Joint **O**rganic **E**missions **Y**ear-round **S**tudy (JOEYS) begins at ANSTO

JOEYS is a collaborative campaign involving the University of Wollongong and the Australian Nuclear Science and Technology Organisation (ANSTO). The campaign will involve running the Biogenic Ambient Atmospheric Sampling System (BAASS) (partly funded by CAUL) for state-of-the-science measurements of the chemicals emitted by trees (biogenic volatile organic compounds or VOCs). There is growing recognition of the importance of these biogenic emissions on atmospheric chemistry and air quality within urban air-sheds (especially in cities surrounded by densely forested regions). Within Australia many of the major cities have very high levels of atmospheric VOCs that are predominantly emitted by vegetation within the cities and emissions originating from nearby natural forested regions. These chemicals can react in the atmosphere leading to increased concentrations of fine particulates and ozone. However, currently our understanding of these important atmospheric impacts is hindered by an almost complete lack of measurements of these biogenic emissions from Australian vegetation. JOEYS will provide a much needed look at the mixture of VOCs produced by the nearby vegetation that surrounds the Sydney basin and how this changes seasonally.

Final preparations are underway with testing of the optimal instrument conditions, and the sampling mast has been constructed and will be installed mid-November along with ancillary instruments to measure other aspects of atmospheric composition. The campaign will begin in earnest in the coming weeks and will form the prelude to the larger scale International campaign COALA (Characterising Organics and Aerosol Loading in Australia).

Photo shows the BAASS installed at ANSTO.