

Position Title	Research Fellow (Chemical Engineering)
Classification	Level A
School/Division	School of Engineering
Centre/Section	Department of Chemical Engineering
Supervisor Title	Professor
Supervisor Position Number	FSR 308999
Position Number	

Your work area

The UWA School of Engineering is renowned for its award-winning researchers, teachers and facilities. It is a multidisciplinary school offering education and research in a number of engineering disciplines. This includes civil, environmental, mining, chemical, mechanical, electrical and electronic engineering. Successful applicants will work primarily in the large Fluid Science and Resources Research (FSRR) Group (<https://www.fsr.ecm.uwa.edu.au/>) which primarily conducts research across the resources industry as well as the Future Energy Exports CRC. The relevant theme to this project is the development and application of NMR techniques for the characterisation of fluids in porous media.

Reporting structure

Reports to: Professor

Your role

The project will be focussed on the development and application of NMR methods for the non-invasive characterisation of fluids in both rock cores and membranes. It will thus involve both experimental work and subsequent data analysis. In particular it will feature the development and use of low magnetic field multi-dimensional NMR relaxometry coupled with restricted self-diffusion measurements. The project is part of the Future Energy Export CRC which is headquartered at UWA.

Your key responsibilities

Conduct high quality research on the project.

Publication of research papers and presentations at international conferences and workshops.

Assist with management, maintenance and repair of the existing NMR hardware.

Assist in the supervision of undergraduate, Masters and PhD students.

Participate in the research group's activities and contribute to/organize group projects, meetings and workshops.

Other duties as directed.

Your specific work capabilities (selection criteria)

PhD in Chemical or Petroleum Engineering (or expected to be completed soon)

Strong track record of research publications relative to opportunity.

Experience applying multi-dimensional NMR methods for surface characterisation in porous media.

Experimental experience with low temperatures and high pressures.

Ability to manage research projects.

Special requirements (selection criteria)

Occasional weekend work.

Some after-hours work may be required.

Compliance

Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including:

To learn more about the Code of Conduct, see [Code of Conduct](#).

To learn more about Diversity, Equity and Inclusion, see [Diversity, Equity and Inclusion](#).

To learn more about Safety, Health and Wellbeing, see [Safety, Health and Wellbeing](#).