

Environmental Health Sciences research facilities

Environmental Health Sciences at Birmingham has its own modern laboratories housing an extensive range of state-of-the-art analytical instrumentation all available for 'hands-on' use by our research students, including:

- **[Atmospheric particle counters and size fractionating devices \(/facilities/environmental-health/about/apc.aspx\)](#)**
- **[Aquatic colloid fractionating and sizing devices \(/facilities/environmental-health/about/aquaticcolloid.aspx\)](#)** (flow and sedimentation FFF, SPLITT, CFUF)
- **[Atomic force microscopes and Scanning near-field optical microscope \(/facilities/environmental-health/about/afm.aspx\)](#)**
- Aerosol Time-of-Flight Mass Spectrometer
- **[Carbon analyser \(/facilities/environmental-health/about/carbon-analyser.aspx\)](#)**
- **[CO, SO₂, O₃, and NO/NO₂/NO_x analysers \(/facilities/environmental-health/about/gas-analysers.aspx\)](#)**
- **[Gas Chromatography / Mass Spectrometry Systems \(/facilities/environmental-health/about/gaschromatography.aspx\)](#)**, one with negative and positive chemical ionisation facilities, and one interfaced with a thermal desorption system to facilitate VOC determination
- HPLC-MS/MS system
- 2 atomic absorption spectrometers
- **[Ion chromatography \(/facilities/environmental-health/about/ion-chromatography.aspx\)](#)**
- **[Solvent Evaporation Equipment \(/facilities/environmental-health/about/solvent-evaporation.aspx\)](#)** (including Accelerated solvent extractor (ASE); TurboVAP automated solvent evaporator; TracePrep automated solid phase extraction system)
- **[Facility for Environmental Nanoparticle Analysis and Characterisation \(FENAC\) \(/facilities/fenac/index.aspx\)](#)**



In addition, our research students have access to facilities located elsewhere in the University - such as ICP-MS, XRD, force and electron microscopes. We also possess an extensive range of sampling equipment, including numerous high volume and PM10 air samplers, personal exposure monitors and cascade impactors. Our computing facilities are excellent.