Laser Diagnostics in Clean Combustion Technology

PhD Scholarship

The Centre for Energy Technology is seeking highly motivated engineering graduates with an Honours degree and an interest in cutting-edge research in clean energy to join an internationally leading research team. The position will provide training in world-leading laser diagnostics and their application in sooting flames, with a view to provide new understanding on the control of soot and the development of next-generation combustion technologies. The program is being undertaken within the framework of the International Sooting Flames Workshop (www.adelaide.edu.au/cet/isfworkshop) in partnership with Professor Pitsch, RWTH Aachen.

Applicants should hold, or expect to hold, a good Honours degree (level 2B or higher) in any of the fields of Mechanical Engineering, Chemical Engineering, Chemistry or Physics. A background in turbulence and/or reacting flows, or in optical techniques is an advantage. The project will fund a supplementary scholarship of up to $10,000 pa to holders of other scholarships at the University (IPRS, APA, University of Adelaide, etc).

The Centre for Energy Technology is internationally recognised for its leading scientific research supporting the development of clean energy technologies to reduce emissions, increase efficiency and decrease the cost of energy. With a wide range of facilities spanning laboratory to pilot-scale, our team is pledged to creating a culture of research excellence and delivering significant breakthroughs in the development of innovative technologies for a clean energy future. The CET laser laboratory houses state-of-the-art diagnostic tools with leading and unique capability that will be employed in the project.

Key CET Researchers on this project are:

Professor Graham ‘Gus’ Nathan, Director CET.
Professor Bassam Dally, Head of Mechanical Engineering.
Assoc. Prof. Zeyad Alwahabi, Leader, technique development.
Dr. Paul Medwell, ARC DECRA Award.

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