Humidity Measurement and Calibration

2 days 13 - 14 June **£1298 + VAT**

Please complete the online registration form at: https://training.npl.co.uk/hum-course

Location

The course will be held at the National Physical Laboratory (NPL), Teddington, which is about 15 miles south-west of London. It is easily reached by road, rail (from London Waterloo) and air (Heathrow Airport). *National Physical Laboratory, Hampton Road, Teddington, Middlesex, TW11 0LW*

How to get to NPL www.npl.co.uk/find-us

Further information For further technical information please contact: Stephanie Bell Tel: 020 8943 6402 Email: stephanie.bell@npl.co.uk For other information please contact: Email: training@npl.co.uk

Course additional options

Duration	Course Options	Dates	Price
2 days	Temperature Measurement and Calibration course	10 - 11 June 2024	£1298 + VAT
3 days	Temperature course with 'Hands On' practical day (Optional)	10 - 12 June 2024	£1718 + VAT
5 days	Temperature and Humidity combined courses	10 - 14 June 2024	£2737 + VAT

You can register for combined courses at the same

time. Please complete the online registration form.

Website: https://training.npl.co.uk/hum-course https://training.npl.co.uk/temp-course

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Humidity Measurement and Calibration

A TWO DAY COURSE

13 - 14 June 2024

Humidity

Humidity and temperature are important physical quantities. Their measurement plays a key part in industrial quality and process control, in the efficient use of energy and other resources, in condition monitoring and in health and safety. Humidity affects the thermal, electrical, optical and transport properties of gases and is important for human comfort. Organic and many non-organic materials contain water and tend towards being in equilibrium with the surroundings. Consequently there are humidity implications in conservation, testing and manufacture.

The Course

The course will be suitable for technicians and technical managers closely concerned with humidity measurement and calibration. Covering dew point, relative humidity and other humidity quantities, it will concentrate on methods of measurement which are of greatest technological relevance to attendees.

Water

273.16 K

Ice

Water

vapour

The course will open with an introductory session on humidity terms and definitions followed by talks that will cover the necessary background to the subject with full course notes provided.

The course will cover measurement techniques and instrumentation, practical use of instruments, calibration, examples of good practice, calculations and conversions between different units.

A tour of the NPL Humidity laboratory, plus 'hands-on' sessions, will give a practical introduction to humidity measurement and calibration techniques.

This will be reinforced with talks on uncertainties, traceability and accreditation.

All participants will receive a certificate of attendance.

Some comments from previous courses

- "Course content very relevant to my work"
- "Very informative"
- "Interesting training course"
- "Answered all my questions and more"
- "Got me into the basics behind hygrometry that I was always aware of but never understood"

Provisional Programme

DAY 1 – Thursday 13 June

- 09:00 Registration
- 09:30 Welcome and introduction
- 10:00 Physics of humidity, terms and definitions
- 11:00 Break, exhibition
- **11:30** Humidity measurement techniques and instrumentation Air temperature
- 12:30 Lunch, exhibition and laboratory tour
- 14:00 Humidity calculations workshop
- 15:00 Break
- 15:20 Calibration and measurement traceability Measurement accreditation
- 17:30 Close

DAY 2 – Friday 14 June

- 09:00 Use of humidity instruments, practical measurements
- 10:00 Break
- 10:20 Laboratory sessions
- 12:45 Lunch
- 13:30 Humidity measurement uncertainty
- 15:00 Break
- 15:15 Laboratory session
- 15:45 Moisture in materials
- **16:15** Further information, frequently asked questions, discussion Optional continuation of question/answer session or time in laboratory, as required
- 17:30 Close