

# Scientia PhD scholarship in Sydney - turbulent combustion modelling

Never Stand Still

Engineering

## PhD in modelling turbulent combustion

**Deadline for contact: 11 November 2016**

The Evatt Hawkes group in the School of Mechanical and Manufacturing Engineering at the University of New South Wales (UNSW), Sydney, Australia, is seeking an outstanding candidate to fill a PhD position in modelling turbulent combustion.

The research will involve direct numerical simulations (DNS) focussing on turbulent combustion phenomena in conditions relevant to advanced compression ignition engines and gas turbines. The research will employ cutting edge super-computing resources to expose the combustion fundamentals and/or to assess/improve models used in industry for engine design.

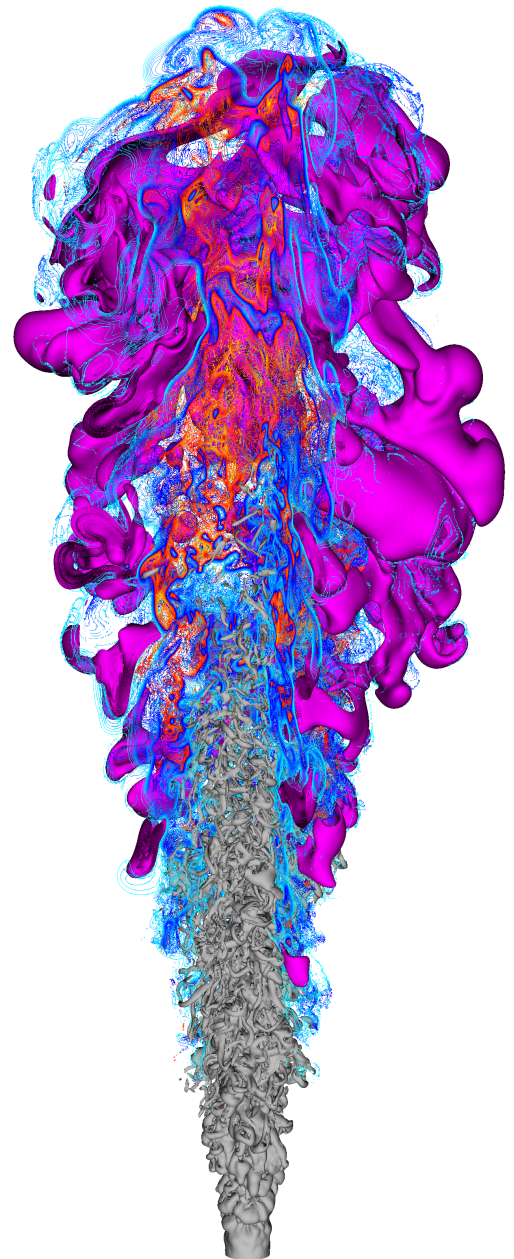
The scholarship will be supported by UNSW's Scientia program. These prestigious scholarships include a stipend of AUD 40,000 per annum for 4 years and a support package of up to AUD 10,000 per annum awarded to provide support for development activities, international collaboration and other related expenses.

Expertise required for this appointment include: an excellent academic record in mechanical engineering or a closely related field (within the top few percent of the cohort obtained at a leading institution); a strong understanding of thermodynamics, fluid mechanics, numerical methods, including preferably experience in code development; strong written and oral communication skills; a commitment to excellence and an ambition to succeed.

The successful applicant will join a thriving research group including 8 PhD students and 3 post-docs, working on combustion and some areas of solar energy. Applicants from many countries may also have an opportunity to spend a period of their research at Sandia National Laboratories or Lawrence Berkeley Laboratory in the USA, depending on the chosen topic.

**Contact: Professor Evatt Hawkes,**  
[evatt.hawkes@unsw.edu.au](mailto:evatt.hawkes@unsw.edu.au)

[1] <https://research.unsw.edu.au/unsw-scientia-phd-scholarship-scheme>



DNS of an igniting n-dodecane jet  
recently carried out by the UNSW team.