



## RESEARCH OFFICER: BIOPROCESS ENGINEERING

Centre for Bioprocess Engineering Research (CeBER)  
Department of Chemical Engineering  
Faculty of Engineering & the Built Environment

CeBER is an inter-disciplinary research centre, based in the Department of Chemical Engineering at UCT. It has a well recognised research portfolio in Biohydrometallurgy, Bioprocess Engineering, Bioproducts through Alkane and Algal Biotechnology as well as Waste Biorefineries. The research portfolio is underpinned by a focus on sustainable development of processes, maximizing resource efficiency and fit-for-purpose water through a circular economy and industrial ecology focus. At this time when South Africa has recognised the bio-economy as a focal point for development, CeBER is looking for two candidates with outstanding ability and research potential to appoint from August 2018.

The appointee to this position will be involved in research centered on integrated bioprocess development using microbial technology. Emphasis will be on the integration of a deep understanding of mixed microbial cultures and their metabolic potential with process engineering aspects of process development and optimization. Up-to-date hands-on experience in the characterisation of mixed microbial communities using molecular biology tools with demonstrated attention to validation and data quality is essential and such research is expected to contribute to 50% of the duties undertaken. Further experience in process development and performance is expected across a selection of applications which will preferably include some of the following: mineral bioprocessing, valorization with concomitant remediation of organic and inorganic waste streams, anaerobic digestion, algal biotechnology, biomass processing and alkane biotechnology.

The successful candidate will be expected to contribute to research projects within the CeBER project grouping and work closely with the team. The successful candidate will be expected to contribute to the delivery of several research projects within the CeBER portfolio of research projects through active research, including hands-on laboratory-based research. This will include conducting the experimentally-based characterization of mixed microbial communities by molecular tools to support the Centre's research (50% of job requirements). The successful candidate will contribute to grant writing and academic writing in the form of technical reports and research papers, advise postgraduate students on technical aspects of their research, supervise postgraduate students and to work closely as part of the team.

The applicant **must** meet the following requirements:

- PhD degree demonstrating expertise in molecular biology.
- At least three years appropriate post PhD experience.
- Substantial expertise in molecular biology methods for microbial speciation of mixed cultures with demonstrable skills in methods development and data accuracy.

### Key competencies include:

- the ability to work interactively as a member of an inter-disciplinary team.
- good interaction and supervision of undergraduate and postgraduate students.
- strength in technical writing and grant writing.

The annual remuneration range, including benefits, is **R 639 848**.

**To apply**, please e-mail the documents listed below in a **single pdf file** to Ms Abigail Dixon at [recruitment03@uct.ac.za](mailto:recruitment03@uct.ac.za):

- UCT Application Form (download at <http://forms.uct.ac.za/hr201.doc>);
- Letter of Motivation; and
- Curriculum Vitae (CV).

Please ensure that the position title and reference number are indicated in the subject line of your email.

An application which does not comply with the above requirements will be regarded as incomplete. Only short-listed candidates will be contacted and may be required to complete competency assessments as part of the selection process.

**Telephone:** 021 650 1673  
**Reference Number:** E18258

**Website:** [www.ebe.uct.ac.za](http://www.ebe.uct.ac.za)  
**Closing date:** 5 July 2018

UCT is committed to the pursuit of excellence, diversity and redress in achieving its equity targets. Our Employment Equity Policy is available at [www.uct.ac.za/downloads/uct.ac.za/about/policies/eepolicy.pdf](http://www.uct.ac.za/downloads/uct.ac.za/about/policies/eepolicy.pdf).

UCT reserves the right not to appoint.