



ARPS 2016



ADELAIDE CONVENTION CENTRE ADELAIDE, SOUTH AUSTRALIA. 11-14 SEPTEMBER 2016
PERCEPTIONS, RISKS AND OPPORTUNITIES

DRAFT & PRELIMINARY PROGRAM as at 4 August 2016

Sunday 11 September 2016

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| 1.00pm – 5.00pm | Registration Desk Open Attendees are encouraged to register early if you are in the vicinity of the Convention Centre |
| 12.00pm-2.00pm | ARPS Executive Meeting <i>City Suite 3</i> |
| 2.00pm – 5.00pm | PRE CONFERENCE WORKSHOP – optional event \$100 registration fee applies <i>Panorama Room 3</i> |
| 5.30pm – 7.30pm | <p style="text-align: center;">WHEN SCIENCE COMMUNICATION MEETS PUBLIC CONTROVERSY</p> <p style="text-align: center;">Facilitated by Dr Paul Willis, Director, RiAus</p> <p>Dr Paul Willis is an experienced science communicator who will challenge what you thought you knew about science communication. Well-accustomed to facilitating debate on controversial scientific issues he will share some of the skills he has acquired over his long career in the field. Don't expect us to predict what he will cover, only to say it will be a lively discussion which could lead anywhere according to whatever communication challenges participants wish to raise. Remember to contribute what you've found from your own experiences as a scientist or practitioner.</p> <div style="text-align: right;">  </div> |
| 5.30pm – 7.30pm | <p>Welcome Reception <i>Riverbank Promenade, Adelaide Convention Centre – included in full registrations</i></p> |

ARPS would like to acknowledge the support of our sponsors



Monday 12 September 2016

ONE DAY REGISTRATION \$435
included in full registrations



In conjunction with its national conference the Australasian Radiation Protection Society invites you to join radiation protection practitioners as they hear international and Australian experts speak on the management, storage and disposal of radioactive wastes.

MANAGEMENT, STORAGE AND DISPOSAL OF RADIOACTIVE WASTE TECHNICAL SYMPOSIUM








8.45am to 4.00pm

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| 7.30am – 5.00pm | Registration Desk Open | |
| CONFERENCE DAY 1: LONG TERM MANAGEMENT OF RADIOACTIVE WASTE | | |
| Plenary Session 1 <i>Panorama Ballroom</i> | | <i>Chair: Ian Furness</i> |
| 8.45am | Convenor Opening Comments & Welcome | |
| 9.00am-9.30am |  | Official Conference Opening <i>Dr Leanna Read, Chief Scientist of South Australia</i> |
| 9.30am – 10.15am |  | Keynote Speaker Perceptions, Risks and Opportunities – the Role of the Radiation Protection Professional <i>Dr Roger Coates OBE, President, International Radiation Protection Association</i> |
| | | Proudly sponsored by  |
| 10.15am – 10.45am | Morning Refreshments & Trade Exhibition Enjoy Barista style coffee Proudly sponsored by | <i>Panorama Foyer</i>  |
| Plenary Session 2 <i>Panorama Ballroom</i> | | HIGH LEVEL WASTE FACILITIES: PROGRESS IN OTHER COUNTRIES <i>Chair: Chuong Pham</i> |
| 11:00am – 11:30am |  | International Safety Standards <i>Dr Marcus Grzechnik, Senior Scientist, Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)</i> |
| 11.30am - 12.15pm |  | Waste Management in Finland <i>Dr Sami Hautakangas, Fortum, Finland</i> |
| 12.15pm – 1.00pm |  | Waste Management in Canada <i>Professor Doug Boreham, Bruce Power, Canada</i> Proudly sponsored by  |

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| 1.00pm – 1.50pm | Lunch & Trade Exhibition <i>Thank you to our exhibiting companies. Please visit them throughout the conference</i> | Panorama Foyer Refreshment Sponsor  |
| Plenary Session 3 <i>Panorama Ballroom</i> | NUCLEAR MATERIALS IN AUSTRALIA | <i>Chair: Keith Baldry</i> |
| 2.00pm – 3.00pm | Australian National Radioactive Waste Management Facility—Technical and Community Engagement: Challenges and Lessons Learnt <i>Mr Bruce Wilson, Head of Resources Division, Department of Industry, Innovation and Science, Australia</i> | |
| 3.00pm - 3.30pm |  Global Nuclear Non-Proliferation and Nuclear Security Regimes - Implications for Nuclear Fuel Cycle Activities in Australia <i>Dr Robert Floyd, Director-General, Australian Safeguards and Non-Proliferation Office (ASNO), Australia</i> | |
| 3.20pm-3.30pm | Closing Summary | |
| 3.30pm - 4.00pm | Afternoon Refreshments & Trade Exhibition Enjoy Barista style coffee proudly sponsored by ANSTO | Panorama Foyer |
| Conclusion of SYMPOSIUM & DAY 1 OF ARPS CONFERENCE | | |

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| 4.00pm – 6.00pm | Monday 12 September 2016 | |
| 4.00pm – 6.00pm | ARPS Annual General Meeting <i>Panorama Room 1</i> |  |
| 6.30pm – 8.30pm | PUBLIC EVENT – RiAus HYPOTHETICAL <i>55 Exchange Place, Adelaide 5000 (map)</i> OPTIONAL EVENT – Registration required (details will be available soon) | |
| | RiAus HYPOTHETICAL <i>Exploring the issues surrounding long term disposal of high level nuclear wastes in South Australia. Draws on the views of a range of local and international experts including invited speakers from ARPS2016.</i> Hosted by RiAus in collaboration with ARPS2016 |  AUSTRALIA'S SCIENCE CHANNEL |

Tuesday 13 September 2016

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| 8.00am – 5.00pm | Registration Desk Open | |
| CONFERENCE DAY 2: EFFECTS OF LOW DOSE RADIATION | | |
| Plenary Session 4 <i>Panorama Ballroom</i> | | <i>Chair: Assoc Prof Tony Hooker</i> |
| 8:45am – 9.00am | Opening Comments | |
| 9.00am – 9.50am |  <p>Keynote Speaker Minimising the Health Consequences of Nuclear Accidents – do we need to reassess our response? <i>Professor Geraldine Thomas, Imperial College of London, UK</i> Proudly sponsored by</p> |  |
| 9.50am-10.20am | Morning Refreshments & Trade Exhibition Enjoy Barista style coffee Proudly sponsored by | Panorama Foyer  |
| Plenary Session 5 <i>Panorama Ballroom</i> | | <i>Chair: Professor Pam Sykes</i> |
| 10.20am – 11.05am |  <p>Guest Speaker Technologies and Models for Studying the Radiobiology of Low-Dose Effects <i>Professor Kevin Prise, Queens University, Belfast</i></p> | |
| 11.05am – 11.50am |  <p>Guest Speaker Understanding adaptation following exposure to radiation- what do we really know? <i>Dr Benjamin Blyth, Peter MacCallum Cancer Centre</i></p> | |
| 11.50am – 12.20pm | Questions to panel | |
| 12.20pm – 12.30pm | Major Sponsor Presentation BHP Billiton |  |
| 12.30pm – 1.30pm | Lunch, Trade Exhibition & Poster Session <i>Thank you to our exhibiting companies. Please visit them throughout the conference</i> | <i>Panorama Foyer Refreshment Sponsor</i>  |

| | Session 1 MEDICAL RADIATION RADIOBIOLOGY Chair: Professor Pam Sykes | Session 2 MINING/CLEAN AIR | Session 3 NON-IONISING |
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| 1.30pm - 1.50pm | Low-dose radiation response in the lungs and spleen: A healthy animal model <i>Stacy Muise, McMaster University</i> | E-Radiation Monitoring used in the Heathgate Resources In-Situ Recovery Uranium Operation <i>Martin Jane, Heathgate Resources</i> | Perceptions regarding patient safety and IPLs and Lasers in the medical aesthetic industry. What are the risks and opportunities? <i>Mr Kane Hammond, The Global Beauty Group</i> |
| 1.50pm - 2.10pm | Parthenolide protects healthy tissues while sensitising prostate tumours to radiotherapy in vivo <i>Katherine Morel, Flinders University</i> | Mineral Sand Mining in Victoria - Radiation Exposure and Management of Community Concerns <i>Morrie Facci, Department of Health & Human Services</i> | What Does the Research Tell Us About the Risk of Electromagnetic Radiation (EMR)? <i>Victor Leach, Oceania Radiofrequency Scientific Advisory Association (ORSAA)</i> |
| 2.10pm - 2.30pm | Risk of micronuclei formation among employees and residents in the vicinity of a monazite processing plant in Sri Lanka <i>Dr Tania Warnakulasuriya, Faculty Of Medicine, University Of Kelaniya</i> | Modelling Atmospheric Dispersion of Radon Exhalation <i>Matthew Pickett, Jacobs</i> | Radiofrequency electromagnetic field exposures in kindergarten children <i>Chhavi Raj Bhatt, Monash University</i> |
| 2.30pm - 2.50pm | Head and Neck Cancer Stem Cells: Proliferation under X-Rays <i>Paul Reid, ICAHE University Of South Australia</i> | Regulating Residues from Uranium Production and Other NORM Activities to International Standards <i>Daniel Bellifemine, South Australian Environment Protection Authority</i> | Non-ionizing Radiation Protection: summary of research and policy options; development of a new text book to promote NIR education <i>David Urban, ARPANSA</i> |
| 2.50pm - 3.10pm | Afternoon Refreshments & Trade Exhibition Enjoy Barista style coffee proudly sponsored by ANSTO | | <i>Panorama Foyer</i> |

| | Session 4 MEDICAL RADIATIONS | Session 5 NORM/ENVIRONMENTAL IMPACT | Session 6 DEVELOPMENTS |
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| 3.10pm – 3.30pm | <p>Optimisation of image quality and patient dose in radiographs of paediatric extremities using direct digital radiography</p> <p><i>Adam Jones, Western Sydney Local Health District</i></p> | <p>An improved NORM based planar radiation calibration facility</p> <p><i>Dr John Wallace, Radiation & Nuclear Science Unit, QLD Health</i></p> | <p>Environmental Dosimetry and Luminescence Research at The University of Adelaide</p> <p><i>Dr Nigel Spooner, University of Adelaide</i></p> |
| 3:30pm – 3.50pm | <p>Radiation Dose Levels in Paediatric Congenital Heart Disease</p> <p><i>Terry Jones, The University of Sydney</i></p> | <p>Radon Measurements at Australian Antarctic Stations</p> <p><i>Brendan Tate, ARPANSA</i></p> | <p>Introduction to gamma spectroscopy on a budget</p> <p><i>Daniel Emes, SA Radiation</i></p> |
| 3:50pm – 4.10pm | <p>Shielding X-Ray Rooms the South Australian Way</p> <p><i>Dr Giovanni Bibbo, Women's and Children's Hospital</i></p> | <p>Case Studies on Existing Exposure Situations</p> <p><i>Dr Fiona Charalambous, ARPANSA</i></p> | <p>Real-time area gamma monitoring data: the only way to manage operational exposures.</p> <p><i>Simon Turner, Queensland University of Technology</i></p> |
| 4:10pm – 4.30pm | <p>Utilising Commonly Available Long-lived Radioisotopes and Filters to Check Contamination Probe Response for Short-lived Nuclear Medicine Radioisotopes</p> <p><i>Ata-ur-rehman Bhatti, Safe Radiation</i></p> | <p>Alpha Spectroscopy of Radon Daughters and Uranium Dust by the YAIO3:Ce Scintillation Detector</p> <p><i>Dr Jiri Kvasnicka, Radiation Detection Systems</i></p> | <p>Monitoring of Radiation Exposure Adjacent to a Linear Accelerator Treatment Bunker with a Highlight Window</p> <p><i>Cameron Jeffries, St Vincent's Hospital Sydney</i></p> |
| 4:30pm – 4.45pm | Close Day 2 | | |
| 6.30pm – 10.30pm | ARPS Conference Dinner, Adelaide Oval, Cathedral Room – included in full registrations | | |

Wednesday 14 September 2016

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| 8.00am – 5.00pm | Registration Desk Open | | |
| | Plenary Session 6 <i>Panorama Ballroom</i> | | <i>Chairs: Assoc Prof Tony Hooker</i> |
| 8:45am – 9.00am | Opening Comments | | |
| 9:00am – 9.45am | Boyce Worthley Oration <i>Sharon Paulka MARPS</i> | | |
| 9.45am – 10.30am | Guest Speaker Reshaping lives after the Fukushima Accident <i>Ms Ryoko Ando, Ethos in Fukushima</i> | | |
| 10.30am – 11.00am | Morning Refreshments & Trade Exhibition Enjoy Barista style coffee Proudly sponsored by | | <i>Panorama Foyer</i>  |
| | Session 7 COMMUNICATION | Session 8 INDUSTRIAL | Session 9 DOSIMETRY |
| 11:00am – 11.20am | Communication of Radiation Risks from Diagnostic Medical Radiation <i>Dr Giovanni Bibbo, Women's & Children's Hospital</i> | Contaminated Site Remediation: Business Interests and Radiation Safety <i>Jayant Raj, Safe Radiation</i> | Extrapolated Skin Dose Assessment with Optically Stimulated Luminescent Dosimeters (OSLD) <i>Dr Mamum Haque, Rad Oncology, Chris O'Brien Lifehouse</i> |
| 11:20am – 11.40am | Involvement of and access to social science researchers from developing countries on research related to radiofrequency electromagnetic radiation <i>Amit Dhungel, Green Tara Nepal</i> | Detection of Radionuclides from Radiation Medical Treatments within South Australia's Wastewater - <i>Samantha Pandelus, Flinders University</i> | Energy dependence of 6LiF and 7LiF TLD response to neutron radiation <i>Stephanie Keehan, RMIT University</i> |
| 11:40am – 12.00pm | Consultation and Engagement – Practical Considerations <i>Jim Hondros, JRHC Enterprises</i> | Designing an Industrial Facility for Assay of Gold and Other Elements in Mineral Samples using Gamma Activation Analysis <i>Chanel Tissot, CSIRO</i> | The mathematics of radiation dose reduction in medical X-ray imaging <i>Dr Xiaoming Zheng, Charles Sturt University</i> |
| 12.00pm – 12.20pm | Perception and Science <i>Dr Richard O'Brien, Retired</i> | DST Group's Philosophical Approach to Radiation Safety <i>Dr Vladimyros Devrelis, DST Group</i> | Case Study - CT Viewing Window <i>Cameron Storm, Sir Charles Gairdner Hospital</i> |
| 12.30pm – 1.30pm | Lunch, Trade Exhibition & Poster Session <i>Thank you to our exhibiting companies. Please visit them throughout the conference</i> | | Major Sponsor  |

| | Session 10 SAFEGUARDS & EMERGENCY | Session 11 MINING/ORES | Session 12 RADIATION PROTECTION |
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| 1.30pm – 1.50pm | Perceptions, Risks and Opportunities of Transporting Major Projects through the Public Domain <i>Gary Lux, ANSTO</i> | A Pathway to Improving Methods for Remediation of Uranium and Daughter Products from South Australian Iron Oxide-Copper-Gold (IOCG) deposits <i>Mark Rollog, University of Adelaide</i> | A “Working Council” is a Council that works! How the RHSAC supports ARPANSA <i>Dr Marcus Grzechnik, ARPANSA</i> |
| 1.50pm – 2.10pm | Path to Best-Practice Nuclear Safeguards Regulation in Australia <i>Dr Michael Went, ASNO</i> | Elemental and Isotopic Characterisation of Australian and International Uranium Ore Concentrates and Uranium Ores for Materials Provenancing in Nuclear Forensics <i>Tim Ditcham, Flinders University</i> | The Biological Effects of Exposure to Ionising Radiation <i>Dr Donald Higson, Retired</i> |
| 2.10pm – 2.30pm | The Consultation Process in Determining a National Reference Level for Emergency Preparedness and Response <i>Dr Marcus Grzechnik, ARPANSA</i> | Radionuclide detection in solid and liquid-phase materials containing uranium <i>Dr David Ottaway, University of Adelaide and ARC Research Hub for Australian Copper-Uranium</i> | The Australian Clinical Dosimetry Service: National Reference Levels <i>Stephanie Keehan, RMIT University</i> |
| 2.30pm – 2.50pm | Learning from incidents – introducing changes to the Australian Radiation Incident Register (ARIR) <i>Chris Nickel, ARPANSA</i> | NORM and NORM Management <i>Dr Richard O’Brien, Retired</i> | Radiation Protection in Industrial Applications in India <i>Dr Ramanathan Ganesan, ex-BARC (Bhabha Atomic Research Centre), India</i> |
| 2.50pm – 3.20pm | Afternoon Refreshments & Trade Exhibition Enjoy Barista style coffee proudly sponsored by ANSTO | | <i>Panorama Foyer</i> |
| | Plenary Session 7 <i>Panorama Ballroom</i> | | <i>Chair: Ian Furness</i> |
| 3.20pm – 4.00pm | Guest Speaker Radium Hill: First hand experiences of Australia’s first uranium mine from the perspective of Kevin Kakoschke <i>Mr Kevin Kakoschke OAM, President, Radium Hill Historical Association</i> | | |
| 4.00pm – 4.30pm | CONFERENCE AWARDS, PRIZES AND CLOSE | | |

OPTIONAL TOUR – included in full registration fee

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| 5.00pm – 6.30pm | TOUR OF THE SAHMRI CYCLOTRON FACILITY Limited places will be available for a one-hour tour of the SAHMRI cyclotron facility hosted by the Director of Molecular Imaging and Therapy Research Unit. SAHMRI is located close to the conference venue on North Terrace. No cost associated with this event. Register by emailing annika@laevents.com.au . |
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