centre and the ARC Centre of Excellence in Convergent Bio-Nano Science and Technology.

Our laboratories are housed across four locations including a substantially renovated main building, a second building devoted exclusively to research, two floors within the nearby Chemistry building and a presence within the Bio21 Institute. Our academics have been elected as Fellows of the Royal Society, the world's oldest scientific society, the Australian Academy of Science, and the Australian Academy of Technological Sciences and Engineering.

Strong collaborations with industry, government and community partners inform teaching and research programs with real-world requirements. Industry Engagement is a key focus area for the Department. We carry out research projects based on deep collaborations with government and business and we also work with organisations that provide internship project opportunities for students.

We offer four Masters of Engineering degrees (Chemical, Chemical with Business, Biochemical, and Materials) with over 250 students, as well as undergraduate majors within the Bachelor of Science and Bachelor of Commerce.

5.3 SCHOOL OF COMPUTING AND INFORMATION SYSTEMS

https://cis.unimelb.edu.au/#about

The School of Computing and Information Systems (CIS) at the University of Melbourne is an international leader in information technology research and teaching.

CIS is one of the highest-profile schools in the country, regularly ranked top in Australia for Computer Science (2020 THE and QS). It is one of only two Australian divisions to be ranked "5 – Well above world standard" in both Information *and Computing Sciences* (FOR 08) and *Information Systems* (FOR 0806). CIS is at the forefront of computing research in Australia and overseas, with close links to major initiatives such as Melbourne Bioinformatics, IBM Research and CSIRO/DATA61 (formerly NICTA).

The School is committed to attracting and retaining the highest-quality staff available in order to produce outstanding and impactful research. CIS has highly successful research teams in the key areas of Computer Science (CS), Artificial Intelligence (AI), Human-Computer Interaction (HCI) and Information Systems (IS).

CIS provides majors in the three-year undergraduate ‘Melbourne Model’ degrees and has a range of specialist graduate programs in CS (including software engineering), AI, HCI and IS. It also has a large cohort of active graduate research students, both domestic and international, who are regularly publishing in top venues and engaging with the community.

5.4 FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGY

The Faculty of Engineering and Information Technology (FEIT) has been the leading Australian provider of engineering and IT education and research for over 150 years. We are a multidisciplinary School organised into three key areas; Computing and Information Systems (CIS), Chemical and Biomedical Engineering (CBE) and Electrical, Mechanical and Infrastructure Engineering (EMI). FEIT continues to attract top staff and students with a global reputation and has a commitment to knowledge for the betterment of society.

FEIT has never been better positioned as a global leader, anchored in the dynamic Asia Pacific region, creating and curating knowledge to address some of the world’s biggest challenges. Through our students and our relationships with communities, we can not only respond to society’s needs but anticipate and create engineering and IT solutions for the future.

https://eng.unimelb.edu.au/

https://eng.unimelb.edu.au/about/join-mse

Our ten-year strategy, FEIT 2025, is our School's commitment to bring to life the University-wide strategy Advancing Melbourne and reinforce the University of Melbourne's position as one of the best in the world.

To achieve our ambitions, we will continue to build new infrastructure to enable our teaching, research and engagement; we continue to recruit outstanding people from around the world; and we continue to attract high-quality students from across the globe who are at the heart of our enterprise.

https://eng.unimelb.edu.au/about/mse-2025

5.5 THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a public-spirited institution that makes distinctive contributions to society in research, learning and teaching and engagement. It's consistently ranked among the leading universities in the world, with international rankings of world universities placing it as number 1 in Australia and number 32 in the world (Times Higher Education World University Rankings 2017-2018).

The University's 10-year strategy, *Advancing Melbourne* will enable the University to contribute to advancing the state and national interest and make vital contributions to Australia's standing on the world stage. We seek to be a leading force in advancing Australia as an ambitious, forward-thinking country while increasing its reputation and influence globally. https://about.unimelb.edu.au/strategy/advancing-melbourne

Further information about working at The University of Melbourne is available at http://about.unimelb.edu.au/careers

5.6 CSL

CSL Limited is a company that fosters a work culture emphasising Superior Performance, Innovation, Integrity, Collaboration and Customer Focus with a commitment to support, train and grow its people. As a genuine leader in the biopharmaceutical industry, CSL is a multinational ASX Listed Company that is actively growing its Australian based manufacturing operations to support global growth. CSL develops, manufactures and markets products to treat and prevent serious human medical conditions and is globally one of the largest manufacturers of plasma-derived therapies.