

# Aerosol measurement and fine particle characterisation

ANSTO's Aerosol measurement and fine particle characterisation capability provides a complete service including fine particle sampling units, PIXE analysis of filters using the STAR Tandedron facility, and full data evaluation. The number of running days required to successfully complete each project should be discussed with an ANSTO contact scientist before a proposal is submitted.

## **Capability selections**

- Complete PM2.5 Cyclone sampling unit
- Ion beam analysis (IBA) particle analysis of filters: two per week, includes postage and despatch
- Black carbon measurements on filters
- IBA data interpretation and consulting

## Complete PM2.5 Cyclone sampling unit

ANSTO can provide a self-contained PM2.5 cyclone sampling unit including pump and microprocessor control unit to turn off and on at pre-determined times. These units use a stretched Teflon filter designed specifically for ion beam analysis on our accelerators. Talk to our contact people for further information.

### Black carbon measurements on filters

The black carbon content on filters can be determined by laser and LED measuring systems developed at ANSTO. Talk to our contact people for further information.

#### **IBA** data interpretation and consulting

IBA is a sensitive technique that can be used to estimate elemental concentrations in solid samples in concentrations from (µg/g) to 100% for most elements in the periodic table.



For further information please contact:

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