



Engineers Australia's College of Biomedical Engineers (SA Branch),
The Society for Medical and Biological Engineering, &
The Australasian College of Physical Sciences and Engineers in Medicine
Jointly present

The Australian Synchrotron - Opportunities in Biomedical Research

By Dr Hugh Harris

**Chair of the SA Synchrotron Committee
Lecturer, School of Chemistry and Physics, University of Adelaide**

Nearly half of the initially funded suite of beamlines at the Australian Synchrotron are now fully functional, with the remainder due to come online over the next 12-18 months. This presentation will cover the construction and capabilities of this exciting facility with a particular focus on those beamlines with biomedical applications. Some examples from my own research will illustrate these capabilities, including infrared and x-ray nanoprobe imaging and spectroscopy of intact tissues to study disease processes and their treatment. Perhaps the most ambitious project at the synchrotron is the construction of the imaging and therapy beamline, which is designed for revolutionary high-resolution phase contrast x-ray imaging of large objects - i.e. live animals. This beamline also breaks the traditional "fundamental research" mould for synchrotrons, in that the clinical diagnosis and treatment of human subjects is intended. As chair of the SA synchrotron committee, which administers the allocation of beamtime the SA consortium is entitled to from its investment in the synchrotron, I will also discuss access and funding mechanisms for potential users.

Event details:

Date: Tuesday 26th August 2008

Venue: Telemedicine Room
Level 3 East Wing ("L" on Map)
Royal Adelaide Hospital
North Terrace
Adelaide 5000

Time: 5:30pm: light food and drinks
6:00pm: talk

Cost: Members FREE, guests also free

RSVP: Please RSVP to Wendy Tuckwell
on 08 8222 2460 or
wendy.tuckwell@health.sa.gov.au
by the 19th of August 2008

