

RADIATION PROTECTION FROM BANANAS TO BOATS PACIFIC BAY RESORT | COFFS HARBOUR, NSW 20-24 OCTOBER 2024

This program is endorsed by ACPSEM for CPD Points

Australasian College of Physical Scientists & Engineers in Medicine

| SUNDAY 20   | OCTOBER 2024               |                                      |        |                         |     |                              |
|-------------|----------------------------|--------------------------------------|--------|-------------------------|-----|------------------------------|
| 1300-1700   | Registration desk<br>opens | Name Badge &<br>Lanyard sponsored by | TELLUS | Satchels sponsored by   | BHP | Foyer of Island<br>Courtyard |
| 1400 - 1700 | Exhibitors bump in         |                                      |        |                         |     | Island Courtyard             |
| 1600-1800   | ARPS Executive Meet        | ing                                  |        |                         |     | Boardroom 3                  |
| 1800 - 2000 | Welcome Reception          |                                      | Sponso | red by Redition for Rad |     | Bayside Green                |



| MONDAY 2        | 1 OCTOBER 2024   | 4                                    |                           |                       |           |   |                                   |
|-----------------|--|--------------------------------------|---------------------------|-----------------------|-----------|---|-----------------------------------|
| 0730 - 0815     | <b>"Women in Radiatio</b><br>To meet at the Hotel                  | -                                    |                           |                       |           |   | Pacific Bay Resort<br>Hotel Lobby |
| 0800 - 1700     | Registration Desk<br>Opens   | Name Badge &<br>Lanyard sponsored by | TELLUS                    | Satchels spo          | nsored by | BHP                                     | Foyer of Island<br>Courtyard      |
| 0800 - 1700     | Speaker Room opens   | S                                    |                           |                       |           |   | Boardroom 3                       |
| 0800 – 1545     | Exhibition + Barista (   | Cart opens                           | Barista cart sponsored by | Australian Government |           | NSTO<br>nce. Ingenuity. Sustainability. | Island Courtyard &<br>Jetty Room  |
| Plenary Sessio  | n 1  |                                      |                           |                       |           |   | Marina Room                       |
| 0900 – 0905     | Convenor Opening Comments  |                                      |                           |                       |           |   |                                   |
|                 | Brent Rogers, ARPS 2024 Convenor                                   |                                      |                           |                       |           |   |                                   |
| 0905 - 0915     | Welcome to Count   | try                                  |                           |                       |           |   |                                   |
|                 | Aunty Jenny Skinne   | er                                   |                           |                       |           |   |                                   |
| Chair: Paula Vo | eevers   |                                      |                           |                       |           |   |                                   |
| 0915 – 1030     | Keynote Address  |                                      |                           |                       |           |   |                                   |
|                 | Radiation Protection Stewardship in a Rapidly Evolving Environment |                                      |                           |                       |           |   |                                   |
|                 | Dr Gillian Hirth, Ch   | ief Executive Officer, ARPANSA       |                           |                       |           |   |                                   |
|                 | Followed by Q&A  |                                      |                           |                       |           |   |                                   |
| 1030 – 1100     | Morning Refreshme  | ents & Trade Exhibition              |                           | Sponsore<br>by        | ed        | ES                                      | Island Courtyard &<br>Jetty Room  |

| 1100 - 1220       | Concurrent Session 1.1 – Marina Room   |   | Concurrent Session 1.2 - Crystal Sapphire Room                    |                                  |  |
|-------------------|--|---|---|----------------------------------|--|
|                   | Theme: Public and Environment 1  | Them  | ne: Radiation Protection Culture                                  |                                  |  |
|                   | Chair: Jim Hondros   | Chair: Jenny Diffey   |   |                                  |  |
| 1100 - 1120       | Developing an ARPANSA framework for radiation monitoring,<br>measurement, and assessment in the Australian environment | Diversity, Equity, Inclusion and Belonging in the Nuclear Industry<br>Darren McPherson, ANSTO   |   |                                  |  |
|                   | Dr Adrian Hawley, ARPANSA  |   |   |                                  |  |
| 1120 - 1140       | Western Australia Environmental Monitoring Working Group Activities  | Consu   | ultation to 360 Engagement: Moving into                           | the 21st Century                 |  |
|                   | James De Corrado, ARPANSA  | Cameron Jeffries, SA Medical Imaging  |   |                                  |  |
| 1140 - 1200       | UNSCEAR Evaluation of Public Exposure to Ionizing Radiation<br>Dr Cameron Lawrence, ARPANSA                            | Transforming Radiation Safety: Harnessing 3D Motion Capture for<br>Holistic Ergonomic Solutions |   |                                  |  |
|                   |  | Rhiar   | n Hoban, ANSTO  |                                  |  |
| 1200 – 1220       | Exposure to Naturally Occurring Radon in the Workplace - A Guidance Document   |   | NRPS Journal and Newsletter: The History<br>itting to the journal | , the future and                 |  |
|                   | Emma Barnes, ARPANSA   | Willia  | am Bartolo, Bartolo Safety Management S                           | Service                          |  |
| 1220 –1320        | Lunch & Trade Exhibition   |   | Sponsored by  | Island Courtyard &<br>Jetty Room |  |
| Plenary Session   | 2  |   |   | Marina Room                      |  |
| Chair: Bronte Sid | al   |   |   |                                  |  |
| 1320 – 1405       | Keynote Address  |   |   |                                  |  |
|                   | Best Practice in Radiation Protection for the Australian NPS Enterprise  |   |   |                                  |  |
|                   | Loch Castle, Acting Assistant Director General Nps Governance Authority, Australian Submarine Agency                   |   |   |                                  |  |

| 1410 - 1510 | Concurrent Session 2.1 - Marina Room<br>Theme: Future Developments & Challenges 1                                | Concurrent Session 2.2 - Crystal Sapphire Room<br>Theme: Education   |  |  |
|-------------|--|--|--|--|
|             | Chair: Bronte Sial   | Chair: Nicole Willetts   |  |  |
| 1410 - 1430 | It's a Long Way to the Shop if You Want a Sausage Roll<br>Cameron Jeffries, SA Medical Imaging                   | Tools of the Trade – Enhancing Education in Radiation Protection<br>Instrumentation for the Trainee Health Physics Surveyor<br>Melanie Hulskamp, ANSTO |  |  |
| 1430 – 1450 | Radiation Harmonisation at IRPA16 - Main Themes and Outcomes<br>Dr Amy Macintosh, ARPANSA                        | Introduction to Gamma Spectrometry as part of the ANSTO Health<br>Physics Core Competency in Radiation Detection and Measurement<br>Liam Brophy, ANSTO |  |  |
| 1450 – 1510 | Updating the ANRDR: keeping ahead of Australia's expanding<br>radiation industry<br>Dr Cameron Lawrence, ARPANSA | Spinning Science: Harnessing Play-Based Learning in Science literacy<br>education<br>Henriette Rossouw, Maniacs Learn Through Play                     |  |  |
| 1510 – 1540 | Afternoon Refreshments & Trade Exhibition  | Sponsored by Island Courtyard & Jetty Room   |  |  |





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| 1540 - 1640 | Concurrent Session 3.1 – Marina Room   | Concurrent Session 3.2 - Crystal Sapphire Ro  | om          |  |
|-------------|--|---|-------------|--|
|             | Theme: Future Developments & Challenges 2  | Theme: NORM 1   |             |  |
|             | Chair: Ron Rubendra  | Chair: Dr Cameron Lawrence  |             |  |
| 1540 – 1600 | An Overview of the activities at the Centre for Radiation Research,<br>Education and Innovation at the University of Adelaide<br>Professor Antony Hooker, Centre for Radiation Research, Education<br>and Innovation, University of Adelaide | Radiation Accounting: Insights from an Australian Mineral Laboratory<br>Lisa Allen, Nagrom  |             |  |
| 1600 – 1620 | Radiocesium accumulation in wild animals from Fukushima, with<br>radiation doses to human consumers<br>Donovan Anderson, Institute of Radiation Emergency Medicine,<br>Hirosaki University, Japan  | Radon (222Rn) exhalation from petroleum processing products<br>Dr Riaz Akber, Safe Radiation  |             |  |
| 1620 – 1640 | Advancements and Challenges in Absorbed Radiation Dose<br>Assessment: A Capability Analysis of Biodosimetry in Australia<br>Jonathan Sentzas, ARPANSA  | Environmental scan of global aquatic dispersion models: Enhancing<br>ARPANSA's capabilities for predicting transport from radiological<br>releases<br>Dr Amy Macintosh, ARPANSA |             |  |
| 1645 - 1745 | ARPS AGM   |   | Marina Room |  |
| 1800        | Young Generation Network Dinner. Bayside Bar and Grill, meet at the Hotel Lobby  |   |             |  |



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| TUESDAY 2         | 2 OCTOBER 2024   | 1  |        |                  |             |     |                                  |
|-------------------|--|--|--------|------------------|-------------|-----|----------------------------------|
| 0715 – 0845       | Breakfast Worksho<br>Radiological Emerge   | p (Registration required)<br>ency Workshop |        |                  |             |     | Crystal Sapphire Room            |
| 0800 – 1700       | Registration Desk<br>Opens   | Name Badge &<br>Lanyard sponsored by       | TELLUS | Satchels spo     | onsored by  | BHP | Foyer of Island<br>Courtyard     |
| 0815 – 1520       | Exhibition + Barista Cart Opens Barista cart sponsored by  |  |        | Island Courtyard |             |     |                                  |
| 0845 - 1600       | Speaker Room open  | 1S   |        |                  |             |     | Boardroom 3                      |
|                   |  |  |        |                  |             |     |                                  |
| Plenary Session 3 |  |  |        |                  | Marina Room |     |                                  |
| Chair: Brent Ro   | ogers, ARPS 2024 Con   | venor                                      |        |                  |             |     |                                  |
| 0900 – 0905       | Welcome to Day 2   |  |        |                  |             |     |                                  |
| 0905 – 1005       | Boyce Worthley Oration<br>Adventures in Radiationland - A Personal Journey from the Invisible Light to the Blinding Light<br>Associate Professor Lee Collins |  |        |                  |             |     |                                  |
| 1005 – 1040       | Morning Refreshme  | nts & Trade Exhibition                     |        |                  |             |     | Island Courtyard & Jetty<br>Room |
| Plenary Sessio    | ession 4   |  |        |                  |             |     | Marina Room                      |
| Chair: Brent Ro   | nt Rogers, ARPS 2024 Convenor  |  |        |                  |             |     |                                  |
| 1040 – 1125       | Keynote Address      Radiological Challenges at Oak Ridge National Laboratory      Dr Scott O. Schwahn, Senior Health Physicist – Oak Ridge Laboratory       |  |        |                  |             |     |                                  |

| 1130 - 1230     | Concurrent Session 4.1 – Marina Room   | Concurrent Session 4.2 - Crystal Sapphire Room  |                                  |  |  |
|-----------------|--|---|----------------------------------|--|--|
|                 | Theme: Public and Environment 2  | Theme: Medical  |                                  |  |  |
|                 | Chair: Dr Cameron Lawrence   | Chair: Nicole Willetts  |                                  |  |  |
| 1130 – 1150     | Radiating Expertise<br>Nikki Keighran, ANSTO   | The Big Banana Equivalent Dose: A Personal Perspective on Radiation<br>Risk Communication in Medical Imaging<br>Dr Jennifer Diffey, Hunter New England Imaging      |                                  |  |  |
| 1150 – 1210     | New Australian Codes for Radiation Gauges and Well Logging<br>Arne Biesiekierski, ARPANSA  | Radiation Measurement and Protection Challenges Associated with<br>212Pb for Targeted Alpha Therapy<br>Drew Watson, Dept of Health Forensic and Scientific Services |                                  |  |  |
| 1210 - 1230     | Determining Radiological Guideline Values for Recreational Water<br>Rachel Williams, ARPANSA   | Experiences in using Monte Carlo simulation for dose calculation in radiation protection<br>Dr Christopher Poole, Radiation Analytics                               |                                  |  |  |
| 1230 – 1330     | Lunch & Trade Exhibition   |   | Island Courtyard & Jetty<br>Room |  |  |
| Plenary Session | 5  |   | Marina Room                      |  |  |
| Chair: Cameron  | Jefferies  |   |                                  |  |  |
| 1330 - 1415     | 1330 - 1415    Keynote Address      "Literacy is not a luxury" – building radiation risk and hazard awareness      Helen Cassidy, Manager, Operations & Inventory, Australian Radioactive Waste Agency |   |                                  |  |  |
| 1415 - 1445     | Poster Session   |   | Jetty Room                       |  |  |
| 1445 - 1515     | Afternoon Refreshments & Trade Exhibition  |   | Island Courtyard & Jetty<br>Room |  |  |

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| 1515 - 1615 | Concurrent Session 5.1 – Marina Room<br>Theme: Instrumentation<br>Chair: Matt Wiggins  | Concurrent Session 5.2 - Crystal Sapphire Room<br>Theme: Future Developments and Challenges 3<br>Chair: Jenny Diffey  |
|-------------|--|---|
| 1515 – 1535 | Quality Management in a Radioanalytical Laboratory<br>Drew Watson, Dept of Health Forensic and Scientific Services   | Artificial Intelligence – Influences on Radiation Safety now and in the future<br>Ron Rubendra, ARPS  |
| 1535 – 1555 | Use of an Extrapolation Ionization Chamber for Uranium Slab Dose<br>Measurements<br>Dr Scott Schwahn, Oak Ridge National Laboratory                                  | The Effect of Radon and Radon Decay Products in the Lung of Small<br>Animals<br>Professor Antony Hooker, Centre for Radiation Research, Education<br>and Innovation, University of Adelaide |
| 1555 – 1615 | Determining The Radon Diffusion Coefficient in A Waterproof Material<br>Dr Chutima Kranrod, Institute of Radiation Emergency Medicine,<br>Hirosaki University, Japan | Voyage to Safety: Setting the Standard for Space Fission Reactor Safety<br>in the Final Frontier<br>Kaan Kaban, ANSTO   |
| 1900 – 2300 | ARPS Conference Dinner - Restaurant & Deck, Pacific Bay Resort   |   |



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| WEDNESDA                           | Y 23 OCTOBER 20  | 24  |                      |  |   |                                  |
|------------------------------------|--|---|----------------------|--|---|----------------------------------|
| 0745 – 0915                        | ARPAB Breakfast Wo   | orkshop (Registration required              | i)                   |  |   | Crystal Sapphire Room            |
| 0840 – 1630                        | Registration Desk<br>Opens   | Name Badge &<br>Lanyard sponsored by        | TELLU                | JS Satchels sp   | onsored by <b>BHP</b>                       | Foyer of Island<br>Courtyard     |
| 0900 - 1600                        | Speaker Room opens   | S   |                      |  |   | Boardroom 3                      |
| 0840 – 1505                        | Exhibition + Barista (   | Cart Opens                                  | Barista cart sponsoi | Australian Government  | ANSTO<br>Science. Ingenuity. Sustainability | Island Courtyard                 |
| Plenary Session<br>Chair: Simon Tu |  |   |                      |  |   | Marina Room                      |
| 0925 – 0930                        | Welcome to Day 3   |   |                      |  |   |                                  |
| 0930 – 1015                        | Sponsored Guest Speaker      Mental models of electromagnetic waves and life      Dr Julie McCredden, President, ORSAA   |   |                      |  |   |                                  |
| 1015 – 1050                        | Morning Refreshmer   | nts & Trade Exhibition                      |                      |  |   | Island Courtyard &<br>Jetty Room |
| 1050 – 1210                        | Concurrent Session (<br>Theme: Non-Ionising<br>Chair: Bill Bartolo   | 6.1 – Marina Room<br>g Radiation 1 (RF-EMF) |                      | Concurrent Session<br>Theme: Regulatory<br>Chair: Paula Veever |   | m                                |
| 1050 - 1110                        | The WHO systematic reviews into RF and health: (Part I) what are they<br>and why are they importantAustralian Safeguards and Non-Proliferation Office (ASNO) permits to<br>hold nuclear material—all your questions answered!Associate Professor Ken Karipidis, ARPANSAPeter Nolan, Australian Safeguards and Non-Proliferation Office |   |                      |  |   |                                  |
| 1110 - 1130                        | The WHO systematic they found  | c reviews into RF and health: (P            | art II) what have    | ANSTO Science and<br>Joshua Reus-smit, A                       | l Technology for 21st Centu<br>NSTO         | ry RNEPR capability              |

|                            | Associate Professor Ken Karipidis, ARPANSA   |   |  |
|----------------------------|--|---|--|
| 1130 – 1150                | Has public RF-EMF exposure in Australia changed over a decade?<br>Dr Chhavi Raj Bhatt, ARPANSA   | How does ARPANSA Influence and Adopt International Standard<br>Radiation Protection in Australia?<br>Dr Marcus Grzechnik, ARPANSA             |  |
| 1150 – 1210                | Does population density affect personal far-field radiofrequency–<br>electromagnetic exposures? Findings from Gold Coast measurements<br>Dr Chhavi Raj Bhatt, ARPANSA  | USP's Journey in Nuclear Science: Past, Present and Future Endeavor<br>Neil Singh, ARPS Pacific Outreach Initiative/University of South Pacif |  |
| 1210 - 1315                | Lunch & Trade Exhibition   | Island Courtyard & Je<br>Room   |  |
| Plenary Sessio             | n 7  | Marina Room   |  |
| Chair: Frank Ho            | arris, Rio Tinto   |   |  |
| 1315 – 1405                | Panel Discussion: The latest revision of the ICRP Recommendations: A   | e the changes fit for purpose for Australia and New Zealand?  |  |
|                            | Panelists:<br>Jim Hondros, JRHC  |   |  |
|                            | Paula Veevers, Queensland Health<br>Brent Le Vert, Office of Radiation Safety  |   |  |
| 1410 – 1510                |  | Concurrent Session 7.2 - Crystal Sapphire Room  |  |
| 1410 – 1510                | Brent Le Vert, Office of Radiation Safety  | Concurrent Session 7.2 - Crystal Sapphire Room<br>Theme: NORM 2   |  |
| 1410 – 1510                | Brent Le Vert, Office of Radiation Safety   Concurrent Session 7.1 – Marina Room   |   |  |
| 1410 - 1510<br>1410 - 1430 | Brent Le Vert, Office of Radiation SafetyConcurrent Session 7.1 – Marina RoomTheme: Non-Ionising Radiation 2 (RF-EMF)  | Theme: NORM 2   |  |
|                            | Brent Le Vert, Office of Radiation Safety      Concurrent Session 7.1 – Marina Room      Theme: Non-Ionising Radiation 2 (RF-EMF)      Chair: Phil Allanson      Bridging the Gap: Advancements in Online Radiofrequency Monitoring                    | Theme: NORM 2      Chair: Dr Cameron Lawrence      Radon Decay Product (RDP) Management in BHP Copper South                                   |  |
|                            | Brent Le Vert, Office of Radiation SafetyConcurrent Session 7.1 – Marina RoomTheme: Non-Ionising Radiation 2 (RF-EMF)Chair: Phil AllansonBridging the Gap: Advancements in Online Radiofrequency Monitoring<br>for Enhanced Environmental Surveillance | Theme: NORM 2      Chair: Dr Cameron Lawrence      Radon Decay Product (RDP) Management in BHP Copper South      Australia                    |  |

| 1450 – 1510 | The Importance of Being Uncertainty-Aware in Electromagnetic<br>Measurements<br>Simon Turner, Sensaweb | Gravimetric Field Estimation of Radioactivity in Soils at a NORM<br>Impacted Site<br>Matthew Crow, Environmental Resources Management Australia Pty L |                                  |
|-------------|--|---|----------------------------------|
| 1510 – 1530 | Afternoon Refreshments & Trade Exhibition  |   | Island Courtyard & Jetty<br>Room |
| 1530 – 1600 | Awards Presentation<br>Closing remarks and Conference Close<br>Brent Rogers, ARPS 2024 Convenor        |   | Marina Room                      |
| THURSDAY    | 24 OCTOBER 2024  |   |                                  |
| 0900 - 1530 | Radon Symposium  |   | Crystal Sapphire Room            |

The ARPS 2024 Conference reserves the right to amend or alter any advertised details relating to dates, program and speakers if necessary and without notice, as a result of circumstances beyond their control. All attempts will be made to keep any changes to an absolute minimum.

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