



James C. Sutherland  
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We are seeking a post-doctoral fellow to assist in petascale simulation of turbulent combustion. Responsibilities will include software design and testing for several turbulent combustion models including DNS, ODT, LES and other new approaches. The research is focused at the confluence of physical modeling, numerical analysis and computer science to advance capabilities of combustion modeling and simulation. This position offers a good opportunity for anyone interested in scientific computing, and particularly for those with interests in turbulent combustion simulation.

The following skills are desired for applicants to this position:

- A strong working knowledge of CFD - particularly LES and/or DNS of variable density reacting flows and turbulent combustion simulation.
- Experience in combustion modeling.
- Familiarity with MPI and thread-based parallel programming.
- A strong working knowledge of C++ including polymorphic and template programming techniques.
- Ability to work in interdisciplinary teams.

Applicants should possess or be willing to develop this skill set. This position includes a competitive salary and benefits including health insurance. The initial appointment will be for two years, subject to the candidate's performance, and may be renewable for up to four years.

Applicants should send a current vitae and list of references via email to professor James C. Sutherland, [James.Sutherland@utah.edu](mailto:James.Sutherland@utah.edu). We hope to fill this position by October, 2009.

Sincerely,

James Sutherland  
Assistant Professor - Department of Chemical Engineering  
The University of Utah