

Joint ICTP-IAEA Workshop on Uncertainty Estimations for Radiation Measurements in SSDLs and Hospitals



2 - 6 December 2019
Trieste, Italy

Further information:
<http://indico.ictp.it/event/8732/smr3337@ictp.it>

The workshop will provide the participants with practical information on how to prepare uncertainty estimations for the calibrations and measurements performed in secondary standard dosimetry laboratories (SSDLs) and for clinical dosimetry in hospitals.

Director:

P. Toroi, IAEA

Description:

Uncertainty estimations and international traceability are required for radiation dose measurements. The uncertainty is an important part of scientific expression of measurement result. The importance of accurate dosimetry is recognized particularly when patient dose in medical exposure is measured. In this workshop the participants will be provided with an understanding of the methods used for the assessment of various uncertainty components and given guidance on how to report measurement uncertainties related to their calibration services and clinical dosimetry measurements in a way that is consistent with the International Guide to the Expression of Uncertainty in Measurement. The whole chain of dosimetry from the primary standards dosimetry laboratory to the hospital will be covered. Using tutorials adapted to practical situations, the candidates will learn how to prepare an uncertainty budget.

Topics:

- International guidelines for uncertainty estimation
- Principles of uncertainty determination
 - Concepts
 - Uncertainty Components
 - Combined and Expanded Uncertainty
- Uncertainty components related to
 - Quantity
 - Equipment
 - Conditions
 - Operation
- Practical examples and exercises for uncertainty estimations in
 - Radiation therapy
 - Diagnostic radiology
 - Contamination measurements and radiation safety surveys
 - Nuclear medicine

Local Organizer:

L. Bertocchi, ICTP

How to apply:

Online application:
<http://indico.ictp.it/event/8732/>

Female scientists are encouraged to apply.

Grants:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.

Deadline:

2 September 2019

