

LAQM: Monitoring and modelling

Topic: LAQM Tools	Module: Technical introduction to air pollution monitoring
<p>This module will explain how to measure concentrations of the seven pollutants prescribed in the 2007 Air Quality Strategy for England, Scotland, Wales and Northern Ireland. The module focuses on nitrogen dioxide (NO₂) and particulate matter (PM) as these are the main pollutants of concern in the UK.</p> <p>Aims – the aims of the module are to:</p> <ul style="list-style-type: none">Explain the rationale of monitoring air quality;Outline monitoring methods for Review and Assessment;Highlight the limitations of different monitoring techniques. <p>Intended learning outcomes – by the end of this module students should be able to:</p> <ul style="list-style-type: none">Identify suitable monitoring techniques and strategies;Explain the strengths and weakness of monitoring methods available in the UK;Devise a monitoring plan suitable for Review and Assessment.	

Topic: LAQM Tools	Module: Diffusion tube bias adjustment & validity
<p>This module will provide learners with an understanding of diffusion tube bias and precision, the purpose of bias adjustment factors and their calculation and use in LAQM. The module focuses on nitrogen dioxide (NO₂) as the primary pollutant monitored using diffusion tubes.</p> <p>Aims – the aims of the module are:</p> <ul style="list-style-type: none">To differentiate between accuracy and precision;To identify sources of error in the use of NO₂ diffusion tubes;To describe the protocol for diffusion tube use; andTo examine the calculation and application of bias adjustment factors. <p>Intended learning outcomes – by the end of this module students should be able to:</p> <ul style="list-style-type: none">Differentiate between accuracy and precision;Understand the sources of error in the use of NO₂ diffusion tubes;Describe the protocol for diffusion tube use;Calculate local bias adjustment factors and determine their suitability.	

Topic: LAQM Tools	Module: Dispersion modelling
<p>This module provides a basic understanding of the theory and practice of using dispersion models to replicate the behaviour of pollution in the atmosphere.</p> <p>Aims – the aims of the module are to: Explain the basic theory behind dispersion models; Describe the ways in which they are used; and Highlight some of the potential limitations and problems associated with them.</p> <p>Intended learning outcomes – by the end of this module students should be able to critically evaluate the pros and cons of dispersion models.</p>	

Topic: LAQM Tools	Module: Model validation, verification and adjustment
<p>This module provides a basic Introduction to concepts of: Validation, Verification and Adjustment Examples of validation The verification and adjustment process</p>	