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NEWSLETTER

Contents

1	Letter from the Editor
2	News from the IOHA Board
3-8	News from Member Associations
8	News from ICOH
9-10	News from WHO
11-12	News from WHO Collaborating Centres
12-13	News from ILO
13-15	News from the European Union
15-21	Contributions from Readers

Letter from the Editor

Dear Colleagues,

It is gratifying to receive so many contributions and a privilege to share them with all of you.

A constant concern, usually demonstrated by participants in courses and lectures on prevention in occupational health, is "how to improve political will and motivation at all levels", as this is indispensable to trigger any effective action. All I have been able to tell them is that we must make increased efforts to improve communication, as well as education and training, at all levels. The more information we gather, the more we share it, not only among colleagues but with all kinds of audiences, the closer we get to the ideal of having a true "prevention culture" everywhere. So, please, whenever you can, talk to any audience about the paramount importance and feasibility of preventing the immense number of occupational diseases. And this number is too large, even in comparison with the "so talked about in the media" diseases and fatalities, such as malaria, AIDS and those resulting from wars. Unfortunately, occupational diseases do not have the visibility and attention they deserve and the work environment is often overlooked as a primary social determinant of health. The information that "reaches the ears" of decision makers does not necessarily reflect the present appalling global situation concerning occupational diseases, and their importance is dimmed amidst other countless threats to health.

I believe there is a need for more occupational risk communication to different audiences, from young people and the general public, to all kinds of professionals, managers and governmental officials. Perhaps a stronger

media involvement might help to create more awareness on the extent of the problem and more motivation to prevent occupational disease and injuries.

Even in Europe, where exposure to chemicals has been controlled for a long time, an EU report estimates that "about 74,000 work-related deaths may still be linked to hazardous substances at work each year". If this happens in this developed part of the world, how much worse this situation has to be in other places where prevention and control are "far fetched" actions, for which there are not even enough competent professionals.

This brings us to the key and so often neglected issue of adequate training in occupational hygiene, that is, the profession that actually deals with the prevention of occupational diseases. Therefore, it is really encouraging to hear about progresses in international training programmes, as the one presented in this issue.

A growing concern and constant worry for occupational hygienists everywhere is nanotechnology and, in this issue, we have contributions from three different parts of the world on this crucial problem. There is much more on this newsletter and I will let you discover while you go through it.

I cannot close this letter without wishing to our great friend and colleague - Michel Guillemin, a very happy retirement - from his institute ("Institut universitaire romand de Santé au Travail", Lausanne, Switzerland – a WHO CC), **not** from occupational hygiene ☺. His contribution to the work of the institute and to its international standing, as well as to our profession both at national and international levels, has been recognized and greatly appreciated by all his peers.

As always, I would like to thank all of you who sent contributions, and ask for comments and suggestions for the improvement of the Newsletter.

Best greetings to all.

Berenice Goelzer
berenice@goelzer.net

NEWS from the IOHA BOARD

Although there has not been a Board meeting since the last issue of the Newsletter, the Board has by no means been idle. One of its major projects has been work on a new-look website, which is now available – www.ioha.net. The site is now much clearer and easier to navigate, although it still needs more work to fully populate all the pages.

If you have any comments or suggestions for further improvement, please email them to admin@ioha.net.

The next Board meeting will be held on 31 May in Toronto, during the AIHCE, and a report from the Board will be published in the November issue of the Newsletter.

Pamela Blythe
Executive Secretary
pamela.blythe@ioha.net

NEWS from MEMBER ASSOCIATIONS

From BOHS, UK

sent by Anthea Page, Communications Manager, BOHS, anthea@bohs.org

Occupational & Environmental Exposure to Skin Conference' (OEESC) 2009; 14th - 17th June 2009, Edinburgh

The British Occupational Hygiene Society is hosting the next international conference on Occupational and Environmental Exposure of Skin to Chemicals in Edinburgh. The meeting is unique in bringing together experts in dermal exposure assessment *and skin diseases*, dermatology and skin toxicology, with policy-makers and *occupational health*, safety and environment professionals interested in increasing their knowledge of dermal exposure issues.

Detailed information available online as follows:

www.OEESC2009.org for programme & venue information
www.bohs.org/eventDetails.aspx?event=153 to book on-line
john.cherrie@iom-world.org to sign up for conference updates

BOHS funds collection of exposure data to support the development of the Advanced REACH Tool

The Advanced REACH Tool (ART) is an advanced exposure assessment tool that is being developed by a consortium of European research organisations. It will produce more precise and accurate estimation of exposure for use in REACH than is currently available with existing exposure models, such as the EASE model. BOHS is helping to facilitate the collection of high quality exposure data to aid the calibration of the mechanistic model of ART, and will also provide guidance on the coding of the various items of contextual information. Further information at:

<http://www.bohs.org/newsArticle.aspx?newsItem=91>

REACH: Registration and Beyond - Exposure Scenarios and safe handling advice, 2nd European Conference and Workshop, 30th September - 1st October 2009, Brussels

REACH (Registration, Evaluation and Authorisation of Chemicals), the European chemicals control legislation, has been in force since 2007. REACH has wide-ranging impacts on chemical safety in all product life cycle stages, as it demands that all manufacture and use of chemical substances is demonstrably safe for humans and the environment. REACH requires communication of *Exposure Scenarios* in the chemicals supply chain, and implementation by Downstream User companies of safe working advice from Manufacturers and Importers.

In December 2005 the British Occupational Hygiene Society (BOHS) held a first European conference in the build-up to REACH. This second European conference will address a number of practical issues relevant to registration and beyond, such as:

- expectations for quantitative exposure assessments in REACH chemical safety assessment;
- exchange of REACH initiatives available from European occupational hygiene associations;
- review of latest tools to support development and application of Exposure Scenarios, including new initiatives to standardise information exchanges in the supply chain;
- quantifying the efficiency of Risk Management Measures;
- clarifying the relationship between DNELs and OELs;
- issues around skin absorption;
- capital investments for improved exposure control;
- what to do when you receive an extended Safety Data Sheet with an Exposure Scenario Annex

As REACH applies uniformly across the EU, the national occupational hygiene associations will use this opportunity to strengthen their collaboration, thereby advancing the quality of occupational hygiene advice available to individuals and companies working with chemical substances across Europe.

From ACGIH, USA

Sent by Tony Rizzuto, ACGIH Executive Director, trizzuto@acgih.org

FOHS Announces Creation of the “Sustainable TLV®/BEI® Fund”

The Foundation for Occupational Health and Safety (FOHS), that has an alliance with ACGIH®, has announced in December 2008 the creation of a new fund: the “Sustainable TLV®/BEI® Fund (the Fund).” The core purpose of this Fund is to develop sustainable financial support to ensure the continued development of TLVs® and BEIs®. The Fund will initially be managed and overseen by a four-member Board of Governors consisting of two representatives appointed by the FOHS Board of Trustees and two representatives appointed by the ACGIH® Board of Directors. The Chair of the Board of Governors will rotate annually between the two organizations’ representatives.

The Fund was created to address the following factors:

1. Since its inception, the core purpose and “cause” of ACGIH® has been to protect workplace employees through the development of science-based occupational exposure guidelines widely known as the TLVs® and BEIs®. These guidelines have become recognized throughout the world as a basis for development of workplace standards. The potential loss of the TLVs® and BEIs® would result in a significant loss of basic worker protection.
2. Current economic conditions and recent legal challenges put the continuation of ACGIH®’s core mission and value at risk, namely the continued development of TLV® and BEIs®.
3. FOHS has the ability to solicit and receive donations and grants from corporate, governmental and private entities alike. There are potentially many entities that would provide support for sustaining the TLV® and BEI® processes, and creation of the Fund provides the mechanism for receiving that support, in furtherance of FOHS’ mission.

Through the creation of the Fund, FOHS can increase support for existing ACGIH® programs used in developing TLVs® and BEIs®, and provide additional opportunities for raising funds to support and sustain the core mission and value of ACGIH® – developing and promoting occupational exposure guidelines.

More information on the Sustainable TLV®/BEI® Fund can be found at:
www.fohs.org/SusTLV-BEIPrgrm.htm

NOTE: FOHS is a foundation whose mission is to (1) sponsor research, education, and the publication of scientific information, (2) provide a vehicle for financial support of the improvement and enhancement of

Detailed information at:

<http://www.bohs.org/eventDetails.aspx?event=164>

occupational and environmental health and safety and the general public health, and (3) disseminate the results of valuable research findings and assure a heightened quality of continuing education in occupational safety and health. More information may be found at: www.fohs.org.

2009 Editions of TLVs® and BEIs® Book and Guide to Occupational Exposure Values

In March 2009 ACGIH® released its 2009 editions of the *TLVs® and BEIs®* book and the *Guide to Occupational Exposure Values*.

The information in the user-friendly, pocket-sized *TLVs® and BEIs®* book, which covers more than 700 chemical substances and physical agents as well as Biological Exposure Indices for more than 80 chemical substances, is used worldwide as a guide for evaluation and control of workplace exposures to chemical substances and physical agents. Introductions to each section and appendices provide philosophical bases and practical recommendations for using these values.

The *Guide to Occupational Exposure Values* is a companion document to the *TLVs® and BEIs®* book and serves as a readily accessible reference for comparison of the most recently published values, namely, 2009 Chemical Substance ACGIH TLVs®, AIHA Workplace Environmental Exposure Limits (WEELs); the OSHA Final Rule PELs; RELs from NIOSH; MAKs from the German Commission for the Investigation of Health Hazards of Chemical Compounds in the Workplace; and carcinogenicity designations from ACGIH®, OSHA, NIOSH, MAK, IARC, U.S. NTP, and U.S. EPA. The Guide also includes a CAS number index.

Further details may be obtained at the ACGIH website:
www.acgih.org

2009 Awards Recipients

Each year, ACGIH honors individuals and/or groups who have made significant contributions to the profession through their leadership and dedication. The 2009 Award recipients are hereby briefly presented and more detailed information on their achievements may be found at the ACGIH website. Congratulations to all of them !

Herbert E. Stokinger Award Recipient:
Vincent Castranova, PhD

The Herbert E. Stokinger Award is presented each year to an individual who has made a significant contribution in the broad field of industrial and environmental toxicology.



Dr. Castranova, Chief of the Pathology and Physiology Research Branch in the Health Effects Laboratory Division of NIOSH, Morgantown, West Virginia, has concentrated his research on pulmonary toxicology and occupational lung

diseases. He has been coordinator of the Nanotoxicology Program at the National Institute for Occupational Safety and Health (NIOSH) since its inception.

John J. Bloomfield Award Recipient:

Jessica Ramsey

The John J. Bloomfield Award is presented to a young industrial hygienist who pursues the problem of occupational health hazards primarily by doing fieldwork, and who demonstrates significant contribution to the profession.

Ms. Ramsey's dedication to occupational safety and health her significant contributions to the profession have earned her this honour in 2009. In the past year, Ms. Ramsey has actively responded to requests for assistance both within NIOSH and from the general public, conducting several health hazard evaluations and participating in surveys in order to determine how effective recommendations have been in reducing occupational hazards.



Meritorious Achievement Award Recipient:

Gyan S. Rajhans, ROH, CIH, PE

The Meritorious Achievement Award is given to members of ACGIH® who have made an outstanding, long-term contribution to the field of occupational health and industrial hygiene. Gyan's dedication and service to the

occupational health and industrial hygiene profession over the years, and his commitment to ACGIH's mission made him a worthy recipient of the Meritorious Achievement Award.

Mr. Rajhans served and contributed to the Province of Ontario in the field of Health and Safety as Chief Industrial Hygienist and District Manager in the Ministry of Labour for many years. He has received several honors, including the Amethyst Award for outstanding achievement by an Ontario public servant, OHIO's Hugh Nelson Award of Excellence, OHS Magazine's Award of Excellence, and India International Friendship Society's Pride of India Award. In 1997, he was ACGIH Chair.

William Steiger Memorial Award Recipient:

Rosemary Sokas, MD, MSc, MOCCH

The William Steiger Memorial Award honors individuals from the social/political sphere whose efforts have contributed to advancements in occupational health and safety. Initiated in 1979, this award is not limited to occupational safety and health professionals.

Dr. Sokas' contributions to advancements in occupational safety and health have earned her this distinguished award. Among many other achievements, her research publications evaluate the impact of occupational exposures on common health outcomes, training intervention effectiveness in health care and construction, and novel approaches to addressing the needs of immigrant, high-risk, contingent and low-income workers.

Dr. Sokas rejoined the Occupational Safety and Health Administration in November, 2008, as Director of the Office of Occupational Medicine in the Directorate of Technical Support and Emergency Management.

From AIHA, USA

Sent by: Peter J. O'Neil, AIHA Executive Director, poneil@aiha.org

AIHce 2009

After ten years, the premier conference and exposition for occupational and environmental health and safety (OEHS) professionals is returning to Toronto, Canada. The American Industrial Hygiene Conference and Expo (AIHce) will be held May 30–June 4 in the heart of what writer Ray Bradbury called "the most perfect city in the western hemisphere." Participants can earn up to 6.5 CM points by choosing from over 200 weekend professional development courses (PDCs) and weekday technical sessions.

The early registration deadline for AIHce 2009 has been extended to April 30. For more information or to register online, visit www.aiha.org/aihce09.

The American Industrial Hygiene Association (AIHA) and the American Conference of Governmental Industrial Hygienists (ACGIH) cosponsor AIHce.

2009 Awards

The recipient of the William P. Yant Award is Alan Rogers CIH, FAIOH, from Australia. His Yant Lecture at the AIHCE

2009 will be on "Peer Support and Encouragement—Essential Ingredients for Industrial Hygiene Success".

The recipient of the Donald E. Cummings Memorial Award is William C. Hinds, ScD, CIH. His Lecture at the AIHCE 2009 will be on "From Silica to Ultrafine Particles: The Role of Aerosol Particle Size in Industrial Hygiene".

The recipient of the Alice Hamilton Award is Donna M. Doganiero, CIH.

The recipient of the Edward J. Baier Technical Achievement Award is to Robert A. Curtis, CIH.

The recipient of the Kusnetz Award is Carter B. Ficklen, III, CIH.

Congratulations to all of them !

Continuing Education

AIHA has been approved as an Authorized Provider by the International Association for Continuing Education and

Training (IACET) through May 31, 2011. AIHA completed an extensive application, was reviewed by an IACET site visitor, and successfully demonstrated adherence to all American National Standards Institute (ANSI)/IACET standards. In obtaining this approval, AIHA demonstrated that its educational offerings comply with the ANSI/IACET 1-2007 Standard, which is widely recognized as the "gold" standard of good practice internationally. As an Authorized Provider, AIHA is certified to approve and issue continuing education units (CEUs) for all of its educational offerings.

Affiliate Laboratory Programs

AIHA's legacy Laboratory Quality Assurance Programs (LQAP) have been reorganized into three separate limited liability companies (LLCs). Effective Feb. 10, 2009, AIHA's laboratory activities, once housed under LQAP, will be operated by:

- AIHA Laboratory Accreditation Programs, LLC (www.aihaaccreditedlabs.org)
- AIHA Registry Programs, LLC (www.aiharegistries.org)
- AIHA Proficiency Analytical Testing Programs, LLC (www.aihapat.org)

The LLCs have been organized as separate legal entities with their own governance, committees, policies, budgets, technical volunteers, and strategic advisors. In forming the LLCs, AIHA created the flexibility for each laboratory program to be more efficiently managed and operated and has met the impartiality requirements included in international standards under which the programs operate.

Information about individual AIHA-accredited labs can now be found at www.aihaaccreditedlabs.org, whereas information on the Registry and Proficiency Analytical Testing (PAT) programs will be maintained separately on the websites listed above.

TeleWebs

The most recent AIHA TeleWeb Virtual Seminar was "Hazard Recognition: Essential Techniques for the Field Employee" on April 28, 2009.

Information regarding AIHA TeleWeb Virtual Seminars or AIHA's Distance Learning Program may be obtained from Cinthia Minan (AIHA's distance learning coordinator: cminan@aiha.org), or by visiting: www.aiha.org/TeleWeb.

Election Results

In April, AIHA announced the election results for its 2009–2010 board of directors. The new board members will be inducted into office at AIHA's annual business meeting during AIHce in Toronto. This meeting will also mark the beginning of the terms of Cathy L. Cole, CIH, CSP, as president; Michael T. Brandt, DrPH, CIH, as president-elect; Lindsay E. Booher, CIH, CSP, as past president; and Cynthia A.

Ostrowski, CIH, as secretary. Allan K. Fleeger, CIH, CSP, will continue his term as treasurer.

The following candidates were elected: Elizabeth L. Pullen, CIH, as new vice president; Harry J. Beaulieu, PhD, CIH, CSP, as treasurer-elect; Alan J. Leibowitz, CIH, CSP; Charles F. Redinger, PhD, CIH, and David C. Roskelley, MSPH, CIH, CSP, as members of the AIHA board of directors

2009 ERPG and WEEL Handbook

AIHA recently published a reference guide for the 137 Emergency Response Planning Guidelines (ERPGs) and 113 Workplace Environmental Exposure Levels (WEELs). The *ERPG and WEEL Handbook* contains recommended values for each series and other useful information. While this handy booklet acts as a quick reference, the exposure limits should always be used in conjunction with the documentation provided in each full set of ERPGs and WEELs. Information on how to order a copy of this handbook and other AIHA publications is available at: www.aiha.org (click "AIHA Marketplace"), or contact Katie Robert (AIHA's product development manager at: krobert@aiha.org).

Ventilation 2009 Conference

The 9th International Conference on Industrial Ventilation will be held Oct. 18–21 in Zurich, Switzerland. Hosted by the Chair of Building Systems, Institute for Building Technology, Department of Agriculture and sponsored by AIHA, this year's conference theme is "Clean Industrial Air Technology Systems for Improved Products and Healthy Environments." The conference will focus on future trends in the industry.

Details on deadlines for registration and fees, as well as any additional information on Ventilation 2009, may be obtained at: www.ventilation2009.ethz.ch.

AIHA, OHAO Sign Memorandum of Understanding

AIHA and the Occupational Hygiene Association of Ontario (OHAO) have agreed to a Memorandum of Understanding (MOU), signaling the organizations' desire to formalize their relationship and cooperate to promote industrial hygienists and other occupational and environmental health and safety professionals.

The agreement states that AIHA and OHAO will do the following:

- Establish links between the AIHA and OHAO websites
- Promote and jointly sponsor educational programs on occupational and environmental health
- Consider pursuing joint activities and projects of mutual interest to members of both organizations, such as the development of books, pamphlets, and educational programming
- Consider promoting each organization's products to their respective members

From Hong Kong, China

Sent by: TW Tsin, HKIOEH, Hong Kong, China, twtsin@labour.gov.hk

Preparation for implementing the Globally Harmonised System (GHS) in Asia

The globally harmonized hazard classification and compatible labelling system, including material safety data sheets and easily understandable symbols have been publicised for over 10 years among the Asian countries. Moreover, the stage of development varies in different countries and regions due to unlike reasons (e.g. in Japan, Korea, China and the ASEAN). In Hong Kong, the current economy maintains only a small percentage of industry



that would use significant quantity of chemicals. Yet, chemicals are widely used in many consumer products and in non-industrial activities. Also, the logistics industry, which is one of the four major sectors of the economy, handles a lot of chemicals in everyday activity. It is almost certain GHS is an important tool that will be the fundamental for prevention and control of chemical hazard in our daily life. It provides the basic hazard information for different chemicals and can be applied by the government officials, the professionals and the public at large.

At present, we do not have the details of an implementation plan for GHS yet. The current Regulations on the hazard information/communication are operated separately and mainly under the following regulations by the authorities, including:

- (1) Factories and Industrial Undertakings Ordinance and its (Dangerous Substances) Regulation – for use of chemicals in workplaces;
- (2) Dangerous Goods Ordinance and related regulations – for control during storage, transport by air or sea, etc.
- (3) Radiation Ordinance – for control of radioactive substances in all aspects;
- (4) Hazardous Chemicals Control Ordinance;

From Japan

Sent by Sent by Masayoshi Karasawa, Special Adviser, JAWE, director@jawe.or.jp, Shigeru Asuka, Executive Director, JAWE, sasuka@jawe.or.jp and Isamu Tanaka, Professor, University of Occupational and Environmental Health, Japan, JOHA itanaka@med.uoeh-u.ac.jp

Japan Association for Working Environment Measurement (JAWE) and Japan Occupational Hygiene Association (JOHA) - Joint Conference and Exhibition on Occupational Hygiene and Working Environment Measurement 2008, Kyoto, Japan, November 2008

- (5) Food and drugs, pesticides Regulations;
- (6) Control of Chemical Ordinance, etc.

The requirements of specific labelling and communication specifications are given in each regulation and operated by the own authority. It means that there is no census yet in the existing hazard communication system. Discussion is still going on in the co-ordination committee within the authorities.

On 29 November 2008, the Hong Kong Institute of Occupational and Environmental Hygiene (HKIOEH) organised the first awareness talk with UNITAR on the topic of developing GHS. Thanks to Mr. Craig Boljkovac and Mr. Jonathan Krueger who agreed to give us some ideas on the importance of the System. Mr. Krueger gave a talk on the development of the GHS in the surrounding countries and the possible way (suggested models) leading to success. The attendance to the seminar included people from various disciplines and industries. The response of the audience was exceedingly good as the meeting room was full occupied. People were listening and were keen on finding out the implementation plans of the other countries as well as how the local legislation can cope with the international system.



The meeting in November 2008 was a successful step to arouse interest among the professionals and the management of some local organisations and companies. Yet, there may still be a long way to success. It is important that the content of GHS be understood by the frontline personnel and communicated among the users or consumers. Translation of the language may be required. Collaboration and coordination with the international bodies (e.g. UNITAR) and other countries are essential. There should be a comprehensive timetable for implementation, including the amendment of laws and regulations, publishing of the guidance or code of practice. It is expected that there will be more training and experience sharing opportunities in the Asian region in this year of 2009 and the next. HKIOEH can also assist and be a contact point for organising some events (e.g., training workshops on how to develop and implement GHS).

The Japan Association for Working Environment Measurement (JAWE), whose Chairman is Mr. Kizoh, Hirayama, Managing Director, General Manager, Personnel & Labour Relations Division, Nippon Steel Corporation, and the Japan Occupational Hygiene Association (JOHA), whose chairman is Professor Isamu Tanaka, held their "Joint Conference and Exhibition on Occupational Hygiene

and Working Environment Measurement 2008" in Kyoto", from 12th to 14th November 2008. Kyoto City is located in the Kinki Region of Japan and had been the Capital of Japan for more than thousand years until the Capital was transferred to Tokyo in 1868 by the Meiji Restoration.

The Joint Conference and Exhibition 2008 in Kyoto was organized by Kyoto-Shiga Branch of JAWE (whose Director is Dr. Chikahisa Yamada, the Vice Chairman of JAWE) as well as JOHA, and consisted of three parts, namely presentations, symposium and exhibits (see photos).



There were 65 scientific presentations, as well as 10 manufacturers' presentations. The scientific presentations reported on research in occupational hygiene and working environment measurement, and included new topics such as:

- Nanomaterials in the workplace and related Occupational Safety and Health activities; results of a questionnaire survey to relevant enterprises
- Confirmation of asbestos dispersal during removal work using automatic fibre particle meter
- Method of quantifying asbestos contents in asbestos-containing sprayed vermiculite
- Examination of the Method to measure dust concentrations, instructed in "the Guideline for Prevention of Dust Hazards in Tunnel Construction Work" by the Ministry of Health, Labour and Welfare
- Dioxin concentration in incineration worker's blood and biological exposure index for exposure assessment
- Actual use of formaldehyde in medical institutions, as well as conditions of work management and working environment management

The full list of the themes of the scientific presentations, as well as of the manufacturers' presentations, is available from the authors.

The manufacturers' exhibits presented new analytical instruments and apparatus such as: new types of high sensitive detector tubes to analyze formaldehyde, organic acid and ammonia; a new type of Immersion Liquid Kit for Dispersion Staining to analyze asbestos, and, phase-contrast and polarizing optical microscopes for asbestos analysis equipped with the new 40-power dispersion object lens; new types of sampling mini-pumps, and, new types of dust proof mask for nanomaterials.



The joint symposium theme was "Measurement and Analysis Data, and How to Ensure their Reliability". It was planned in order to deepen the understanding of the importance to ensure reliability concerning the data from measurements and analyses by Working Environment Measurement Agencies in response to requests from enterprises, as well as by other enterprises, which perform working environment measurement using their own occupational hygienists.

The aim was also to cope properly with the recent problems with respect to Occupational Safety and Health, in Japan especially regarding risk assessment and risk management in work places.

In the Joint Symposium, there were four presentations, namely:

- The Importance of Obtaining and Analyzing Manufacturing Process Data in the Steel Industry, and the requirements to Improve their Reliability, by HONDA, Tomoki, Nippon Steel Corporation
- The Reliable Management of Asbestos Analyses Data, by OKADA, Takayuki, Occupational Health Research Development Centre, Japan Industrial Safety and Health Association
- Ensuring the Reliability of Working Environment Measurement Data, by MORI, Hiroshi, Akita Environment Measurement Centre Co., Ltd.
- Techniques of Engineering Measures for Environmental Improvement and the Reliability of related Measuring Data, by IWASAKI, Takeshi, Occupational Hygiene Consultant Office, Koken Ltd

This was followed by a discussion on these topics, conducted by Professor KOHYAMA, Norihiko, Toyo University and Mr. TAMURA, Mikio, Joetsu Environment Science Centre Foundation.

In the Conference, Professor Emeritus Tsutomu Takata (Kitasato University), as the Vice Chairman of JAWE, granted the Superior Award to Mr. Yoshihito Konishi et al. (Quality Control Centre, Japan Association for Working Environment Measurement), as a winner of the Best Scientific Presentation Award in 28th Conference and Exhibition of JAWE on Occupational Hygiene and Working Environment Measurement 2007, in Nagoya, regarding "Examination of the Quantitative Analysis of Asbestos in Construction Material Products by the X-ray Diffraction Method"(presented by Mr. Kazunobu Terada).



In addition, both a best manufacture's presentation award and a best manufacturer's exhibition award were granted to Shibata Scientific Technology Ltd., Japan.

In the evening of the second day, the Reception for Exchange was held; it was opened with welcoming speeches by Professor Isamu Tanaka, University of Occupational and Environmental Health, Japan (as the Chair Person of JOHA), and by Mr. Kizoh Hirayama (Managing Director, General Manager, Personnel & Labour Relations Division, Nippon Steel Corporation, (as the Chairperson of JAWE). Moreover, both Mr. Arimichi Handa, Director, Office of Working Environment Improvement, Ministry of Health, Labour and Welfare, Japan, and Mr. Nobuo Sobaharaya, Director General, Kyoto Prefectural Labour Bureau, addressed congratulatory messages.

Then, Professor Emeritus Tsutomu Takata, Kitasato University, as the Vice Chairman of JAWE, addressed a greeting and proposed a toast.

The Joint Conference was attended by more than 350 participants, as well as guests including representatives from the Headquarters of the Ministry of Health, Labour and Welfare, as well as from the

Kyoto Prefectural Labour Bureau. Many Japanese experts in occupational health participated in this event and the full list is available from the authors.

The next Joint Conference on Occupational Hygiene and Working Environment Measurement will be held in Kanazawa City, located in Hokuriku Region of Japan, from 11 to 13 November, 2009.

NEWS from ICOH

Newly elected Officers and Board Members who will serve for the Triennium 2009-2012

The Officers are: Dr. Kazutaka Kogi, President; Prof. Sergio Iavicoli, Secretary General, Dr. Suvi Lehtinen, Vice President; Prof. Bonnie Rogers, Vice President. The Past President is Prof. Jorma Rantanen. The newly elected Board Members are: Dr. Jorge A. Morales-Camino (Mexico), Prof. Frank Van Dijk (The Netherlands), Dr. Marilyn Ann Fingerhut (USA), Dr. John Harrison (United Kingdom), Dr. Seong-Kyu Kang (Republic of Korea), Dr. Mary H. Ross (South Africa), Prof. Sheng Wang (P.R. of China), Dr. Claudio H. Taboadela (Argentina), Prof. Harri U. Vainio (Finland), Prof. Peter Westerholm (Sweden), Prof. Antonio Mutti (Italy), Prof. Norito N. Kawakami (Japan), Prof. Giovanni Costa (Italy), Dr. Timo J. Leino (Finland), Michel Guillemin (Switzerland), Prof. Thomas Kieselbach (Germany).

education and training in Mozambique, and regional collaborations in occupational health. The session proved to be the ideal networking forum for introductions as well as proposed collaborations between and within the various Portuguese-speaking countries represented.

ICOH gave its first Student Presentation Award, which went to Ntombizodwa Ndlovu of South Africa for her presentation, "Damaged Goods Return to Sender: A Review of the Records of Migrant Gold Miners in South Africa: 1904-1913".

Next ICOH conferences will be 2012 in Monterrey, Mexico, and 2015 in Seoul, Korea.

Detailed information on ICOH, its activities and publications (including the Code of Ethics) may be found at: <http://www.icohweb.org/>

29th ICOH

The 29th International Congress on Occupational Health "ICOH2009" was successfully hosted in Cape Town, South Africa, 22-27 March 2009, with about 1400 participants from 81 countries. Congratulations to the South African colleagues and others who worked very hard for this important event!

About 100 participants from 40 developing countries received grants enabling them to attend. Tom Grumbles, President, IOHA, provided an overview of IOHA in a Session "Strategies and Programmes of International Organizations"; he also organized and chaired a session on "Globally Harmonized Systems". David Zalk, IOHA, and Susan Wilburn, WHO, organized and chaired the 5th International Control Banding Workshop (5ICBW) during the ICOH Congress on 25 March 2009.

There were two Special Sessions within the ICOH 2009 Scientific Programme - in Portuguese and French - focusing on occupational health issues in Portuguese- and French-speaking countries, respectively. The Portuguese Special Session was attended by 28 Portuguese-speaking congress delegates, and the presenters were from Brazil, Mozambique and South Africa. The topics presented included child and adolescent labour and the development of workers' health care systems in Brazil, occupational health



This meeting will take stock of advancements in and realization of the following priority working areas identified by the Network partners as they relate to the Global Plan of Action on Workers' Health:
http://www.who.int/gb/ebwha/pdf_files/WHA60/A60_R26-en.pdf

GPA Objective 1 : Devise and implement policy instruments on workers' health

Priority 1:
 Develop/update national profiles on workers' health and provide evidence base for development, implementation and evaluation of national action plans on workers' health
Output: National profiles and national plans developed with WHO and CC support

Priority 2: Develop and disseminate evidence-based prevention tools and raise awareness for the elimination of silica-related diseases.
Output: interventions for primary prevention, control of exposures, diagnosis of diseases

Priority 3: Develop and disseminate evidence-based tools and raise awareness for the elimination of asbestos-related diseases, incl. estimates of the burden of asbestos-related diseases, review of good practices for substitution of asbestos, prevention of exposure to asbestos already in place, health surveillance of exposed workers
Output: National programmes for elimination of asbestos-related diseases developed with WHO and CC support

Priority 4: Conduct studies and develop evidence-based tools and information materials for the comprehensive protection and promotion of health for health care workers, emphasizing HBV immunization
Output: guidance documents, assistance to countries for implementing programs, training on national programs

GPA Objective 2 : Protect and promote health at the workplace

Priority 1: Develop practical tools for the assessment and management of OH risks (focus: chemical, physical, biological, psychosocial risks)
Output: inventory, framework document, mapping of use and types of tools, evaluation, definition of common criteria of toolkits

Priority 2: Develop a global framework and guidance on healthy workplaces
Output: review effectiveness of existing programmes for healthy workplaces, tools for creating healthy workplaces including a health-promoting culture and OH&S principles

Priority 3: Develop toolkits for the assessment and management of global health threats including HIV, tuberculosis, malaria, influenza, emphasizing vulnerable groups, in particular migrant workers
Output: Projects include inventory, framework, mapping of use and types of tools, evaluation, and definition of toolkits

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<i>GPA Objective 3 : Improve the performance of and access to occupational health services</i>			
<p>Priority 1: Develop working methods, provide technical assistance to countries for organization, deliver and evaluate basic OH services in the context of primary health care, with particular focus on underserved populations and low-resource settings</p> <p>Output: National programmes for the development of basic OH services initiated countries with WHO and CC support</p>	<p>Priority 2: Adapt and disseminate curricula, training materials and training for international capacity building in OH</p> <p>Output: model courses for BOHS, international courses and on-line training, national training programmes in low- and medium-income countries, introduction of OH into prof. education, technical assistance to countries</p>	-	-
<i>GPA Objective 4 : Provide and communicate evidence for action and practice</i>			
<p>Priority 1: Encourage practical research on emerging issues, incl. nano-materials and climate change</p> <p>Output: communication strategies with low- and medium income countries on interventions to ensure workers' health</p>	<p>Priority 2: Further develop the global research agenda for workers' health</p> <p>Output: development of a research matrix approach to review existing research initiatives to help identify relevant gaps in research</p>	-	-
<i>GPA Objective 5 : Incorporate workers' health into non-health policies and Projects</i>			
<p>Priority 1: Collate and conduct studies to clarify the economic benefits of workers' health</p> <p>Output: published articles and website information</p>	<p>Priority 2: Develop specific and relevant recommendations to manage risks associated with the effects of globalization on workers' health</p> <p>Output: guidance for development banks, non-health sector entities to improve workers' health and safety</p>	<p>Priority 3: Implement sectoral toolkits for the assessment & management of OH risks in the most hazardous sectors (agriculture, construction, transport)</p> <p>Output: inventory and evaluation of existing sectoral toolkits for implementation</p>	-

NEWS from WHO Collaborating Centres

From NIOSH, USA

Approaches to Safe Nanotechnology: Managing the Health and Safety Concerns Associated with Engineered Nanomaterials, March 2009 (NIOSH Publication No. 2009-125)

This document reviews what is currently known about nanoparticle toxicity, process emissions and exposure assessment, engineering controls, and personal protective equipment. This updated version of the document incorporates some of the latest results of NIOSH research, but it is only a starting point. The document serves a dual purpose: it is a summary of NIOSH's current thinking and interim recommendations; and it is a request from NIOSH to occupational safety and health practitioners, researchers, product innovators and manufacturers, employers, workers, interest group members, and the general public to exchange information that will ensure that no worker suffers material impairment of safety or health as nanotechnology develops

The complete document can be downloaded free of charge from: <http://www.cdc.gov/niosh/docs/2009-125/pdfs/2009-125.pdf>

Persistent Pulmonary Fibrosis, Migration to the Pleura, and Other Preliminary New Findings after Subchronic Exposure to Multi-Walled Carbon Nanotubes

Multi-walled carbon nanotubes, known as MWCNTs for short, are a type of engineered nanomaterial that shows promise for various applications. These include the potential for creating stronger, more durable building materials; improving cancer therapies; creating more efficient means of energy generation, storage, and transmission; and speeding computer processes. However, as with other types of engineered nanomaterials, the potential occupational health implications of MWCNTs are not well understood at this emergent stage of the technology. A broad group of health and safety practitioners and business observers have agreed that research is vital for determining if MWCNTs pose a health risk for workers engaged in

their production and industrial use, and for informing the responsible development of this technology. There is general agreement that this issue must be approached in a proactive manner with good research in order for society to benefit from the many promises this new class of materials has to offer.

The National Institute for Occupational Safety and Health (NIOSH) has worked closely with its partners to stimulate, design, conduct, and report pioneering research in this area.

At the 2009 Annual Meeting of the Society of Toxicology, a team of NIOSH researchers reported new, preliminary scientific findings that add significantly to the data that scientists and policymakers need in ongoing risk assessment. They reported on a scientifically ambitious study of laboratory mice exposed to multi-walled carbon nanotubes by pharyngeal aspiration causing the lab animal to inhale a small drop of liquid with suspended material that closely resembles inhalation of the same material suspended in the air. The research showed inflammation in the lungs of the mice, and fibrosis in their lungs, which persisted following exposure. Such effects are similar to the interstitial pulmonary fibrosis reported previously by NIOSH researchers using single-walled carbon nanotubes.

Most significantly in terms of generating new knowledge, the study demonstrated the ability of MWCNTs to migrate from the lungs to the pleura (the tissue that surrounds the lungs). The preliminary findings are the first to demonstrate that carbon nanotubes aspirated by laboratory mice can actually migrate from the alveoli in the lungs (the tiny structures in the lung that are critical for gas exchange), through the lungs, to the pleura. The preliminary findings offer significant new evidence of MWCNTs appearing to behave like durable fibers in that they translocate to the pleura.

Further details may be found at:

http://www.cdc.gov/niosh/blog/nsb031909_mwcnt.html

From "Institut universitaire romand de Santé au Travail" (Institute for Work and Health), Lausanne, Switzerland

Michel Guillemin, an IOHA and ICOH Board member and past IOHA President, was for a long time Director of this very active WHO Collaborating Centre for Occupational Health. He recently retired from the Institute, although



he will continue busy with a number of international activities, always promoting occupational hygiene.

A ceremony in his honour, in Lausanne, gathered a large number of colleagues and friends. Trevor Ogden spoke about the international scope and impact of Michel's contribution to occupational hygiene, including his work at the institute and in technical cooperation, as well as his occupational hygiene scientific publications.

Michel's speech was about "Work and its impact on Health, Environment and Economy"; he emphasized "the role of Occupational Hygiene as a science and a profession absolutely necessary for improving the working conditions

and therefore to better protect the environment".

After the ceremony, there was a party with music, as Michel is a great jazz bass player, as can be seen on the photo.

NEWS from ILO

Sent by Ilise Feitshans, feitshans@ilo.org

The ILO Encyclopaedia of Occupational Health and Safety

The Encyclopaedia of Occupational Health and Safety is the ILO's online flagship publication on all aspects of the multidisciplinary field of occupational safety and health. With over 1,000 articles, the fourth edition was produced with the collaboration of thousands of recognized experts from over 50 countries.

According to Dr. Sameera Al-Tuwaijri, Director, Safety and Health at Work and the Environment (Safework), ILO, Geneva: "The fifth edition of the Encyclopaedia will provide users with information on occupational safety and health in a highly accessible format. We hope that it will help to reduce the unacceptable global toll of 2.2 million deaths and 430 million accidents and diseases each year".

The 5th edition of the ILO Encyclopaedia of Occupational Health and Safety is unprecedented in many ways: changes in technology have shaped information retrieval, created job descriptions with graduate degrees in fields that never existed before and have inescapably, perhaps permanently, reshaped the organization of work. One of the fundamental failings of occupational safety and health, as a field throughout the 20th century, was the inability to get the message across that our work saves lives. Not some remote lives in the coal mines of West Virginia or the gold mines of South Africa - our work is for Everyone.

"Sound occupational health programs that implement best strategies are the grease for the machinery of powerful economic engines. Without the information we provide through occupational health programs no employer can survive because accidents and disease are not simply expensive but wasteful. We cannot afford waste in this economy. The fat to be trimmed, however is not the same as the grease for the wheels and machinery that makes smooth commerce.", according to Ilise L Feitshans JD and ScM, Coordinator of the 5th Edition of the ILO Encyclopaedia of Occupational Health and Safety, as she remarked in her speech "Health at Work: A Basic Human Right Brought to Daily Life by the 5th Edition ILO Encyclopaedia", Kuwait, March 2009.

"The first edition of the ILO Encyclopaedia of Occupational Health and Safety was a remarkable moment for intellectual history in contrast to this heritage. The First Edition invented what we call today in occupational health the "right to know" by bringing technical information together in two volumes that were available to every occupational health and safety expert in the world" noted Feitshans.

The legacy of this remarkable document sets a high mantra for the 5th Edition. Our goal is to bring together Ten Thousand Experts. As a United Nations agency, we relish our Constitutional obligation to involve people from every nation. The joy of the web is that we are not bound by the artificial line drawing of the hard copy text. User-friendly database searches will allow for natural language search in the 5th edition, and a new thematic approach to chapters will provide readers with instant access to expert information simply by following the Encyclopaedia's format.

The International Labour Office (ILO) is one of the oldest specialized agencies of the United Nations, founded in 1919 under the Treaty of Versailles. The ILO Encyclopaedia of Occupational Health and Safety is an internationally respected standard reference, used in the preparation of policy and programme planning, as well as for occupational hygiene, occupational medicine and workplace safety training and education. Accuracy, objectivity and commitment to its international mission have been the hallmark of the ILO, since its founding in 1919, and since the first Encyclopaedia in 1930. The ILO Encyclopaedia reflects the best thinking and collective knowledge of experts who have written down information for the benefit of all people; it is available free of charge, in order to improve occupational health and safety and reduce costs.

Please join us on this journey, as an article author, chapter editor, steering committee member peer reviewer—we will need thousands of peer reviewers—or financial supporter as ILO embarks on a fifth edition that will use state of the art methods to operationalize OSH principles in the 21st century.

The 5th Edition of the ILO Encyclopaedia of Occupational Health and Safety will provide a completely electronic, up-to-date, accurate and user-friendly information resource, understandable by

millions of people, anywhere in the world. It will be located on the ILO Internet site starting December 2009. Worldwide participation will be emphasized, following the principle of tripartism, with the goal of having at least Ten Thousand Experts join the Encyclopaedia network as article authors, chapter

editors or peer reviewers. One of those Experts can be you!

For further information, or to participate, please, contact: encyclopaedia@ilo.org or ilise@prodigy.net, or view the video link at: <http://www.trainingprofessionals.com/ilo.html>

NEWS from the European Union

EU Nano Archive

The Nano Archive is part of the ICPCNanoNet project, funded by the EU for four years starting 1st June 2008. It brings together partners from the EU, China, India and Russia and aims to provide wider access to published nanoscience research and opportunities for collaboration between scientists in the EU and International Cooperation Partner Countries.

This electronic archive of nanoscience publications has a simple interface for the deposit of full-text papers and incorporates facilities for retrieval by browsing or searching. It is freely accessible to researchers around the globe, making research papers and other scholarly publications widely available.

The Nano Archive aims at:

- reducing barriers to the access of research outputs from nano scientists and researchers across the globe;

- ensuring that records are readily searchable and retrievable by providing an "Open Archives Initiative Protocol for Metadata Harvesting" compliant service, and,
- bringing together material currently distributed across different institutions.

Detailed information on the ICPCNanoNet project is available at: <http://www.icpc-nanonet.org/>

Detailed information on the Nano Archive is available at: <http://www.nanoarchive.org/>

Direct link to bibliographic references: <http://www.nanoarchive.org/view/subjects/HA.html>

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

Sent by Birgit Müller, muller@osha.europa.eu

EU adopts the Global Harmonized System (GHS) of Chemical Labelling

The Globally Harmonised System of Classification and Labelling of Chemicals (GHS) is a United Nations system to identify hazardous chemicals and to inform users about these hazards through standard symbols and phrases on the packaging labels and through safety data sheets (SDS). On 16 December 2008 the European Parliament and the Council adopted a new Regulation on classification, labelling and packaging of substances and mixtures (CLP), which aligns existing EU legislation to the GHS, as published in the Official Journal of 31 December 2008.

The new Regulation enters into force on 20 January 2009. The deadline for substance classification according to the new rules will be 1 December 2010 and for mixtures 1 June 2015. The CLP Regulation will ultimately replace the current rules on classification,

labelling and packaging of substances (Directive 67/548/EEC) and preparations (Directive 1999/45/EC) after a transitional period.

Further details may be found at: http://ec.europa.eu/enterprise/reach/index_en.htm

European survey of enterprises on new and emerging risks (ESENER)

EU-OSHA is carrying out a European-wide establishment survey on health and safety at the workplace and fieldwork is due to start in March. In this survey, the responsible actors (managers and workers' health and safety representatives) will be asked about how health and safety risks are managed at their workplace.

A particular focus will be on psychosocial risks, i.e. on phenomena such as work-related stress, violence and harassment. The survey aims to assist workplaces across Europe to deal more effectively with health and safety and promote the health and well-being of employees. It will provide policy makers with cross-nationally comparable information relevant for the design and implementation of new policies in this field.

The survey, which involves approximately 40,000 interviews and covers 31 countries, has the support of governments and social partners at European level.

Further details may be found at:
<http://osha.europa.eu/en/riskobservatory/enterprise-survey/enterprise-survey-esener>

Safety with a smile – NAPO faces workplace risks and shows good practice

On his own website, the famous animated character NAPO tackles workplace risks and shows – in a universal language - how to deal with musculoskeletal diseases and noise, gives advice to young workers, builders and cleaning workers and explains safety signs. All stories have an educational value and can be used to encourage discussions on health and safety topics.

Find out more about the NAPO films:
www.napofilm.net

Occupational skin diseases and dermal exposure

Skin diseases are among the most important emerging risks - related not only to the extensive use of chemicals, but also to exposure to biological and physical risk factors. The report gives an overview of dermal exposures and skin diseases, contains the principal policies and practices in the EU-25 and concludes with challenges, prospects and recommendations.

The report on skin diseases is available at:
http://osha.europa.eu/en/publications/reports/TE7007049ENC_skin_diseases

Workplace exposure to vibration

One in three European workers is exposed to vibration at work and this risk is becoming more and more important. This report gives an overview of the challenges facing the occupational safety and health community as regards the management of occupational vibration risks.

The report on vibration is available at:
http://osha.europa.eu/en/publications/reports/8108322vibration_exposure/view

European workers face new and increasing health risks from hazardous substances

An ever-increasing number of hazardous substances used in industry and in a wide range of workplaces are threatening the health of workers across Europe. A new Risk Observatory report identifies the main groups of substances which could pose new and increasing risks

and highlights the exposure of 32 million people in the EU to known carcinogens at unsafe levels.

The report also estimates that about 74,000 work-related deaths may be linked to hazardous substances at work each year in the EU – about 10 times more than workplace accidents. About 15% of European workers report handling chemical products for a quarter of their working time and 19% report breathing in dust, fumes and smoke in their workplaces.

The 49 experts from 21 European countries who participated in this forecast highlighted particles and dusts as major emerging concerns and put nanoparticles at the top of the list of emerging risks. Other main groups of emerging risks identified were carcinogenic, mutagenic and reprotoxic substances, and the increasing use of allergenic and sensitising substances. Specific occupations of emerging concerns were also highlighted and include the increasing waste management industry, construction, and service activities such as cleaning or home nursing. In addition, there are a growing number of workers in SMEs and sub-contracted jobs, where the management of chemical risks is generally poorer. Last but not least, concern about multiple exposures is increasing as it was also shown in the three other forecasts on emerging biological, physical and psychosocial emerging risks.

This report "Expert forecast on emerging chemical risks related to occupational safety and health" is available as an over view and in full at:

http://osha.europa.eu/en/publications/reports/TE3008390ENC_chemical_risks/view

Healthy Workplaces campaign: 30 multinational organisations and companies take action

Just after the first campaign year, the number of official partners has risen to 30 as more pan-European organisations and multinational companies signed up to support the Healthy Workplaces campaign organised by EU-OSHA. The campaign aims at reducing work-related accidents and illnesses by promoting risk assessment as the first step to a sustainable prevention culture. Improvements in this area are urgently needed as it is estimated that every year in the EU 167.000 people die from work-related causes.

As Jukka Takala, Director of EU-OSHA said: "All of these workers' and employers' federations, NGOs and enterprises from different industry sectors are renowned organisations and they invest a lot of time and money". ... "We are very proud that they help us to reach the workplaces and get our main messages across: First, risk assessment is the key to preventing accidents and ill health at work – for any type of organisation, whether large or small. And secondly: Risk assessment is not necessarily complicated or bureaucratic. Even micro-firms and SMEs are able to carry out their own risk assessment. To help them, we are promoting a simple five-step approach."

By signing up as official partners, the 30 organisations commit themselves to organise seminars, workshops

and press conferences on risk assessment and to disseminate the campaign messages and material. Other activities include the production of workplace safety and health videos, photo competitions or training sessions with clients, partners and contractors. Further details on partners and their activities may be found at:

<http://osha.europa.eu/en/press/press-releases/eu-risk-assessment-campaign-30-multinational-organisations-and-companies-take-action>

European Good Practice Award winners 2008 to be announced at Safety and Health congress in Prague

On 27 April 2009 the European Good Practice Award winners will be announced during the congress "Safety and Health at Work in Europe in the 21st Century", organised by the Czech Presidency of the European Union in Prague. The main focus of the meeting is on the impact of occupational safety and health on

economy and businesses, the role of workers and the effectiveness of economic incentives to improve OSH. Further information on this matter available at: http://osha.europa.eu/fop/hungary/en/news/news_board/a-2008.-evi-helyes-gyakorlat-dij-nyertesei

EU-OSHA launches pan-European photo competition: What's your image of safety and health at work?

EU-OSHA's competition challenges everyone to share their own perspective on safe and healthy workplaces. Four winners stand a chance to win prizes totalling 7,000 Euros. An international jury of professional photographers and OSH experts decides on the three best photos and there is an online voting for the public's favourite. Deadline for submission is 15th August 2009.

Details on this competition will be available by the end of April 2009 – check the EU-OSHA website: <http://osha.europa.eu/>

CONTRIBUTIONS from READERS

INTERNATIONAL

10th International Symposium on Inhaled Particles

The papers from the 10th International Symposium on Inhaled Particles, held in Sheffield, **UK, 23–25 September 2008**, are now available (free of charge) at:

<http://www.iop.org/EJ/toc/1742-6596/151/1>

The *Journal of Physics: Conference Series* is an open-access journal. All articles are permanently available online without charge immediately after publication.

Sent by: Roger Alesbury, roger.alesbury@uk.bp.com, Steve Bailey, steve.r.bailey@gsk.com and Brian Davies, bdavies@uow.edu.au

International Training Modules for Occupational Hygiene – status report and forward plan - December 2008

Recent decades have seen a decline in manufacturing in much of the developed world and increasing production and mineral extraction in other countries. With the change in the industrial base comes a change in geographical patterns of demand for occupational hygiene and occupational hygienists. In addition to emerging indigenous organisations, many major multinational corporations are expanding in parts of the world where there is limited inherent capability in the protection of health and safety at work. In 2006, following difficulties in recruiting, a number of occupational hygienists from multinational corporations produced a paper (Alesbury, Bailey, et al, 2006) with ideas for addressing this challenge. This set out options to grow skills using a modular development programme. The proposals have since been developed, presented and debated at occupational hygiene conferences and workshops around the world.

Over the last three years the ideas have been refined and updated to reflect comments received and feedback from national occupational hygiene societies

and the International Occupational Hygiene Association (IOHA).

A paper is available with further details and proposals for an interim governance board to manage the next stage of the programme until negotiations on the legal framework for a governance structure are finalised. This interim arrangement is based on a memorandum of understanding (MoU) between interested parties and agreement on areas of cooperation. So far, three hygiene associations have signed the MoU, namely the American Industrial Hygiene Association, the Australian Institute of Occupational Hygienists, and the British Occupational Hygiene Society.

The approach focuses initially on the development of basic and practical occupational hygiene skills at the technician level to identify, assess and control risk. The concept is based on modular training to a consistent format that can be deployed around the world, reducing costs, increasing the potential for local development, and providing the facility to train large numbers of individuals in a cost effective way.

At this point in time there is a proven and workable scheme of training modules at the technician level that

has been tried and tested over the last three years. The modules have been run in a variety of locations and have included dual language versions. Course materials have been peer reviewed, piloted and checked for copyright approval and there is agreement to offer their use to the occupational hygiene community.

The modular courses that have been developed so far are listed below. They cover a range of occupational hygiene topics, the idea being that using a package of courses, skills can be developed to suit the risk profile and priorities of the organisation funding the training.

Those marked "completed" are available and in use, and those marked 'piloting' are going through the final stages of review and editing and will be complete in 2009.

Module	Status
W501 – Measurement of Hazardous Substances	Complete
W502 – Thermal Environment	Complete
W503 – Noise	Complete
W504 – Asbestos	Piloting
W505 – Control	Piloting
W506 – Ergonomics	Complete
W507 – Health Effects of Hazardous Substances	Under Development

From BRAZIL

Sent by Arline Abel Sydneia Arcuri, FUNDACENTRO, São Paulo, Brazil

E-mail: arline@fundacentro.gov.br

Actions concerning Nanotechnology in Brazil

The Brazilian government has been investing appreciably in nanotechnology, particularly considering the national standards for R&D. The number of research networks in nanotechnology increased from four in 2001 to ten in 2005. Many laboratories are being set up and many research projects are being carried out; however, research aiming at the evaluation of the economic, social, environmental, ethical and health impacts has been excluded from this process. Studies specifically related to workers' health are practically non-existent in our country.

Since 2005, FUNDACENTRO, the national institute for occupational health and safety and a WHO Collaborating Centre for occupational health, as the official agency for research and studies in this field, started studies and actions on nanotechnology and, in 2007, the project "Preliminary study of the impacts of nanotechnology on workers' health" ("Estudo preliminar dos impactos da nanotecnologia para a saúde dos trabalhadores") was launched. During 2007, bibliographic searches were carried out, lectures were given in different places and for different audiences, and special events were held. One member of the FUNDACENTRO team dealing with this subject was sent for post-doctoral work in Germany.

The intent is for student manuals to be made downloadable free of charge from the internet, providing easy access in the developing world. IOHA member organisations and course providers will also be able to print and sell paper copies if they wish. Other course materials will be provided to authorised course providers.

In addition to the modules a student assessment process has been developed and is being trialled in a number of countries. This offers the potential for a system of globally transferable qualifications that would allow hygiene technicians to be recognised internationally.

It is hoped that future development and technical oversight will be provided by a technical advisory board consisting of those IOHA member organisations that are actively using the system, and also representatives from IOHA. The organisation has been given a working title of The Occupational Hygiene Training Association (OHTA), and it is envisaged that this will be constituted as a not-for-profit charitable company. In the interim, the process is being administered by an interim ad hoc committee

Final arrangements for the governance process will depend on negotiations between the interested parties and the establishment of a legal entity. Bringing the scheme under the umbrella of IOHA member organisations, through the MoU, is a first step.

FUNDACENTRO held seminars on this subject in Recife, São Paulo and Rio de Janeiro, and has also supported a DVD entitled "Nanotechnology – the future is now", elaborated by RENANOSOMA (Brazilian network on research in nanotechnology, society and environment) and the enterprise "Último ato" (both distribute the DVD as a non-profit activity).

In 2008 the project was continued through activities such as: a number of events in many FUNDACENTRO Regional Units; lectures in events organized by entities such as ANAMT (National Association of Occupational Medicine), ANENT (National Association of Occupational Nursing), DIESAT (Inter-union Department of Studies and Research on Health and Work Environment), DIEESE (Inter-union Department of Statistics and Socio-Economic Studies), Chemical Workers Union of São Paulo, Association of Safety Engineers of Rio Grande do Sul; press interviews: preparation and publication of the first cartoon magazine on the subject, and, the II International Seminar on Nanotechnology and Workers. Some chapters on the subject were written for books published by DIESAT and NATO (book on *Nanomaterials: Risks and Benefits*, 2009, published by Springer).

The largest event on the subject, the Seminar "Nanotechnology, Health of Workers, and Impacts on

Society and the Environment”, took place on 3 - 4 October 2008, at FUNDACENTRO/São Paulo, with more than 100 participants, including many union representatives and workers. Partly as a consequence of this seminar, many partnerships were created in order to ensure continuity of the work on this subject.

Further steps are foreseen in 2009, including the investigation of working conditions in Brazilian

From CANADA

Sent by Maura Tomi, Communications Division, IRSST, Canada, mautom@irsst.qc.ca

Improving Nanoparticle Risk Management

On 3 February 2009, the Quebec Occupational Health and Safety Research Institute (IRSST) released the first guide in Québec for managing potential occupational risks associated with engineered nanoparticles. This guide, entitled “*Best Practices Guide to Synthetic Nanoparticle Risk Management*”, was published jointly by the *Institut de recherche Robert-Sauvé en santé et en sécurité du travail* (IRSST), the Quebec’s *Commission de la santé et de la sécurité du travail* (CSST) and *NanoQuébec*.

A practical approach: The authors of the guide note that the level of knowledge on health and safety risks related specifically to nanoparticles is still very limited. For one thing, the toxic effects linked to the ability of these particles to pass through various biological barriers, disperse in the organism and accumulate in certain organs and within cells have only been partially documented. While we know that nanoparticles can be more toxic than their equivalent larger-scale chemical counterparts, current knowledge nevertheless allows us to manage the risks, even when the levels of toxicity and exposure are uncertain.

Designed for companies, researchers and other stakeholders concerned about the effects of nanotechnologies, the guide describes the current state of knowledge in the field and makes recommendations to encourage taking responsibility for and controlling its risk factors so as to prevent employment injuries. The guide ascertains the health, safety and environmental risks of nanotechnologies, suggests an approach for evaluating and controlling these risks, documents current practices at the international level and specifies which factors should form part of an institutional prevention program.

Research opportunities: It should be recalled that the IRSST and *NanoQuébec* had called on Québec researchers to submit proposals to advance knowledge in the field of prevention and effective management of the risks associated with nanoparticles. The projects submitted employed an approach based on eliminating risks at source. Those selected will be published.

For more details or to download the document: <http://www.irsst.qc.ca/files/documents/PubIRSST/R-599.pdf>

When we are deterred by what others think

A study published by the *Institut de recherche Robert-Sauvé en santé et en sécurité du travail* (IRSST)

enterprises (where there is production or use of nano-materials), as well as in research laboratories. Awareness-raising campaigns will be continued, as this subject is still widely unknown to the public, particularly to workers. Two new cartoon books are being elaborated. The FUNDACENTRO website will have a special section dedicated to nanotechnology.

reveals, among other things, the disastrous consequences for injured workers when they do not feel believed or supported during their absence from work. Researchers actually observed the importance of workers' social reality for better understanding their rehabilitation process by listening to representations of health, illness and pain by workers unable to return to work due to musculoskeletal-related pain.

The results of this innovative study related to the rehabilitation of workers suffering from MSD are aimed mainly at occupational health and safety practitioners and rehabilitation counselors. The latter will be able to use this research to establish action plans that are better adapted to the reality of people living with MSD. Studying and appreciating the testimonies promotes an in-depth understanding of the emotions, attitudes and behaviours that influence adaptation strategies for patients on the road to recovery or in rehabilitation.

The report can be downloaded free of charge at: <http://www.irsst.qc.ca/files/documents/PubIRSST/R-592.pdf>

Ototoxic potential of industrial chemicals

This project of IRSST (Quebec Occupational Health and Safety Research Institute) was undertaken to develop a toxicological database allowing the identification of possible ototoxic substances present in the work environment. There is accumulating epidemiological evidence that exposure to some solvents, metals, asphyxiants and other substances in humans is associated with an increased risk of hearing loss.

To access the tool: <http://www.irsst.qc.ca/en/utOto.htm>

Performing arts: Occupational risks emerge from behind the scenes

An exploratory study on occupational risks in the performing arts sheds light on the impact of organizational modes of productions, cultural enterprises and sectors of activity on the health and safety of artists and artisans. The study, which was conducted by the *Institut de recherche Robert-Sauvé en santé et en sécurité du travail* (IRSST), forms part of the work of the “*Table de concertation paritaire en santé et sécurité du travail pour le domaine des arts de la scène*” (“Joint Table on Occupational Health and Safety in the Performing Arts”), a body created in 2005 by the *Commission de la santé et de la sécurité du*

travail (CSST) to follow up on measures put forward in "Pour mieux vivre de l'art" ("To better live from art"), the action plan implemented by the Ministry of Culture and Communications ("Ministère de la Culture et des Communications").

New insights on occupations

Among the results obtained by the researchers is a description of enterprises and occupations in the performing arts sector. They identify risks to the health and safety of the artists and artisans, and the various causes of accidents. The study highlights inclusion, in the practices of cultural enterprises, of formal and informal experiences that can have a very positive effect on the health and safety of artists and artisans, despite the fact that prevention is sometimes perceived as a constraint on creative activity. The study also

suggests that "participatory approaches" (approaches based on workers' participation), which emphasize the need for prevention in occupational health and safety (OHS), depend on workers having positive experiences with these approaches. What also emerges is that artists, since they are passionate about their art and for reasons relating to the work environment, often choose to remain silent about their pain and hide their injuries. Furthermore, there is a marked trend among numerous stakeholders toward more open consideration of the realities of occupational injuries.

To download the document, please visit:

<http://www.irsst.qc.ca/files/documents/PubIRSST/R-607.pdf>

From JAPAN

Sent by Masayoshi Karasawa, Special Adviser, director@jawe.or.jp and Shigeru Asuka, Executive Director, JAWES s.asuka@jawe.or.jp

Japan Association for Working Environment Measurement (JAWE) released the result of the General Accuracy Cross-Check Project conducted by JAWE in the fiscal year 2008, concerning the Evaluation of Design, Sampling, and Analyses of such four kinds of blind samples as crystalline silica, hydrogen fluoride, lead and mixed organic solvents.

According to the business programme of the fiscal year 2008, JAWE, whose chairperson is Mr. Kizoh Hirayama (Managing Director, General Manager, Personnel & Labour Relations Division, Nippon Steel Corporation) conducted independently and nationwide, "the General Accuracy Cross-Check Project" concerning the four following kinds of Blind Samples of airborne contaminants, which are controlled by the regulations under the Occupational Safety and Health Law, Japan:

- crystalline silica in dust;
- hydrogen fluoride as a typical example of the specified chemical substances;
- lead as a typical example of heavy metals, and,
- mixed organic solvents as a typical example of organic solvents.

This Accuracy Cross-Check Project succeeded and developed the Unified Accuracy Cross-Check Project, which had been conducted by JAWE, under the trust by the Ministry of Health, Labour and Welfare, Japan, since the fiscal year 1997, and was ceased in the fiscal year 2007 as a trust by the Ministry, and was the second Accuracy Cross-Check Project, following the one conducted by JAWE, in the fiscal year 2007.

The total plan of this Cross-Check Project consists of the following three kinds of Cross-Check items:

- evaluation of suitability of the design of working environment measurements
- the Cross-Check of flow rate of sampling pumps

- measurement of content in weight of the blind sample of crystalline silica in dust, and/or measurement of contents in weight as well as calculated airborne concentrations of the other three kinds of blind samples (as above mentioned).

The targets for this Cross-check project are basically the working environment measurement agencies and the employers who have their own licensed occupational hygienists to perform working environment measurements. However, the target for the second Cross-Check Project (in 2008), were those who did not participate the first Cross-Check Project (in 2007), or were evaluated as unsuccessful in the previous Project, with regard to one or more Cross-Check items. Those evaluated as successes in the first Cross-Check Project have been certified by JAWE, from the fiscal year 2007 to the fiscal year 2008, therefore JAWE decided that it was unnecessary for them to join the 2008 Cross-Check Project.

This project included following steps:

- In order to evaluate their suitability, preparation by JAWE of design sheets of working environment measurement for this Cross-Check, containing intentionally some mistakes among 35 items concerning compliance of the National Working Environment Measurement Standards, such as the reason for the selection of the unit working place, calculation of working environment measurement, evaluation of its result according to the National Working Environment Measurement Evaluation Standards and others. This method was adopted for the first time, in Japan.
- For the Cross-check of flow rate of sampling pumps, preparation by JAWE of two kinds of flow meters of square type, namely with capacity of 200ml/min and of 1500 ml/min type, equipped with a resistance tube, which adds to the air

resistance, correspondent to the actual air resistance in working environment measurement, and intentionally without the necessary division. JAWE distributed one of these two types of pumps to each participant, according to the application of each participant.

- For the Cross-Check of the measurement of the four kinds of blind samples, preparation by JAWE, independently and secretly, of the following samples:
 - As the sealed blind samples of dust, a mixture of dusts not containing crystalline silica and crystalline silica itself, with the intended content in weight of crystalline silica.
 - As the sealed blind samples of hydrogen fluoride or lead, an aqueous solution of sodium fluoride or lead nitrate, correspondent to the actual airborne concentration in the concerned working environment
 - As the blind samples of mixed organic solvents, a mixture of three kinds of different organic solvents, as carbon disulfide solution, which was then, impregnated into sealed charcoal tubes, correspondent to the actual airborne concentration in the concerned working environment.

Afterwards, JAWE distributed the design sheets, the flow meters, as well as each kind of sealed blind sample, to the participants according to their own applications.

The participants who applied to join this Project, checked the design sheet of working environment measurement, calibrated the sampling pumps, conducted analyses of one or more of these sealed blind samples, and sent the results to JAWE, under the General Plan for this Cross-Check Project.

These results were evaluated by the Experts Committee of the General Accuracy Cross-Check Project (Chairperson; Professor emeritus, Tsutomu

Takata, Kitasato University, and Vice Chairperson of JAWE), organized by JAWE.

JAWE has decided that those participants who were evaluated as unsuccessful by the Experts Committee in the primary evaluation, can join the additional advanced training courses on the Cross-Check items on which they were unsuccessful; if they finish these courses, they can join again the same Cross-Check Project and can be evaluated a second time by the Experts Committee. These additional advanced training courses will be conducted by JAWE in the fiscal year 2009.

The numbers of the participants with regard to each Cross-Check item, the Evaluation Standards as successes by the Cross-Check items, decided by the Experts Committee, as well as the total percentage of those who were evaluated as successes in the primary evaluation by the Experts Committee (listed by the Cross-Check items), are shown on tables, which may be obtained from the authors of this contribution.

However, in view of the fact that this method was adopted for the first time, the results concerning the evaluation of the suitability of the design sheets, will be presented by the Experts Committee only after the additional advanced training course on these Cross-Check items are conducted and their results are evaluated for a second time by the Experts Committee.

JAWE notified all the participants of the results, successful or not, of their evaluation by the Experts Committee. With the exception of the evaluation of suitability of the design sheet, JAWE will release – and post on the JAWE Website, all results from this Cross-Check Project, including the names of the participants (both from working environment measurement agencies or private enterprises that have their own licensed industrial hygienists to perform measurements), who were evaluated, certificated by JAWE as successes, and agreed to be posted.

JAWE will continue to conduct “the General Accuracy Cross-Check Project”, in the fiscal year 2009.

From The NETHERLANDS

Sent by Adrianus de Rooij A.deRooij@workershealth.eu, Rudolf van der Haar, rvan@mc-mutual.com and Tom Mutsaerts, t.mutsaerts@workershealth.eu

Workers' health for low income countries

Occupational health is still a great concern for the working poor in low income countries. The larger part of the working population earns its livelihood as an informal worker or as a farmer.

Informal workers are exposed to poor working conditions and income insecurity. Their workplaces are not safe, they have insufficient basic health and sanitation facilities and they suffer absence of social security. Their families are often put at risk when the work is performed in their homes. Farmers and their families handle unregistered, repacked, unlabelled pesticides. Most of them have very little knowledge

about the health risks of these pesticides. They also lack of social security.

Due to the globalization, workers in low income countries may be exposed to the so-called new occupational risks. An emerging concern is the production of nanomaterials that results in exposure to particles smaller than 100 nanometers. Other concern is the increase of biological risks through global trading. Moreover, workers' health is aggravated by the social-economic constraints characterized by the presence of a growing and widespread informal employment. Therefore it is not surprising that the “ILO/WHO estimates” show high numbers of occupational diseases in spite of their recognized and appreciable under reporting, injuries and deaths in low-income

countries and the ILO put “decent work” high in its agenda.

Improvements in work conditions not only lead to the prevention of occupational accidents and illnesses but also to increases in productivity and incomes. There is scientific and technical knowledge available today that, if applied, could prevent and control most occupational risk factors. Against this background the foundation “Workers Health Impulse (WHI)” was founded. WHI started in 2009 and is committed to the improvement of workers’ health in low-income countries. WHI is a foundation with a growing network of NGO’s and individuals committed to workers’ health. WHI helps to collect and spread practical information (Examples in the photos below).



Rotating carousels to harvest flowers simplify task (Source Stigas)

From SPAIN

Sent by Rudolf Van Der Haar, rvan@mc-mutual.com, Ruth Jimenez, ruth.jimenez@istas.ccoo.es and Miguel Angel Alba, maah02@gmail.com

Foundation/Establishment of the Spanish Industrial Hygiene Association

After more than a year of discussions and writing the necessary documents, in December 2008, the Spanish Industrial Hygiene Association, abbreviated as AEHI (Asociación Española de Higiene Industrial) was formally established. It was decided to use the term industrial hygiene in the name of the association for being more identifiable since it is well embedded in the Spanish society and legislation

With its foundation, as a non-profit organization, the AEHI pretends to be the answer to the growing need of having an independent network for occupational hygienists in Spain to exchange experiences and knowledge and, above all, to promote awareness of industrial (occupational) hygiene as a necessary professional discipline to protect people from chemical, physical and biological risks at work.

To achieve these aims the AEHI has programmed a list of activities, such as: setting up a website and having an electronic newsletter; promoting courses, congresses and technical seminars; working with committees of the national standards-setting body, and, interacting actively with other health and safety groups

From The UK

Sent by Trevor Ogden, Editor in Chief, Annals of Occupational Hygiene, ogden@ogs.org.uk

Nancy Tait

Nancy Tait, a British activist on asbestos, died on 13th February, the day after her 89th birthday. For almost 40

On the other hand education is at the base of improving occupational health. So the specific objectives of WHI for the coming years are:

- developing local projects
- fund-raising
- establishing networks
- collecting practical solutions
- facilitating information and technical assistance, and,
- participating in projects about micro-insurance for the working poor.

Special attention will be given to the development of practical and cost-effective solutions, small scale enterprises and the informal sector.



Ingenious device to work on the ground with less musculoskeletal stress (Source Stigas)

Your reaction is very welcome and more information about the foundation WHI can be found on:

www.workershealth.eu

and associations. Special attention will be given to the promotion of high quality education in occupational hygiene, since the existent education scheme, which has serious shortfalls, will be modified in the near future due to the Bologne Process.

The AEHI wants to ensure that its members have a strong and effective voice, which influences occupational hygiene related issues with governmental organisations, employers, universities and trades unions.

Also the AEHI, by contacting other counterpart organisations world-wide, wants to give the Spanish occupational hygiene new impulses since, at present, it finds itself in a more or less isolated situation. Therefore, it seeks the cooperation with other (European) occupational hygiene associations in order to advance research and proactively assist in the dissemination of knowledge throughout Spain and other countries (EU, Latin America, etc.).

More information about the AEHI can soon be found on the website (www.aehi.es), currently under construction.

years, she had held a unique position in the fight against occupational disease.

Nancy had been a junior employee in the British Post Office and Patent Office, and her husband Bill was a post office engineer, until he died of mesothelioma in 1968. This was only a few years after the first unequivocal recognition of the link of this disease with crocidolite mining, and for many it was incredible that the occasional contact with asbestos in Bill's job could have caused his disease. Certainly the Post Office said so, and denied liability. Bill's death might easily have been forgotten amongst those of so many other victims, but Nancy looked into the literature, was shocked at what she found, and became one of the forces which changed attitudes and legislation, writing, speaking, agitating, soft-spoken but forthright, uncompromising and persistent, supporter of thousands of other individual victims, and goad to the lumbering elephant of government bureaucracy. She founded a charity to support victims of industrial disease, and appeared at

international meeting on asbestos to challenge the industry and asbestos users.

She often simplified the science in her desire to see wrongs righted, but in the end she turned out to be right on the most important thing, and in Britain most people now developing mesothelioma were not those obviously employed in the asbestos industry, but people in the construction and user industries, like her husband.

For professionals, Nancy is a permanent warning that wisdom does not always lie with the obvious expert. For fuller obituaries, see The Guardian newspaper, <http://www.guardian.co.uk/society/2009/feb/23/nancy-tait>, and the IBAS website http://ibasecretariat.org/mem_nancy_tait.php.

From The USA

Sent by: Thais C. Morata (CDC/NIOSH/DART) E-mail: tcm2@cdc.gov

National Hearing Conservation Association Announces Call for Papers for 2010 "Explore the World of Hearing Loss Prevention" Conference

The mission of the National Hearing Conservation Association (NHCA) is "to prevent hearing loss due to noise and other environmental factors in all sectors of society". NHCA provides networking, resources and professional development opportunities to improve skills, practices and services for over 600 members. NHCA's membership includes audiologists, researchers, industrial hygienists, educators, professional service organizations, safety professionals, medical professionals, engineers, audio professionals, students, and others who have dedicated their work to the advancement of hearing loss prevention.

The NHCA is announcing a call for papers for presentations and posters at its 35th Annual Conference, 25-27 February 2010, at the Rosen Plaza Hotel, Orlando, Florida, USA. All topics related to NHCA's mission will be considered. Presentations may address basic scientific research, applied research, practical applications of research results, or other findings or concepts which may enhance hearing loss prevention efforts.

NHCA's conference features three days of engaging workshops, presentations, panel discussions and poster presentations on most current issues relevant to the practice of hearing loss prevention, including: the latest research on occupational hearing loss; public and personal health issues related to hearing loss; music and noise exposure; hearing loss prevention training and education; health communication

strategies; hearing protection device innovations and measurement. Over 300 professionals attend the annual conference, and rely on it for professional development and networking.

In 2010, the conference theme "Explore the World of Hearing Loss Prevention" expresses the intent to enhance professional development and practices by reaching out to the international community to optimize the exchange of experiences and skills and expedite research progress.

Outstanding professionals in the field are recognized at the NHCA Conference. Previous award recipients include: Alice Suter, PhD; Mead Killion, PhD.; Robert A. Dobie, MD; Julia Royster, PhD.; John Franks, PhD., and, Donald Henderson, Ph.D. Safe-in-Sound Awards for Excellence and Innovation in Hearing Loss Prevention™ are also presented at the conference.

Queries concerning details of the presentations and deadlines should be sent, with subject line "NHCA 2010 Presentation Proposal", to: nhcaoffice@hearingconservation.org.

The deadlines are:

For Platform and Workshop Presentations: 31 July 2009

For Poster Presentations: 30 September 2009

Further information about the National Hearing Conservation Association can be found at: www.hearingconservation.org.

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