

Post Doctoral Fellowship in Aerospace Liquid Hydrogen Containment Modelling

Closing date: 20 December 2023



If you have a keen interest in numerical methods and programming, join our [international-award winning initiative](#). The Industrial Computational Fluid Dynamics Research Group (InCFD) specializes in developing [state-of-the-art modelling software](#) for industry.



The research involves the development and programming of numerical methods to enable accurate and efficient modelling of LH2 storage during flight. The emphasis of the work is on numerical methods, programming and computer based simulation of LH2 tanks using high performance computing. The work will be done in collaboration with the UCT spin-out company [Elemental Numerics](#) and as such guarantees industrial experience.

Requirements:

- PhD thesis submitted for examination/awarded in Engineering or Applied Mathematics.
- PhD graduates must have graduated with their doctoral degree within four (4) years.
- PhD should involve significant numerical methods and programming.
- The Fellowship is for one year at R350,000 per annum and includes access to our world class CFD lab and computing facilities + funding to travel abroad for conference attendance. Renewable for a second year based on performance.
- Research to commence by no later than 25 February 2024.

Please send a letter of application together with your CV and all academic publications to arnaud.malan@uct.ac.za. Also please include names and email addresses of at least two academic referees with whom you have worked. Shortlisted applicants will be contacted by 25 December'23. UCT reserves the right not to appoint.