

**Position Title:** Research Associate

**Position Classification:** Level A

**Position Number:** 317693

**Faculty/Office:** Engineering, Computing and Mathematics

**School/Division:** Chemical Engineering

**Centre/Section:** Centre for Energy 00660/PG 40000400

**Supervisor Title:** Professor

**Supervisor Position Number:** 307261

**Your work area**

UWA Centre for Energy is an internationally renowned research facility in fuels, combustion science and technology, and sustainable energy development. The Centre's overall aim is to develop new knowledge and advanced technologies for efficient, effective and environmentally friendly utilisation of fuels and energy in the resources industries. The Centre for Energy is located within the School of Mechanical and Chemical Engineering, which is renowned for its award-winning researchers, teachers and facilities. The broad-based undergraduate and postgraduate programs are complemented by a wide range of research activities. The School is a leader in developing graduates in the critical industries of energy, oil and gas.

**Reporting Structure**

Reports to: Professor

**Your role**

As the appointee you will, under limited direction of the Professor, participate in and coordinate the experimental, analytical and other research work, and provide advice and assistance to other research personnel carrying out projects in the laboratories

**Key responsibilities**

Perform independent and collaborative research on Methanol/DME synthesis from biomass pyrolysis syngas, including catalyst development, performance evaluation and catalytic reactor design

Provide high level scientific and technical assistance to the Professor in relevant research fields

Provide innovation and input into planning and design of experiments

Undertake data analysis and interpretation

Undertake experiments and research activities

Record and analyse results

Present data or information from experiments to the Professor with detailed analysis and contributions to scientific publications and technical reports

Provide supervision to final year and postgraduate students

Participate in the experimental and analytical (GC, GC-MS, HPLC, SEM, TEM, XRD, XPS, BET, etc.) work

Publish in high quality journals

Other duties as directed

**Your specific work capabilities (selection criteria)**

A PhD in a relevant field

Highly developed verbal and written communication skills

Highly developed organisational skills including ability to plan, coordinate, meet deadlines and conduct research

Ability to co-ordinate and conduct research

Willingness to learn new technical skills

Proficiency with computers and ability to use word and data processing programs

Considerable previous research and project management experience

Able to work independently, demonstrate initiative, work productively in a team under limited supervision

Knowledge of analytical instrumentation gas and liquid chromatograph techniques

Strong track record of research publication relative to opportunity.

**Compliance**

**Workplace Health and Safety**

All supervising staff are required to undertake effective measures to ensure compliance with the Occupational Safety and Health Act 1984 and related University requirements (including Safety, Health and Wellbeing Objectives and Targets).

All staff must comply with requirements of the Occupational Safety and Health Act and all reasonable directives given in relation to health and safety at work, to ensure compliance with University and Legislative health and safety requirements.

Details of the safety obligations can be accessed at <http://www.safety.uwa.edu.au>

**Equity and Diversity**

All staff members are required to comply with the University’s Code of Ethics and Code of Conduct and Equity and Diversity principles. Details of the University policies on these can be accessed at <http://www.hr.uwa.edu.au/publications/code_of_ethics>, <http://www.equity.uwa.edu.au>