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## PROGRESS REPORT FOR AINGRA07003

<b>PROJECT TITLE</b>	<b>Chemical composition and source identification of fine aerosols in South East Queensland</b>	
<b>INVESTIGATOR(S)</b>	<b>Institution and Department</b>	
<b>Chief Investigator</b>	<b>Dr Godwin Ayoko</b>	Physical and Chemical Sciences, Queensland University of Technology
Other Investigators		
Students		
ANSTO Investigators	Ed Stelcer & Dr David Cohen	
Specialist Committee	E	

### SCIENTIFIC OBJECTIVES

- To undertake a comprehensive inventory of the chemical composition of atmospheric aerosols at a specific receptor site in Brisbane.
- To use receptor models to identify the sources of the chemical species in the fine aerosols and assess the contributions of each of the sources to ambient fine aerosol levels at the receptor site.
- To assess the role of meteorological conditions on the levels of the chemical species at the site.
- To use advanced factor analytic receptor model (s) to identify source markers for fingerprinting pollutants arising from multiple sources.

### PROGRESS REPORT and RESEARCH OUTCOMES

The project was delayed because the proposed date for its commencement coincided with the movement of Queensland EPA's site at Rocklea from an old site to a new location in the Rocklea area. In addition, after the construction of the site, it took several weeks before external power supply was installed at the new site.

Eventually a technician from ANSTO installed the rented Aerosol Sampling Unit at Rocklea in May 2007 and the first filter was exposed on 30 May 2007. Subsequently, sampling has occurred twice weekly and 30 of the anticipated 104 samples for the first year have been posted to ANSTO for analysis. It is hoped that the samples will be analysed and the results made available by ANSTO in January 2008.

Apart from the initial problem encountered in starting the project, the exchange of blank and exposed filters between ANSTO and QUT has been smooth to date.

The results will greatly advance fundamental knowledge on air quality in Brisbane and assist in air quality management in order to protect the Australian Community from the adverse human health and environmental effects of poor air quality.

### DATA

No results are available to date but 30 exposed filters have been sent to ANSTO for analysis since the commencement of the sampling in May 2007.

**Signature of Investigator preparing the report for**

**After signing this report please fax this page with your signature for our files**

**Proj: AINGRA07003**

**Date: 14/9/07**

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**PhD STUDENTS**