



ASSOCIATE PROFESSOR: THERMOFLUIDS (PERMANENT POST)

Department of Mechanical Engineering **Faculty of Engineering and the Built Environment**

The University of Cape Town is in the top rank of Universities in South Africa, and the Department of Mechanical Engineering endeavours to contribute to this reputation. This is achieved through world class research in niche areas (e.g., structural impact and materials engineering, computational mechanics and fluid dynamics, energy studies, engineering education, among others), as well as through excellent teaching based on sound pedagogical principles. The Department is well established, internationally accredited, and has historically produced some of the country's most competent mechanical engineers.

The Department of Mechanical Engineering seeks to appoint a permanent, full-time academic at the Associate Professor level to undertake teaching in thermofluids, including thermodynamics, fluid mechanics, heat transfer, combustion and psychrometrics, and to undertake research in thermofluids systems and related mechanical engineering sciences. The successful candidate will be expected to contribute to teaching, administration, research, and social responsiveness activities in the Department. We invite suitably qualified persons to apply for this position.

Requirements for the position:

- A BSc (Eng) or BEng in Mechanical, Mechanical and Mechatronics, or Electro-Mechanical Engineering.
- A PhD in engineering.
- Demonstrable experience of thermofluids systems analysis, design, or optimization.
- Experience of undergraduate and/or postgraduate teaching.
- Research track record, including recent peer-reviewed research publications.
- An excellent reputation for leadership as a researcher, as demonstrated by publications in accredited journals, post-graduate supervision and high-level professional involvement.
- Is recognized as an effective teacher who makes a substantial contribution to undergraduate and/or postgraduate teaching, is active in curriculum design and development, and is responsive to the needs of students.

The following will be advantageous:

- A track record of research projects, securing funding and research publications.
- Experience in the management of courses, staff and/or research projects.
- Experience of the management and leadership of projects, and supervision of research students.
- Contribution to curriculum development at course and/or programme level.
- Compliance with the criteria for registration as a Professional Engineer with the Engineering Council of South Africa (ECSA).
- National Research Foundation (NRF) rating as a researcher, or potential for such rating.
- Postdoctoral research experience, or relevant industrial experience in engineering industry and/or academia.

The successful candidate will be expected to:

- Contribute to the teaching of courses within the department, primarily thermofluids, including lecturing and supervision of students, developing course material and contributing to excellence in undergraduate and postgraduate teaching.
- Conduct research, attract funding, supervise postgraduate students, publish in accredited journals, and contribute to excellence in research in the Department.
- Contribute to the leadership of the Department.
- Contribute to the Department's social responsiveness by engaging with community and/or industry through teaching and research.

The annual remuneration package for 2022, including benefits, is **R1, 163 096**.

To apply, please e-mail the below documents in a **single pdf file** to Ms Abigail Dixon at recruitment03@uct.ac.za

- UCT Application Form (download at <http://forms.uct.ac.za/hr201.doc>);
- Motivation letter, highlighting the relevant experience; and
- A detailed curriculum vitae.

Please ensure the title and reference number are indicated in the subject line.

An application which does not comply with the above requirements will be regarded as incomplete and might not be considered. Only shortlisted candidates will be contacted and may be required to undergo competency assessments and/or submit a portfolio of recent work.

Telephone: 021 650 1673
Reference number: E230115

Website: www.mecheng.uct.ac.za
Closing date: 09 February 2023

"UCT is a designated employer and is committed to the pursuit of excellence, diversity, and redress in achieving its equity targets in accordance with the Employment Equity Plan of the University and its Employment Equity goals and targets. Preference will be given to candidates from the under-represented designated groups. Our Employment Equity Policy is available at www.uct.ac.za/downloads/uct.ac.za/about/policies/eepolicy.pdf."

UCT reserves the right not to appoint.