

Appendix 10: Publications

Codes and Guides

In December 2014, ARPANSA published the *Code for the Safe Transport of Radioactive Material*, RPS C-2 (commonly referred to as the Transport Code), which replaces the *Code of Practice for the Safe Transport of Radioactive Material (2008)* (RPS 2). It adopts the International Atomic Energy Agency *Regulations for the Safe Transport of Radioactive Material 2012 Edition* (No. SSR-6). This Code is intended to establish uniform requirements for the transport of radioactive material in Australia by road, rail or those waterways not covered by the Maritime legislation.

Book Chapters

Gies, P, Henderson, S & King, K, 2014, 'Ultraviolet radiation: nuts and bolts of the big skin cancer factor', *Sun, Skin and Health*, T Slevin (ed.), CSIRO Publishing, Melbourne.

Gies, P, McLennan A & Javorniczky J, 2014, 'UV protection by clothing, hats and umbrellas', *Sun, Skin and Health*, T Slevin (ed.), CSIRO Publishing, Melbourne.

Journal Articles

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Butler, DJ, Ramanathan, G, Oliver, C, Cole, A, Lye, L, Harty, PD, Wright, T & Webb, DV, 2014, Australas. 'Direct megavoltage photon calibration service in Australia', *Phys. Eng. Sci. Med.*, vol. 37 pp. 753-761, 7 September.

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Guo, S, Gies, P, King, K, & Lucas R, 2014, 'Vitamin D and acculturation in cardio-metabolic health: A community-based study of East Asian Australians living in Canberra, Australia', *Photochem Photobiol*, vol. 90 pp. 1455-1461.

Hartley, M, Hoare, S, Lithander, FE, Neale, R, Hart, P, Gorman, S, Gies, P, Sherriff, J, Swaminathan, A, Beilin, L, Mori, T, King, L, Black, LJ, Marshall, K, Fan Xiang, Wyatt, C, King, C, Slevin, T & Lucas, R, 2015, 'Comparing the effects of sun exposure and vitamin D supplementation on vitamin D insufficiency, and immune and cardio-metabolic function: The Sun Exposure and Vitamin D Supplementation (SEDS) Study', *BMC Public Health* MS:2317838021571183.

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Marks, P, Hayton, A, Beveridge, T, Thomas, P & Wallace, A, 2014, 'Report on the European DOSE DATAMED projects', *Spectrum* 21(6), pp. 20-23.

Oliver, C, Butler, D, Webb, D, Wright, T, Lye, J, Ramanathan, G, Harty, P & Takau, V, 2015, 'Maintaining the accuracy of the ⁶⁰Co calibration service at the ARPANSA post source replacement in 2010', *Phys. Eng. Sci. Med.*, vol. 38 pp. 325-330, June.

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and the ARPANSA standards for absorbed dose to water in high-energy photon beams', *Radiation Protection Dosimetry*, 12 September.

- Simpson, S, Stewart, N, van der Mei, I, Otahal, P, Charlesworth, J, Ponsonby, AL, Blizzard, L, Dwyer, T, Pitas, F, Gies P & Taylor B, 2015, 'Stimulated PBMC-produced IFN- γ and TNF- α are associated with altered relapse risk in multiple sclerosis: results from a prospective cohort study', *J. Neurol. Neurosurg. Psychiatry* vol. 86 pp. 200-2017.
- Thomas, P, Hayton, A, Beveridge, T, Marks, P & Wallace, A, 2014, 'National Diagnostic Reference Level Service data 2011-2013 and Dose Saving in CT', *Spectrum* 21(10), pp. 15-17.
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- Wright, T, Lye, JE, Ramanathan, G, Harty, PD, Oliver, C, Webb, DV & Butler, DJ, 2015, 'Direct calibration in megavoltage photon beams using Monte Carlo conversion factor: validation and clinical implications', *Phys. Med. Biol.* Vol. 60 pp. 883-904, January 2015.

Technical Reports

- Urban, D, Tjong, L & Karipidis, K, 2014, 'Measurement of Extremely Low Frequency Electric and Magnetic Fields Associated with Electricity Supply and Distribution Infrastructure'. *ARPANSA Technical Report No. 170*, August.
- Wallace, A, Hayton, A, Thomas, P & Beveridge, T, 2015, 'The 2011 - 2013 National Diagnostic Reference Level Service Report', *ARPANSA Technical Report No. 171*, February.

Conference Papers

- Beveridge, T, 2014, 'Comparison of system indicated organ dose', *2014 Combined Scientific Meeting*, Melbourne, 4 – 7 September.
- Bokor, I, 2014, 'Development and validation of an automated unit for the extraction of caesium from seawater', *South Pacific Environmental Radioactivity Association (SPERA) Conference*, Darwin, September.
- Butler, D, Stevenson, A, Wright, T, Hall, C & Häusermann, D, 2014, 'Spatial dosimetric response of an ionisation chamber to kilovoltage synchrotron radiation by 2D scanning in a sub-millimetre beam', *Synchrotron Users Meeting, Melbourne*, 20-21 November.
- Carey, E, 2014, 'Monte Carlo modelling to improve the calibration of gamma-ray spectrometers', *South Pacific Environmental Radioactivity Association (SPERA) Conference*, Darwin, September.

- Grzechnik, M, Bokor, I, Urban, D, Carpenter, J, & Hirth, G, 2014, 'Monitoring Australia's Northern Coastline in advance of signs from Fukushima', *Proceedings of the International Conference on Radioecology & Environmental Radioactivity*, Barcelona 7-12 September.
- Grzechnik, M, Orr, B, Bokor, I, Hirth, G, & Solomon, S, 2014, 'Modelling and monitoring in preparedness for Nuclear Powered Warship Visits in Australia', *Proceedings of the International Conference on Radioecology & Environmental Radioactivity*, Barcelona 7-12 September.
- Hardman, D, 2014, 'The radionuclide monitoring stations operated by Australia', *South Pacific Environmental Radioactivity Association (SPERA) Conference*, Darwin, September.
- Harty, P, Ramanathan, G, Lye, G, Wright, T, Butler, D, Stevenson, A, Hall, C, Cornelius, I, Takau, V, 2014, 'Absolute Dosimetry using a Graphite Calorimeter on the Imaging and Medical Beamline at the Australian Synchrotron', *Synchrotron Users Meeting*, Melbourne, 20-21 November.
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- Harty, PD, Ramanathan, G, Butler, DJ, Lye, JE, Hall, CJ & Stevenson, AW, 2014, 'Absolute x-ray dosimetry based on calorimetry at dose rates above 1 kGy/s on a synchrotron medical beam line', *2014 Combined Scientific Meeting*, Melbourne, 4-7 September.
- Hayton, A, Wallace, A, Marks, P, Thomas, P, Beveridge, T and Johnston, P, 2014, 'Estimating risk from adult and paediatric medical imaging - What fraction does Medicare statistics really cover?', *2014 Combined Scientific Meeting*, Melbourne, 4 – 7 September.
- Hirth, G, Carpenter, J, Bollhöfer, A, Johansen, M, & Beresford, N, 2014, 'Whole-organism concentration ratios in wildlife inhabiting Australian uranium mining environments', *Proceedings of the International Conference on Radioecology & Environmental Radioactivity*, Barcelona 7-12 September.
- Kupfer, T, Lehmann, J, Franich, R, Butler, D, Ramanathan, G & Rykers, K, 2014, 'A large detector for small fields - measurement of dose-area product with a Bragg Peak ionization chamber in stereotactic radiotherapy fields', *2014 Combined Scientific Meeting*, Melbourne, 4-7 September.
- Litwin, M, 2014, 'Characteristic limits for solid state nuclear track detectors'. *South Pacific Environmental Radioactivity Association (SPERA) Conference*, Darwin, September.

- Long, S, 2014, 'The 2013 Australasian gamma-spectrometry capability exercise', *South Pacific Environmental Radioactivity Association (SPERA) Conference*, Darwin, September.
- Marks, P, Wallace, A, Thomas, P, Hayton, A, Beveridge, T & Johnston, P, 2014, 'Report on the European Society of Radiology EUROSAFE Imaging Program', *Australian Radiation Protection Society*, Hobart, 26 – 29 October.
- Marks, S, 2014, 'ARPANSA's emergency ground deposition measurements in Fukushima Japan – using ISOCS to estimate an unknown relaxation depth'. *South Pacific Environmental Radioactivity Association (SPERA) Conference*, Darwin, September.
- Oliver, CP, Butler, DJ, Cole, A, Harty, PD, Ramanathan, G, Takau, V, Wright, T, Lye, JE & Webb, DV, 2014, 'Calibration of secondary standard ionization chambers in linear accelerator megavoltage photon beams', *2014 Combined Scientific Meeting*, Melbourne, 4-7 September.
- Ramanathan, G, Harty, P, Oliver, C & Butler, D, 2014, 'Preliminary electron calorimetry measurements at ARPANSA', *Australasian Radiation Protection Society Conference*, Hobart, 26-29 October.
- Ramanathan, G, Harty, P, Wright, T, Lye, J & Butler, D, 2014, 'Calorimetry for synchrotron radiation', *Synchrotron Users Meeting*, Melbourne, 20-21 November.
- Ramanathan, G, Harty, PD, Butler, DJ, Wright, T, Lye, J, Oliver, C & Webb, DW, 2015, 'Photon Beam and Electron Beam Dosimetry using Calorimetry at ARPANSA', *Council of Ionizing Radiation Measurements and Standards Conference*, Gaithersburg, 27-29 April.
- Sdraulig, S, 2014, 'Background radioactivity in northern Australian seafood', *South Pacific Environmental Radioactivity Association (SPERA) Conference*, Darwin, September.
- Sdraulig, S, 2014, 'Natural background radiation dose from the average Australian diet', *South Pacific Environmental Radioactivity Association (SPERA) Conference*, Darwin, September.
- Takau, V, Oliver, C, Ramanathan, G, Harty, P, Lye, J, Webb & D, Butler, D, 2014, 'Average calibration coefficients of common radiotherapy ionisation chambers measured at ARPANSA', *2014 Combined Scientific Meeting*, Melbourne, 4-7 September.
- Thomas, P, 2014, 'Evidence of dose saving in CT using iterative reconstruction from data submitted to the National Diagnostic Reference Level Service in 2013', *2014 Combined Scientific Meeting*, Melbourne, 4 – 7 September.
- Wallace, A & Hayton, A, 2015, 'Lessons Learned from Developing and Establishing a National Web-Based MDCT DRL Survey Program', *European Congress of Radiology*, Vienna, 6 – 10 March.
- Wallace, A, 2014, 'Perspectives on Radiation Protection of the Patient: An Update', 2014, *Australian Radiation Protection Society*, Hobart, 26 – 29 October.
- Wallace, A, Thomas, P & Hayton A, 2015, 'Data distributions and the impact of iterative reconstruction algorithms from the first three years of the Australian MDCT DRL project (2011-2014)', *European Congress of Radiology*, Vienna, 6 – 10 March.
- Wallace, A, Thomas, P, Marks, P, Hayton, A & Beveridge, T, 2014, 'The National Diagnostic Reference Level Service Data Distributions for MDCT (2011 – 2014)', *2014 Combined Scientific Meeting*, Melbourne, 4 – 7 September.

Presentations and Seminars

- Beveridge, T, Marks, P, Tomas, P, Hayton, A & Wallace, 2015, 'CT dose in adult SPECT/CT scans' (poster) *Australian & New Zealand Society of Nuclear Medicine*, Brisbane, 17 -20 April.
- Butler, DJ, Takau, V, Ramanathan, G, Harty, PD, Wright, T, Lye, J, Oliver, C, 2015, Presentations at the *ARPANSA Practical Reference Dosimetry Course*, Melbourne, 21-24 April.
- Karipidis, K, 2014, 'Occupational exposure to electromagnetic fields', *Australian Institute of Occupational Hygienists*, Annual Conference, Melbourne, Victoria, November.
- Karipidis, K, 2014, 'Radiation Safety' *Guest lecture in Environmental Influences in Health*, Monash University, Victoria, September.
- Wallace, A, 2014, 'General Safety requirements, Part 3 of the IAEA Basic Safety Standard', *ACPSEM Summer School*, Melbourne, 7 November.
- Wallace, A, 2015, 'IAEA Expert Mission on the Establishment of DRLs at the UAE Hospitals', Abu Dhabi, United Arab Emirates, 19-23 April.

Reports

- Butler, D, Takau, V, Ramanathan, G, Harty, P, Oliver C, Webb, D & Wright, T, 2015, 'Report to the 22nd Meeting of the CCRI(I): Recent Activities in Measurement Standards and Dosimetry at ARPANSA, 2013-2015', Paris 24-26 March.