

CARM 2018

NPL, Teddington, Middlesex TW11 0LW

6th – 8th November 2018

Final agenda

Day 1 – Tuesday 6 th November	
<u>Radionuclide Metrology – Frontiers of the Underpinning Science</u>	
0900 – 1040	Reception and coffee
1040 – 1050	Welcome – Julian Dean (NPL)
1050 – 1200	<i>Session 1: Current frontiers in physics with fast neutrons (Chair: Paddy Regan, NPL / University of Surrey)</i>
1050 – 1115	Stephan Oberstedt (JRC Geel) – ‘Nuclear fission – research with neutrons in the resolved-resonance and fast-energy region’
1115 – 1140	Simon Rice (AWE) – ‘An overview of AWE’s research interest and work using fast-neutron induced reactions / nuclear data’
1140 - 1200	Mike Bunce (NPL) – ‘Neutron generator upgrade’
1200 – 1300	Lunch
1300 – 1450	<i>Session 2: Technologies for radionuclide separation and production (Chair: David Read, NPL / University of Surrey)</i>
1300 – 1325	Sam King (RWM) – ‘Geological disposal – the endgame for managing higher activity radioactive waste’
1325 – 1350	Aude Bombard (Triskem) - ‘TK200 Resins series: New developments for the specific separation and subsequent measurement of actinides and difficult to measure radionuclide ⁹⁹ Tc’
1350 – 1410	Vicky Frankland (University of Surrey) – ‘Characterisation of uranium mineral phases by Time-Resolved Laser Fluorescence and Raman Spectroscopy’
1410 - 1425	Ben Webster (NPL / University of Surrey) – ‘Radiochemical purification of ¹⁵⁵ Tb produced at the CERN-MEDICIS facility for applications in nuclear medicine’
1425 – 1450	Carl Wheldon (University of Birmingham) – ‘Radioisotope production at the Birmingham Cyclotron Facility’
1450 – 1510	Tea / coffee
1510 – 1700	<i>Session 3: Nuclear data (Chair: Paddy Regan, NPL / University of Surrey)</i>
1510 – 1520	Paul Davies (University of Manchester) – ‘Status update of UK Nuclear Data Network’
1520 - 1540	Paula Salvador-Castiñeira (NPL) – ‘Towards the adoption of ²³⁸ U(n,f) and ²³⁷ Np(n,f) as primary standards for fast neutron energies’

1540 – 1605	Toby Wright (University of Manchester) – ‘Recent neutron cross section measurements for the UK Nuclear Data needs’
1605 – 1620	Rhiann Canavan (NPL / University of Surrey) – ‘Excited state lifetime studies in the N=100 isotone ¹⁶⁶ Dy, using the NuBALL array’
1620 – 1635	Giorgio Battaglia (NPL / University of Glasgow) – ‘Laser-driven radioisotopes production at SCAPA for medical and industrial application’
1635 - 1700	Thomas Cocolios (University of Leuven, Belgium) – ‘Producing medical radioisotopes with the ISOL technique’
1900	Conference dinner at the Wharf Restaurant, Teddington (seated by 1930)

Day 2 – Wednesday 7th November Radionuclide Metrology – Real World Applications	
0930 - 1000	Coffee
1000 – 1205	<i>Session 4: Applications in industry, academia and the environment (Chair: Ben Russell, NPL)</i>
1000 – 1025	Jen Barnes (Wood) – ‘Design and deployment of an in-situ underwater gamma monitoring system’
1025 – 1050	Peter Roberts (Cavendish Nuclear) – ‘The application of fast neutron detectors and innovative analysis in the characterisation of fissile material’
1050 – 1115	Andrew Robinson (NPL) – ‘Metrology for nuclear medicine imaging’
1115 – 1140	Ian Della Rocca (Symetrica) - ‘Delayed gamma ray and neutron detection for Photofission in a European port as part of C-BORD’
1140 - 1205	Chantal Nobs (CCFE) – ‘The application of gamma-spectroscopy techniques to neutron spectrum unfolding methods for fusion’
1205 - 1315	Lunch
1315 – 1430	<i>Session 4, continued (Chair: Peter Ivanov, NPL)</i>
1315 – 1345	Julian Dean (NPL) – ‘Results of the NPL Environmental PTE 2017’
1345 – 1405	Emma Braysher (NPL / University of Surrey) – ‘Development of Certified Reference Materials in support of NORM Characterisation’
1405 – 1430	Ben Russell (NPL) – ‘Development of reference materials as part of the H2020 Insider project’
1430 - 1450	Tea / coffee
1450 – 1655	<i>Session 5: Applications in air monitoring (incorporating the Airborne Radioactivity Monitoring Users’ Group, ARMUG) (Chair: Steven Bell, NPL)</i>

1450 – 1515	Matthew Goodwin (AWE) – ‘Radiometric science in support of the Comprehensive Nuclear Test-Ban Treaty’
1515 – 1540	Peter Rhodes (Kromek) – ‘Euramet Preparedness: Enhancements to Kromek’s QuantAir’
1540 – 1605	<i>speaker to be announced</i>
1605 - 1630	<i>speaker to be announced</i>
1630 - 1655	Steven Bell (NPL) – ‘Radioactive gas metrology at NPL’

Day 3 – Thursday 8th November	
<u>Radionuclide Metrology – The Ionising Radiation Metrology Forum</u>	
0930 - 1000	Coffee
1000 – 1235	<i>Session 6: IRMF (Chair: Simon Threadingham, dstl)</i>
1000 – 1010	Chair’s welcome and introduction
1010 – 1050	Pete Burgess (Radiation Metrology Ltd) – ‘Advantages of SiPM’
1050 – 1120	Simon Threadingham (dstl) – ‘Good Practice Guides update’
1120 - 1155	Laura Hunter-Smith (Wood) – ‘Development of a solid radioactive waste characterisation good practice guide document’
1155 - 1235	Alan Shippen (Create Technologies Limited) – ‘Optimised shielding approach using the N-Visage system’
1235 - 1345	Lunch
1345 – 1445	<i>Session 6, continued</i>
1345 – 1415	Simon Threadingham (dstl) – ‘Potential error in beta dose rate approximation’
1415 – 1445	‘Supply and disposal crisis of ¹³⁷ Cs using CsCl’ (<i>speaker to be announced</i>)
1445 - 1510	Tea / coffee
1510 - 1550	<i>Session 6, continued</i>
1510 – 1530	Pete Burgess (Radiation Metrology Ltd) – ‘The importance of type test data’
1530 – 1540	Shaun Marriott (BAE Systems) – ‘Fault recovery share’
1540 – 1550	Simon Threadingham (dstl) – Thanks and AOB
1550 - 1600	CARM 2018 close – Julian Dean (NPL)