

**Session Program**

**26-31 Mar 2023**

**23rd International Conference on  
Radionuclide Metrology and its Applications -  
ICRM 2023**

***Radionuclide metrology techniques***

## Tuesday 28 March

10:25

### Radionuclide metrology techniques: 11 Poster contributions

**Session** | **Conveners:** Christophe BOBIN, Ryan Fitzgerald

10:25–10:27

#### Ongoing research at NPL for Radioactive Gas Metrology

**Speaker**

Dr Steven Bell

10:27–10:29

#### PRIMARY STANDARDIZATION AND MONTE CARLO MODELLING OF ( $^{243}\text{Am}$ + $^{239}\text{Pu}$ ) BY MEANS OF A 4-PI (PC)- GAMMA COINCIDENCE COUNTING SYSTEM

**Speaker**

Dr Mauro S. Dias

10:29–10:31

#### Primary standardization of I-125 in aqueous form using a gamma well counter

**Speaker**

Ryan Fitzgerald

10:31–10:34

#### Activity determination of $^{113}\text{Sn}$ by LS methods

**Speaker**

Dr Justyna Marganec-Gałązka

10:34–10:36

#### Primary Internal Gas Counting at NRC

**Speaker**

Dr James Renaud

10:36–10:38

#### Commissioning and validation of a high-pressure proportional counting system at ANSTO

**Speaker**

Dr Michael L. Smith

10:38–10:40

#### Standardization of $\text{Cd-109}$ by two methods at IFIN-HH

**Speaker**

Dr Andrei Antohe

10:40–10:42

#### Activity standardization of $^{64}\text{Cu}$ by $4\pi\beta(\text{LS})\text{-}\gamma$ coincidence and TDCR counting method

**Speaker**

Mr Agung Agusbudiman

10:42–10:44

#### $\alpha\text{-}\gamma$ digital anti-coincidence spectroscopy and its application to activity measurement of $^{225}\text{Ac}$

**Speaker**

Dr Takahiro Yamada

10:44–10:47

**COMPARISON OF CALIBRATION FACTORS FOR VINTEN IONIZATION CHAMBER SIMULATED USING FOUR MONTE CARLO METHODS****Speaker**

Ms Brittany Broder

10:47–10:50

**Digital coincidence counting system with  $4\pi\beta$ (PPC)- $\gamma$  for the standardization of Co-60****Speaker**

Ms Minji Han

10:50

11:20

**Radionuclide metrology techniques: 4 Oral contributions****Session** | **Conveners:** Christophe BOBIN, Ryan Fitzgerald

11:20–11:40

**A bilateral comparison between LNHb and PTB to determine the activity concentration of the same  $^{125}\text{I}$  solution****Speaker**

Karsten Kossert

11:40–12:00

**Implementation of digital selective sampling method (SESAM) on a  $4\pi\beta$ (PC)- $\gamma$ (NaI) system****Speaker**

Haoran LIU

12:00–12:20

**Standardization of Tc-99m by digitizer-based  $4\pi\text{ce}$ (LS)- $\gamma$  coincidence counting****Speaker**

Dr Marcell Takacs

12:20–12:40

**Comparative study of digital electronic systems available at IRA primary laboratory****Speaker**

Dr Teresa Duran

12:40

14:10

**Radionuclide metrology techniques: 3 Oral contributions****Session** | **Conveners:** Christophe BOBIN, Ryan Fitzgerald

14:10–14:30

**Standardization of Rn-222 concentration using the multi-electrode proportional counter****Speaker**

Ms Rio Furukawa

14:30–14:50

**A Calibration procedure of beta-gamma coincidence measurements using four radioxenon spikes****Speaker**

Mr Boxue LIU

14:50–15:10

**The standardisation of  $^{125}\text{I}$  and  $^{109}\text{Cd}$  using gamma-X coincidences via the National Nuclear Array****Speaker**

Dr Robert Shearman

15:10

15:40

**Radionuclide metrology techniques: 1 Oral contribution and ICRM WG Meeting****Session** | **Conveners:** Christophe BOBIN, Ryan Fitzgerald

15:40–16:00

**Application of inductively coupled plasma tandem mass spectrometry for re-measuring the half life of long lived radionuclides****Speaker**

Dr Ben Russell

16:00–17:20

**ICRM WG Meeting: Radionuclide Metrology Techniques (RMT)****Speakers**

Ryan Fitzgerald, Christophe BOBIN

17:20