



# OCCUPATIONAL HYGIENE MATTERS

Welcome to the July 2020 edition of Occupational Hygiene Matters.

A quarterly newsletter from

The Australian Institute of Occupational Hygienists,  
Inc. (AIOH)

Australia's premier professional association representing the interests of occupational hygienists and allied professionals.

Our mission is to promote and preserve the health and wellbeing of Australian workers through application of the knowledge, practice and standing of occupational health and occupational hygiene.

## FROM YOUR PRESIDENT



Andrew Orfanos - AIOH President 2020

We are already halfway through the year and the AIOH Council, Staff and the many volunteers involved in our various committees and projects, have been busy delivering on our Annual business plan. If you haven't already, please take the time to listen to me go through the 2020 AIOH Annual Business Plan ([https://www.youtube.com/watch?v=VKMYgVz0KSI&feature=emb\\_title](https://www.youtube.com/watch?v=VKMYgVz0KSI&feature=emb_title)).

As we speak, the easing of COVID-19 restrictions, which have been progressing across the country, look to slow down as we see a rise in cases across metropolitan Melbourne.

One critical control in the effective containment of the virus is the use of fit for purpose respiratory protection for front line health care workers. To provide guidance and support to procurers and wearers of disposable P2 respiratory protection, the AIOH, in conjunction with the Australian Institute of Health and Safety (AIHS), Indoor Air Quality Association Australia (IAQAA) and the New Zealand Occupational Hygiene Society (NZOHS) has developed a comprehensive guidance document to help wade through the myriad of faulty and counterfeit disposable respirators that have flooded the Australian & International market. To find out more about this fantastic resource please have a read of Kate Cole & Jane Whitelaw's overview

This is the first time that these organisations have come together, united on an OHS related issue. It is also the first time that such a guidance document has been supported by the ACTU, State regulatory agencies, and in the case of New Zealand, HASANZ.

As such I am very proud of the development of this guidance document and appreciative of the passion and time spent by both Kate Cole and Jane Whitelaw in its development. Thanks, must also go out to Terry Gorman who also contributed to the guidance document on behalf of the AIOH. This valuable resource would not have achieved the profile and broad level of acceptance but for the collaboration of David Clarke (AIHS CEO), Dr Claire Bird (President, IAQAA), and Suzanne Broadbent (NZOHS). Many thanks for their

input, support and advice, particularly with respect to engaging with external supporters of the guidance document and the media release (<https://www.aioh.org.au/static/uploads/files/joint-media-release-national-register-final-003-wflimbofmeri.pdf>).

The theme of looking outwards, rather than inwards will continue as we continue to promote the occupational hygiene profession as well as the value of the AIOH to all stakeholders across the Nation who advocate worker health.

To this end, the AIOH earlier this year signed a memorandum of understanding with the Asbestos and Hazardous Materials Consultants Association (AHCA). Working with AHCA President, Nigel Johnson the AIOH will look to see how we can identify opportunities to collaborate in the area of hazardous materials management.

Continuing this collaborative theme, I am also excited to communicate that the AIOH is also exploring opportunities to work in conjunction with IAQAA to develop a guide around mould assessment strategies, something that has been long overdue.

As mentioned previously, Council is also looking to see how we can better improve our Member Value Proposition across all membership grades. The AIOH Membership Coordinator has been busy working to map out and assess the utilisation and effectiveness of the various services and resources that the AIOH offers its members. Once completed, the aim is to tailor these services and resources specifically to our membership grades, to ensure we provide the appropriate resources and services corresponding to where you currently are on your professional hygiene journey.

To help us get a better understanding of how the institute can improve on our member value proposition we are asking you all for your feedback. You all would have recently received an email requesting you to kindly complete a short three-minute survey. For those that haven't completed this survey, I urge you do so at your earliest convenience, as it will be a key resource for our future planning. Complete the survey here. (<https://www.surveymonkey.com/r/Z53TRLS>)

Martin Jennings and the External Affairs committee continue to work hard in the advocacy space, having submitted the AIOH's position on the Australian Bushfire Season to the recent Senate Enquiry. Martin also recently caught up with Jacqueline Agius, the new ACT Work Safety Commissioner and Executive Director Construction, Environment and Workplace Protection Division in Canberra.

Kelly Johnstone, along with her Scientific Committee is busy putting together a great line-up of both international and local speakers to speak at our 40<sup>th</sup> Anniversary Online Symposium on a range of topical subjects. Expressions of interest for speakers is open until the end of July - click here. (</events-public/events-docs/aioh-eoi-virtual-symposium-2020-call-for-speakers>)

Finally, I would like to take this opportunity to thank our outgoing Business Manager, Kerrie Doherty who recently resigned to take up a new role. Kerrie has worked for the AIOH over the best part of 4 years, and I wish her all the best in her future endeavours.

**Andrew Orfanos**

2020 President



## AIOH EVENTS UPDATE

New Webinars and virtual Chapter Meetings just announced

[CLICK HERE TO FIND OUT MORE](#)



## NATIONAL UPDATE



**A Guide to Buying P2, or Equivalent,  
Respirators for use in the Australian &  
New Zealand Work Environment**

June 2020 – Version 1.0



# Launch of a new resource to help protect worker health

**Kate Cole & Jane Whitelaw**

Many of us would have noticed an increase in demand for P2 respiratory protection (disposable & reusable) driven by both the bushfires and more immediately for CoV-SARS-2. This has resulted in non-compliant respiratory protective equipment entering the supply chain, which has been highlighted by several bodies including SafeWork NSW and WorkSafe New Zealand.

Occupational hygienists across the country have fielded many an email and phone call to help businesses find legitimate respiratory protection – which is challenging because the processes and checkpoints that provide compliance with this can be complex.

We have been in the thick of it over the past year. Trawling through documentation, trying to explain to retailers that products need to meet certain standards, creating a Facebook page to help our fellow hygienists, and eventually being featured in the media on this very topic.

At the end of the day, what is most important to us, is that workers are protected. So, we put our heads together, wrote down our knowledge, collaborated with industry associations and sought wider stakeholder feedback to produce a much needed guide on this topic. The final product, "A Guide to Buying P2, or Equivalent, Respiratory Protection for use in the Australian & New Zealand Work Environment" is targeted towards those who buy disposable respiratory protection and will help them make sure that it meets suitable standards.

We would like to thank the AIOH, and specifically Andrew Orfanos and Terry Gorman who gave their time and support for the development of this publication. We are also grateful to the AIHS, the IAQA and the NZOHS who also supported its development, collaborated with us, and provided much assistance to help deliver the final product.

Read the guide here. (<https://www.aioh.org.au/static/uploads/files/guide-p2-respiratory-protection-in-anz-final-wfldhefkoks.pdf>)

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## An Update on the 2020 Council Minutes & Activities

**Secretary – Dr Sharann Johnson**

Although it has been an extraordinary start to the year with COVID-19, the 2020 Council has responded with consolidation and new initiatives to meet the changing times.

Our premier event, The AIOH Conference, planned for Adelaide has had to be changed quickly to a **Virtual Symposium Monday 30<sup>th</sup> November – Thursday 3<sup>rd</sup> December**. This will also be an opportunity to celebrate the success of our 40<sup>th</sup> year as the largest network of professional occupational hygienists in Australia.



**Video Conferencing and webinars** have become the new norm. Since March, the Council and Executive monthly meetings have been by videoconferencing. It is anticipated that future Councils will use videoconferencing with a limited number of face-to-face meetings. This will be a significant cost savings for the Institute.

2020 has seen the introduction of a successful series of webinars achieving attendances of over 900 participants since April.

Reflecting the changing times, the Exposure Standard Committee has been renamed to the **Workplace Exposure Assessment Committee**, with opportunities to look at how new technologies change the way we measure exposures.

Thank you to Ian Firth, Robert Golec, Ross Di Corleto, Kim Ng & Jaemie Wilson who have updated the **“Simplified Occupational Hygiene Risk Management Strategies”** publication. This will be launched late July with a special seminar. The publication will be available as PDF files and hard copies. In addition, other strategy documents will become available in PDF format for members later in July.



The **Certification Board** has completed the 5-year CM points audits. Breaking news, the pilot of using videoconferencing to conduct COH oral examinations was successfully completed on 12<sup>th</sup> June. The September/October dates for 2020 COH oral examinations will be published soon.

**A new Code of Conduct** was released earlier this year. In addition, a one-page statement detailing professional and ethical behaviours to be acknowledged when the 2020/2021 subscriptions are paid. This will meet our IOHA ethics requirements and will save money as members are no longer required to attend



an ethics training course.

A successful Planning Day was held in January with Committee chairs to set the **2020 AIOH Business Plan**.



### **MOU with the Asbestos and Hazardous Materials Consultants Association, (AHCA).**

We are proud to report that President Andrew Orfanos and President Nigel Johnson recently signed an MOU, an important step forward in building partnership with special interest areas.

Council, supported by our Indoor Quality SEG led by Philip Turner, has provided members with an excellent resource on COVID-19. In addition, the focus on the fake respirator problems associated with COVID-19 has enabled the AIOH to work in conjunction with several leading OHS professional associations and government authorities to publish the “A Guide to Buying P2, or Equivalent, Respirators for use in the Australian & New Zealand Work Environment”. A great effort by Kate Cole and Jane Whitelaw leading this initiative.

Progress was made in the 1Q20 by agreeing the Deed of Release between the AIOH and the FAMANZ organisation.

The **RESP-FIT** project, under the leadership of Mark Reggers, continues to progress on time with its launch at the 40<sup>th</sup> Anniversary Virtual Symposium. The goal to complete the assessments online took a big step forward with the agreement signed in June with USA Examsoft.



**Breathe Freely Australia (BFA)** – The Council are proud to report we have shared the IT framework and IP of BFA to establish Breathe Freely NZ. This is another achievement for our goal to promote knowledge and competency in occupational hygiene practise by expediting the establishment of the NZ website.

To improve awareness of the BFA website and resources, advertising was included in the diaries for AWU, CFMEU and the WA Miners Promise this year. A first for the AIOH.

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# RESP-FIT Update

**By Mark Reggers**

The pandemic has certainly brought respirators into the public consciousness which in turn has made more workplaces, hospitals and general public aware about the importance of fit and fit testing in achieving expected levels of protection. The [respfit@aioh.org.au](mailto:respfit@aioh.org.au) (mailto:respfit@aioh.org.au) email has seen an increase in inquiries asking about the program in the past 2 months, which is encouraging.



The RESP-FIT committee is progressing well with the goal to launch it in December at our 40<sup>th</sup> Anniversary Virtual Symposium. The major milestones which have been achieved in the past 3 months include:

- The training syllabus and procedure document has been finalised which covers training course structure and trainer requirements.
- The accreditation procedure document has been finalised which includes a 2-part assessment: an online theory exam and submitted video assessment.
- The RESP-FIT branding and style guideline has been completed to ensure the program marketing and website is eye catching and distinct. This includes badges for approved training providers, approved trainers, accredited fit testers, supports and partners.
- The AIOH has signed an agreement with the US software company, Examsoft, <https://examsoft.com/> (https://examsoft.com/), which is the online platform for undertaking accreditation assessments. It is a world class system with some features such as an invisible invigilator, offline access, plus much more.
- The committee structure was changed to reflect post launch requirements with the RESP-FIT Board and the team of assessors.
- Pricing has been established for the training application, accreditation application with a discount for AIOH members and supporter pricing.



Although much has been achieved, there is still much more to do in the lead up for the targeted launch during our 40<sup>th</sup> Anniversary virtual Symposium. This includes building the RESP-FIT website, development of the terms of reference document, developing accreditation theory questions, completing the FAQ guides, brand awareness survey, creation of RESP-FIT SharePoint site for the committee plus more.

TIP: When communicating about RESP-FIT in your workplace or to others, be sure to present it as RESP-FIT all in capital with the hyphen. It isn't Resp-Fit, Resp-FIT, resp-fit, respfit, RESPFIT. The correct format is **RESP-FIT**.

If you have any questions, be sure to email [respfit@aioh.org.au](mailto:respfit@aioh.org.au), or (<mailto:respfit@aioh.org.au>) feel free to give me a call on 0428 720 159.

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Need to quickly and easily identify tasks and areas with potential exceedance levels of harmful particulates such as

**coal dust, respirable crystalline silica or diesel particulate matter?** Kenelec Scientific can help with that.

**TSI AM520i SidePak™:** a great complementary product to have in your arsenal; with real-time readings and alarms

and intrinsically safe certification, high aerosol levels are easily identifiable, even in an explosive environment.

**TSI PortaCount 8048:** the only commercially available instrument in the world that can quantitatively fit test all tight-fitting respirator face masks, including all N95, P1, P2 and P3 filtering face piece respirators.



Contact our team to **find out more about these products** and how else we can help your business:

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AIOH Product Advertisement

## INTERNATIONAL UPDATE

### AIOH Member becomes first Australian to graduate from Mongolian National University

On Friday June 19, Andy McCarthy MAIOH, COH graduated from the Mongolian National University of Medical Science with a Master of Public Health. Andy is the first Australian ever to graduate from this university. Andy was chuffed when Australian Ambassador to Mongolia, Dave Vosen, wrote an official Australian Embassy tweet and Facebook post congratulating him on this achievement.

During the Graduation ceremony, Andy was humbled and honoured to receive an offer of an adjunct professor position at the university from the Dean of school, Professor Chimedsuren. Andy will begin in this part time position in semester 2, 2020 and work in the areas of occupational, environmental and public health, toxicology and research.

There has been no time more important to have a strong health team during this pandemic, particularly given Mongolia (700km) and the mine's (80km) proximity to China, and the fact that materials are trucked over the boarder multiple times a day. It has been essential to ensure good hygiene practices and hard control measures are in place to protect all workers. Andy and his team have been working on COVID-19 management close to full time since mid-January.

When asked to comment Andy replied "I would like to firstly thank those who supported me through this over the last couple of years. It has been a long road with many challenges, the language being only one of them! I look forward to continuing with the work underway at Oyu Tolgoi to embed systems and to begin working with the University to improve educational outcomes for students at the Mongolian National University of Medical Science"

Andy is a full member of the AIOH and COH. He also is a volunteer on our M&Q Committee. Congratulations to Andy on this achievement!



Enter the WHWB/WHWB-UK ECO-LEV and fan System competition!



The LEV competition has been launched by Workplace Health Without Borders UK (WHWB-UK), who have an interest in improving Health and Safety in developing countries. The idea of the competition, which originated from Adrian Sims, is to design a suitable, simple LEV and fan system from recyclable materials. Details of the competition for individuals or groups to enter are given below for you to circulate to interested Health and Safety LEV engineers and other related professionals.

Win a year's membership to BOHS or to ILEVE. The aim is to design an ECO-LEV system or a fan using inexpensive and recyclable materials in developing countries to protect workers from hazardous dusts such as respirable crystalline silica.

Here is the link to the competition Application form and Entry pack plus a presentation about the competition.

<https://www.dropbox.com/sh/ejck6qmx3cr0xnc/AACTIn6JV6eBLiqUEBEIGJuia?dl=0>  
(<https://www.dropbox.com/sh/ejck6qmx3cr0xnc/AACTIn6JV6eBLiqUEBEIGJuia?dl=0>)

For further queries on this competition please contact us at: **[whwb.uk@whwb.org](mailto:whwb.uk@whwb.org)**  
(<mailto:whwb.uk@whwb.org>)

**Dorothy Cook – WHWB-UK Treasurer & Secretary**

## Occupational Health Newsletter - Southern Africa

[Click here to read \(/static/uploads/files/occhealth-may-june2020new-wfpzpqwitusa.pdf\)](/static/uploads/files/occhealth-may-june2020new-wfpzpqwitusa.pdf)

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## RESEARCH BITES

# Assessing the COVID-19 & Biological Toxic Health Risks Associated with High Rise Trash Chutes

By Dr. Maurice Baum

[Read more \(/static/uploads/files/draft-covid-19-toxic-health-risks-of-high-rise-trash-chutes-wfljsdtgzanq.pdf\)](/static/uploads/files/draft-covid-19-toxic-health-risks-of-high-rise-trash-chutes-wfljsdtgzanq.pdf)

## The Hazardous Materials Register

### **AFFF Fire Extinguishers & Foam Concentrate**

Philip Turner of [philipturner@optusnet.com.au](mailto:philipturner@optusnet.com.au) (<mailto:philipturner@optusnet.com.au>)

Aqueous film forming foams (AFFF) are generally intended to extinguish flammable and combustible liquid fires.

Queensland & South Australia are phasing out AFFF foams containing PFOS and PFOA.

Investigators in all states & territories should consider providing suitable advice to employers &/or clients

### **QLD**

Firefighting foam management policy

<https://www.qld.gov.au/environment/pollution/management/disasters/investigation-pfas/firefighting-foam> (<https://www.qld.gov.au/environment/pollution/management/disasters/investigation-pfas/firefighting-foam>)

### **SA – EPA**

Per- and poly-fluoroalkyl substances (PFAS)

[https://www.epa.sa.gov.au/environmental\\_info/perfluorinated-compounds](https://www.epa.sa.gov.au/environmental_info/perfluorinated-compounds)  
([https://www.epa.sa.gov.au/environmental\\_info/perfluorinated-compounds](https://www.epa.sa.gov.au/environmental_info/perfluorinated-compounds))

### **NSW - SafeWork NSW**

Working safely with PFAS containing aqueous film-forming firefighting foams - Technical guide

<https://www.safework.nsw.gov.au/resource-library/public-administration-and-safety/working-safely-with-pfas-containing-aqueous-film-forming-firefighting-foams-technical-guide>  
(<https://www.safework.nsw.gov.au/resource-library/public-administration-and-safety/working-safely-with-pfas-containing-aqueous-film-forming-firefighting-foams-technical-guide>)

### **Alternatives are available**

FPAA Information Bulletin

[http://www.fpaa.com.au/media/103103/fpa\\_australia\\_-\\_ib\\_06\\_v1\\_selection\\_and\\_use\\_of\\_firefighting\\_foams.pdf](http://www.fpaa.com.au/media/103103/fpa_australia_-_ib_06_v1_selection_and_use_of_firefighting_foams.pdf)

([http://www.fpaa.com.au/media/103103/fpa\\_australia\\_-\\_ib\\_06\\_v1\\_selection\\_and\\_use\\_of\\_firefighting\\_foams.pdf](http://www.fpaa.com.au/media/103103/fpa_australia_-_ib_06_v1_selection_and_use_of_firefighting_foams.pdf))

Wormald

<https://www.wormald.com.au/fluorine-free-foam> (<https://www.wormald.com.au/fluorine-free-foam>)

AIP Submission to an EPA-SA enquiry

<https://www.aip.com.au/sites/default/files/download-files/2017-10/2017%2007%20AIP%20Submission%20to%20SA%20EPA%20on%20PFAS%20FINAL.PDF>  
(<https://www.aip.com.au/sites/default/files/download-files/2017-10/2017%2007%20AIP%20Submission%20to%20SA%20EPA%20on%20PFAS%20FINAL.PDF>)

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# International Standard WG ISO 23785 for operator enclosures -air quality control systems and air quality performance testing:

Awaiting additional comments from those that provided the submission

## PROFESSIONAL DEVELOPMENT UPDATE





## ECU News July 2020

Prof Jacques Oosthuizen (PhD)

We would like to congratulate Dr Lisa Mills, who was awarded the 3M prize, as the graduating student from the Master of Occupational Hygiene and Toxicology course (2019) with the highest course Weighted Average Mark (WAM).

Congratulations also to PhD candidate Melinda Gardner for having a paper accepted for publication in the Annals of Occupational Hygiene. This manuscript, entitled "*Assessment of worker exposure to occupational organic dust in a hemp processing facility*" described work Melinda conducted as part of the Master of Occupational Hygiene and Toxicology.



UNIVERSITY  
OF WOLLONGONG  
AUSTRALIA

## New Research Centre at the University of Wollongong

**By Jane Whitelaw**

It goes without saying that the past three months have different times and that the only constant is change! Like other Universities, we have had to move some OHS content online for a short time, but are pleased that our Occupational Hygiene Practice subjects are still face to face as we believe the personal and hands-on approach to sharing & gaining knowledge is second to none.



Speaking of change.....what a difference 5 years can make. In 2015 Monica Torbol enrolled in a Graduate Diploma in OHS, but soon fell in love with Occupational Hygiene, and in 2017 graduated with a Master in Occupational Hygiene. She is now working with Hypex Group as a consultant. Here's what she had to say about the changes in her life: "I loved the UOW course because it gave me the necessary technical and practical skills to develop as a professional in the field of occupational hygiene. They taught me integrity and passion for the protection of workers' health, and without UOW, I wouldn't be the passionate occupational hygienist I have become. One of the best aspects was that it allowed me to meet amazing professionals, and gain lifelong friends and colleagues. With the support of the UOW lecturers, I was able to find my dream job as an occupational hygienist!"

### **3M Award Winner**

Congratulations to Lachlan McPhail for taking out the 3M Award for the best workplace project for his "*Managing Formaldehyde Exposure in modern University Anatomy Laboratories: How low can we go?*". You may have seen his poster at AIOH2019 (<https://www.aioh.org.au/resources/past-conference-proceedings1>). Thank you Terry Gorman and 3M for your continued support.

Enrolments in our Graduate Certificate and Master of Occupational Hygiene are open for 2021 and Commonwealth Supported Places are available for domestic students. Please feel free to contact me regarding your specific situation @ [jane\\_whitelaw@uow.edu.au](mailto:jane_whitelaw@uow.edu.au) ([mailto:jane\\_whitelaw@uow.edu.au](mailto:jane_whitelaw@uow.edu.au)) or just

**Apply Now:** <https://coursefinder.uow.edu.au/information/index.html?course=master-occupational-hygiene>  
(<https://coursefinder.uow.edu.au/information/index.html?course=master-occupational-hygiene>)

# AIOH COMMITTEE UPDATES

## Certification Board Update July 2020

Thank you to the COHs who constructively engaged with the Membership Coordinator and the COH Board to complete their five-yearly audit (cycle ending 2019). As part of this review, the Board identified some key improvements for 2021:

- **Everyone including NAR accredited members to provide evidence if randomly selected for audit, upon request:** Anyone who maintains CPD via another institute (e.g. ABIH, SAIOH) must provide evidence of activities upon request. Offering only a current certification status will no longer be accepted
- **Reinstate the original Excel activity sheet:** We have heard from many users regarding the cumbersome nature when navigating the My COH portal. While there were plans to improve the user interface, budget constraints have delayed any software upgrades beyond this year. As an interim, members will have the option to use an excel spreadsheet, similar to the original Excel spreadsheet to track their activity. Note: This spreadsheet and all evidence will still need to be uploaded into My COH at the end of the 5yr-cycle for COHs selected for audit. The new spreadsheet will be made available shortly.
- **COH# allocation:** All AIOH-sponsored events will automatically be assigned a COH# as part of the promotion. The team are also looking at pre-emptively assigning COH# for planned CPD sessions offered from other institutes (e.g. AIHA, ACGIH, IOHA, NZOHS)
- **Routine reminders and support:** There will be periodic reminders sent via the Membership Coordinator for all COHs to conduct housekeeping of their CPD activities especially around retaining evidence. If you need assistance on navigating this system please contact [membership@aioh.org.au](mailto:membership@aioh.org.au)  
(file:///C:/Users/AIOH%20Membership/Downloads/membership@aioh.org.au)

### COH examination via videoconferencing - Pilot

With all face-to-face COH exams now postponed for the rest of 2020, a pilot programme was initiated to evaluate if examination via videoconference was a feasible option.

During May and June, a team of volunteers prepared and executed two mock exams and evaluated the performance as per the criteria below:

- Safety and well-being of everyone;

- Suitability of the assessment environment for the candidate;
- Control of the examination process through third-party invigilation; and
- Acceptability of the technology & software interface between the panel and candidate.

The outcome from the evaluation was positive with preparation now underway for virtual exams to be deployed later this year. Watch out for further communications from the Membership Coordinator.





*Images show the general layout of invigilator (left) monitoring the candidate(s) who are facing the panel on the monitor (right)*

### **Continuing professional development and COH maintenance**

2020 has forced many of us to adjust our learning plans when searching for CPD opportunities. While the schedule for this year has eliminated essentially all face-to-face seminars, training and conferences, there has been an increase from providers promoting online sessions. As a bonus, many of these sessions are recorded adding the convenience for viewing the content on demand at a convenient time. Here are some examples of offerings openly advertised by the hygiene societies:

- AIOH 2020 Virtual Symposium
- AIOH SLO webinars
- AIHA webinars & eLearning subscriptions
- ACGIH webinars & eLearning subscriptions

Also, simply doing an online search for “health safety webinars 2020” will yield a useful list of upcoming sessions offered by various institutes. Keeping in touch with colleagues via word of mouth and social media will also alert you to any relevant sessions being planned.

### **Key reminders when registering and attending webinars and eLearning sessions**

- From the AIOH My COH portal, check the COH master worksheet if the session has a COH# assigned (must be signed in).
- If there is no COH#, then send in a request to the AIOH office along with the required information so it can be assigned a COH#. Activities with no COH# will be rejected during Audit.
- Retain evidence of your registration and attendance or completion of the session and update your COH activity in the My COH Portal. Evidence can include email confirmation of registration, and/or invoice PLUS confirmation you attended such as a screen shot during the webinar.

### **Resources**

- AIOH Virtual Symposium: <https://www.aioh.org.au/virtual-symposium>  
(<https://www.aioh.org.au/virtual-symposium>)



- AIHA eLearning: <https://www.aiha.org/education/eLearning>  
(<https://www.aiha.org/education/eLearning>)
- ACGIH eLearning: <https://www.acgih.org/professional-development-events/education/elearning>  
(<https://www.acgih.org/professional-development-events/education/elearning>)

### **Hardship considerations**

The Board recognises that each of us have been impacted differently from the pandemic. Those who feel they will not reach their goal of maintaining 40 CM points (5yr-cycle) over the next 1-2yrs are encouraged to contact Membership at the AIOH office. You may be asked to outline your situation in writing so the Board can consider any adjustments to your CPD requirements.

### **Neil Goulding**

Chair - Certification Board

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## **AIOH Foundation Update**

The Foundation reached a great milestone in June when its inaugural round of grant applications was officially opened. These grants are one of the central strategy pillars for the Foundation and are open to any organisation doing work that helps achieve the Foundation's purpose of improving the understanding, prevention, and control of workplace disease in Australia. It must be acknowledged that nearly all of the funds being used to offer project grants come from the generous donations of AIOH members or supportive corporate partners – we thank all donors for their generosity and look forward to seeing these donations be used to make a difference to worker health in Australia. The grant application process is open until August 31 and information on how to apply can be found on the Foundation's webpage (</aioh-foundation>) .

The Foundation is also pleased to advise that credit card donations can now be received via the Foundation's webpage (</aioh-foundation>). This will make the process of donating to the Foundation easier and more convenient for AIOH members and other interested parties. We are grateful for the support provided by the AIOH office in setting up this donation process.

In April, we were sad to farewell Caroline Langley from our Board. Caroline left an indelible impact on the Foundation, both as the driver of the AIOH Foundation's initial concept when AIOH President in 2016 and during her time more recently on the Board. Her experience, wisdom, compassion, and sense of fun will be sorely missed.



Looking ahead to the remainder of the year, the Foundation will be focused on assessing and awarding grants, identifying a replacement Board member and reviewing our strategy. We always welcome ideas and feedback from AIOH members – please contact any of us on the Board – Philip Hibbs, Sally North, Raelene Young, and Rob Golec.

**Andrew Bennett**

Chair - AIOH Foundation

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## Professional Development Awards & Sponsorship - 2020

As with much of our personal and professional activities, Coronavirus has affected the undertaking of travel associated with Peter Aspinall's 2019 Airmet Professional Advancement Award to the AIHA Conference and Carman Naylor's 2019 Draeger Young Hygienist Award to the BOHS Conference. Both these awardees have had their travel and professional visits extended to take place in the 2021 season, when hopefully things may be back at least partly to normal.

Regarding the Awards system this year, A&S Committee have been in discussion with the 2020 Council and the Sponsors who are keen to continue to support the awards in these difficult times. This will mean that in addition to the postponed 2020 award travellers listed above, both the Airmet Professional Advancement Award and the Draeger Young Hygienist Award will be open for new applicants for travel in 2021. Hopefully by early 2021 international travel, access to site visits and travel insurance issues will be sorted. The AES Postgraduate Scholarship Award for study in Australia will continue as per usual in 2020. All the other awards such as those provided by DuPont, Industrial Scientific, and Safe Work Australia, usually associated with the AIOH Annual Conference and CES sessions activities, will be assigned to partaking in the 2020 virtual conference.

The 2020 Council has supported the A&S request for a reformatting of the award application forms to a more user-friendly mode for both applicants and also for committee members. The amended application forms are currently being prepared and tested. They will be available for applicants when the award applications process is formally announced in mid to late August.

Meanwhile, it is strongly suggested that you can start preparing your application by reading the Award conditions on the AIOH website, discussing the application requirements and how to best meet these with any of the committee members of A&S. Just check out the article in this newsletter on Jen Hines and the

gaining of her Doctorate with the assistance of the postgraduate scholarship award provided by AES.

2020 brings some new faces to the committee so a warm welcome to the current President Andrew Orfanos, Kerrie Burton (Draeger Award recipient 2006) Samantha Clarke (Draeger Award recipient 2005) and Brett Young (MSA Postgraduate Scholarship recipient 2007). Continuing is Melanie Windust (Draeger Award recipient 2010) and myself as Chair.

We thank outgoing committee members Simon Worland, Charles Steer and Gary Rhyder for their considerable contributions to the committee over many years of faithful service.

The value and extent of the AIOH Professional Development Awards system is not possible without the contribution and generous support provided by our sponsors, hence a mighty thank you to Airmet Scientific, Draeger Australia, AES, DuPont Australia, Industrial Scientific and Safe Work Australia.

## **Alan Rogers**

Chair - Awards & Sponsorship Committee



In 2016, AES awarded their fourth AES Scholarship to Jennifer Hines. The Active Environmental Solutions Scholarship provides generous support for AIOH members to develop their academic credentials in occupational hygiene. Jen has put this scholarship to good use, adding to the knowledge of Emissions Based Maintenance and the benefits of this both to workers and industry by completing a PhD on "The Role of Emissions Based Maintenance to Reduce Diesel Exhaust Emissions, Worker Exposure and Fuel Consumption" (See the UoW newsletter article). AES has provided seven of these scholarships since 2013. Jen is the first to complete her studies with other recipients closely following. The Awards are opening soon for 2020 with applications closing in September. Start putting your applications together for this fantastic award. By receiving this award you help both yourself and future workers with the knowledge gained from the education opportunities provided by the award.

Jen Hines, AES scholarship recipient

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## AIOH Mentoring Committee



The Mentoring committee is on the lookout for Mentors across all industries to take part in the program in 2020 and beyond. A rewarding and fulfilling way to give back to the OH Community, mentees can also offer you a fresh and different perspective on situations (which in return increases your learning!)

CPD points available for Mentors, for more information please contact [MentoringChair@aioh.org.au](mailto:MentoringChair@aioh.org.au) (<mailto:MentoringChair@aioh.org.au>)

[Apply to become a Mentor \(/website-forms/request-to-be-an-aioh-mentor-form\)](/website-forms/request-to-be-an-aioh-mentor-form)

[Apply to become a Mentee \(/website-forms/request-to-be-an-aioh-mentee-form\)](/website-forms/request-to-be-an-aioh-mentee-form)

**Jason Green**

Mentoring Committee Chair

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## FEATURE ARTICLE

Please welcome AIOH's latest Doctorate holder,  
Dr Jennifer Hines!

[https://scholars.uow.edu.au/display/jennifer\\_hines](https://scholars.uow.edu.au/display/jennifer_hines) ([https://scholars.uow.edu.au/display/jennifer\\_hines](https://scholars.uow.edu.au/display/jennifer_hines))



### **The Role of Emissions Based Maintenance to Reduce Diesel Exhaust Emissions, Worker Exposure and Fuel Consumption.**

The main area of research for Jen Hines, from the University of Wollongong, is in controlling worker exposure to diesel engine exhaust by reducing exposure at the source. This in turn leads to an improvement in worker health and reduced running costs to the workplace.

Having more than 20 years' experience as an occupational hygienist, Jen's research over the past 4 years has predominantly involved measuring the exhaust of diesel engines, determining maintenance requirements to improve the exhaust from these measurements, and ultimately the engine operation. This quantitative research has been completed in two Illawarra underground coal mine sites and is currently being expanded to a number of other industries. With significant cost savings in fuel consumption for industry when machines are maintained properly, Jen believes this is an added incentive for industry adoption of the program. "It was this concept that drove my research, to begin with, to provide dual outcomes with links between improvements in engine maintenance and reduced exposure and costs"

The next phase of research is to make emissions-based maintenance more sustainable, and to further quantify productivity gains. To this end, further research is in progress to investigate centralised real-time emissions-based maintenance (EBM) data management for diesel fleets that will reduce worker exposure to diesel emissions (and continue to provide a cost-saving in fuel and other costs). The research that has been completed to date has demonstrated that a significant amount of data is generated and this needs to be evaluated in a time-efficient, consistent manner to be beneficial as an intervention to reduce worker exposures. Further research will develop and validate an automated system to interpret and manage the engine emission data in near real-time and establish if such a system can be sustainable on a large scale (three mines with small to large diesel fleets) across different mining sectors (coal and metalliferous) in different countries (Australia and South Africa).

By using an automated centralised computer hub servicing three underground mining operations in NSW, Queensland and South Africa, engine emission data can be interpreted in near realtime by specialist software whose algorithms are based on the experiences of the researchers. Maintenance issues could then be highlighted to operating personnel for immediate correction. The application of this approach to monitoring, interpreting and managing diesel exhaust emissions remotely is innovative and world best practice. Improvements in engine performance which lowers emission outputs and avoids unnecessary

use of fuel is of immense value for health, safety, the environment, and productivity. This model could provide a process to bring about behavioural change in the way maintenance engineers maintain engines (emissions-based maintenance).

This system is translatable to other industries operating diesel fleets bringing significant synergies in terms of emissions management. The application of this system for worldwide benchmarking between mine sites of their diesel exhaust emissions based on diesel fuel type being used, engine performance, fuel savings and workers' exposures was truly transformational for the industry. An additional benefit of this research program is the minimal implementation cost to the industry as the entire system will be implemented for use globally. The benefits of this research program will be reduced exposure of workers to carcinogenic diesel exhaust emissions, improved fuel efficiency which translates to fuel cost savings, reduced carbon footprint and increased productivity and long-term sustainability of maintenance practices that reduce exhaust emissions.

"The workers' insight to improved ways to undertake the sampling and to use the available equipment has been rewarding. Their interest in their own health, and how they can improve their workplace to provide cleaner air for their workmates to breathe has been gratifying." It is only recently that mining regulators have provided an exposure standard for diesel exhaust. The provision of these standards will create more urgency around implementing high order controls such as emissions-based maintenance.

Undertaking this PhD was made possible from support from amazing supervisors (Brian Davies, Vinod Gopaldasani, and Cas Badenhorst) as well as funding through the Active Environmental Solutions (AES) Postgraduate Scholarship (see article in this newsletter). Thank you very much to Aleks Todorovic and his team at AES for providing this funding as well as excellent support throughout the research. The AIOH members are very fortunate to have such amazing support from sponsors.

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