Novel Biotechnology to Convert Green House Gas to Biofuel

Supervisors: Assoc Prof Bo Jin and Dr Sheng Dai, in collaboration with University of Minnesota.
Nature of work: Laboratory based experiments
Area: Advanced Materials and Biotechnology.
Potential implications: Novel biotechnology to achieve CO_2 and methanol conversion.
Funding: *Via* the various University scholarship schemes (see separate information for these).

Brief description: The CO_2 mission results in climate change. To date, many approaches for CO_2 capture have been developed. In this project, we aim to develop the applications of those captured green house gas since CO_2 is also a cheap carbon resource. A novel biotechnology will be developed by combining polymer science and modern nanotechnology to produce methanol from CO_2.

This is a laboratory-based research project. The candidate should have interests in biotechnology, nanomaterial and polymer science. More details More details on this project or other advanced research topics can be referred to the website of www.adelaide.edu.au/bio-nano-tech or visit my office.