



IOHA

APRIL - JUNE
2024

GLOBAL EXPOSURE MANAGER

SPECIAL EDITION ON IOHA 2024

Editor: Maharshi Mehta, CIH, CSP, FAIHA
Email: maharshi.mehta@ioha.net

Reflections on the 13th IOHA International Scientific Conference in Dublin

Nuala Flavin | Occupational Hygiene Society of Ireland, nuflavin@outlook.com,
Margaret Kirby | Assistant Editor, Health & Safety Review, IRN Publishing, margaret.kirby@irn.ie

The Occupational Hygiene Society of Ireland (OHSI) and the British Occupational Hygiene Society (BOHS) co-hosted the 13th IOHA International Scientific Conference at the Aviva Stadium in Dublin from June 9th to 13th. Attracting 665 delegates from 45 countries, the conference focused on "Protecting workers from health hazards: Advancing in this changing world." Delegates were eager to meet face-to-face to discuss occupational health issues and connect with international colleagues.

This electrifying event featured over 250 contributions, including presentations, themed sessions, workshops, debates, a launch of Breathe Freely Ireland, exhibitors, posters, and keynote lectures. Twelve, three-hour Professional Development Courses (PDCs) were held before the conference free of charge to conference delegates from outstanding speakers on the most relevant topics. The Emerging Leader Institute (ELI), prior to the conference, provided unprecedented opportunities for ELI participants to learn leadership skills.

Welcoming delegates to the start of the conference, the OHSI President, Shara Smith, emphasised that "every worker has the right to a safe and healthy working environment." Launching the event, Dr. Sharon McGuinness, Executive Director of the European Chemicals Agency (ECHA) and former Chief Executive Officer of the Health and Safety Authority (HSA), gave an overview of ECHA's role in protecting workers from exposure to hazardous chemicals. This, she said, is achieved through EU regulations, including the Registration, Evaluation, Authorization, and Restriction of Chemicals Regulation (REACH) and the Classification, Labelling

and Packaging Regulations (CLP). She added there are several projects to enforce these regulations and that ECHA also provides scientifically robust opinions to facilitate developing occupational exposure limits. Making the connection between information which is understood and its relevance to worker health protection, she said that occupational hygienists have an important role to play, particularly in relation to human biomonitoring.

Dr. Balakrishnan, an environmental health scientist from India in her key-note speech highlighted that nearly 0.5 million deaths and 11.8 million Disability Adjusted Life Years (DALYs) were linked to occupational air pollution worldwide in 2019. She stressed the importance of prioritizing actions to improve air quality, such as promoting the use of gas over solid fuels. In his key-note speech, Professor Cas Badenhorst, from a global mining and metal company, emphasized how real-time exposure measurements are revolutionizing the immediate measurement of airborne substances, leading to the control of particulate exposures.

"By collaborating and working closely together on REACH and occupational safety and health, we can ensure workers are protected" Dr. Sharon McGuinness

Dr. Lisa Brosseau, known for her research in infectious diseases, underscored the importance of occupational hygienists' involvement in setting guidelines and standards for infectious agents and disease prevention in workplaces.

Mr. Roger Alesbury, representing the Occupational Hygiene Training Association (OHTA), highlighted the global need for qualified occupational hygienists and provided pathways to becoming qualified in occupational hygiene.

The conference sessions featured the most diverse industry types, including pharmaceuticals, metal fabrication, mining, healthcare, renewable energy, and agriculture, to name a few.

During a dedicated session on Breathe Freely, which originated from the British Occupational Hygiene Society (BOHS), OHSI launched the Irish version of the Breathe Freely campaign (www.breathefreely.ie). Additional presentations discussed lessons learned from the Australian and Canadian experiences in implementing Breathe Freely initiative. The rollout plan for Breathe Freely in the United States was also discussed. These initiatives are a testament to the success of Breathe Freely initiative.

200 plus years old Dublin City Hall, which provided a unique setting for networking. A gala dinner was held at the Aviva Stadium and the events Casella and the Institute of Occupational Medicine sponsored also provided additional opportunities for conference participants to network and experience Irish hospitality.

The conference paved the way for inter-organization and inter- country collaboration, which will go a long way toward reducing potential occupational health risks globally.

The theme of protecting workers was echoed across the full and varied program of this exciting four-day event, where spot prizes for the best posters were awarded each day, and a presentation made to the winner of a national student competition for free attendance at this memorable event.

As the conference delegates return to their respective fields armed with new knowledge and connections, the impact of this conference is sure to resonate globally, shaping the future of occupational hygiene practices.



The social events played a vital role in fostering networking opportunities. The International Safety Systems (ISS) sponsored a welcome reception at the

The 13th IOHA International Scientific Conference in Dublin was a resounding success on all counts. Kudos to all event planners and organizers from IOHA, BOHS, and OHSI for their remarkable efforts in the conference's success. IOHA sincerely thanks all conference sponsors.

IOHA2024 Dublin: Reflections from IOHA President

Samantha Connell, IOHA President, samantha.connell.cih@outlook.com

Hosting an international conference is no small feat. IOHA2024 was a testament to the dedication and passion of everyone involved and the general sense of volunteering across our great profession. On behalf of IOHA, I want to extend a special thank you to the Occupational Hygiene Society of Ireland and the British Occupational Hygiene Society for taking on the responsibility of hosting IOHA2024 and making it a world-class event. I would like to recognize Nuala Flavin (Organizing Committee Chair) and Alison Connolly (Scientific Committee Chair) from OHSI, as well as Kate Jones for her support with the Scientific Committee, and Marie Townshend for the event planning and execution from BOHS.



As I reflect on the experience, several key points stand out, each contributing to the extraordinary nature of the event: diversity of attendees, the well-rounded scientific program, the energy and networking among participants and a common theme that repeatedly appeared – promoting the value of our profession.

While most of our member organizations host a local annual conference or event that provides a strong technical or scientific program, a tailored social program and opportunities to network among their members, the IOHA triennial conference is so special because it is an opportunity for our larger community of

talented professionals to gather for this experience.

One of the most remarkable aspects of IOHA2024 was the diversity of attendees. Participants hailed from various corners of the globe, bringing with them a wealth of perspectives and experiences. This diversity was not just in terms of nationality but also in the range of professional backgrounds represented. It was inspiring to see how different cultures and disciplines could come together to enrich discussions and broaden collective understanding.

The scientific program was meticulously curated to ensure a comprehensive and balanced representation of our field, from cutting-edge research and thought-provoking presentations to practical workshops like the World Cafe. The program catered to various interests and expertise. The quality of the content was a testament to the hard work of our scientific and organizing committees and the contributions of our distinguished speakers.

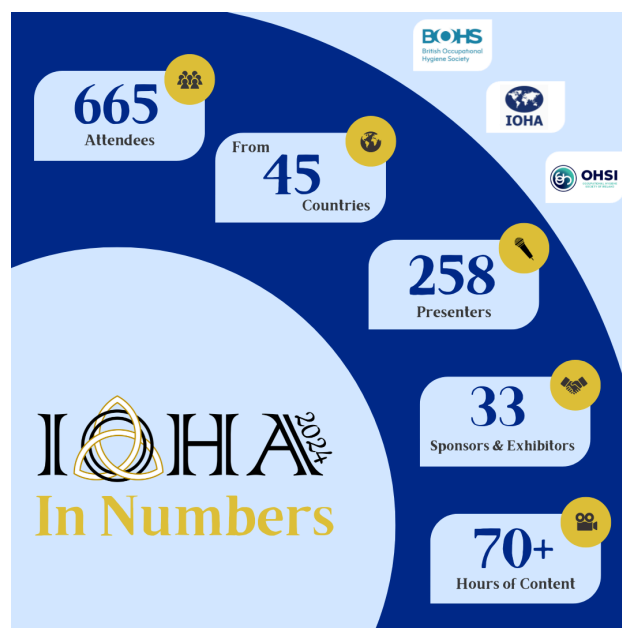
The energy at the conference was palpable from the moment we began. There was a daily buzz of excitement in the Aviva Atrium and throughout the stadium halls. Networking opportunities were abundant. It was particularly gratifying to witness the connections being made, knowing that these interactions would lead to future collaborations and innovations in our field.

A recurring theme throughout the conference was the importance of advocacy and promoting the value of our profession to advance in this changing world. Keynote speakers and panel discussions often circled back to the importance of advocacy and influencing policymaking, providing strategies and

inspiring stories that underscored our collective responsibility to champion our work. This emphasis on advocacy highlighted the current challenges we face and galvanized us to continue striving for greater impact and recognition.

IOHA2024 was a powerful reminder of the strength and potential of our global community. As we move forward, let us carry the lessons and connections from this event, promoting and advancing our profession with renewed vigor and a shared purpose.

We hope to see you at IOHA2027 in Montreal, Canada!



Emerging Leaders Institute Update

Samantha Connell, IOHA President, samantha.connell.cih@outlook.com

The inaugural Emerging Leaders Institute was held the weekend before the IOHA 2024 conference from Friday, June 7th to the afternoon of Sunday, June 9th, 2024, at the Clayton Ballsbridge Hotel in Dublin, Ireland. ELI focuses on strengthening the leadership skills of early career Occupational, Environmental, Health & Safety (OEHS) professionals through three main areas: awareness and influence of self and others to expand leadership capabilities, building and managing high-performance teams, and making a lasting impact on the future of the profession. The program is designed for young professionals with fewer than 15 years of work experience.

The committee would like to extend a thank you to ELI Supporters: IOHA, British Occupational Hygiene Society, Dutch Occupational Hygiene Society (NVvA), Indorama Ventures PCL, Institute of Occupational Medicine, Casella, Shaw City, the Stephen Davis Memorial Fund and many individual contributors.

Andea Hiddinga, past president of IOHA and board member of the Dutch Occupational Hygiene Society, is graciously sharing her experience as a facilitator in the inaugural ELI below.

Thirty-five participants from nineteen countries were in attendance. The future of ELI is to be determined, but one thing is for sure: there is a unanimous call for this cohort to meet at IOHA2027 and for the next group of emerging leaders to take their turn as well!

Journal of an ELI Facilitator: A Poetic Chronicle of Emerging Leaders

Andrea Hiddinga, IOHA Past President and ELI facilitator, andrea@ahoh-projects.com

Day 1: June 7, 2024 - Dublin, a New Dawn

It is Friday morning, 10 a.m., and the Ballsbridge Hotel in Dublin hums with anticipation! Participants of the Emerging Leaders Institute (ELI) gather a colourful mosaic of 19 nationalities, each bringing dreams and aspirations. Some arrived early, soaking in Dublin's charm, while others, fresh off morning flights, rushed in with breathless excitement. Their journey began months ago, with their resumes and letters of recommendation leading to this gathering.

At 11 a.m., the facilitators—Megan, Alex Perry, Samantha, and Andrea—extend their warm welcome. Expectations are shared, and journals handed out, ready to capture the unfolding experiences. The first exercise, the helium stick, sets the tone.

Divided into color groups—red, blue, yellow, and white—participants quickly realize the challenge of synchrony, even with like-minded peers. Laughter and insights fill the room as they grapple with the task, a microcosm of leadership dynamics.



The Color Code methodology follows, unveiling core motives—Power, Intimacy, Peace, or Fun. Participants cluster with their color kin, debating strengths, limitations, desires, and pet peeves. Lively

discussions ensue, fostering mutual recognition and camaraderie. During breaks, conversations flow, and connections deepen. Leadership and accountability partners are chosen, their significance underscored by Megan and Alex's own journey.

Afternoon deepens into more intricate color code details—secondary colors, filters of life experiences. Discussions of complementary and non-complementary relationships, driven by logic and emotion, weave through the session. The day concludes with a BBQ, where reflections mix with future visions for OEHS in various homelands. As dusk settles around 10 p.m., the first day of ELI training wraps up, leaving a buzz of anticipation for what's to come.

Day 2: June 8, 2024 - Escape and Exploration

Saturday dawns early. Some participants opt for a morning run, others for a quiet ritual. The day begins with a quick partner check-in, reflecting on the previous day's insights. Then, a change in pace—armed with running shoes, jackets, and Leap cards, participants embark on an escape tour through Dublin's heart, following the footsteps of Molly Malone.

After being briefed by Andrea, the groups set off to report at the William Smith O'Brien statue as soon as possible to receive their access code from Perry and Alex. The legend of Molly Malone, her quest for wealth and escape from Gerry Adams, unfolds as participants navigate the city, answering questions, snapping creative photos, and strategizing their way through Dublin's streets. Laughter and teamwork abound, a testament to the bonding power of shared adventure.

“This event has been a turnaround in my career and Leadership Journey. It would be great if this continues as the World lacks leaders in various sectors.”

Returning to the Ballsbridge Hotel, lunch is a time for storytelling. Afternoon sessions led by Perry delve into the essence of high-performance teams, reflecting on core values and traits. The Red and Black game follows a stark lesson in team dynamics and the sometimes-painful path to understanding. Evening brings respite at Paddy Cullen's Pub—food, drinks, live music, and camaraderie flow freely, ending the day on a joyous note.

Day 3: June 9, 2024 - Cultural Insights and Future Commitments

Sunday morning, and participants trickle in, seeking coffee comfort. Samantha, ever energetic, begins the day solo but soon gathers the group for the day's introduction. Morning check-ins reveal lingering reflections on the Red-Black game, fostering a rich evaluation of its lessons.

Samantha introduces the culture map, based on Dr. Erin Meyer's research. Discussions on cultural reactions and communications spark vibrant exchanges, highlighting the critical importance of understanding cultural nuances in team dynamics. Groups delve into eight categories, exploring how these insights can shape effective teamwork.

“Attending the ELI was the most influential early career decision I've ever made. Not only was it a great networking event, but it was an opportunity to collaborate on a global level that I wouldn't have been able to do otherwise. We will change the world!”

Just before lunch is served, luminary Chris Laszcs-Davis gives her insights on her journey into leadership. After lunch, participants gain insights from seven community leaders: Nicole Greeson, Sarah Leeson, Nancy McClellan, David Rodriguez, Larry Sloan, Cas Badenhorst, and Ruth Jimenez. These dialogues inspire participants and offer a treasure trove of wisdom and practical advice.

The final session focuses on action plans. Participants create personal leadership commitments captured in quotes or photos and develop 30- 60- 90-day plans with their partners. These commitments are shared, fostering a collective spirit of progress and accountability.

As the sun sets on Dublin, the ELI participants leave with hearts full, minds sharp, and a network of allies. The journey of leadership, now richer and more nuanced, stretches ahead, promising growth, challenge, and triumph.

The reflections from ELI participants, echoing the three-day journey, capture the essence of what the ELI training meant to its participants—a blend of personal growth, professional development, and deep, meaningful connections.

IOHA Updates

IOHA Spring 2024 Board Meeting

Samantha Connell, IOHA President,
samantha.connell.cih@outlook.com

The IOHA Spring 2024 board meeting occurred on Friday, June 14, in the magnificent Thomas Prior Hall of Dublin. There were 32 in-person attendees present among board members, committee chairs, and observers.

Presentations included Executive Committee updates, Committee Chair updates, bids for IOHA2027, and a forum for board members to provide feedback openly. There was an overwhelming appreciation for meeting so many colleagues in person, and many declared renewed energy.



Finalized! 14th IOHA International Scientific Conference in Montréal Québec in September 2027

The Canadian Registration Board of Occupational Hygienists (CRBOH) is pleased to announce that they will host the 14th IOHA International Scientific Conference in Montréal Québec in September 2027. Montréal is a vibrant city that combines fun and games with safety assurance and thrives on diversity and respect. With a world-famous culinary scene and an exciting cultural calendar that never stops, Montréal hosts over 100 cutting-edge festivals.

The planned conference center is high-tech, sustainable, and situated right downtown, with access to 16,000 hotel rooms. Montréal is the home of Institut de recherche Robert-Sauvé en santé et en sécurité du travail (IRSST), a globally recognized research center dedicated to advancing and mobilizing scientific and technical knowledge in occupational hygiene and home of MultiPrévention ASP, an association devoted to the prevention of occupational injury or illness in the manufacturing industry. As one of the founding members of the IOHA, the CRBOH participated in the first IOHA meeting in 1987 held in Montréal.



IOHA 2023 Annual Report from Then IOHA President Maharshi Mehta

Highlighted in this [annual report](#) are the shared accomplishments. Three more associations (Chile, Mongolia, and Nigeria) were added to a total of 42 IOHA associations.

IOHA conducted 12+ webinars for the first time, covering 800+ attendees from 30+ countries on the most relevant topics from outstanding speakers.

IOHA Global Exposure Manager (GEM) newsletter was revitalized with 2500+ impressions on social media and cost savings of 4000 GBP.

IOHA Updates

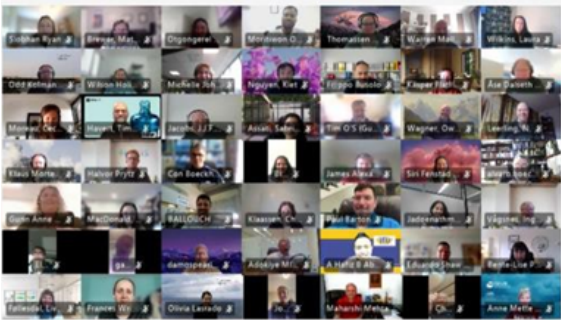
IOHA achieved a 12.5% increase in cash reserve over the previous two years from sound fiscal management and other factors.

IOHA recognizes financial contributions from Amazon.



IOHA Webinars

IOHA continued to offer the most engaging webinars on unique aspects of occupational hygiene. 130+ Participants attended the IOHA webinar on Ototoxicants. **Eduardo Shaw**, CIH, CSP, offered an outstanding webinar that received rave reviews, such as "Thank you for an excellent and very needed presentation. Very well done!"



Webinar Participants

Member Updates

Updates from the Italian Association of Industrial Hygiene (AIDII)

Andrea Spinazzé,¹ Andrea Martinelli,² Mariella Carrieri²

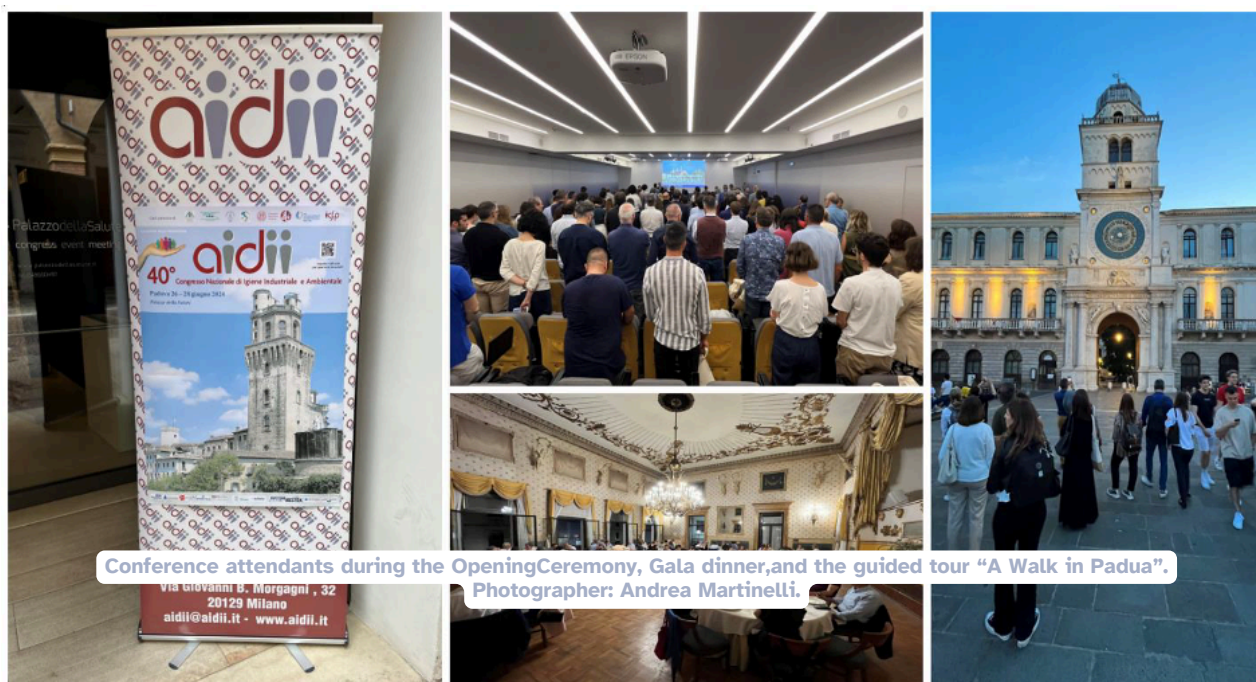
1 Department of Science and High Technology, University of Insubria, 22100 Como, Italy. andrea.spinazze@uninsubria.it

2 Department of Cardiac Thoracic Vascular Sciences and Public Health, University of Padua, 35132 Padova, Italy. andrea.martinelli@unipd.it; mariella.carrieri@unipd.it

The Italian Association of Industrial Hygienists (AIDII) organized the 40th National Congress of Industrial and Environmental Hygiene from June 26 to June 28, 2024, at the Palazzodella Salute in the beautiful city of Padua. The conference's scientific committee delivered a high-quality event that attracted more than 250 participants, underscoring the growing importance of topics related to workplace health and safety and environmental hygiene. The congress offered a rich and varied program with numerous contributions from national and international experts (80 oral presentations and 25 posters) and the keynotes of Samantha Connell and Angelo Moretto during the Opening Ceremony.

A very emotional time was the moment of silence to remember the worldwide victims of work-related accidents and diseases. An empty seat was reserved for the victims throughout the conference.

The 40th National Congress of Industrial and Environmental Hygiene was a success in terms of both participation and content quality. It provided a valuable platform for learning, exchange of ideas, and networking.



Conference attendants during the Opening Ceremony, Gala dinner, and the guided tour "A Walk in Padua".
Photographer: Andrea Martinelli.

Member Updates

Heat Stress App from the American Industrial Hygiene Association (AIHA)

*Ed Rutkowski, director of periodicals at AIHA® and editor-in-chief of The Synergist®
erutkowski@aiha.org*

In June, a beta version of the AIHA Heat Stress Mobile App underwent user testing. It was anticipated that the app would be ready for wide release on both Android and iOS platforms by the middle of July.

A project of AIHA's Thermal Stress Working Group, the AIHA Heat Stress Mobile App improves upon the Heat Safety Tool released by U.S. OSHA and NIOSH in 2017. Both apps access weather data and present users with qualitative risk levels and recommended preventive measures, but the OSHA/NIOSH version is based on heat index while the AIHA app uses WBGT (wet bulb globe temperature) index, a more accurate environmental metric of heat stress.

The AIHA app not only calculates the current WBGT index but also forecasts what the WBGT index will be up to five days ahead of time. Knowing the forecasted WBGT index allows employers to schedule work accordingly, perhaps by shifting heavier work to the morning.

Also part of the app's initial release is a clothing adjustment factor. By default, the app assumes users are wearing a t-shirt and jeans, but users can choose among a few protective ensembles; the more impermeable the clothing, the greater its potential contribution to heat stress. The app also accepts user input regarding cloud cover. If nothing is selected, the app assumes the user is working in direct sunlight. And users can select one of four workloads—light, moderate, heavy, or very heavy—and set reminders to rest and hydrate based on their work schedules.

Based on the inputs for clothing, ambient weather, and workload, the app adjusts the user's WBGT index and the resulting risk level. Once the risk level is determined, the app delivers appropriate protective measures. Users can access links to authoritative resources on heat stress and an explanation of how to help coworkers who may be experiencing heat-related illness.

The app can access weather data throughout North, Central, and South America, and is available not only in English but also in French, Portuguese, and Spanish. Eventual expansion to other parts of the world is possible. Further development is planned, with updates released on a regular, perhaps annual, basis.

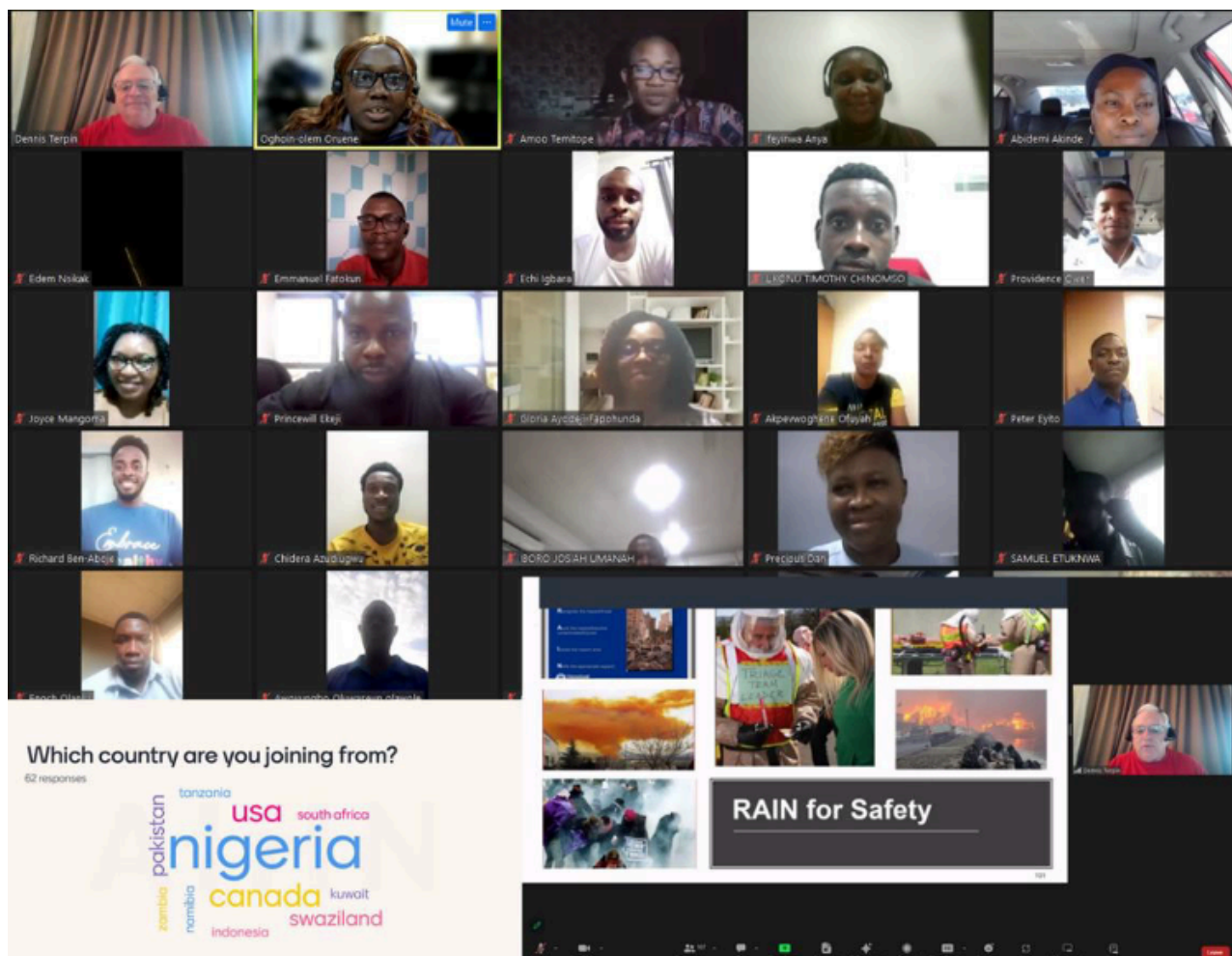
This article is excerpted from the June/July issue of The Synergist. The full article is available at aiha.info/syn2406app.

Member Updates

Association of Industrial Hygienists Nigeria (AIHN) Webinar

On Saturday, June 22, 2024, the Association of Industrial Hygienists Nigeria (AIHN) conducted the second webinar of the year 2024. The webinar was facilitated by Dr. Dennis Terpin, a Master-Level Instructor and retired Senior Industrial Hygienist with over five decades of experience. The webinar focused on "Hazard and Risk Assessment Respiratory Protection During Disaster Management."

Dr. Terpin emphasized pre-planning for emergencies, recognizing hazards, and the critical first 100 minutes of a disaster. The session was engaging and brought unmatched insights, with a record peak attendance of 110 participants from 12 countries. The #AIHN2024 tagged "Addressing Occupational Health Risks in Nigeria: Strengthening the Role of Industrial Hygiene." was officially unveiled during the webinar. This announcement has set the stage for the third Annual Conference of the AIHN, scheduled to host OEHS Professionals from across the globe from November 7 to 9, 2024. Mark your calendars - this will be an event like no other!



Upcoming Events

EXPO2025 Safety, Health, and Wellbeing for All

Samantha Connell, IOHA President, samantha.connell.cih@outlook.com

EXPO 2025 is an international exposition that will be held in Osaka, Japan, from April 13 to October 13, 2025, with a week dedicated to Safety, Health and Well-being (SHW) from July 16 – 19, 2025. The theme of the expo is "Designing Future Society for Our Lives". EXPO 2025 will be a monumental moment for our field, as it is the first time that SHW will be allotted a week at an international expo.

During the program, Expo visitors and SHW experts worldwide will have the opportunity to enjoy six exciting activities: a Summit, a World Assembly, an ILO Youth Congress, an International Symposium, a Festival, and a Theme Park/Exhibition.

As a member of the Executive Committee and Working Groups for the International Symposium and World Assembly, IOHA will be present and participating in several of the events listed above. IOHA members from across the world can also join the SHW week during the expo at a discounted rate.

- IOHA members from Low- and Lower-middle Income Countries are entitled to a 40% reduction in the registration fee
- IOHA members who are officially registered students are entitled to a 60% fee reduction in the registration fee
- All other IOHA delegates will be entitled to a special fee reduction of 30%

IOHA will be communicating more on the various events throughout the SHW week. For now, save the date and check out more details here:

[GISHW - Global Initiative for Safety, Health & Well-being](#)



The Institute of
Global Safety Promotion



Upcoming Events

First Occupational Health, Safety and Environment Conference Viet Nam Vietnamese Industrial Hygiene Association (VIHA)

Tuan Nguyen, MBA, CIH, CSP, ARM, FAIHA, Vice President, VIHA
tuancihcsp@gmail.com

The first Occupational Health, Safety, and Environment conference will be held in Hanoi, Vietnam, from October 14 to October 26, 2024. The conference is hosted by the Faculty of Environmental Sciences, University of Science, Vietnam National University, Hanoi (FES-HUS-VNU), and the Central Institute for Natural Resources and Environmental Studies (CRES-VNU)). The organizers invite you to attend the conference and participate as session moderators, presenters, or abstract reviewers. This pivotal event will bring together experts, practitioners, and stakeholders from around the globe.

MIHA-ICE'24 & 7th ANOH Conference 2024

Philip Hibbs, President, ANOH philip.hibbs@hibbs.com.au

The Malaysian Industrial Hygiene Association (MIHA) & the Asian Network of Occupational Hygiene (ANOH) will jointly host the MIHA International Conference & Exhibition 2024 (MIHA-ICE '24) & the 7th ANOH Conference 2024. The conference will be held on October 17 to October 23, 2024 at Kuala Lumpur Convention Centre, Malaysia.

The conference theme is “Connect for Innovative Change—The Asian Way,” with the aim of fostering collaboration, exchanging best practices, sharing lessons learned, and promoting innovative solutions to enhance Industrial Hygiene (IH) / Occupational Hygiene (OH) standards in the region.

Please refer to the website for more information. <https://mihaice.anoh2024.org/>

Upcoming Events

ISRP conference



21st International Conference on “Respiratory Protection Use and Users” from the European Section of the International Society for Respiratory Protection (ISRP) will be held at Oxford, UK from September 22 to September 24, 2024.

The conference is a great opportunity to hear about and to share the very latest in respiratory protection research, innovations, applications, and many other topics, with the international community. The conference will include a technical presentation program, a poster session, an exhibition and many networking opportunities.

[Registration and Information Link for the Conference](#)

The Southern African Institute for Occupational Hygiene (SAIOH) Annual Conference 2024

“Sustainable Occupational Hygiene in Changing Work Environments and Emerging Economies”

SAIOH is inviting participants from Southern African nations and all other countries to its upcoming Annual Conference, which will be held in Gaborone, Botswana, from October 21 to October 24, 2024.

The SAIOH Annual Conference will be held in a hybrid format so that participants can attend in person and virtually.

[Link for additional information on the SAIO Conference](#)



Upcoming Events

The Association of Industrial Hygienists, Lagos Nigeria (AIHN) Annual Conference 2024, November 7 – November 9, 2024, Port Harcourt, Nigeria

Submit an abstract for the third (3rd) AIHN Annual Conference on Addressing Occupational Health Risks in Nigeria: Strengthening the Role of Industrial Hygiene on or before September 10, 2024, at email id aihlagos@gmail.com.

The sub-themes for this conference are:

- IH Monitoring Data
- Industrial Processes
- Legislation
- Sustainability, and
- Exposure Control



IOHA in Español

Impacto del Cambio Climático en la Salud Laboral: Un Desafío Emergente.

Dra. Ana María Salazar B. Profesora Titular. Jefa Programa Salud Ocupacional. Instituto de Salud Poblacional. Facultad de Medicina. Universidad de Chile. anasalazar@uchile.cl

No cabe duda, que el cambio climático es una realidad que impacta no solo en el medio ambiente, sino también en la salud y seguridad de los trabajadores (SST). Fenómenos como el aumento de las temperaturas, la exposición a la radiación ultravioleta y los eventos climáticos extremos representan riesgos adicionales a los que se enfrentan los trabajadores en distintos sectores económicos. Es fundamental implementar estrategias de mitigación de riesgos adaptadas a cada lugar de trabajo y comprender a fondo las amenazas medioambientales para evaluar y gestionar adecuadamente los riesgos en materia de seguridad y salud laboral.

El cambio climático afecta la seguridad y la salud de los trabajadores, asociado al aumento de las temperaturas, la exposición a la radiación ultravioleta, el contacto con patógenos, la contaminación del aire y el clima extremo, ya que pueden incrementar los riesgos existentes o generar otros nuevos, como trastornos relacionados con el calor, enfermedades transmitidas por vectores y agua, accidentes, alergias y cáncer (ANSES, 2018). En nuestro país, en los últimos años adquiere mayor relevancia en trabajadores que realizan actividades en la agricultura, minería, silvicultura, construcción, entre otras. Por lo tanto, las estrategias de mitigación de riesgos deben adaptarse a la diversidad de la población activa y a los peligros de cada sector económico. Es necesario comprender a fondo las amenazas del cambio climático para la SST para evaluar y gestionar adecuadamente los riesgos (OST wiki, 2023).

Respecto al aumento de las temperaturas, este es un tema que en los últimos años ha adquirido mayor importancia para la SST; el calor extremo puede afectar la concentración y causar fatiga mental, deshidratación, agotamiento, alterar el ritmo cardíaco, enfermedades respiratorias y renales, y potencialmente golpe de calor, agotamiento y síncope, si el cuerpo no puede mantener su temperatura habitual (Parsons, 2014; Varghese et al., 2018; EEE, 2022; EU-OSHA, 2023b; OSH wiki, 2023). Por otra parte, una mayor exposición al calor fuera de las horas de trabajo puede impedir que los trabajadores se recuperen adecuadamente del estrés térmico entre turnos de trabajo, especialmente si no cuentan con sistemas que le permitan controlar dicha exposición (Hansen et al., 2013). En ciertas regiones de nuestro país, es posible que sea necesario modificar los patrones de trabajo para evitar las horas más cálidas y soleadas y el trabajo nocturno podría aumentar a modo de compensación.

Por otro lado, las personas que trabajan con carga solar también corren el riesgo de una mayor exposición a la radiación Ultra Violeta bajo un clima cambiante, lo que aumenta el riesgo de quemaduras solares y, en última instancia, cáncer de piel. En Europa, se ha visto que, éstos corren más riesgo de cáncer de piel que los trabajadores que ejecutan sus labores al interior de una empresa, con un tipo de piel similar (Trakatelli et al., 2016). La exposición directa a la radiación solar también puede afectar el rendimiento moto-cognitivo (Piil et al., 2020) y aumentar el riesgo de lesiones.

Se prevé que los fenómenos meteorológicos extremos, como inundaciones e incendios forestales, aumenten en número, severidad e intensidad a nivel mundial y puedan causar lesiones y muertes. Las condiciones climáticas severas pueden aumentar el riesgo de asfixia, quemaduras, congelación y en el caso de los trabajadores de emergencia de primera línea (bomberos, socorristas, rescatistas, etc.), los riesgos de gases tóxicos, explosiones, calor extremo y lucha contra incendios. No cabe duda entonces, que los impactos físicos, los peligros climáticos también afectan la salud mental de los trabajadores (Schulte et al., 2016; Dasgupta et al., 2021; OMS, 2022).

Referencias.

- ANSES, 2018, ANSES Opinion — Evaluación de los riesgos para la salud de los trabajadores que plantea el cambio climático, ANSES (Agencia Francesa para la Alimentación, el Medio Ambiente y la Seguridad en el Trabajo), Maisons-Alfort. Disponible en <https://www.anses.fr/en/system/files/AP2013SA0216EN.pdf>
- OSH wiki, 2023, Cambio climático: Impacto en la Seguridad y Salud Ocupacional (SST). Agencia Europea para la Seguridad y la Salud en el Trabajo, disponible en <https://oshwiki.osha.europa.eu/en/theme/s/climate-change-impact-occupational-safety-and-health-osh>. Consultado el último mes de marzo de 2023. Parsons, 2014.
- Varghese, B.M., et al., 2018, ¿Están los trabajadores en riesgo de lesiones ocupacionales debido a la exposición al calor? Una revisión completa de la literatura, Safety Science 110, 380-392. <https://doi.org/10.1016/j.ssci.2018.04.027>
- EEE, 2022, El cambio climático como amenaza para la salud y el bienestar en Europa: centrarse en el calor y las enfermedades infecciosas. Agencia Europea de Medio Ambiente, Copenhague. Disponible en <https://www.eea.europa.eu/publications/climate-change-impacts-on-health>
- EU-OSHA, 2023b, Heat at work — Orientación para los lugares de trabajo. Orientación de la UE, Agencia Europea para la Seguridad y la Salud en el Trabajo. Disponible en <https://osha.europa.eu/en/publications/heat-work-guidance-workplaces>
- Hansen, A., et al., 2013, Vulnerabilidad al calor extremo y al cambio climático: ¿Es la etnicidad un factor? Acción en materia de salud mundial 6, apartado 1, 21364. <https://doi.org/10.3402/gha.v6i0.21364>
- Trakatelli, M., et al., 2016, Riesgo de cáncer de piel en trabajadores al aire libre: un estudio multicéntrico europeo de casos y controles, Journal of the European Academy of Dermatology and Venereology 30(S3), 5-11. <https://doi.org/10.1111/jdv.13603>
- Piil, J.F., et al., 2020, La exposición directa de la cabeza a la radiación térmica solar afecta el rendimiento cognitivo motor. Informes científicos 10(1), 1-10. <https://doi.org/10.1038/s41598-020-64768-w>
- Schulte, P.A., et al., 2016, Avanzando el marco para considerar los efectos del cambio climático en la seguridad y la salud de los trabajadores, Journal of Occupational and Environmental Hygiene 13, 847- 865. <https://doi.org/10.1080/15459624.2016.1179388>
- Dasgupta, S., et al., 2021, Efectos del cambio climático en la productividad y la oferta laborales combinadas: un estudio empírico, multimodelo, The Lancet Planetary Health 5(7), e455-e465. [https://doi.org/10.1016/S2542-5196\(21\)00170-4](https://doi.org/10.1016/S2542-5196(21)00170-4)
- OMS, 2022, Salud mental y cambio climático: Resumen de la política. Organización Mundial de la Salud. Disponible en <https://www.who.int/publications-detail-redirect/9789240045125>