

Accurate Light Measurements

(A Measurement Assurance Program Course) 20 Nov 2020, 9:00 am – 5:00 pm, NMC

Introduction

This course aims to introduce basic metrological concepts and practical knowledge in the measurement of light sources. It covers the definitions and measurement principles of light measurement units such as luminous intensity (candela, cd), total luminous flux (lumen), illuminance (lux), luminance (cd/m²), colour (chromaticity coordinates x, y), colour temperature (Kelvin), colour rendering index, etc. The participants will also learn the working principle of instruments such as integrating sphere photometer, lux meter, colorimeter, etc. that are used to measure these quantities.

Course Leader

Mr Liu Yuanjie is a senior metrologist in the Optical Radiation Metrology Lab of the National Metrology Centre (NMC) of A*STAR (Singapore). He has been working in the fields of Photometry, spectro-radiometry and Spectrophotometry since he joined NMC in 1998. He is also involved in accreditation and standardisation activities, and has been a technical assessor for the Singapore Accreditation Council-Singapore Laboratory Accreditation Scheme (SAC-SINGLAS) since 2010.

Course Contents

- Basic metrological concepts and quantities of light measurements
- Working principle of goniophotometer
- Working principle of integrating sphere photometer
- Working principle of lux meter
- Working principle of colorimeters
- Common factors affecting the measurement accuracy of light and colour, and measurement uncertainty evaluation

Measurement Assurance Program (MAP)

National Metrology Centre (NMC) launched MAP in December 2012 with the aim to enhance the measurement capability and confidence of calibration and testing laboratories. It provides:

- Proficiency Tests (PT) to verify laboratory's competency and measurement accuracy,
- Measurement Assurance Seminars, and
- Training and consultancy to upgrade the industry's skills in measurements.

For more details on MAP and upcoming events, visit:

www.a-star.edu.sg/nmc/map.htm

Contact Us

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Online-Course Registration

□ Fee \$425.00+GST (registration close 2 week before the course date)

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Please fax filled-in form to 62791992, or e-mail to shirley_tng@nmc.a-star.edu.sg to register.

| Name of Participant | IVII | Designation | | siness hone |
|------------------------|------|-------------|--------|---------------------|
| Company | | | E-mail | |
| Address | | | | |
| Signature/ Co Stamp | | Date | | Check if vegetarian |

Acceptance of registration is based on first-come-first-served basis. Payment is to be made by crossed cheque to "SCEI-NMC", by telegraphic transfer, by credit card or by NETS. 50% is refundable for withdrawals in writing at least 10 working days before the commencement of the course. NMC reserves the right to cancel or postpone the course. In the event of cancellation, registration fees will be fully refunded.

For Whom

Test engineers, calibration engineers, solar device suppliers and installers, quality assurance and quality control personnel, process control engineers and project managers in green building fields