GLOBAL EXPOSURE MANAGER

IOHA Hoternational Occupational Hyriane Association

Edited by **Dr Thomas P Fuller:** IOHA president e-mail: tpfuller1@gmail.com

Updates from the Italian Association of Industrial Hygiene (AIDII)

Andrea Spinazzè

e-mail: and rea.spinazze@uninsubria.it

The 37th National Congress of Industrial and Environmental Hygiene, organised by the Italian Association of Industrial Hygienists (AIDII), was held from 22 to 24 June 2021. The conference committee delivered another high-quality event, which was held online for the first time, with five keynote speakers, 60 scientific presentations, seven presentations for the 'Young Industrial Hygienists' competition, and more than 140 attendants.

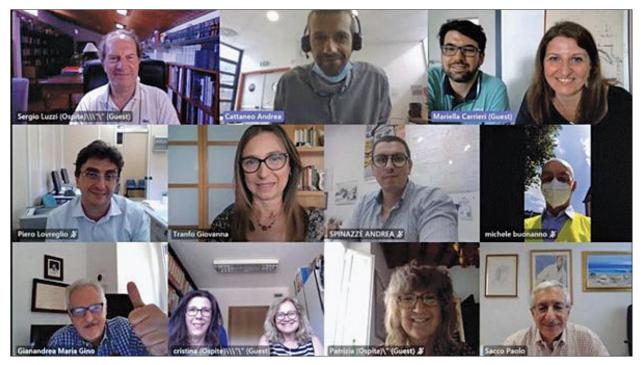
The conference topics included integrated approaches to risk assessment and management, exposure assessments of chemicals and physical agents, repercussions on environmental and occupational hygiene of climate changes, and COVID-19 risk prevention strategies and experiences in occupational and community settings.

The opening lecture, entitled 'The NIOSH perspective on the use of field methodologies and sensors in the occupational field: the challenge for industrial hygiene 4.0', was delivered by Dr Emanuele Cauda, co-director of the NIOSH (National Institute for Occupational Safety and Health) Center for Direct Reading and Sensor Technologies.



During the conference, the AIDII members' meeting was also held. One of the points of the agenda was the presentation of the results of the election that took place in June for the renewal of the National Board of Directors.

In the future, the AIDII will organise the *Incontri Mediterranei* (Mediterranean meetings) in the beautiful location of Syracuse in Sicily (Italy) from 25 to 26 November 2021. The next National Congress of Industrial and Environmental Hygiene will be held from 22 to 24 November 2022 in Cagliari in Sardinia (Italy). Find more information and a calendar of events at https://www.aidii.it/.



The new AIDII National Board of Directors – top (L-R): Sergio Luzzi (vice-president), Andrea Cattaneo (treasurer), Andrea Martinelli (councilor), Mariella Carrieri (president); middle (L-R): Piero Lovreglio (councilor), Giovanna Tranfo (councilor), Andrea Spinazzè (councilor), Michele Buonanno (councilor); bottom (L-R): Gianandrea Gino (secretary), Cristina Aprea (past-president), Anna Cenni (councilor), Patrizia Andreini (councilor), Paolo Sacco (councilor) Photograph: courtesy of AIDII



Joint course with the Swiss Society of Occupational Hygiene (SSOH) and French Society of Occupational Hygienists (SOFHYT)

The Swiss Society of Occupational Hygiene (SSOH) and French Society of Occupational Hygienists (SOFHYT) are proud to share that they successfully collaborated to offer a professional development course (PDC) in French and in English! This was the first collaboration between the societies. We hope this was just the beginning, as we plan to have other opportunities to collaborate in the near future.

The course'How to define an exposure measurements strategy and interpret the data via the use of statistical tools' was held on 21 May 2021 (French version) and 28 May 2021 (English version). The course was conducted by Prof. Jérôme Lavoué, University of Montreal. There were approximately 40 participants. Participant feedback was more than enthusiastic, with overall satisfaction survey results of 84% and 93% for the English and French courses, respectively.

"The PDC was excellent, I'm very glad that Jerome started with the basics and went on step by step."

"Thank you very much for this quality training provided, it allowed me to make better use of the data collected and also to put in place a good strategy for preventing the risk of worker exposure."



Université de Montréal

Invitations to the course were sent to association members and it was advertised on LinkedIn. The eight-hour course was open to both members and non-members of the two societies. The cost was CHF250 or \in 225 for members, and CHF350 or \in 320 for non-members, and was taught via Zoom. It was interactive with poll questions, whereby participants were asked to use their judgment regarding exposure data, and to conduct exercises using the platform Expostats (www.expostats.ca). There was also a final quiz to ensure that participants had been attentive. The top three participants won Swiss chocolates as a motivation.

SSOH and SOFHYT would like to extend a big thank you to all participants!

Controlling exposures to prevent occupational lung disease — the Welding Fume Control Selector Tool

Adrian Parris

e-mail: adrian.parris@sellafieldsites.com

After successfully raising awareness about occupational respiratory risks within the construction industry, the British Occupational Hygiene Society (BOHS) launched the Breathe Freely campaign for the manufacturing sector, with a specific focus on welding fume exposure. The timing was fortuitous as, following the launch of the Welding Fume Control Selector Tool, the International Agency for Research on Cancer (IARC) published a report with the reclassification of welding fume as carcinogenic to humans.

The Breathe Freely manufacturing campaign approach remained the same, targeting the education of key stakeholders such as managers and supervisors, and the use of this newfound knowledge to review risk assessments and improve workplace control of welding fume. The www.breathefreely.org. uk web portal had a familiar feel and remained the key source of educational material. BOHS members united to build their



vast experience and technical expertise into practical and easyto-understand information sheets and guidance documents. In addition to the web portal, the message was shared through hosting events and webinars.

There was one key addition to this campaign, viz. the introduction of an ambitious vision – the Welding Fume Control Selector Tool. The concept was simple: the development of a tool which, when you input a key set of welding parameters and scenarios, will tell the user the optimum control solution for the welding fume that would be generated. So, how did it happen? A panel of experts from industry, consultancies, academia, and the UK Health and Safety Executive formed a working group to create the tool.

GLOBAL EXPOSURE MANAGER



They identified key welding techniques, e.g. tungsten inert gas (TIG), metal inert gas (MIG), and manual metal arc (MMA) welding, and parameters such as material being welded, duration of exposure, and size of the work piece, which influence the risk of exposure. For each combination of these parameters, they then recommended the optimum control for the fume being generated.

The challenge was to integrate this information into an easyto-use tool. A committed developer and many hours later, the tool came to fruition. The final control selection is based on the responses to four basic task-related questions. On answering these, the tool produces a guidance sheet, outlining the best welding fume control solution/s for the various common welding tasks. It could not be simpler!

The working group did not want to provide only the optimum control solution, but also the key information that the owner and user would need to obtain and maintain the best performance from the system. All this information is provided in easy-to-follow guidance sheets. It was also recognised that, under some circumstances, it may not be possible or affordable to use the optimum control solution. Therefore, at the end of the guidance sheets, alternative control solutions are provided.

There is a lot to consider when investing in a new control regime and, to ensure that businesses can easily navigate the sometimesdaunting processes for purchasing, installing, and commissioning a control regime, additional management sheets are provided, which can assist a company in obtaining the maximum return from their investment.

The tool has been accessed by a vast range of users across the world since it was launched in early 2019, and has received positive reviews from them. During the Healthy Workplaces Good Practice Awards at the Healthy Workplaces Summit, held in Bilbao, Spain in autumn 2019, the BOHS was proud to be one of 10 organisations that received commendations for innovative approaches to managing dangerous substances.

So, what is next for the Welding Fume Control Selector Tool? The working group has recently met to discuss how the tool and its content can be enhanced and what additional content can be included, such as controls for welding outdoors and additional information on local exhaust ventilation (LEV) and general ventilation design. A programme has been drawn up and working groups are being structured to develop the new material. The selector tool has been a huge success in this welding fume control project and it is hoped that it can be used in other future Breathe Freely campaigns.

If you haven't already done so, please visit the Welding Fume Control Selector Tool microsite and publicise its existence. Sign up to receive updates and you will be notified when we make changes or add content. It is a great example of how we can work together to make workplaces healthier.

New IOHA communications with the International Agency for Research on Cancer (IARC)

Thomas P. Fuller

e-mail: tpfuller1@gmail.com

Recently, the International Occupational Hygiene Association (IOHA) Stakeholder Relations Committee initiated conversations with the International Agency for Research on Cancer (IARC), the cancer research arm of the World Health Organization, located in Lyon, France. The initial Zoom meetings identified some exciting new areas of collaboration. To begin, two IARC representatives, Mary Brauer-Berigan and Daniel Middleton, will be giving presentations in a special IOHA 2021 Symposium, entitled 'Exposure characterization for international programs in global burden of disease estimation and cancer hazard identification: needs and opportunities for collaboration.'

It was also agreed that IOHA would work more closely with the IARC to understand their needs for data, and provide support in an effort to forward important information to the IOHA membership in an effective and meaningful communication stream. To begin this process, an article on research priorities that describes IARC agents of interest, which appeared in 2019 in *The Lancet Oncology* can be accessed at: https://www.thelancet.com/journals/lanonc/article/ PIIS1470-2045(19)30246-3/fulltext (freely available on registration). A version of this article in French, hosted by Centre Leon Berard in Lyon, is available at: https://www.cancer-environnement.fr/596-Recommandations-du-Groupe-consultatif-sur-les-priorites-des-Monographies-du-CIRC.ce.aspx).

In a simplified representation of IARC areas of interest, a poster of



the recommended priorities for the IARC Monographs during 2020– 2024 is available for viewing or download at: https://monographs. iarc.who.int/wp-content/uploads/2021/01/Priorities-poster-streams. pdf (see Fig. 1). A full report, describing the evidence that led to the priority determinations, is available at: https://monographs.iarc. who.int/wp-content/uploads/2019/10/IARCMonographs-AGReport-Priorities_2020-2024.pdf.

Table 1 shows those priority agents, listed in the full report, that have already been evaluated, or that are scheduled for evaluation through June 2022.

For the upcoming meetings of monograph working groups, all the details (including the calls for experts and data needs), are available at: https://monographs.iarc.who.int/iarc-monographsmeetings/#period:%3E. Last, a link to the working group member nominations process, and forms for agents that should be considered for future prioritisation, are provided at: https://monographs.iarc.who. int/information-on-nominations/.



GLOBAL EXPOSURE MANAGER

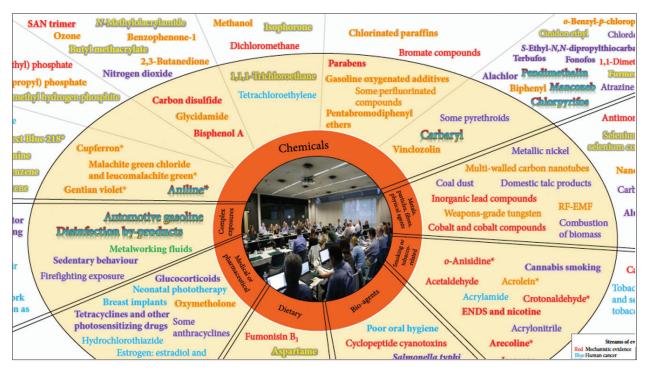
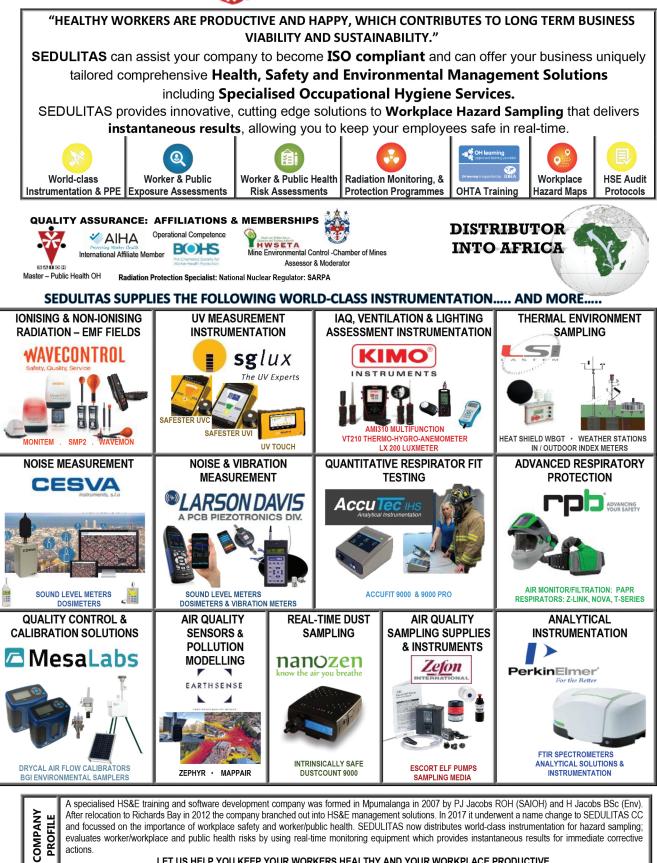


Figure 1. Priorities recommended for IARC Monographs evaluation in 2020–2024

Table 1. Agents that have been evaluated or are scheduled for evaluation
--

Agent	Meeting no. (end date)	Result
Aniline and aniline hydrochloride	127 (12 June 2020)	Group 2A
o-Anisidine and o-anisidine hydrochloride	127	Group 2A
o-Nitroanisole	127	Group 2A
Cupferron	127	Group 2B
Acrolein	128 (13 Nov 2020)	Group 2A
Crotonaldehyde	128	Group 2B
Arecoline	128	Group 2B
Gentian violet	129 (5 March 2021)	Group 2B
Leucogentian violet	129	Group 3
Malachite green	129	Group 3
Leucomalachite green	129	Group 2B
C.I. Direct Blue 218	129	Group 2B
1,1,1-Trichloroethane	130 (22 Oct 2021)	Pending
Hydrazobenzene	130	Pending
N-Methyloacrylamide	130	Pending
Diphenylamine	130	Pending
Isophorone	130	Pending
Cobalt metal (without tungsten carbide) and cobalt (II) salts	131 (15 March 2022)	Pending
Weapons-grade tungsten (with nickel and cobalt) alloy	131	Pending
Antimony trioxide	131	Pending
Occupational exposure as a firefighter	132 (14 June 2022)	Pending





LET US HELP YOU KEEP YOUR WORKERS HEALTHY AND YOUR WORKPLACE PRODUCTIVE. CONTACT US FOR ALL HAZARD ASSESSMENT REQUIREMENTS, SURVEYS AND EQUIPMENT.

MANAGING DIRECTOR: Peter-John (Jakes) Jacobs ROH(SAIOH)

+27 (0)82 551 4001 pjjacobs@sedulitas.co.za