

## **BIPM Capacity Building and Knowledge Transfer Programme**

### **2019 EURAMET-BIPM Training Course on Organisation and Piloting of Intercomparisons in Ionizing Radiation**

#### **PROGRAMME HIGHLIGHTS**

*NPL, Teddington, UK, 9-11. October 2019*

##### **Wednesday, 9 October 2019**

- General metrology, CIPM, CCs, CCIR
- EURAMET, TC-IR
- Detailed description of steps of conducting comparisons at the BIPM (K) level; important steps, initiation at EURAMET (S) and BIPM...
- General information on different types and levels of comparisons (EURAMET guide on comparisons)
- Logistics of comparisons
- Preparation of a good and suitable protocol
- Evaluation of the results, which statistical tests are suitable, how to determine outliers...
- Practical aspects of conducting comparisons (what-if)

##### **Thursday, 10 October 2019**

- Dosimetry comparisons lecture, workflow examples (go through the protocol)
- A view from a newcomer
- Case studies (practical exercises)
- Presentation of results / discussion
- Radioactivity comparisons lecture, workflow examples (go through the protocol)
- A view from a newcomer
- Case studies (practical exercises)
- Presentation of results / discussion

##### **Friday, 11 October 2019**

- Neutrons comparisons lecture, workflow examples (go through the protocol)
- A view from a newcomer
- Case studies (practical exercises)
- Presentation of results / discussion
- A summary overview - Differences and specifics of comparisons in the dosimetry and in the radioactivity field, requirements for proficiency tests and reference materials (according to ISO 17043 and ISO 17034 standards)
- Introduction to the KCDB-2.0 (example of entering data from IR field)
- What have we learned (students' presentation for each of specific fields)
  - Dosimetry
  - Radioactivity
  - Neutrons