



CURRICULUM VITAE

Name	Ross Kleinschmidt (PhD)
Discipline / Profession	Environmental Health Physics & Radioecology
Educational Qualifications / Appointments	Adjunct Associate Professor (QUT), 2015 – 2021 Doctor of Philosophy (Environmental Health Physics), QUT 2011 Master of Applied Science (Research), QUT 2001 Bachelor of Applied Science (Physics), QUT 1991 Assoc. Diploma App. Physics, QIT 1985
Professional Memberships	Member, Australasian Radiation Protection Society Member, International Union of Radioecology Member, South Pacific Environmental Radioactivity Association
Areas of Advanced Skill / Appointments	Australian Member Laboratory, IAEA – Analytical Laboratories for Measurement of Environmental Radioactivity (ALMERA) network State Radiation Analyst (<i>Qld. Radiation Safety Act 1999</i>) Radiation Safety Advisor, Qld Health Forensic and Scientific Services Campus, and Radiation Safety Officer, Radiation & Nuclear Sciences, QHFSS (<i>Qld. Radiation Safety Act 1999</i>) Accredited Person, Compliance Assessor (<i>Qld. Radiation Safety Act 1999</i>) Licence to Use & Transport Sealed & Unsealed Radioactive Substances (<i>Qld. Radiation Safety Act 1999</i>)
Expert Consultant: (& Committee Chair)	International Atomic Energy Agency – IAEA Program ‘Measurement & Assessment of Radionuclides and Non-Radioactive Pollutants in the Terrestrial Environment’. Austria (IAEA Laboratories, Seibersdorf).
Expert Advisor:	Australian Parliament Senate Estimates Committee Review of Defence Policy and Procedures for the management of equipment containing tritium-based light sources. Australia.
Expert Witness:	Australian Parliament Senate Select Committee on the Dangers of Radioactive Waste. Australia.
Journal / Research peer review panels	Radiation Protection Dosimetry (International) Journal of Environmental Radioactivity (International) Journal of the Total Environment (International) Applied Radiation and Isotopes (International) Isotopes in Environmental and Health Studies (International) Journal of Hazardous Materials (International) Chemosphere (International) International Journal of the Physical Sciences (International) Radiation Protection in Australasia (National) University of Wisconsin Sea Grant Institute (Research grant assessment) Qld Health Forensic & Scientific Services – Research Advisory Committee
Technical Assessor: / Technical Specialist:	National Association of Testing Authorities, NATA (Radioanalytical Laboratories) National Certification Services International, NCSI (now BSI)
Conveyor, drafting panel:	Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), Safety Guide RPS 16, Pre-Disposal Management of Radioactive Waste. 2002

Editorial panel (Book series – Sustainable Water Developments 1–6):

Membrane Technologies for Water Treatment – Removal of Toxic Trace Elements with Emphasis on Arsenic, Fluoride and Uranium (2016). Series: Sustainable Water Developments 1. Editors: Alberto Figoli, Jan Hoinkis & Jochen Bundschuh. CRC Press/Balkema. The Netherlands.

Innovative Materials and Methods for Water Treatment – Solutions for Arsenic and Chromium Removal (2016). Series: Sustainable Water Developments 2. Editors: Marek Bryjak, Nalan Kabay, Bernabe L. Rivas & Jochen Bundschuh. CRC Press/Balkema. The Netherlands.

Membrane Technology for Water and Wastewater Treatment, Energy and Environment (2016). Series: Sustainable Water Developments 3. Editors: Ahmad Fauzi Ismail & Takeshi Matsuura. CRC Press/Balkema. The Netherlands.

Renewable Energy Technologies for Water Desalination (2017). Series: Sustainable Water Developments 4. Editors: Hacene Mahmoudi, Noredine Ghaffour, Mattheus Goosen & Jochen Bundschuh. CRC Press/Balkema. The Netherlands.

Application of Nanotechnology in Membranes for Water Treatment (2017). Series: Sustainable Water Developments 5. Editors: Alberto Figoli, Jan Hoinkis, Sacide Alsoy Altinkaya, Jochen Bundschuh. CRC Press/Balkema. The Netherlands.

Geothermal Water Management (2018). Series: Sustainable Water Developments 6. Editors: Jochen Bundschuh & Barbara Tomaszewska. CRC Press/Balkema. The Netherlands.

Employment Summary

2018 – current	Principal Consultant – qRAD Consulting (Radiation Safety Solutions) Professional health physics consultant providing scientific advisory services, radioanalytical optimisation programs, NORM Management and baseline reconstruction for rehabilitation
2007 – current	Principal Health Physicist, Radiation and Nuclear Sciences, Forensic and Scientific Services, Queensland Department of Health. Professional health physics specialist consultant / manager directing consultancy & scientific advisory services, radioanalytical, NORM, personal dosimetry and instrument performance assessment laboratories for Qld Health, government, private organisations and the public.
1997 – 2007	Advanced Senior Health Physicist, Queensland Health Scientific Services, Qld Health
1996 – 1997	Senior Health Physicist, Biomedical & Health Technology Services, Qld Health.
1995 – 1996	Senior Physicist (Health Physics Services), Radiation Health. Qld Health.
1991 – 1995	Senior Physicist (Industry & Research), Radiation Health. Qld Health.
1987 – 1991	Technical Officer, Radioisotope Laboratory, School of Physics. QUT.
1985 – 1987	Technical Officer, Division of Health & Medical Physics. Qld Health.
1983 – 1985	Laboratory Attendant, Department of Physics. QIT.
1980 – 1983	Laboratory Technician / Information Technology Officer, Connellan & Son – Iron and Steel Founders.

Publications

Kleinschmidt R., Watson D., Janik M., Gillmore G. (2018). **The Presence and dosimetry of radon and thoron in an historical, underground metalliferous mine.** Journal of Sustainable Mining. 17: 120–130.

Kleinschmidt R. (2017). **Reference Natural Radionuclide Concentrations in Australian Soils and Derived Terrestrial Air Kerma Rate.** Journal of Environmental Radioactivity. doi: 10.1016/j.jenvrad.2017.03.021

Kleinschmidt R., Watson D. (2015). **Terrestrial Gamma Radiation Baseline Mapping using Ultra Low Density Sampling Methods.** Journal of Environmental Radioactivity. doi:10.1016/j.jenvrad.2015.05.008

Watson D., Kleinschmidt R., Finlayson S. (2014). **Gamma Spectrometry and ICP-MS Assessment of NORM in Queensland Major Drainage Catchments**. Proceedings of the 4th Asian and Oceanic Congress on Radiation Protection, AOCR-4. Kuala Lumpur, Malaysia.

IAEA/AQ/33. (2013). **National and Regional Surveys of Radon Concentration in Dwellings: Review of Methodology and Measurement Techniques**. IAEA Analytical Quality in Nuclear Applications Series. Bochicchio F, Chalupnik S, Hampe D, Kleinschmidt R., Vajda N, Kim CK, Martin P, Sansone U, Gondin da Fonseca AM. International Atomic Energy Agency, Vienna.

Kleinschmidt R. (2011) **Radioactive Residues Associated with Water Treatment, Use and Disposal in Australia**. Thesis – Doctor of Philosophy. Queensland University of Technology.

Cook M, Kleinschmidt R. (2011). **Simultaneous Determination of ²²⁶Ra and ²²⁸Ra in Water by Liquid Scintillation Spectrometry**. Australian Journal of Chemistry. 64. 880–884.

IAEA. (2011) **A Procedure for the Rapid Determination of Ra-226 and Ra-228 in Water by Liquid Scintillation Counting**. IAEA Analytical Quality in Nuclear Applications Series. Drafting & review panel: Cook M, Gaigl SF, Chmielewska I, Kleinschmidt R., Kim CK, Kim YJ, Kis-Benedek G, Kozar logar J, Martin P, Maurizio F, Rusconi R, Sansone U, Sanada T, Tarjan S. International Atomic Energy Agency

IAEA/AQ/19. (2010) **A Review of Analytical Methodology for the Determination of radium isotopes in Environmental Samples**. IAEA Analytical Quality in Nuclear Applications Series No. 19. Drafting & review panel: Chalupnik S, Hampe D, Kim CK, Kleinschmidt R., Martin P, Sansone U, Vajda N. International Atomic Energy Agency. Vienna.

Kleinschmidt R., Black J and Akber R. (2010). **Mapping radioactivity in groundwater to identify elevated exposure in remote and rural communities**. Journal of Environmental Radioactivity. 102. 235–243.

IAEA/AQ/11. (2009) **A Procedure for the Rapid Determination of Pu Isotopes and Am-241 in Soil and Sediment Samples by Alpha Spectrometry**. IAEA Analytical Quality in Nuclear Applications Series No. 11. Drafting & Review panel: Bochicchio F, Chalupnik S, Hampe D, Kim CK, Kis-Benedek G, Kleinschmidt R., Sansone U, Torvenyi A, Vajda N. International Atomic Energy Agency. Vienna.

IAEA/AQ/12. (2009) **A Procedure for the Rapid Determination of Po-210 in Water Samples by Alpha Spectrometry**. IAEA Analytical Quality in Nuclear Applications Series No. 12. Drafting & review panel: Bochicchio F, Chalupnik S, Hampe D, Kim CK, Kis-Benedek G, Kleinschmidt R., Lee MH, Martin P, Matthews KM, Sansone U, Torvenyi A, Vajda N. International Atomic Energy Agency. Vienna.

Kleinschmidt R. (2009). **Uptake and depuration of ¹³¹I by the macroalgae *Catenella nipa* – potential use as an environmental monitor for radiopharmaceutical waste**. Marine Pollution Bulletin. 58. 1539–1543

Kleinschmidt R. (2009) **Environmental Tritium Contamination from a Gaseous Tritium Light Device Maintenance Facility**. Radioprotection 44(5). 359–363

Pham MK, Sanchez-Cabeza JA, Povinec PP, Andor K, Arnold D, Benmansour M, Bikit I, Carvalho F, Dimistrov K, Edrev ZH, Engeler C, Fouche FJ, Garcia-Orellana J, Gasco C, Gastaud J, Gudelis A, Hancock G, Holm E, Ibanez FL, Ikaheimonen TK, Ilchmann C, Jenkinson AW, Kanisch G, Kis-Benedek G, Kleinschmidt R., Koukouliou V, Kuhar B, LaRosa J, Lee S-H, LePetit G, Levy-Palomo I, Liong Wee Kwong L, Llauro M, Maringer FJ, Meyer M, Michalik B, Michel H, Nies H, Nour S, Oh J-S, Oregioni B, Palomares J, Pantelic G, Pfitzner J, Pilvio R, Puskeiler L, Satake H, Schikowski J, Vitorovic G, Woodhead D, Wyse E. (2008). **A New Certified Reference Material for Radionuclides in Irish Sea Sediment (IAEA-385)**. Applied Radiation and Isotopes. 66(11). 1711–1717

Kleinschmidt R. and Akber R. (2008). **The impact of naturally occurring radioactive materials derived from urban water treatment plants in southeast Queensland, Australia**. Journal of Environmental Radioactivity. 99 607–620

Golding G.M., Mattner R., King G., Peter T., Sadler R., Kleinschmidt R., White G., and Bates J. (2006). **Terrorism response: Issues involved in the development of a chemical weapons analysis capacity within state public health and forensic laboratories.** In: Proceedings of 6th Annual Health and Medical Research Conference of Queensland, Towards a Healthier Queensland through Research and Innovation. 6th Annual Health and Medical Research Conference of Queensland: Translating Innovation and Research into Better Health, Hilton Hotel, Brisbane, Queensland, (). 23rd – 24th November.

Kleinschmidt R. (2006). **Residual radioactivity from the treatment of water for urban domestic applications.** Environmental Health Risk III. Transactions on Biomedicine and Health. 9. 373–382

Kleinschmidt R. (2004). **Gross alpha and beta activity analysis in water – A routine laboratory method using liquid scintillation analysis.** Applied Radiation and Isotopes. 61. 333–338

Noller BN, Moore MR, Kleinschmidt R. (2003). **An evaluation of atomic radiation exposure in Australian service personnel from consumption of seafood at Hiroshima following the bomb explosion on 6 August 1945.** Report for Commonwealth Department of Veterans' Affairs, Canberra. National Research Centre for Environmental Toxicology & Queensland Health Scientific Services. Australia.

Kleinschmidt R. (2001) **An Investigation of Fluorometry Techniques for *in-vivo* Bone Mineral Determination.** Thesis – Master of Applied Science. Queensland University of Technology. Brisbane.

Kleinschmidt R. (2000) **Radionuclides.** Chapter 3.4, Wastewater recycling health effects scoping study, Queensland Health Scientific Services, National Research Centre for Environmental Toxicology and Envirotest Pty Ltd. Qld Dept. of Natural Resources. State of Queensland. Brisbane

Kleinschmidt R., Wallace B. (1996). **The investigation, assessment, remediation and management of a tin mineral processing site contaminated with technically enhanced concentrations of naturally occurring uranium and thorium.** Radioactivity in the Environment, Proceedings of the SPERA96 4th Biennial Workshop. Darwin

Wallace JD, Kleinschmidt R, Veevers P. (1995) **The planning, construction and operation of a radioactive waste storage facility for an Australian state radiation regulatory authority.** Proceedings of the 17th Annual U.S. Department of Energy Low Level Radioactive Waste Management Conference, Arizona USA.

Conference Presentations & Professional Communications

Hoffman, M., Johansen, M., Cook, M., Howell, N., Kleinschmidt, R., Clegg, J. (2018). **Assessment of radioactive 'hot particles' and marine sediment plutonium and americium levels from the Montebello Islands, Western Australia.** South Pacific Environmental Radioactivity Association SPERA 2018 Conference, 6–9 November, Perth, Australia.

Patterson, S., Kleinschmidt, R., Medley, P. (2018). **Naturally occurring radionuclide analysis of prawns in Queensland, and assessment of radiation dose.** South Pacific Environmental Radioactivity Association SPERA 2018 Conference, 6–9 November, Perth, Australia.

Cook M., Wong V., Brugger J., Kleinschmidt R. (2018). **Migration and transport of plutonium in Australian climates.** XXII Meeting of the International Mineralogical Association, 13–17 August 2018. Melbourne, Australia.

Kleinschmidt R. (2018). **Vehicle mounted radiation monitoring system – MONA.** Radiation Safety Officer Users Group meeting, 23 February 2018. Brisbane, Australia.

Kleinschmidt R. (2017). **Overview of Radiation and Nuclear Science General Facilities & Capabilities, Current Research Areas.** Radiation Safety Officers User Group meeting, 5 May 2017. Brisbane, Australia.

Kleinschmidt R. (2015). **Preliminary radon survey results from a historical (metalliferous) mine: Implications for workers and the public.** Invited speaker, Clean Air Society of Australia and New Zealand. 25 November 2015. Brisbane, Australia.

Kleinschmidt R. (2015). **A calibration facility for environmental radiation survey instruments.** Radiation Safety Officers User Group meeting, 17 November 2015. Mt Isa, Australia.

Kleinschmidt R. (2015). **Preliminary radon survey results from a historical mine in North Queensland: Implications for workers and the public.** Invited speaker, Australian Society of Exploration Geophysicists. 05 March 2015. Brisbane, Australia.

Cook M., Kleinschmidt R. (2014). **The analysis of plutonium isotopes in Queensland soils.** RACI National Congress. 07 – 12 December 2014. Adelaide, Australia.

Kleinschmidt R. (2014). **QRBP – Queensland Radiation Baseline Project, Marine Biota.** Health & Food Sciences Precinct Seminar Series. 28 November, Coopers Plains. Australia.

Kleinschmidt R., Watson D. (2014). **Ultra-low density sampling methods and applications in baseline radiometric mapping.** South Pacific Environmental Radioactivity Association conference, SPERA2014. 01 – 04 September 2014. Darwin, Australia.

Kleinschmidt R., Wallace J. (2014). **The design, fabrication and characterisation of an environmental radiation calibration facility for NORM measurements.** South Pacific Environmental Radioactivity Association conference (poster), SPERA2014. 01 – 04 September 2014. Darwin, Australia.

Kleinschmidt R. (2014). **Validation of baseline (background) terrestrial gamma radiation levels for Queensland as derived from drainage sediment geochemistry mapping data.** Health & Food Sciences Precinct, National Science Week, 18 – 22 August. Coopers Plains. Brisbane.

Watson D., Kleinschmidt R., Finlayson S. (2014). **Gamma Spectrometry and ICP-MS Assessment of NORM in Queensland Major Drainage Catchments.** IRPA Regional Congress – Proceedings of The Fourth Asian and Oceanic Congress on Radiation Protection, AOCRP-4. 12–16 May 2104. Kuala Lumpur, Malaysia.

Watson D, Kleinschmidt R. **Accuracy & Portability of Background Gamma Radiation Survey Data.** Australasian Radiation Protection Society ARPS2013 Conference, 13–17 October 2013. Cairns. Australia.

Kleinschmidt R. **Radiation Awareness in Mining, Mineral Processing and Industry.** *Invited speaker* – Australian Institute of Occupational Hygienists seminar series. Brisbane, Melbourne, Adelaide, Perth. July 2013.

Kleinschmidt R., Wallace JD. **Radiation Awareness in Mining and Mineral Processing.** *Invited speaker* – Safety in Mines Testing and Research Station (SIMTARS). Redbank, Queensland. 22 February 2013.

Kleinschmidt R. **Medical Laboratory Sciences and Environmental Health Physics – What's the connection?** *Invited speaker* – Australian Institute of Medical Scientists and New Zealand Institute of Medical Laboratory Science South Pacific Congress 2011 (AIMS/NZIMLS SPC2011). Gold Coast Convention Centre, Gold Coast, Queensland from 8 – 12 August, 2011.

Kleinschmidt R. **Use of Digital Phosphor Plate Imaging (Autoradiography) In The Investigation Of Radioactive Contamination Events.** *Accepted for presentation* – International Conference on Radioecology and Environmental Radioactivity, ICRER 2011. 19–24 June 2011. Hamilton. Canada.

Kleinschmidt R. **Radioactive Residues Associated with Water Treatment, Use and Disposal in Australia.** PhD Final Seminar. Queensland University of Technology. 29 November 2010. Brisbane. Australia

Kleinschmidt R. **Liquid scintillation analysis methods in water quality and water treatment residue assessments.** *Accepted for presentation* – International Conference on Advances in Liquid Scintillation Spectrometry, LSC2010. September 2010. Paris. France.

Kleinschmidt R. **Identification and Impact of Radioactive Residues Associated with Water Treatment, Use and Disposal in Australia.** South Pacific Environmental Radiation Association Conference SPERA2010. 30 August – 3 September 2010, Gold Coast. Australia

Cook ML, Maguire GL, Kleinschmidt R. **Gross beta activity analysis with retention of volatile iodine-131 in various aqueous matrices.** South Pacific Environmental Radiation Association Conference SPERA2010. 30 Aug – 3 Sep 2010, Gold Coast. Australia

Coles K, Cook ML, Maguire GL, Kleinschmidt R. **Water sampling methods for measurement of radioactivity in wastewater and recycled water treatment plants.** South Pacific Environmental Radiation Association Conference SPERA2010. 30 Aug – 3 Sep 2010, Gold Coast. Australia

Kleinschmidt R, Barr S, Cook M and Watson D. **Environmental Tritium Contamination from a Gaseous Tritium Light Device Maintenance Facility.** International Conference on Radioecology and Environmental Radioactivity, June 2008. Bergen, Norway.

Watson D and Kleinschmidt R. **The benefits of liquid scintillation analysis in the assessment, decontamination and decommissioning of a gaseous tritium light device maintenance facility.** International Conference on Advances in Liquid Scintillation Spectrometry, May 2008. Davos. Switzerland

Kleinschmidt R. **Impact of technologically enhanced radioactive wastes derived from water use applications in Australia – an update in 2008.** *Invited speaker* – Australasian Radiation Protection Society – Queensland Branch Special Interest Group Seminar, May 2008. Brisbane.

Kleinschmidt R. **Contamination of an Instrument Maintenance Facility by Gaseous Tritium Light Source Residues.** Australasian Radiation Protection Society ARPS32 Conference, September 2007. Brisbane.

Watson D.M., Kleinschmidt R., Barr S. **Decontamination and Decommissioning of the University of Queensland Radon Laboratory.** Australasian Radiation Protection Society ARPS 32 Conference, September 2007. Brisbane.

Kleinschmidt R. **Radioactive material at Damascus Barracks, Meeandah – Assessment, Dose Reconstruction and Remediation.** Consultancy communication for Australian Department of Defence, Damascus Barracks. May 2007. Brisbane.

Barr S and Kleinschmidt R. Disposal of Low Level Radioactive Materials via Incorporation in Cement Matrix. Australasian Radiation Protection Society ARPS31, October, 2006, Sydney.

Kleinschmidt R. **Environmental Radioactivity – Implications for Environmental Consultants in Queensland.** *Invited speaker* – Australian Contaminated Land Consultants Association – Qld. Seminar. 17 October 2006. Brisbane. Queensland.

Kleinschmidt R. **Impact of technologically enhanced radioactive wastes derived from water use applications in Australia.** PhD Confirmation of Candidature Seminar, September 2006. Queensland University of Technology. Brisbane.

Kleinschmidt R. **Point-of-use Water Treatment and NORM (Naturally Occurring Radioactive Material).** CRC for Water Quality and Treatment Fifth Postgraduate Student Conference 10–13 July 2006. Melbourne. Victoria.

Kleinschmidt R. **Residual radioactivity derived from the treatment of water for urban applications.** 5th Annual Health and Medical Research Conference of Queensland. Brisbane. Queensland. November 2005

Kleinschmidt R. **Residual radioactivity from the treatment of water for urban domestic applications.** Third International Conference on the Impact of Environmental factors on Health – Environmental Health Risk III. Bologna. Italy, September 2005

Kleinschmidt R. **Gross alpha and beta activity analysis in water – A routine laboratory method using liquid scintillation analysis.** International Committee for Radionuclide Metrology Conference on Low Level Radioactivity Measurement Techniques. Vienna, Austria. 2003

Kleinschmidt R. **Will I Glow in the Dark?... A Story about Gaseous Tritium Light Devices.** QARPS Seminar Series. Queensland Health Scientific Services. Brisbane. 2003

Kleinschmidt R. **Phase 2 – Bulimba, Detailed Facility Characterisation Preliminary Report.** Consultancy communication for Joint Logistics Unit, Australian Department of Defence, Bulimba Barracks. April 2003. Brisbane.

Kleinschmidt R. **Radioactive Tracers.** Queensland Science Week Seminars. Queensland Health Scientific Services. Brisbane. Australia. 2002

Kleinschmidt R. **Radioactive Waste Monitoring using Bio-indicators – The impact of sampling and Environmental Conditions.** Environmental Radioactivity: Migration, Measuring and Monitoring in the South Pacific, SPERA2002, Lucas Heights Science and Technology Centre, Sydney. Australia 2002.

Kleinschmidt R. **Environmental Radioactivity, Investigation and Management.** *Invited speaker* – 2001 Local Symposium, Physical Sciences and Engineering in Medicine – The Local Scene in Queensland XII. Brisbane. August 2001.

Kleinschmidt R. **Radiopharmaceutical Waste, Friend or Foe?** Queensland Health Scientific Services Seminar Series. Brisbane. May 2001.

Kleinschmidt R. **Radioactive Iodine 131 and Technetium 99, Sewage Plume Tracers.** Environmental Changes and Radioactive Tracers, SPERA2000, Noumea, New Caledonia. 2000.

Kleinschmidt R. **Results of a limited gamma spectrometry intercomparison on mineral sand products & associated issues.** Environmental Changes and Radioactive Tracers, SPERA2000, Noumea, New Caledonia. 2000.

Kleinschmidt R., Syrmis M. **Tracing of sewage plumes using radioisotopes.** Training Workshop, Commonwealth Science Council, Queensland Health Scientific Services & National Research Centre for Environmental Toxicology, Brisbane. 2000.

Kleinschmidt R. **Management of incidents involving radioactive materials.** *Invited speaker* – CHEM Unit, Department of Emergency Services Training Workshop, Brisbane. 2000.

Kleinschmidt R. **Radioactivity in Air.** Environmental impact of air pollution. Commonwealth Science Council Workshop. Brisbane. 1999.

Kleinschmidt R. **Management of Medical Wastes – Radioactive Waste.** *Invited speaker* – Australian Waste Water Association Workshop, Tweed Heads. 1998.

Kleinschmidt R., Wallace BW. **Assessment of land contaminated with radioactive material.** Environmental Radioactivity and its application in environmental studies, SPERA98, Christchurch, New Zealand. 1998.

Kleinschmidt R. **The investigation, assessment, remediation and management of a tin mineral processing site contaminated with technically enhanced concentrations of naturally occurring uranium and thorium.** Radioactivity in the Environment, SPERA96 4th Biennial Workshop Proceedings, Darwin 1996.

Kleinschmidt R. **Commissioning and operation of Queensland Health's radioactive waste storage facility,** Australian Radiation Protection Society ARPS20, Brisbane. 1995

Kleinschmidt R. **Incidents involving radioactive substances.** Industrial Radiation Safety – RSO's User's Group Proceedings, Dept. of Applied Physics, University of Central Queensland. Rockhampton. 1993.

Manuals / Training Courses

Field Operations Health & Safety Guidelines. Health Physics Group, Queensland Health Scientific Services. 2004 – current (QIS# 22501,22502,22503)

Radiation Safety and Protection Plan – Queensland Health Scientific Services. 2000 – 2017 (QIS #18790)

Radiation Protection Course – Unsealed radioactive substances. Qld. Health Approval:

No. ED017 Users of unsealed radioactive substances for teaching or research &

No. ED026 Licence to use unsealed radioactive substances for pathology & Radiation Safety Officer Certification for unsealed radioactive substances used in a pathology practice. Queensland Health Scientific Services. 1999 – 2013

Tritium Measurement – Persons maintaining Gaseous Tritium Light Devices. Queensland Health Scientific Services, 2003.

Management of Radioactive Contamination Associated with LPG Production (Oil Company of Australia). Health Physics Group, Queensland Health Scientific Services. 1999.

Procedures & Training. Removal, Consolidation and Disposal of Devices Containing Radioactive Materials (ENERGEX) Health Physics Group, Queensland Health Scientific Services. 1999.

Technical Reference Manual – Queensland Radioactive Waste Interim Store. 1996

Honours and Awards

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| 2006 | CRC for Water Quality and Treatment, Fifth Postgraduate Student Conference July 2006, Melbourne
<i>Best oral presentation.</i>
Point-of-use Water Treatment and NORM (Naturally Occurring Radioactive Material) |
| 2004 | Qld Health Pathology and Scientific Services 2004 AGM, Caloundra.
<i>2nd place Poster Presentation.</i>
Gross alpha and beta activity analysis in water – A routine laboratory method using liquid scintillation analysis. |
| 1999 | Qld Health Pathology and Scientific Services 1999 AGM, Caloundra.
<i>Outstanding Involvement Award – RACE and RHEM Teams</i>
(RHEM – Radiation Hazard and Emergency Management) |
| 1999 | Qld University of Technology, Centre for Medical and Health Physics
<i>Seminar of the Semester Award</i>
Presentation for most outstanding seminar by a student, 1 st Semester. |

Research Grant Summary

2018 – 2019	Radon (NORM) in Historical Buildings – Scoping Project
Collaborators:	Dr Ross Kleinschmidt, Radiation & Nuclear Science, QHFSS, Coopers Plains. Australia. Puspendra Chauhan and Kathy Coles, Radiation & Nuclear Science, QHFSS, Coopers Plains. Australia.
Funding:	<i>Cash (FSS, RSS18-025)</i> – \$100; <i>In-kind</i> – \$9326; TOTAL – \$9426
2018 – 2019	Baseline reconstruction for Mary Kathleen uranium mine
Collaborators:	Dr Ross Kleinschmidt, Radiation & Nuclear Science, QHFSS, Coopers Plains. Australia. Tania Hall, Abandoned Mine Unit (Nth Queensland), DNRM.
Funding:	<i>Cash (FSS, RSS18-003)</i> – \$74730; <i>In-kind</i> – \$125622; TOTAL – \$200352
2017 – 2019	Naturally Occurring Radioactive Materials (NORM) in mineral processing slag dumps – assessing a possible construction material resource.
Collaborators:	Dr Ross Kleinschmidt, Radiation & Nuclear Science, QHFSS, Coopers Plains. Australia.
Funding:	<i>Cash (FSS, RSS17-051)</i> – \$4120; <i>In-kind</i> – \$27413; TOTAL – \$31533
2017 – 2019	Development of a passive thoron progeny monitor based on the TASL track etch platform
Collaborators:	Dr Ross Kleinschmidt, Radiation & Nuclear Science, QHFSS, Coopers Plains. Australia.
Funding:	<i>Cash (FSS, RSS17-023)</i> – \$9300; <i>In-kind</i> – \$35078; TOTAL – \$44378
2016 – 2017	Predicting high risk NORM environments in the resources sector
Collaborators:	Dr Ross Kleinschmidt, Radiation & Nuclear Science, QHFSS, Coopers Plains. Australia. Darcy Milburn, Wolfram Camp Mining Pty Ltd, Dimbulah. Australia
Funding:	<i>Cash (FSS, RSS16-011)</i> – \$3670; <i>In-kind</i> – \$48500; TOTAL – \$52170
2015 – 2017	Radon, Thoron and Gamma Radiation Levels in Historical Metalliferous (Tungsten) Mines: Implications for Existing and New Underground Mine Safety
Collaborators:	Dr Ross Kleinschmidt & Drew Watson, Radiation & Nuclear Science, QHFSS, Coopers Plains. Australia. Michael Sturman, Wolfram Camp Mining Pty Ltd, Dimbulah. Australia Prof. Gavin Gillmore, Kingston University, London. UK
Funding:	<i>Cash (FSS, RSS15-008)</i> – \$56000; <i>In-kind</i> – \$123827; TOTAL – \$174227
2014 – 2016	Environmental Calibration Pads – Development, Characterisation & Commissioning
Collaborators:	Dr John Wallace, Radiation & Nuclear Science, QHFSS, Coopers Plains. Australia. Dr Ross Kleinschmidt, Drew Watson & Pushpendra Chauhan, Radiation & Nuclear Science, QHFSS, Coopers Plains. Australia
Funding:	<i>Cash (FSS RSS14-004)</i> – \$267590; <i>In-kind</i> – \$150000; TOTAL – \$417590
2013 – 2015	Terrestrial gamma radiation baseline mapping using ultra low density sampling methods
Collaborators:	Dr Ross Kleinschmidt & Drew Watson, Radiation & Nuclear Science, QHFSS, Coopers Plains. Australia. Dr Joseph Tang, Geological Survey Queensland, DNRM. Brisbane. Australia
Funding:	<i>Cash (FSS RSS13-03)</i> – \$28000; <i>In-kind</i> – \$79200; TOTAL – \$107200
2011 – 2013	Mapping of groundwater radiological water quality as a potential indicator of community exposure to naturally occurring radioactive material in Queensland.
PhD Candidate:	Ross Kleinschmidt (project within PhD research program)
Supervisors (QUT):	Dr Riaz Akber, Prof. Lidia Morowski
Funding:	<i>Cash (FSS RSS08-06)</i> – \$34236; <i>In-kind</i> – \$125500; TOTAL – \$159736