

# **NEWSLETTER**

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#### Letter from the Editor

After a very cold winter in the North hemisphere and very hot summer in the South  $\odot$ , here we are to share some news and thoughts about our field.

This issue is shorter than usual but we have many interesting news, from IOHA, member associations, EU-OSHA and colleagues from many countries.

I take this opportunity to share with you a concern and ask for ideas on how we could act jointly to improve the present situation, as occupational health professionals from all over the world – each one in his/her sphere of action.

As already mentioned on previous Newsletters, over the years, we have all had the occasion to observe important actions definitely requiring a component of primary prevention at the workplace, which was however non-existent or very weak. The insufficient importance given to primary prevention is an "old story". We have also seen many actions advocating environmental protection but overlooking the tremendous contribution that could and should come from primary prevention in the workplace, particularly through measures for source control.

However, what I am about to mention now is not only lack of primary prevention but lack of recognition of the paramount importance of the workplace concerning one dreadful but preventable disease: occupational cancer.

What drew my attention to this was a notice about cancer prevention programmes in Latin America, particularly in Brazil, involving considerable funds and supported by an important foreign NGO dedicated to this field, that I am sure carries out very relevant and useful work. I thought that this was very good but was disappointed when, looking at the content of these programmes, I did not to find adequate mention of the dangers, and the possibilities for prevention, of occupational cancer. The same occurred when looking at similar programmes, sponsored by other organizations and even governmental agencies. The main focus is usually early diagnosis (which is essential) and

treatment (which is indispensable) and psychological follow up of people under treatment (undeniably needed), but would it not be better to avoid all this suffering and expense by just preventing the disease, if and when this is possible? And this is possible when dealing with occupational cancer! In some programmes, occupational cancer is not mentioned at all; in others, there are brief mentions, mostly to asbestos (and there as so many other carcinogens in workplaces!). I would be delighted to be wrong (and perhaps I am), therefore I am asking for your help in examining cancer prevention programmes in your countries and finding out exactly the degree of importance given to the recognition, diagnosis and prevention of, specifically, occupational cancer.

This is a serious matter. For example, according to NIOSH, "it is estimated that approximately 20,000 cancer deaths and 40,000 new cases of cancer each year in the U.S. are attributable to occupation" (<a href="http://www.cdc.gov/niosh/topics/cancer/">http://www.cdc.gov/niosh/topics/cancer/</a>). As we know, cases of occupational diseases, recognized as such, represent a small fraction of what really occurs, in view of much under diagnosis and under reporting. This is particularly (although not exclusively) true in developing countries. For example, for Latin America, PAHO/WHO estimates that no more than 5% of occupational diseases are duly notified. This refers to all of them and, for cancer, the situation may be even worse because latency can be so long and not all health professionals are able to establish its causal link to workplace hazards.

This situation troubles me because occupational cancer is so preventable! I believe that we, as occupational health professionals, should contribute more and more efficiently to creating greater awareness and political will in this respect. It is important that occupational hygienists and other occupational health professionals (particularly physicians and nurses) work together to emphasize the link between work environment exposure and disease, hence the great possibility for prevention. Particularly in the case of cancer, it seems to me that this has been overlooked by many decision makers, and it would be in their hands not only to save lives but to avoid unnecessary human suffering and also (why not say it ?) unnecessary waste of usually scarce funds for health. Your views on this matter would be most welcome and appreciated, and will be shared with all our readers in the next issue.

As always, I would like to thank those who contributed to this issue and encourage colleagues from all over to send news on their work and on their professional concerns, as well as suggestions for improvement of this Newsletter. Thank you.

Best greetings to all

Berenice Goelzer berenice@goelzer.net

# 8<sup>th</sup> IOHA International Scientific Conference – Rome 2010



#### **HEALTH, WORK AND SOCIAL RESPONSIBILITY**

The occupational hygienist and the integration of environment, health and safety Sent by: Alice Gargiullo, E-mail: A.Gargiullo@igeam.it

The 8<sup>th</sup> IOHA International Conference, to be held in Rome from 28 September to 2 October 2010, has generated a growing interest, due to the particular relevance of the latest developments in the scientific programme and the significant contributions arriving from all over the world.

It is expected that this conference will be a major forum in the development of occupational (industrial) hygiene in view of the following:

**Papers:** More than 600 papers have been received from more than 50 Countries all over the world. The scientific reviewers are evaluating the submissions and they might suggest methodological and/or editorial modifications in order to ensure a high quality in all presentations. There will be over 700 scientific contributions including more than 600 oral and poster presentations as well as award and special lectures. In addition, there will be workshops, technical discussions and professional meetings.

Speakers: The Conference will bring together the most prominent international experts to discuss social responsibility strategies for the decade of 2010-2020, to define occupational hygiene methods and tools needed in countries with different levels of industrial development and to discuss current occupational hazards related to new emerging technologies and social scenarios. The speakers represent experienced professionals from the most prestigious universities, institutions, professional organisations and associations worldwide who are dedicated to health and safety in the workplace.

**Topics:** These will address both traditional issues of occupational (industrial) hygiene and new "frontier topics" always accounting for and emphasizing innovation and integration of competences. Examples of topics to be addressed by the Congress include: risk assessment, indoor air quality, asbestos and silica, chemicals and physical agents, REACH, biological monitoring, ergonomics, sampling techniques, health and safety in agriculture, stress and work, control banding and nanotechnologies, occupational hygiene certification systems, sustainable development and environmental hygiene.

Scientific Partnerships and Sponsorship: The most relevant Institutions worldwide will attend the IOHA 2010 Conference. The congress is being organized by IOHA, the

Italian Association of Industrial Hygienists (AIDII), the National Institute for Occupational Safety and Prevention (ISPESL) and the Italian Workers' Compensation Authority (INAIL) and also has the sponsorship from the ILO, WHO and Italian national and local institutions, such as the Italian Ministry of Labour, Italian Ministry of Environment and Italian Ministry of Economic Development.

Other outstanding institutions worldwide have joined the IOHA conference as partners, such as the European Network of Safety and Health Professional Organisations (ENSHPO), International Commission on Occupational Health (ICOH), International Ergonomics Association (IEA), European Environment Agency, European Agency for Safety and Health at Work (EU-OSHA), International Standardization Organization (ISO), and National Institute for Occupational Safety and Health (NIOSH, USA).

**Publications**: A special issue of the Annals of Occupational Hygiene will be dedicated to selected papers from the Conference. A special issue of the Italian Journal of Occupational and Environmental Hygiene (IJOEH) will be dedicated to the keynote lectures. Other papers will be selected for publication in IJOEH and in other scientific journals with which agreements will be signed in the next weeks. Moreover, all scientific papers will be published and distributed during the Conference. Participants will have also the access to the database containing all scientific documents on the Conference website (<a href="https://www.ioha2010.org">www.ioha2010.org</a>).

Certification Maintenance (CM) Points: Attendance and participation in assigned activities is required to earn certification points. IOHA 2010 has already been approved for certification maintenance points by the Australian Institute of Occupational Hygienists (AIOH), the British Occupational Hygiene Society (BOHS), the Canadian Registration Board of Occupational Hygienists (CRBOH), the Southern African Institute for Occupational Hygiene (SAIOH) and the Italian ECM. Detailed information concerning certification points and point values for specific professional development courses can be found in the conference website. So far, the following professional associations have confirmed point values, as follows:

- AIOH: 0.5 per half day;
- BOHS: 1 point per full day attendance;
- CRBOH: 1 maintenance point per conference day; 1.0
  maintenance point for each full day attendance at
  Professional Development Courses and 0.5 maintenance
  point per ½ day;
- SAIOH: double points (meaning: "attendance of the Conference: 0.25 x 2/double pts per day; presentation of a paper or lecture: 0.5 X 2/double pts per talk/ presentation, and, attendance of CPD sessions: 0.5 x 2 per day or 0.25 x 2/half day").

Target Audience: An attendance of about 1.000 people is expected, among the world leading scientific and workers' health, professional experts in environmental issues and social responsibility, from governmental and non-governmental institutions, as well as from the private sector. Participation in this Conference will provide the opportunity to have a face-to-face meeting with thousands of OHSE professionals, such as occupational (industrial) hygienists, EHS specialists, safety professionals, risk management professionals and others responsible for safety, health and environment in their organisations. Those interested in improving their career or developing their businesses internationally will have the chance to make important contacts and build up a network of colleagues from different countries. During the Conference there will be the possibility to arrange private or public meetings.

**Date and Location:** The months of September and October are the best time of the year to visit Italy. The conference venue is in the heart of the historic centre of Rome, close to St Peters and the Vatican Museums, and within walking distance from the Forum and Coliseum. By direct train from Rome, one can visit the treasures of Florence (95 minutes), Venice (4 hours), and Naples (70 min). On Rome's metro ticket one can visit the forgotten ancient city of Ostia Antica (30 min).

More information is available online at the conference website: www.ioha2010.org, which is regularly updated.

#### Remember

**Important deadlines:** In the next days the definitive scientific programme and time table will be posted on the conference web site <a href="https://www.ioha2010.org">www.ioha2010.org</a>.

The deadline for Early Bird Registration is 28 May 2010.

**Forthcoming events:** The IOHA Conference Chair and some members of the Organizing Committee will attend the AIHCE Conference in Denver, Colorado, USA. On this occasion there will be an IOHA exhibit at the Colorado Convention Center, Halls A & F1, Booth number 635.

#### **Organisers:**









# **News from Member Associations**

# From AIHA, USA

**AIHA Participates in GHS Public Hearing** 

Sent by Aaron Trippler, E-mail: <a href="mailto:atrippler@aiha.org">atrippler@aiha.org</a> and Melissa Hurley, E-mail: <a href="mailto:mhurley@aiha.org">mhurley@aiha.org</a>

The American Industrial Hygiene Association (AIHA) participated in a public hearing hosted by the Occupational Safety and Health Administration (OSHA) on 5 March 2010, to discuss modifications to the Hazard Communication Standard in order to conform to the United Nations' Globally Harmonized System of classification and Labeling of Chemicals (GHS). In anticipation, AIHA prepared comments to the proposed revisions and submitted its "Proposal to Modify the Hazard Communication Standard to Conform to

the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS)" at the hearing.

"AIHA shares the concerns that inaccurate, incomplete and outdated Material Safety Data Sheets (MSDSs) can increase risks of illnesses and injuries and environmental consequences arising from the handling, storage, transportation, and use of hazardous chemicals. Industrial

hygiene, safety, emergency response, and environmental health professionals rely on MSDSs as a source of information to assist employers and employees properly manage hazardous chemicals," said AIHA President Cathy Cole, CIH, CSP.



# Cathy Cole, AIHA President, addressing the GHS Public Hearing

In the proposal comments, AIHA discussed parts of the OSHA proposal that it supports and gave

recommendations regarding areas of concern. Cole further stated that "AIHA agrees the proposed modifications to the Hazard Communication Standard (HCS) will improve the quality and consistency of hazard communication information provided to employers and employees."

One of AIHA recommendations referred to the proposed requirement that OSHA permissible exposure limits (PELs), as well as other exposure limits used or recommended by the chemical manufacturer or importer, be included on the Safety Data Sheet. AIHA believes that if OSHA allows

the inclusion of other occupational exposure limits used or recommended by chemical manufacturers, importers, or employers, then the agency must take this a step further and add a non-mandatory appendix to the HCS to incorporate reference to the TLVs and other occupational exposure limits like the Workplace Environmental Exposure Levels (WEELs).

AIHA cited several explanations as to why the requirement should be extended to include these additional occupational exposure limits. The association also requested that OSHA work with stakeholders in order to address the issue of updating PELs. In its conclusion, AIHA highlighted parts of the OSHA proposal that it supports, including the proposed implementation schedule.

"The GHS, when fully implemented, will facilitate international trade in chemicals and provide a recognized framework that adds to the protection of employers and employees. AIHA pledges our full assistance to OSHA, other regulatory bodies, industry, and the international community to see that the GHS accomplishes its intended objectives. AIHA's concern continues to be the prevention of health risks to workers and others", said Cole.

AIHA's full <u>comments</u>, as well as additional comments eventually received, are available for review at their website: <u>www.aiha.org</u>.

# From JAWE, Japan

Japan Association for Working Environment Measurement (JAWE) - Joint Conference and Exhibition on Occupational Hygiene and Working Environment Measurement 2009, Kanazawa, and Signing ceremony between JAWE and KSOEH

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The Japan Association for Working Environment Measurement (JAWE), whose Chairperson is Mr. Shigeru Oshita, Managing Director, Nippon Steel Corporation, and the Japan Occupational Hygiene Association (JOHA), whose chairperson is Professor Isamu Tanaka, University of Occupational and Environmental Health, held their 12<sup>th</sup> "Joint Conference and Exhibition on Occupational Hygiene and Working Environment Measurement 2009" in Kanazawa", from 11 to 13 November 2009, in Kanazawa City, located about 400 Km northwest from Tokyo, one of the major cities along the Japan Sea.

This event provided researchers, technical experts in working environment control, manufacturers/dealers of measuring equipment and other interested people of 300 participants altogether with a good opportunity to discuss and exchange views on their daily technical issues.

The Joint Conference and Exhibition consisted of three parts, namely scientific presentations, special lecture sessions and exhibits. There were 46 scientific presentations and 13 case studies by researchers and experts, together with 12

manufacturers' presentations on their commercially available models.

Among the 46 scientific presentations, 32 were on sampling and analytical technology for environmental agents ranging from mineral dusts and asbestos to metals and organic compounds. Sixteen presentations were on working environment evaluation.

The Symposium, which used to be an important part of this event, was replaced by four special lectures on the following topics:

- "Discussion in ISO on the analytical methodology of asbestos in construction materials" by Dr. Norihiko Kohyama, professor of Toyo University and head of the Japanese working group of SC-3, TC146 of ISO;
- "Nanoparticles and sampling/analysis of workplace environment" by Dr. Mitsutoshi Takaya, Chief researcher of JNIOSH;

- "Risk assessment and management of Chemicals in workplaces" by Mr. Kenichi Yamada, deputy director of Occupational Health Research and Analysis Centre, Japan Industrial Safety and Health Association, and,
- "International Trend of Nanoparticles Research and Development" by Dr. Toshihiko Myojo, assistant professor of University of Occupational and Environmental Health.



**Special lecture sessions** 



Exhibition at the JAWE/JOHA 2009 Conference

#### Memorandum of agreement between JAWE and KSOEH

At the annual academic convention of the Korean Society of Occupational and Environmental Hygiene (KSOEH) held in Pusan, Korea, on 28 and 29 January 2010, KSOEH and JAWE had the MoU signing ceremony with signers of Palk, Jong-Min, President of KSOEH and professor of Department of Industrial Health, Catholic University of Pusan, and Shigeru Asuka, Executive Director of JAWE.



Signing ceremony between JAWE and KSOEH

The purpose of this MoU is to improve the professional capacity of the respective institutions in the field of occupational hygiene/working environment control, thereby ensuring better working conditions and contributing to workers' health and safety in the respective countries.

It was indeed a commemorative occasion for both associations to have launched, for the first time, an agreement for bilateral cooperation. JAWE would like to exchange information and experiences with other Asian countries in the field of working environment control in near future.

Besides, at the opening ceremony of the academic convention, Dr. Palk, Jong-Min, President of KSOEH, kindly gave JAWE Executive Director a chance to introduce the present status of working environment measurement and control in Japan.

# From SSOH, Switzerland

The Swiss Society's Certification Scheme has been recognized by the National Accreditation Recognition Committee of IOHA

Sent by: Michel Guillemin, E-mail: <u>michel.guillemin@gmail.com</u>

On 8 October 2009, the Swiss Society of Occupational Hygiene (SSOH) was certified as an "IOHA Recognized Certification Board" by the IOHA President, Danilo Cottica who got the positive report of the National Accreditation Recognition (NAR) Committee of IOHA.

The SSOH has been founded in the eighties, first as a "local section of AIHA", and a few years later as a National Society.

In cooperation with the University of Lausanne and its Institute for Occupational Health Sciences, and the Federal Institute of Technology in Zürich and its Institute for Hygiene and Work Physiology, a two years postgraduate course has been created in 1993, which is still running and has been transformed in a "Master of Advanced Studies". The originality of this training and education framework relied on the fact that it was for occupational physicians and

occupational hygienists together. Three out of four "blocks" of training modules were for both disciplines and one was dedicated only for the occupational hygienists (core business) and one only for the physicians. The participants learned from the beginning to work together and to practice "transdisciplinarity". Now the course is also dedicated to the ergonomists and has three "specialized" blocks. The idea to have a closer cooperation with occupational psychologists is under consideration.

Thanks to the National Accreditation Scheme of IOHA, the Swiss course has been fitted to the requirements of the scheme; as a result, the examination procedure and the overall validation of the professional competence of the future occupational hygienists have been significantly improved.

The SSOH has now around 120 members and runs two meetings every year: one for the exchange of experience among peers and another to promote the multidisciplinary approach with one the other national societies in the other occupational health and safety fields (e.g., safety,

occupational medicine, ergonomics, occupational nursing, among others).

Switzerland is a multilingual and multicultural country, which favors an opening to the world as well as a democratic and a collaborative approach to the OH&S problems.



The founding members of the SSOH and the President of AIHA on 6 April 1984; from left to right: Pierre Cuendet, David Bernstein, Pierre-Olivier Droz, Alfred Steinegger, Gene Kortsha (AIHA President), Michel Guillemin and Daniel Bauer. Berenice Goelzer, not on the picture, was also part of this group.

# **NEWS from WHO Collaborating Centres**

# From Fundacentro, Brazil

International Symposium "Impacts of Nanotechnology on Worker's Health and Safety and the Environment"

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This symposium is being organized by FUNDACENTRO (WHO Collaborating Centre in São Paulo, Brazil), CEREST (Workers' Health Reference Center), CRQ – IV (Chemistry Regional Council – IV), DIEESE (Inter Union Department of Statistics and Socio-Economical Studies), DIESAT (Inter Union Department of Studies and Research on Health and Workplace), ENSP/FIOCRUZ (Public Health National School/Oswaldo Cruz Foundation), IIEP (Information Exchanges on Studies and Research), IOS (Institute Social Observatory) and RENANOSOMA (Nanotechnology, Sociological Issues and Environmental Matters, Brazilian Research Network), to be held in São Paulo, on 25 - 27 May 2010.

Nanotechnology is a generic name that represents all technologies involving the design, characterization, production and application of structures, devices and systems for control of their shapes and sizes in the nanometer scale.

There are many definitions for nanotechnology, for example:

It is a system of innovative methods to manipulate

- matter at near atomic scale, in order to produce new materials, structures and devices.
- It is the result of manipulation of basic building blocks of the constitution of matter: atoms and molecules.

The field of nanotechnology advances rapidly and is expected that its impact will reach every facet of industry and society. On this minuscule scale, materials begin to exhibit unique properties that affect their physical, chemical and biological behavior, which is determined by quantum mechanics. This change of behavior is very worrying when the focus is the health of workers, especially when there is the possibility of exposure to these nanoparticles. The same properties that change the physical and chemical properties of nanoparticles can lead to harmful (and often unknown) health impacts if and when they come into contact with the human body. Workers are the first to have contact with these substances in their production or use as components of other particulate materials. There is a significant concern about the limited knowledge available on the possible toxic effects of nanoparticles on human health and on the various life forms in the environment.

The objectives of this event are:

- to discuss the possible impacts of nanotechnology on health, work and life of workers, and the environment;
- to present the result of research conducted in Brazil on the impacts on health and the environment, and, to promote exchanges among researchers.

There will be oral presentations and posters, and the main topics will be public policies, workers' health and safety, environment, toxicology, education and capacity-building, dissemination of scientific issues, regulation and risk communication. On 25 May there will be a "Roundtable on International Actions in Nanotechnology and the Health of Workers".

The target audience will include: occupational health and safety professionals; employers, workers, union leaders, members of CIPAs (Internal Committees of Prevention) and of quality programs of companies; leaders of NGOs and entities related to the environment, consumer protection and related areas; teachers, academia and researchers; members of health councils; human resources and legal professionals, as well as the general public interested in the subject.

The working languages will be Portuguese and English (simultaneous translation).

# From NIOSH, USA

NIOSH and NHCA present 2010 Safe-in-Sound Excellence in Hearing Loss Prevention Awards

Sent by Christina Spring, E-mail: CSpring@cdc.gov

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Work-related hearing loss is a permanent but preventable problem. The National Institute for Occupational Safety and Health (NIOSH), in partnership with the National Hearing Conservation Association (NHCA), is pleased to announce the recipients of the 2010 Safe-in-Sound Excellence in Hearing Loss Prevention Award, honoring those who have shown their dedication to the prevention of noise-induced hearing loss through innovative or excellent hearing loss prevention practices in the work environment.

The awards were presented at the 35<sup>th</sup> Annual Hearing Conservation Conference on February 26, 2010 in Orlando, Florida.

The award honors hearing loss prevention programs in the construction, manufacturing, and service sectors. In addition, it recognizes individuals or organizations for innovation in hearing loss prevention and their dedication to fostering and implementing new and unique advances in the prevention of hearing loss.

"This year's awardees highlight how work-related hearing loss affects people across all industry sectors," said NIOSH Director Dr. John Howard. "The impact of partnerships and innovation in developing solutions and policies to address the preventable problem of work-related hearing loss is clear in these initiatives."

The Safe-in-Sound Awards Expert Committee (comprised of experts in the fields of public health, hearing loss prevention, audiology, and industrial hygiene) evaluates applicants against key performance indicators. Examples include: development and adoption of new strategies for hearing loss prevention; demonstration of increased awareness of the value of healthy hearing and the

prevention of hearing loss and tinnitus; documented reduction in noise levels and hearing loss registered longitudinally, and, the use of a participatory approach between workers and employers.

The recipient for Innovation in Hearing Loss Prevention in the Manufacturing Sector is:

Etymotic Research, Inc., a research and product development group founded in 1983 that creates products designed to measure, improve, and protect hearing. It is recognized for its pioneering technical expertise, remarkable influence, ardent support, and essential sponsorship of hearing loss prevention research, services, products, and public outreach. Etymotic Research's innovations have had a direct impact on the quality, delivery, and effectiveness of hearing loss and tinnitus prevention programs.

The recipients for Innovation in Hearing Loss Prevention in the Construction Sector are:

The New York City Department of Environmental Protection (NYC DEP) and Parsons Brinckerhoff, Inc. (PB), recognized for their combined efforts in developing, implementing and overseeing the New York City Construction Noise Mitigation Rule. The rule, which is a result of a mayoral charge to update the New York City's Noise Code and creates a new law establishing rules for construction noise, established noise emission limits and mitigation measures for all construction within New York City and also proactively addressed work-related exposures.

The recipients for Innovation in Hearing Loss Prevention in the Services Sector are:

Associate Professor Dr. Kris Chesky and the College of Music, University of North Texas, recognized for their contribution towards raising the awareness of the importance of hearing loss prevention among student and professional musicians. Dr. Chesky and colleagues are pursuing innovative research and methodology, education and advocacy to contribute to the success of hearing loss prevention among individuals involved in music performances and practice. Their work is bringing additional attention to the risk of music-induced hearing loss to other professionals in entertainment venues and to the general public.

Nominations for the next awards will be accepted until September 1<sup>st</sup>, 2010. For further information please visit www.safeinsound.us.

Through research and the NORA cross-sector program, NIOSH has developed a number of resources to assist workers and employers in reducing noise exposure as well as in finding and fitting the proper kind of hearing protection and determining hazardous levels of noise. NIOSH recommends removing hazardous noise from the workplace whenever possible and using hearing protectors in those situations where dangerous noise exposures have not yet been controlled or eliminated. For more information about noise and hearing loss prevention research at NIOSH please



Awards presentation, left to right: Erich Thalheimer (PB), Mead Killion (Etymotic), Kris Chesky (UNT) and Award Presenter CAPT Margaret Kitt (NIOSH)

visit

www.cdc.gov/niosh/topics/noise/abouthlp abouthlp.html.

NIOSH is the federal agency that conducts research and makes recommendations for preventing work-related injuries and illnesses. Mention of any company or product does not constitute endorsement by NIOSH. More information about NIOSH can be found at

www.cdc.gov/niosh.

# News from the European Agency for Safety and Health at Work (EU-OSHA)

World's biggest workplace health and safety campaign goes from strength to strength

The Agency's new Healthy Workplaces campaign (2010-2011) will be launched officially on 28 April, the World Day for Safety and Health at Work. The campaign raises awareness of the importance of maintenance for safe and healthy workplaces and the need to protect workers that carry it out. EU-OSHA's focal points already call for nominations for the national Good Practice Awards 2010/2011.

See link: <a href="http://osha.europa.eu/en/campaigns">http://osha.europa.eu/en/campaigns</a>

# Risk Assessment Tools Database

The Agency has developed a risk assessment tools database with tools from all over Europe. The database is regularly updated.

The most common risk assessment tools are checklists, which are a useful tool to help identify hazards. Other kinds of risk assessment tools include: guides, guidance documents, handbooks, brochures, questionnaires, and 'interactive tools' (free interactive software, including

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downloadable applications which are usually sectorspecific). These tools can be either generic or branch/riskspecific.

See link: <a href="http://osha.europa.eu/en/practical-solutions/risk-assessment-tools">http://osha.europa.eu/en/practical-solutions/risk-assessment-tools</a>

Outlook: New and emerging risks in occupational safety and health

The safety and health of EU workers is affected by changing demographic structures, new technologies and the shift to service sectors. This Outlook offers an overview of the present and future trends of relevance to occupational health, the main workplace risks and their prevention. Outlook is available in 22 languages.

Read the current issue of Outlook at: <a href="http://osha.europa.eu/en/publications/outlook">http://osha.europa.eu/en/publications/outlook</a>

<u>Visit the European Risk Observatory</u> at: <a href="http://osha.europa.eu/en/riskobservatory">http://osha.europa.eu/en/riskobservatory</a>

#### **Health and Safety of Health Care Staff**

Workers employed in the health care sector have to deal with a wide range of activities and environments that pose a threat to their health and put them at risk of occupational disease or work-related accidents.

Many of the settings in which health care workers carry out their jobs and the multiplicity of tasks they perform can present a great variety of hazards. The health care sector is large, employing around 10% of all workers throughout the European Union. More than three quarters of them are women.

The nature of their work, whether delivering frontline care for the physically or mentally impaired, or handling patients or providing cleaning services, makes it absolutely vital that health and safety be a priority in this sector. Yet European data show that the proportion of healthcare workers considering that their health and safety is at risk because of work they do is higher than the average across all sectors in the EU. In particular, exposure to threats of physical violence and actual acts of violence from colleagues and non-colleagues is highly prevalent compared to other sectors.

The range of risks faced by health workers includes:

- Biological risks such as infections caused by needle stick injuries
- Chemical risks including drugs used in the treatment of cancer and disinfectants
- Physical risks such as ionising radiation
- Ergonomic risks, for example, patient handling
- Psychosocial risks including violence and shift work

Further details, including case studies, examples of good practice and checklists to help those who are dealing with this sector, are available online at the EU-OSHA site – direct link:

#### http://osha.europa.eu/en/sector/healthcare.

#### **Combined exposure to Noise and Ototoxic Substances**

Noise-induced hearing loss remains one of the most prominent occupational diseases in Europe. Increasing attention is being paid to the risks of combined exposure to high-level noise and ototoxic substances. This review aims to provide an up-to-date picture of the knowledge in this field, including current diagnostic tools and an overview of the chemicals that may contribute to hearing loss, and to highlight gaps in our current knowledge for proposed future action and research.

#### Further information at:

http://osha.europa.eu/en/publications/literature\_reviews/combined-exposure-to-noise-and-ototoxic-substances/view

#### Expert forecast on emerging chemical risks related to OSH

This publication presents the results of the expert forecast on emerging physical OSH risks based on a Delphi survey. The risks which were identified in the expert survey are related to musculoskeletal disorders (MSDs), noise, vibration, thermal risks, risks related to ionising and non-ionising radiation, to machinery, work processes and technologies, as well as various ergonomic risks. A literature review explores in more depth the context and the health outcomes of five of the main emerging risks singled out in the forecast: lack of physical activity in the workplace; combined exposure to musculoskeletal risk factors and psychosocial risk factors; multi-factorial risks; complexity of new technologies leading to increased mental and emotional strain; and increase of exposure to ultraviolet radiation (UV) at the workplace.

Available online at: <a href="http://osha.europa.eu/en/publications/">http://osha.europa.eu/en/publications/</a> reports/6805478

#### **EU-OSHA's blog**

Reminder: The EU-OSHA's blog is at <a href="http://osha.europa.eu/en/blog">http://osha.europa.eu/en/blog</a>

# **Contributions from Readers**

# International

International Training Modules for Occupational Hygiene - status report November 2009

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Plans are progressing well and on schedule. The completed website OHLearning.com will be previewed at the BOHS Conference in Harrogate and formally launched on 1st May, in time for the American Industrial Hygiene Conference and Exposition in Denver. Funding for the development of the website has been provided jointly by IOHA, AIOH and BOHS.

Ongoing running costs for the website will be modest and the aim is to secure this from sponsorship and donations. One option being discussed with suppliers to the occupational hygiene market is an offer to provide a link to organisations that are willing to loan or provide demonstration equipment to course providers.

The website will allow open and free access to all of the training materials - currently the seven international modules listed below and a principles course - other courses will be added later. Each course includes a student manual, PowerPoint slides, lecture notes, overnight student questions, syndicate studies and details of practical sessions. There is a student assessment process under which successful candidates on approved courses are given an Award of Successful Course Completion that can be used toward an internationally recognised intermediate level qualification. There will be links to IOHA and the IOHA member organisations that have signed the Memorandum of Understanding, as well as to the examining boards that participate in the student assessment work.

The site will also list approved course providers - those that meet the criteria specified and offer the courses with the approved examination scheme. These approved providers will be able to use the IOHA logo and 'supported by IOHA' phrase on approved courses and awards related to the international modules. They will have links to their own sites and course dates and details shown by geographic location.

Participating IOHA member associations will be consulted and may be involved in 'approved' courses planned in their country, adding their logo and local information if they wish.

The site will operate on a 'wiki' style, enabling feedback and comments on course materials. Editors have been appointed for each course to review feedback and to comment on suggested improvements.

If you represent an IOHA member society that is yet to sign up to the MoU, if you are interested in becoming an 'approved' course provider, or if you are supplier interested in contributing, please get in contact.

To help determine the level of demand and enable us to match up those who are interested in attending courses with course providers, please get in touch with the anticipated number of students, the courses you are interested in and the region or country of interest. There are several course providers who are assessing the market in certain countries and hearing from you will certainly help.

| Which of the following modules would   | you be interested in?                                | Please tick all that  | apply   |
|--|--|-----------------------|---------|
| W101 Basic Principles of Occupational Hy   | giene  |                       |         |
| W501 Measurement of Hazardous Substa   | nces   |                       |         |
| W502 Thermal Environment   |  |                       |         |
| W503 Noise – Measurement and its effec   | ts   |                       |         |
| W504 Asbestos and Other Fibres   |  |                       |         |
| W505 Control of Hazardous Substances   |  |                       |         |
| W506 Ergonomics Essentials   |  |                       |         |
| W507 Health Effects of Hazardous Substa  | ncor   |                       |         |
|  |  |                       |         |
| Approximately how many people would next two years?  | d you expect to undertake training in the            |                       |         |
| For the people who will be undertaking Please tick all that apply                                      | the training which of the following location         | s are most convenient | to you? |
|  | the training which of the following location         | s are most convenient | to you? |
| Please tick all that apply  Australia  | the training which of the following location  Africa | s are most convenient | to you? |
| Please tick all that apply Australia Brazil  |  | s are most convenient | to you? |
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| Please tick all that apply Australia Brazil  | Africa<br>Asia                                       | s are most convenient | to you? |
| Please tick all that apply Australia Brazil China  | Africa Asia Europe Middle East South America         | s are most convenient | to you? |
| Please tick all that apply Australia Brazil China France   | Africa Asia Europe Middle East                       | s are most convenient | to you? |
| Please tick all that apply Australia Brazil China France Hong Kong                                     | Africa Asia Europe Middle East South America         | s are most convenient | to you? |
| Please tick all that apply Australia Brazil China France Hong Kong India                               | Africa Asia Europe Middle East South America         | s are most convenient | to you? |
| Please tick all that apply Australia Brazil China France Hong Kong India Ireland                       | Africa Asia Europe Middle East South America         | s are most convenient | to you? |
| Please tick all that apply Australia Brazil China France Hong Kong India Ireland Italy                 | Africa Asia Europe Middle East South America         | s are most convenient | to you? |
| Please tick all that apply Australia Brazil China France Hong Kong India Ireland Italy Malaysia        | Africa Asia Europe Middle East South America         | s are most convenient | to you? |
| Please tick all that apply Australia Brazil China France Hong Kong India Ireland Italy Malaysia Norway | Africa Asia Europe Middle East South America         | s are most convenient | to you? |

# **From Countries**

#### From Canada

# **News from the IRSST**

Verifying the content of lockout programs – IRSST technical data sheet Sent by: Maura Tomi, E-mail: Maura.Tomi@irsst.gc.ca

The IRSST just published a technical data sheet that provides companies with a mean of verifying the content of a lockout program. Lockout is defined in CSA Z460-05 as the placement of a lock or tag on an energy-isolating device in accordance with an established procedure, indicating that the energy-isolating device is not to be operated until removal of the lock or tag in accordance with an established procedure.

A lockout program should provide guidance to supervisors and employees on what is expected of them. A written program establishes the company's general policies and procedures for implementing lockout as well as sets specific performance requirements for employees. It also provides the mechanism for regulatory compliance. The written program addresses the program's purpose, scope and

application, defines key terms, prescribes the responsibilities of managers, supervisors and employees for implementing the program elements and outlines general lockout rules and procedures.

This technical data sheet presents the major themes of a lockout program; however, when it is used it is important to consider all the major themes presented in and to carry out a procedure based on the company's reality to determine whether the presented points are adapted to the context.

To download the document, please visit: www.irsst.gc.ca/en/ publicationirsst 100514.html

# From Egypt

#### Egypt - Workshop on Occupational Safety and Health and Microfinance Institutions

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Occupational safety and health (OSH) hazards are prevalent in micro and small enterprises and the informal economy globally. The literature, both scientific and otherwise, is filled with examples of problems in almost every small-scale sector or occupation. Microfinance institutions (MFIs) that provide loans to the owners of micro and small enterprises in developing countries represent an untapped opportunity to reach millions of workers with OSH information and services. MFIs have access to the some of the poorest populations in the world. If these organizations were to begin to systematically address OSH problems during their routine business activities, their positive impact on public health and well-being would be enormous.

There is an emerging dialogue and set of experiences that demonstrates how MFIs can improve working conditions by building on their positive relationships with entrepreneurs. Occupational hygienists and others trained in OSH generally do not have direct contact with informal micro-level entrepreneurs on a wide scale because there is little demand or awareness of their services. There are few opportunities for interaction. However, women and men who operate micro and small enterprises actively seek out opportunities for loans and related financial services. MFIs

have combined assets and loans worth billions of U.S. dollars and millions of clients – most of whom represent businesses too small to be visited by labor inspectors. There are thousands of MFIs throughout the world and their potential to alleviate poverty is touted by the Millennium Development Goals.

With this in mind, the Canadian International Development Agency (CIDA) funded the first interactive workshop in Cairo on the theme of improving workplace safety and health through the provision of financial services. The workshop benefited from the experiences of OSH specialists as well as non-OSH experts from national and international organizations involved in microfinance. Most of the attendees at the workshop were not trained in OSH yet recognized its importance and explored ways to promote good OSH practices among their clients.

Following formal presentations and panel exchanges, workshop participants joined small-group discussions and responded to questions related to opportunities and constraints on mainstreaming OSH into the day-to-day functioning of organizations that provide financial services to the poor. The issue on the table focused on the potential

for MFIs to increase their social impact by finding ways to share and address occupational and safety problems and solutions among micro-enterprises.

Many ideas and opportunities came out of the CIDA Cairo Workshop discussions and are currently being synthesized into a summary report. The report will be available at: www.ppic-work.org. The workshop agenda and presentations are already online. Go to the website and click "Resources," then "Workshop Materials," and see "Workshop 3."

More dialogue and ideas are needed. Are there opportunities for the international occupational hygiene

community to support MFIs as they explore this new area of engagement with their clients? Please email us your comments or suggestions and we will summarize them in a future edition of this IOHA Newsletter.

NOTE: The Millennium Development Goals (MDGs) are eight international development goals that 192 United Nations member states and at least 23 international organizations have agreed to achieve by the year 2015. They include reducing extreme poverty, including "Decent Work for all," reducing child mortality rates, fighting disease epidemics such as AIDS, and developing a global partnership for development. Further information at the site: <a href="http://www.un.org/millenniumgoals/">http://www.un.org/millenniumgoals/</a>

# **From India**

#### International Conference on Silica Hazards held in New Delhi December 2009

Sent by: Perry Gottesfeld and Shannon Selerowski Contact authors at E-mail: <a href="mailto:info@okinternational.org">info@okinternational.org</a>

Occupational Knowledge International (OK International - USA), in partnership with the Public Health Foundation of India (PHFI), organized a meeting on "Silica Hazards in Construction and Mining: Reducing Exposures and Preventing Disease" in New Delhi, India on December 11-12, 2009. The meeting was planned to raise awareness among key stakeholders and encourage specific policy initiatives to promote silica dust control technologies and reduce silica-related diseases in India.

Indian and international experts presented case studies of successful silica dust reduction programs, described measurement and control methods, highlighted the link between silica exposure and tuberculosis, and gave suggestions for establishing improved systems for identifying silicosis victims. A comprehensive analysis of existing policies, laws, and regulatory agencies that cover occupational silica exposures and related diseases was conducted prior to the conference and used as a framework for discussion.

The conference was well attended by more than 130 participants from diverse groups of private companies, non-governmental and community-based organizations, professional associations, universities, international organizations, and government ministries. Several silicosis victims from the stone crushing sector also attended.

Mr. Harish Rawat, the National Union Minister of Labour in India, provided opening remarks and gave his support for the objectives of the meeting. The Keynote speaker, Dr. David Rees from the National Institute of Occupational Health in South Africa, showed practical examples of research and intervention studies and emphasized the relationship between tuberculosis and silica exposure. Other speakers included:

- Srinath Reddy, President of the Public Health Foundation of India
- Salma Burton, World Health Organization
- Justice G.P. Mathur, National Human Rights Commission of India
- Neha Vyas, World Bank
- Sarabjit Chadhe, Revised National TB Control Programme of India
- TK Joshi, Maulana Azad Medical College
- Jagdish Patel, Peoples Training and Research Centre
- Rajnarayan R Tiwari, National Institute of Occupational Health
- Habibullah Saiyed, World Health Organization
- Norbert Wagner, University of South Florida
- K. Srinath Reddy, Public Health Foundation of India
- Manoranjan Mishra, Jeevan Rekha Parishad
- Richard Rinehart, Consultant, formally with U.S. NIOSH

The conference generated positive and intelligent debate on important issues and challenges, and was unique in that it brought together diverse groups of stakeholders who usually do not interact with each other on a common goal — to reduce silica exposure and related disease in India. Discussion between participants and speakers resulted in a call for a National Plan to identify and compensate silicosis victims and address silica hazards throughout India.

The conference increased awareness of the topic among Indian NGOs and community based organizations, health professionals, government ministries, professional trade associations, and others and provided an important forum to initiate positive long-term change that will benefit

employers, workers and their families, and communities.

It emphasized the need to establish a multi-sector approach to address the problem. An Executive Committee was formed on the closing day of the conference to encourage the implementation of the conference policy and action recommendations and to track future progress.

The conference was supported by the following organizations:

- U.S. National Institute for Occupational Safety and Health (NIOSH)
- The Deshpande Foundation

- International Development and Research Centre, Ottawa, Canada
- Environ Foundation
- International Work-To-Live Project
- ERM Foundation

For more information please see the OK International website: <a href="www.okinternational.org">www.okinternational.org</a>. OK International is an international non-governmental organization working in developing countries to mitigate the environmental and human health hazards of industrial pollutants.

# **From The Netherlands**

### Advanced REACH Tool (ART version 1.0) has been launched

Sent by: Erik Tielemans (on behalf of the ART consortium) E-mail: erik.tielemans@tno.nl

The development of the Advanced REACH Tool (ART) version 1.0 has been completed. The tool is available, free of charge, at: <a href="https://www.advancedreachtool.com">www.advancedreachtool.com</a>. Users may assess it for guidance on occupational assessment of exposure to dust, vapours and mists. The use of ART as a higher tier exposure assessment tool is described in ECHA's updated REACH guidance, but ART can of course also be used in another context (e.g., the Chemical Agent Directive).

The ART is based on a robust and calibrated mechanistic model that produces an exposure prediction with a confidence interval. The model includes parameters related to the activity, substance, work environment and local controls. In addition, ART contains a facility to update and refine the predictions with relevant exposure data using a Bayesian procedure, even if only few data are available. The influence of the data increases with increasing sample size. This feature of ART will be expanded in the near future with a built-in database of exposure measurements.

ART has been developed in close collaboration with stakeholders from industry and member states. Following feedback from users on the beta version of the ART tool we have amended the user interface, and included additional functions such as the *quick revision* function, the *report* function and the *save as* function. We are confident that these modifications have improved the software's user friendliness. Why not try it? Any feedback on the use of the tool is very much appreciated and can be provided via the ART website.

An ART training module is currently under development. Questions with respect to ART training sessions can be directed to the following e-mail address: <a href="mailto:Marloes.vanderwal@tno.nl">Marloes.vanderwal@tno.nl</a>.

The ART tool has been developed as a collaborative venture between TNO, HSL, IOM, BAUA, NRCWE, and University Utrecht. The scientific work has been extensively reviewed by more than 10 independent experts across Europe.

# **From Sweden**

**Hazard Prevention and Control in Ship Breaking** 

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Around fifty years ago, after a cyclone in 1960 had killed thousands of people in Bangladesh, an international industry for marine salvage began. At that time ship breaking of old cargo ships was developing in several places, within the industrially developed countries and in the developing countries, and often taking place within ship repair yards equipped with the shipbuilding technology of that time.

When the local people awoke on the morning after the cyclone, they discovered that the Greek ship *MD Alpine* had been washed up on the muddy beach coast of Fauzdarhat at Sitakunda Upazila by an enormous tidal wave. The stranded ship lay untouched for several years, until a local company by the name of Chittagong Steel House bought and dismantled it. This process took place

over several years and created employment opportunities amongst the local people during a time of political unrest and extreme poverty. This experience in combination with a considerable local market for cheap labour awakened the business idea: to use tidal power for ship recycling. Thus a work method that was more cost effective than all other existent alternatives came about. Furthermore, the Pakistani ship *Al Abbas*, which was destroyed in the Chittagong harbour during the war of 1971, is now considered as the first case of commercial ship recycling and was carried out by Karmafully Metal Works Ltd in Bangladesh, in 1974.

During the following decades a boom occurred in the so called "tide beaching ship scrapping industry" (TBSS), mainly in the countries of India, Bangladesh and Pakistan. In principle these countries took over all the related industries from Europe and the other Organisation for Co-operation and Development (OECD) Economic countries. The TBSS industry grew to contain more than 80% of all the commercial cargo ship recycling in the world (Other countries that carry out ship recycling, though without the use of tidal power are China and Turkey. The fast expansion in Asia has developed concurrently with the sharpening of international environment law. Moreover rapid development has also been possible due to the fact that "ship breaking" activities are not considered under national laws whereby certificates and authorization for industrial organization is required. Besides "ship breaking", the terms "ship dismantling" or "ship scrapping" are also used.



Shipyard Work (Copyright NGO Platform on Shipbreaking)

Consequently there have been many years of financial opportunity for satellite businesses to the ship recycling industry in Bangladesh and India to turn a quick profit. Therefore, it was not long before one of the world largest second-hand markets - specializing in machine components and materials originating from every imaginable part of the ship - had become established in the neighbouring areas of the so called ship-dismantling regions at the Alang coast, near Mumbai in India and at the Chittakong coast in

Bangladesh. In these regions it is possible to find everything from bronze screws and toilet seats to electric generators. Hundreds of specialized service companies have also subsequently sprouted up, for example: onboard cleaning, reconditioning of second-hand machines, transport companies, waste disposal, recycling of copper from electrical cables, regenerating used oils, numerous retailers and many more. In addition, around 40 ship-dismantling companies on the Chittakong coast provide approximately 80% of Bangladesh's steel industry with metal properties, with the comparative figures in India being between 12 to 15%. There are around 160-180 Indian ship-dismantling companies and are all situated along the Alang coast.

Recycling itself, energy-saving and climate protection are just some examples of the positive aspects of ship recycling. However, upon closer inspection, the ship recycling industry of today presents some concerns in the terms of safety, the work environment and environmental issues. High numbers of fatalities and serious work related injuries have been revealed through several international reports provided by various non-governmental organizations and international work injury statistics. Moreover, despite poor official statistics, the International Labour Organisation (ILO) has judged as unacceptable the number of work related diseases caused by (preventable) exposure to asbestos, PCBs, heavy metals, organic and inorganic chemicals, etc. For further information on these issues, see: http://www.ilo.org/public/english/dialogue/ sector/papers/shpbreak/index.htm#2.1%20Where.

Initially, whenever the various international organizations acted in response to the growth of the ship recycling industry, there was a clear lack of cooperation. For example, each organization produced individual guidelines for environmentally friendly ship recycling. Finally, the International Maritime Organisation (IMO) took the initiative in uniting these views. After several years of meetings between the IMO and the Marine Environment Protection Committee (MEPC) - where the numerous guidelines for ship recycling were a constant issue – a comprehensive text for a new International Convention was ultimately elaborated and finalized at the Hong Kong conference in 2008, thus becoming known as the "Hong Kong Convention".

See: <a href="http://www.cfr.org/content/publications/">http://www.cfr.org/content/publications/</a> attachments/HK\_Conv.pdf).

That an International Convention has come into being is significant in itself, and yet it is the application of practical issues pertaining to safety at work and environmental risks that requires the most considerable efforts. in order to make the transfer from theory to practice, the EU has striven to initiate various information campaigns, has made political efforts and has invested in diverse research

programs such as 'Shipdismantl' (2004-2008) and 'DIVEST' (See: <a href="http://www.divest-project.eu/">http://www.divest-project.eu/</a>).

The DIVEST project has, among other things, made it clear that there is a real need to develop work methods for ship breaking that are safe for those involved, and that are applicable to the circumstances indigenous to the countries where the main share of the work is undertaken. A first step can be in the creation and provision of educational material that is suitable for use in spreading basic knowledge about risks and safe working practices, and a source that is not dependant on language. Video exposure monitoring (VEM) satisfies these conditions (Rosén G, et. al., 2005). VEM means that the potential for harm to the individual in the work environment is measured at the same time as the situation is filmed. The result is a video film which includes a graphic presentation of the results of the measurement synchronized with the video file. The recorded material creates a visualization of the different ways of performing a job, and can also show how technical aids and personal protection equipment can contribute to minimize risks. Work environment risks currently associated with ship breaking include: smoke from gas welding, dust that contains toxic substances, vapours from different chemicals, noise and vibration. PIMEX is one VEM method that has been used to produce different kinds of educational material. One example is a material about dust exposure prevention used by WHO and the ILO.

Moreover, a pilot study has been carried out in Sweden, in order to gain experiences about how PIMEX can be used in the development of educational material concerning reducing work environment risks within the ship breaking industries. The study was carried out in a ship-yard that performs ship reparations, in order to simulate the conditions of ship breaking. Exposure to smoke from gas welding and noise were the factors under study. The results illustrated that PIMEX recording can constitute an important foundation to educational material, targeting broad groups of people who are currently exposed to unacceptable work environment risk levels (in this case gas welding and noise). The conclusions from the study indicated that such educational material should be made widely available, though with an important condition that production of such a training material should be carried out

in cooperation with those groups that will make use of the material in the applicable countries. Work has already begun to create some necessary prerequisites in the form of economic resources and organization of cooperation between all interested parties.

In summary, it is expected that 'tide beaching' is likely to be a leading technique well into the foreseeable future. This is why there is considerable urgency to make special efforts to minimize the work environment risks associated with 'tide beaching'. The creation of educational material based on visualization and that focuses on simple solutions to minimize risks is therefore a facet of this urgency. Such educational material must therefore develop in direct cooperation with national authorities as well as the private companies and their staff involved in the industry. Whilst at the same time, the technical aspects of ongoing development in ship breaking must also naturally be addressed in order that a comprehensive ground level for safe methods for ship breaking can be achieved.

#### Reference

Rosén G, et.al. (2005) "A review of video exposure monitoring as an occupational hygiene tool" Ann. Occup. Hyg., Vol. 49, No 3, pp 201-217

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