

For whom
QC Personnel
Quality Analysts
Chemists
Lab Supervisors
Technicians
Process Engineers
Managers
R & D Chemists
Analytical R & D
Enviro. Analysts

Environmental/Online Measurement

The current major emphasis on pollution monitoring and control, coupled with increased environmental awareness is posing a huge challenge to industry in general and analytical measurement in particular. Stringent regulatory demands combined with major economic implications and increased competitiveness places necessity for validity on every analytical test performed either in the field or the laboratory. Not only must the correct result be obtained but also proof must be provided of its fitness for purpose, validity and accuracy. Such proof must then be accessible, retrievable and presented in an easily understood format.

This seminar and workshops will deal with these and a host of other issues which can be categorised under the following headings:

- Sampling Strategy
- Compliance
- Validity of result
- Choice of field or laboratory test
- Most important Environmental Parameters
- Good analytical practise
- Guaranteeing Correct Result every time
- Fitness for purpose
- Online Measurement and control

Participants will see at first hand the correct procedures to enable valid and accurate measurement to be carried out in a cost-effective manner.

The seminar and workshops will cover how you can put all the issues raised into effect in your own laboratory. Both the formal presentations and workshops will be presented by a team of contributors with extensive experience in all aspects of environmental monitoring and online measurement.

C O N T E N T

♦ Online Measurement (pH, Conductivity, DO)

Calibration, use of check standards, care & maintenance, types of online pH, conductivity and DO sensors, trouble shooting, fault diagnosis

♦ Important environmental parameters

COD, BOD, Phosphate, Nitrate, Turbidity, Sulphide, Silica, Chloride, Ammonia, Chlorine, Hardness, Sulphate, Chromium

♦ Instrumentation (pH, Conductivity, DO)

Online measurement and control, selecting the correct instrument, features and benefits, specifications, data storage, process control, on/off control, dead band, PID, titration profile, temperature, flow rate, volume, composite sampling.

♦ Conductivity, Dissolved Oxygen & pH .

Effects of temperature, correct choice of system including meter, sensor, standards, maintenance, calibration, control loops, data logging.

♦ pH electrodes

Theory, reference systems, sensing element, diaphragm, applications, fault diagnosis, care & maintenance, trouble shooting, physical considerations.

♦ Sampling Considerations

Sampling strategy, procedures, transport, storage, records, traceability, packaging, integrity, identification, hazards, preparation.



Environmental Seminar & Workshop Programme

9.00	Introduction
9.20	Sampling
9.50	pH Electrodes (Theory/Application)
10.20	Process Electrodes
10.50	Coffee
11.10	Rapid Tests
11.30	Workshop 1. Groups A, B, & C A - Measurement Equipment B - Process Controllers C - Rapid Tests
12.30	Questions and Answers
12.45	Lunch
2.00	Workshop 2. Groups A, B & C to rotate
3.00	Coffee
3.15	Legislation
4.00	Workshop 3. Groups A, B & C to rotate
5.00	Conclusion and Questionnaire to be completed.