

Workshop on the Use of Mass Spectrometry in Radionuclide Metrology: Opportunities and Challenges¹

Agenda

14-16 February 2023

10:00 – 13:00 UTC

(21:00 – 00:00 Sydney)

(11:00 – 14:00 Paris)

(05:00 – 08:00 Washington, DC)

Lisa Karam (NIST), CCRI(II) Chair

Mike Winchester (NIST), CCQM IAWG Chair

(all times UTC)

DAY 1

- 10:00 Welcome and Introductions (**V Gressier, Steering Committee members**)
- 10:10 Workshop Purpose and Goals (**L Karam**)
- 10:20 Using Mass Spec in Radionuclide Metrology: CCRI perspective (**L Karam**)
- 10:35 Measurement of Radioisotopes by Mass Spec: CCQM perspective (**M Winchester**)
- 10:45 Session 1a: Current activities using mass spec at measurement (metrology) laboratories, especially as applied in radioactivity measurements: **PTB (J Eberhardt), IAEA (D Nakazawa), CEA/LANIE (H Isnard)**
- 11:25 BREAK
- 11:40 Session 1b: Current activities using mass spec at measurement (metrology) laboratories, especially as applied in radioactivity measurements: **NRC Canada (R Galea), NMIJ (S Asai), KRISS (K-S Lee)**
- 12:20 Session 2: Discussion of the ADVANTAGES of using mass spec (need a summary slide to guide the discussion (**Led by R Essex and B Russell**))
- 13:00 END FIRST DAY

¹ This Workshop will be recorded for temporary usage by the Steering Committee; presentations will be recorded and posted on the BIPM YouTube channel at <https://www.youtube.com/thebipm>

DAY 2

- 10:00 Session 3: Discussion of the requirements for establishment of an SI-traceability chain to support radionuclide metrology (**Led by R Essex and B Russell**)
- 10:30 Session 4a: Enabling mass spec use in radionuclide metrology (**TBD**)
- 11:15 BREAK
- 11:30 Session 4b: Discussion of what is needed to enable mass spec as a viable tool in radionuclide metrology (**Led by J Mann**)
- 12:00 Session 5: Discussion on how radionuclide metrology impacts/could impact mass spectrometry (e.g., reference materials) (**Led by B Russell and V Lorenc**)
- 12:30 Future activities in the use of mass spec (including EURAMET project, NIST work supporting TES) (**D Arnold, R Essex**)
- 13:00 END SECOND DAY

DAY 3

- 10:00 Session 6a: Stakeholders and their needs: **FDA (Zhichao Lin), CDC (J Button), DOE RESL (Radiological and Environmental Sciences Lab) (G Backstrom), ICRM (B Quintana)**
- 11:00 Session 6b: Discussion (Led by **J Mann**)
- 11:30 BREAK
- 12:00 General discussion and summary (Led by **L Karam and M Winchester**)
- 12:30 Path forward and next actions (**all**)
- 13:00 Close of workshop