



DATE

TIME 6:15pm Social
 6:30pm Dinner (Zupas)
 7:00pm Talk

PLACE Eccles Boardroom, Warnock Engineering Building (WEB)
 University of Utah
 72 South Central Campus Drive
 Salt Lake City, UT 84112



COST \$1000 per person. Lecture and meal free for local section members and first 30 students. Spouses/significant others welcome.

SPEAKER Brian S. Haynes
 Professor of Chemical Engineering, University of Sydney, Australia

TITLE

Using small channels for chemical processing applications creates many interesting opportunities for the development of processes that are energy and atom efficient, compact, scalable and distributable. We discuss the development and application of "printed circuit" techniques for the creation of complex fluidic networks for heat exchangers, reactions, and separations. The design principles for such process operations are described. The development and testing of an integrated system for steam methane reforming provides a practical demonstration of what can be achieved.

Brian Haynes obtained his BE (1973) and PhD (1976) from the University of NSW in Sydney, Australia. Since 1983 he has been at the University of Sydney. His research has covered a wide range of topics in energy utilisation, especially in the chemical kinetics of combustion processes. He was President of the International Combustion Institute from 2004-2008 and was awarded the Bernard Lewis Gold Medal of the Combustion Institute in 2012. His work in combustion led to other topics in energy intensive processing including heat transfer, reforming, nitric acid manufacture, hydrothermal liquefaction of biomass, and CO₂ utilisation. He has a particular interest in process development based on fundamental research and has been granted a number of patents for such developments.

RSVP to Jonathon Horton at jonathon.horton@utah.edu
Please also email Jonathon regarding any dietary restrictions.

The link below provides directions to the Warnock Engineering Building. All parking on campus is free after 6pm.
<http://testingcenter.utah.edu/directions/web.php>