AIOH23

ANNUAL SCIENTIFIC CONFERENCE & EXHIBITION

FUTURE READY:
transformative, innovative, relevant

CONFERENCE PROGRAM

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2 - 6 December 2023

Time	Session Title	Description	Speaker	Cost	Venue/Room
0815-1700	Mental health first aid accedited course - 2 day course	This 2-day Standard Mental Health First Aid (MHFA) course is accredited based on the international MHFA Guidelines. To date 2 million mental health first aiders have been trained in 23 countries. This training has proven effective in improving mental health literacy, reducing stigma, and increasing helping behaviours. These evaluations were conducted in work-places and community settings. Taking this course will provide you with the tools to help someone who is experiencing: • Panic attacks • Suicidal thoughts and behaviours • Non suicidal self-injury • Acute psychosis (such as hallucinations or delusions) • Overdose/withdrawal from alcohol or drug use • Exposure to a traumatic event You will be given time to hone your skills through role-plays, scenarios and activities making it easier to use them in real-life.	John Clark	$750 - Member $850 - Non member	M14
0815-1700	Understanding exposure variability and industrial hygiene statistics: how www.expostats.ca and IHSTAT_Bayes can help	How do we demonstrate if a group is compliant with the OEL? What do six (6) measurements tell about what happened the rest of the year? How do I convert measurement data into information about the AIHA exposure control categories? The answers to these questions are paramount to the practice of industrial hygiene. Unfortunately, the variability observed in occupational exposures represents a considerable challenge to obtaining them reliably. Despite available theoretical approaches, there is a lack of practical tools to support day-to-day decision making. This CES aims to present in an accessible manner the statistical concepts underpinning IH data analysis and demonstrate how answers to the above questions can be readily obtained with the Expostats and IHSTAT_Bayes free tools. The Course presents the challenge of exposure variability and the current theory underpinning the interpretation of exposure levels. Emphasis is put on the management of uncertainty associated with the statistical extrapolation of information from of a few measurements to an entire exposure distribution: "what does my data tell me about exposures when I was not there?". Such management is first explained within the framework of traditional statistics, but the course provides a short primer in Bayesian statistics and emphasises how decision-making can be facilitated with this approach. This CES demonstrates how to make reliable exposure decisions with Expostats, a web application available since 2015, and IHSTAT_Bayes, and AIHA owned EXCEL tool developed by the same team and released in 2022.	Jerome Lavoue	$600 - Member $710 - Non Member	M12-13
0815-1215	Advances in real time instrumentation	This CES aims to inform the participant on the advancements in wearable occupational hygiene monitoring devices and how using such technologies can assist in providing context and real-time decision-making for potential workplace exposures. The CES will focus on important considerations such as selection criteria, connectivity and wearable types, all of which contribute to the success of a wireless wearable monitoring program. Concepts such as Real-time Video Exposure Monitoring, compliance measurement, control verification and dynamic hazard zone mapping will be explored highlighting benefits and disadvantages to the occupational hygienist.	Aleks Todorovic	$300 - Member $355 - Non member	M11

Time	Session Title	Description	Speaker	Cost	Venue/Room
1300-1700	Holistic mould	Holistic Mould Assessment Sampling mould is easy. You run the pump, send the sample to the lab, and they'll have all the answers for you. Done. Except that mould sampling results can be wildly misleading, and, at best, only tell you half the story. The purpose of this session is to give you practical skills and techniques to address a range of objectives in mould assessment, answering questions such as: • Where is the mould? • How do I fix the mould? • What is the risk to health? • Has remediation removed all the mould? • Is this even mould!? This session will include: • Collection of building history • Visual investigation techniques • Moisture testing and water damage assessment • Selecting sampling methods (viable/total, air/surface) • Sample result interpretation and exposure risk assessment • Lots of photos of cool/gross/interesting mould	Nicola Power	$300 - Member $355 - Non Member	M11
1300-1700	Modern sampling technologies versus traditional	In April 2019, the Nickel Institute, a global association of primary nickel producers, held a meeting with interested stakeholders regarding the development or adaptation of sampling trains to measure low levels of metals and metalloids in the workplace. Those involved in these initial discussions agreed on the need for an International study to compare currently used persona samplers and real-time detections systems for measuring particulate-related exposure in workplace settings. This CES aims to disseminate the rationale and findings of work that has been carried out to date. It covers the importance of standardization in workplace air measurements, sampling train requirements for measuring particulate matter, and requirements regarding sampling and analysis of metals and metalloids. It also aims to identify the next steps for particle sampling performance and comparison studies and how the scientific community and others can assist.	Steven Verpaele	$300 - Member $355 - Non Member	M16
1300-1700	Environmental noise - building on OH knowledge	All Hygienists should be thoroughly familiar with the physics of noise propagation, the physiology of noise exposure and the engineering controls on noise (see pre-CES readings to brush up). But what happens to noise issues beyond the boundary fence? How does noise propagate over long distances and different atmospheric events? How is noise considered in Environmental Law. We will study the Victorian EPA Protocol on noise limits as a case study in how to measure and evaluate an environmental noise scenario, covering both practical aspects as well as calculation methods used.	Steve Atkinson	$300 - Member $355 - Non member	M5-M6

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0815-1215	Fundamentals of respiratory protection device selection	Respiratory Protection Devices (RPD) can be used for reducing airborne exposures on the job when higher order controls are not adequate or feasible. The use of respirators in the workplace requires the employer to have a site-specific respiratory protection program (RPP). A key component of an RPP is the selection of appropriate respiratory protection. Selection of RPD is much more than selecting the correct filter level. This CES will cover a wide range of considerations and factors for selecting RPDs through interactive discussions and examples. Additional topics include respirator classification and the importance of respirator fit.	Mark Reggers	$300 - Member $355 - Non Member	M12-M13
0815-1215	LEV sizing, design & filters - build your own LEV!	A practical guide to select the best solutions for your client. 30 mins presentation followed by small teams practical solution exercise in which you design a LEV solution to a real world customers problem This CES covers: • How to size a fan and filter. • How to select the right type of filter and fan for the dust / fume concerned • Abrasive dusts, explosive dusts, sticky dusts and fumes - extraction and filtration. • Initial Cost / Ongoing Maintenance Cost considerations • Simple sizing guidance sheets to take away at end of workshop	Geoff Ebdon	$300 - Member $355 - Non member	M11
0815-1700	AIOH future leaders training course	The Workshop format will consist of: • An overview of Leadership through group discussion and a short presentation • Understanding of the role of self-assessment tools such as 360 Behavioural Feedback, Thinking Style Preference (HBDI), Psychometric data (Eg DiSC, OPQ, Belbin & MBTI) and clarity on personal Values and Life Vision and the role that this information plays in leadership development. • A series of short content presentations on specific leadership capability topics with: • individuals' self-assessment of their current capability • how they have learned what they know to date • the barriers they encounter demonstrating the capability regularly • individual actions to implement further learning in the specific capability. • Initiation of a Personal Development Plan focused on specific leadership capabilities. • Presentation from a senior AIOH leader on his / her leadership journey and learnings with group discussion. • Initial skills development of targeted capabilities.	Steve Arthurson	$750 - Member $850 - Non member	M15-M16

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1300-1700	Non-potable water risks and effective controls	As part of most industrial operations, there can be numerous non-potable water (sometimes also called "alternate water") systems on site. The credible human health risks from each of these water systems can vary significantly. Should we apply a simple and consistent approach to assess and manage each of these systems, or should our approach vary based on the system-specific risk profile? This CES will walk you through the differing regulatory requirements for each type of "alternate water" system (such as raw water, cooling towers, dust suppression, wash down and process water) and provide examples of how water quality risks for these systems can be effectively managed using a risk-based approach.	Steve Delidies	$300 - Member $355 - Non Member	M11
1300-1700	How to think like a lawyer - understanding the expert witness landscape	This CES will cover the following, and will give you a broader idea of what is required to be an expert witness. 1. Being an "expert" in civil (compensation claims) or criminal (WHS prosecutions) – the expert's role and the civil and criminal burden of proof 2. An examination of the expert's code of conduct – the parameters of your opinion 3. The provision of expert opinion in written form – the good and the bad 4. The tips and traps of being cross examined (with real life case examples being used) 5. Case studies – interactive session to illustrate the above topics 6. How to become an expert witness – highlighting your expertise and engaging with lawyers	Jonathan Walsh	$300 - Member $355 - Non Member	M12-M13
1645-1740	Ask Me Anything! Session	Emerging Hygienist Group (EHG & Mentoring)			M3-M4
1745-1830	AIOH newcomers networking event	All Welcome	MC Linda Apthorpe		M10
1830-1930		**GCG Opening Night Networking Event**			River room
1930-2330	**AES Welcome Dinner**				Crown Palladium

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Time	Session	Presentation Title	Speaker	Venue/Room	Notes
0815-0820	Welcome	Welcome to AIOH 2023 Conference	Samantha Clarke	Rio Tinto Plenary Hall	
0820-0830	Welcome to country	Welcome to country	Koori Heritage Centre	Rio Tinto Plenary Hall	
0830-0845	Official opening of conference	Conference opening	Barbara Hill	Rio Tinto Plenary Hall	
0845-0900	AIOH President's address	AIOH 2023 President's address	Tracey Bence	Rio Tinto Plenary Hall	
0900-0945	Keynote address 1	How digital transformation will change work & business forever	Adam Spencer	Rio Tinto Plenary Hall	
0945-1000	Official opening of trade exhibition		Tracey Bence	Exhibition Hall & Foyer	
1000-1100	Morning tea & trade exhibition	Exhibition hall & foyer		Exhibition hall & foyer	
1100-1145	Plenary address 1	Exposure modelling mastery	Jerome Lavoue	Rio Tinto Plenary Hall	
1145-1230	Plenary address 2	The future of real time monitoring	Emanuele Cauda	Rio Tinto Plenary Hall	
1230-1330	Lunch and trade exhibition	Exhibition hall & foyer		Exhibition hall & foyer	
1230-1330	AIOH mentoring group	Mentoring workshop for new mentors & mentees	Jason Green	M10	
1230-1330	Past president's lunch	Attendance by invitation only	Attendance by invitation only	M11	
1330-1400	OHTA stakeholders meeting	Attendance by invitation only	Attendance by invitation only	M14	

Concurrent sessions

Time	Session	Room M11	Room M12 & M13	Room M15 & M16	Room M1 & M2
1330-1400	Concurrent session 1	Future changes to gas monitoring instruments is alarming - **Peter Aspinall**	Evaluation of Portland Cement and hexavalent chromium exposure for workers in a cement plant - **Ryan Collins**	Validity of the linear no-threshold (LNT) model and its impact on derivation of exposure limits- **Ian Firth**	How a mature safety culture resulted in a leading multidisciplinary approach to eradicating mould contamination - **Monika Buys**
1400-1430	Concurrent session 2	Real time particulate monitoring – modern approaches for exposure control - **Dustin Bennett**	Industry change in the manufactured stone benchtop industry following a five year compliance program in NSW - **Natasha Kreitals**	Exhaled breath condensate; a novel substrate for exposure assessment and control verification - **Peter Knott**	Evaluation of stonemason health and air monitoring reports - **Perdita Dickson**
1430-1500	Concurrent session 3	Victorian Part 4.5 crystalline silica regulations - **David Hughes**	When the dust settles: a dust disease lawyer's view on legal issues for occupational hygienists - **Jonathan Walsh**	Chemical risk assessment strategy according to European Standard EN-689 - **Joost Van Rooij**	A comparative study of point-of-care protection from N95 filtering facepiece respirators in residential aged care and tertiary hospitals: respiratory protection challenges remain amidst long-term impacts of COVID19 - **Darius Chapman**

Time	Session	Venue/Room
1500-1530	Afternoon tea & trade exhibition	Exhibition hall & foyer

Time	Session	Room M11	Room M12 & M13	Room M15 & M16	Room M1 & M2
1530-1600	Concurrent Session 4	Realtime versus conventional sampler comparison study - **Ben Walsh**	Integrated risk management through real-time monitoring of dust exposure and proximity sensing in large-scale civil construction sites and mining operations - **Aleks Tordorovic**	Transforming and visualising OH data using O365 - **Milankumar Patel**	Potential heavy metal exposure from taxidermy animal specimens and skeletons from exhibition-type settings - **Jason Green**
1600-1630	Concurrent Session 5	Future ready patented aerosol tracer technology for ventilation verification and IAQ assessments - **Julie Sullivan**	Firefighter exposures and cancer - **Debroah Glass**	Millions of hazards?! Try control banding - **Nicola Power**	An improved simplified heat stress management approach for the non-technical user - **Ross DiCorleto**
1630-1700	Concurrent Session 6	Why you should know how your aerosol sampler is performing - **Steven Verpaele**	An assessment of worker exposure to respirable dust and respirable crystalline silica in workshops fabricating engineered Stone - **Micheal Weller**	Communicating risk - how to build trust and influence behaviours - **Jackie Shepherd**	Development of occupational hearing loss: a review of identification and Management - **Adelle Liebenberg**

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1530-1630	Mining sector panel invitation only	Perspectives on diesel exhaust emissions for the mining sector	Tracey Bence & panel	M3 & M4
1630-1800	Regulator's Meeting	Attendance by invitation only	Attendance by invitation only	M11
1930-2330	**3M Themed Dinner**	**Back to the 80's - All to meet at 6.30pm at Crown Promenade for transport to surprise venue**		

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Time	Session	Presentation Title	Speaker	Venue/Room	Notes
0730-0830	Committee Chair Breakfast	Attendance by invitation only	Attendance by invitation only	M11	
0830-0915	Keynote Address 2	The art of communicating your science	Prof Alan Duffy	Rio Tinto Plenary Hall	
0915-1000	Plenary Address 3	The future of work: the impact on safety & health professionals	Frank Hearl	Rio Tinto Plenary Hall	
1000-1100	Morning tea & trade exhibition	Exhibition hall & foyer	Exhibition hall & foyer		
1100-1145	Plenary Address 4	An integrated approach to workplace mental health: an organising framework	Angela Martin (UTAS)	Rio Tinto Plenary Hall	
1145-1230	A panel of unique perspectives (including audience Q&A)	Silica - before the dust settles	Panel of risk leaders: facilitated by Julia Collins	Rio Tinto Plenary Hall	
1230-1330	Lunch and trade exhibition	Exhibition hall & foyer	Exhibition hall & foyer		
1330-1430	Asian Network Meeting	Attendance by invitation only	Attendance by invitation only	M14	

Time	Session	*Room M11*	*Room M12 & M13*	*Room M15 & M16*	*Room M1 & M2*
1330-1400	Concurrent Session 7	Comparative analysis of industrial ventilation design methods: a case study using CFD and manual pressure loss calculations - **Adrian Moscoso**	Silica dust exposures in the Western Australian mining industry- how effective is compliance in preventing disease? - **Paul Foley**	On detection limits and uncertainty of gravimetric analysis of aerosol collection substrates - **Steven Verpaele**	Mould remediation: choosing risk based end points - **Michael Taylor**
1400-1430	Concurrent Session 8	Just when you thought it was safe to breathe again - **Nikky LaBranche**	Airborne "Countable fibres" uncounted – the asbestos regulatory paradox impacting risk assessment - **Laurent Fenouil**	Cancer and mortality of coal mine workers - **Deborah Glass**	More bang for your buck: using emissions-based maintenance programs save dollars and reduce DPM exposure! - **Deon Swanepoel**
1430-1500	Concurrent Session 9	Benchmarking study for common welding fume controls - **Peter Knott**	Reducing welding fume exposure for boilermakers at a coal processing plant using on tool extraction: a transformative journey - **Jamie Gass**	A hygienist's field guide to enclosed cabins - **John Padgham**	Vive la (electric) révolution – field evaluation of the impact on operational conditions and environmental contaminants between electric and diesel loaders in an underground mining environment - **Hamish Rae**

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1500-1530	Afternoon tea & trade exhibition	Exhibition hall & foyer	Exhibition hall & foyer		
1530-1615	Plenary Address 6	Ventilation, what is it good for?	Simon Witts	Rio Tinto Plenary Hall	
1615-1730	Annual General Meeting	River Room, Level 1 Crown Towers, Crown Melbourne, 8 Whiteman St, Southbank VIC 3006			
1930-2330	**Gala Dinner**	**Palladium Ballroom, Crown - Dress Formal - MC - Comic of the Year Marty Wilson**			

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0730-0830	AIOH Council Meeting			M11	
0900-0910	Sponsor Presentation (Dräger)			Rio Tinto Plenary Hall	
0910-0930	2022 Award Winner's Presentations	Kerry McDougall Dr Carmen Naylor	Airmet Award presentation Drager Award presentation	Rio Tinto Plenary Hall	
0930-0950	3M Winning Paper - Best Conference Paper	TBC	TBC	Rio Tinto Plenary Hall	
0950-1010	BOHS President	Getting health risk management right the first time	Alex Wilson (BOHS president)	Rio Tinto Plenary Hall	
1010-1025	Workplace Health Without Borders		Jason Green	Rio Tinto Plenary Hall	
1025-1045	Morning tea & trade exhibition	Conference Centre Foyer	Conference Centre Foyer		
1045-1130	Keynote Address 3	From lab to living room: mould made simple	Dr Cameron Jones (Biological Health Services)	Rio Tinto Plenary Hall	
1130-1215	Plenary Address 7	Future directions for silicosis diagnosis	Dr Hayley Barnes (Alfred Hospital)	Rio Tinto Plenary Hall	
1215-1225	Conference 2024	Introduction to AIOH's Conference 2024	Zach Bentley - Conference chair 2024	Rio Tinto Plenary Hall	
1225-1230	Official conference close		Jeremy Trotman	Rio Tinto Plenary Hall	
1230-1330	Committee Debrief Meeting			Secretariat	

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