

NEWSLETTER - April 2007



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Letter from the Editor

Dear Colleagues,

The sharing of information among colleagues not only brings us together and strengthens our commitment but multiplies our knowledge and experience. This brings to mind a Bernard Shaw quote: "If you have an apple and I have an apple and we exchange these apples, then you and I will still each have one apple. But if you have an idea and I have an idea and we exchange these ideas, then each of us will have two ideas." In fact, this is one of the reasons why IOHA started the Newsletter many years ago, besides keeping readers informed on main IOHA goals, endeavours and activities. However, in order to have a useful and interesting newsletter, it would be important to have more feedback from readers, so do not hesitate to send your comments and suggestions for improvement or changes.

For this issue we received news from member associations in Australia, Japan, UK and USA; other member associations are encouraged to send news and share their experiences.

It is very rewarding to see how collaboration among colleagues around the world has been gradually strengthened. One outstanding example is the impetus that the WHO Global Network of Collaborating Centres has taken in recent years. As you may see under News from WHO, many activities have been successfully completed, new

initiatives started and partnerships established aiming at joint projects and exchanges of information.

I would like to, once more, draw your attention to the importance of implementing the GHS at the country level in all countries. For health and the environment, there are no boundaries. As the admirable past Director General of WHO, Dr H. Mahler, used to say when addressing the staff: "we are all navigating together in Spaceship Earth and we must work together to keep it safe". I believe that is exactly what we have to do and our profession has a significant role to play in this respect.

The "fight" against asbestos is a difficult one. In this context, I believe it is timely to bring to your attention an analytical method for analyzing the content of asbestos in bulk samples, recently developed in Japan, in order to meet the requirements of new legislation. This is presented under "Contribution from Readers", alongside a contribution from Canada. For each issue, a couple of contributions from readers is selected and posted. Brief news about ongoing investigations and practical control solutions are also very much welcome.

Best greetings to all of you

Berenice Goelzer
berenice@goelzer.net

News from the IOHA Board

From the IOHA Recognition of National Occupational Hygiene Certification/Accreditation Schemes

Sent by Tom Grumbles,
Chair of the IOHA National Accreditation Recognition (NAR) Committee, Tom.Grumbles@us.sasol.com

Congratulations to the Canadian Registration Board of Occupational Hygienist (CRBOH) for recognition under the IOHA National Accreditation Recognition (NAR) Committee guidelines and Procedures.

This process compares the existing national programs to what has been determined to be an International model program for certification schemes. This set of criteria was developed through an International process of discussion

and debate with the existing Occupational Hygiene Certifying bodies.

The overall aim of this process is to promote the recognition of certifying schemes on a global basis. It is believed that a consistent quality standard for these country schemes is important to shape performance of occupational hygienists.

Canada now joins the US, UK, Australia, South Africa and the Dutch in achieving this recognition.

News from Members Associations

From Australia (AIOH)

AIOH 2006 Conference in Review

Sent by Gerard Tiernan, AIOH Newsletter Editor, gerard.tiernan@nrm.qld.gov.au

The AIOH Conference, held at the magnificent Marriott Hotel Resort on Queensland's Gold Coast, was another gala spectacular this year with a plethora of fun filled nights and heady days of intellectual stimulation and challenge. From the week-end where the two PDCs and 11 CESs were packed to overflowing to the final lunch on Wednesday, a record number of delegates were treated to an excellent social and scientific agenda. Ross Di Corleto and his team (see photograph) are to be heartily congratulated on coordinating and staging such an excellent event and a very successful conference socially, scientifically and financially.



The week-end started with the traditional *Introduction to Occupational Hygiene*, course which was over-subscribed indicating the need for hygiene skills is far from diminishing. The second PDC, the free session on Full Membership Interview skills, was well attended

The 11 CESs were all oversubscribed with a blend of international guests and locals presenting. There were a number of excellent sessions including Annette Bunge's

Estimating the potential risk from skin exposure to chemicals, which really challenged participants.

A first for the AIOH Conference was the Sunday afternoon *Interactive Forum - Minimum acceptable measurement protocols for exposure to workplace hazards* run by the ASCC - Australian Safety and Compensation Council - (Australia's national OH&S standard setting body) representatives, Anthony Hogan and Howard Morris, and marks a significant step forward in building the relationship between the AIOH and the ASCC.

At the Welcome Function came the most exciting event of the year for the AIOH – the launch of the BOOK!! Three years in the planning and creation the BOOK is a revision of David Grantham's "*Occupational Health and Hygiene, Guidebook for the WHSO*", the copyright for which David kindly gave to the AIOH. (David was the recipient of the IOHA Lifetime Achievement Award in 2004). Go to the weblink:

<http://www.allenandunwin.com/Shopping/ProductDetails.aspx?ISBN=9781741750584> to purchase your copy.

On Monday morning, Ron Clarke, the Mayor of the Gold Coast, gave the opening address. Next Julie Nielsen from Workplace Health and Safety Queensland brought delegates up to date with what is happening in the Queensland inspectorate and then tried to woo a few hygienists to Queensland – like every other jurisdiction Queensland is having trouble recruiting and keeping hygienists. Outgoing AIOH President John Edwards then gave a short address and was followed by the SEA sponsored speaker Vincent Covello – an international expert in risk communication.

Covello's talk was excellent with some audience participation and interaction. He talked about the 1000 dos and don'ts of media communication and the 27/9/3 rule, when in a high pressure situation such as a media interview it is best to get your **three** points across in 27 words and 9 seconds. At the end of the first plenary John Edwards officially opened the trade exhibition and delegates broke to view and discuss the latest and greatest technology and services with the 23 exhibitors who have again been most generous in their support of the conference.

After the break Frank Renshaw, AIHA President, and Andy Gillies, BOHS President, gave us an update on the latest developments in the US and UK/Europe. In the afternoon delegates were treated to eight concurrent sessions and a plenary from Tony Parker from Queensland University of Technology on *Managing the Aging Workforce*.

Tuesday morning was a plenary presented by John Cocker from the HSL in the UK talking on Biological Monitoring and Ken Parsons from Loughborough University in the UK talking about the Thermal Environment. This was followed by four concurrent sessions providing delegates with plenty of choice and variety from OHS training (Hannah Aumann) to acid mist (Andrew Orfanos) to epidemiology (Deborah Glass) to indoor air quality (Dan le Van). In the afternoon a plenary session was run by ASCC representatives Anthony Hogan and Peta Miller on the *National Exposure Surveillance Strategy*. Stephen Dean then gave a presentation on next year's conference to be held in Melbourne. This was followed by a first for the AIOH – an Interactive Panel Session facilitated by Norman Swan the presenter of the *Health Report* on the ABC's *Radio National*. The panel consisted of incoming AIOH President Ian Firth,

AIHA President Frank Renshaw, BOHS President Andy Gillies, current AIOH President John Edwards, Julia Norris representing the young hygienists, and occupational physicians, Dr Robert McCartney and Dr Ki Douglas.

Early Wednesday, delegates were again in the scientific sessions listening to Margaret Hyland, The University of Auckland, presenting a paper on tracking airborne dust including nanoparticles. This was followed by Geza Benke's 3M Award winning paper. After morning tea, Annette Bunge, from the Colorado School of Mines, presented an informative and challenging paper on skin exposure. Mark Wagstaff, National Occupational Health & Safety Advisory Committee, NZ, then gave the final paper covering New Zealand's perspective on the national management of OH&S. Newly installed President, Ian Firth, then brought the proceedings to a close.

It was certainly a great conference overall and very successful scientifically and socially. The record numbers of CES attendees and conference delegates will also ensure a financial success as well. A special first for 2006 was the peer review of a selected number of the conference papers. David Bromwich is to be congratulated on getting this initiative off the ground, and now that it is in place, it should be able to be continued for future conferences. Once again the Conference Committee and the AIOH Council is to be congratulated on putting together an excellent event that will significantly benefit all those who attended by extending their professional networks and maintaining their scientific knowledge.

Further information on the next AIOH conference, Melbourne, Victoria, 1-5 December 2007, is available from www.aioh.org.au.

Australian Institute of Occupational Hygienists (AIOH)

The Editor of the AIOH Newsletter, Gerard Tiernan, sent us their March 2007 issue and, among much interesting information, it is important to share with the readers that an AIOH key action for 2007 is to "better promote the profession of occupational hygiene"; this is a role that no national association should ignore as our profession needs to be consistently and efficiently promoted worldwide. To this end, AIOH produced a promotional letter - "Occupational Hygienists - The Scientists Behind Health and Safety" available, as well as the complete AIOH Newsletter, at their

site (http://www.aioh.org.au/about_obj.asp). There is also a presentation "About AIOH" available as a download that can be used to promote the Institute. AIOH is promoting their certification scheme, particularly among OH&S Government bodies.

The Newsletter also introduces new President Ian Firth, two new Councillors, Kerrie Burton and Ron Capil and new President-elect, Geza Benke, as well as their award winners for 2006.

From Japan (JAWE and JOHA)

Joint Conference and Exhibition on Occupational Hygiene and Working Environment Measurement 2006, Sendai, Japan, November 2006

Sent by Mr. Masayoshi Karasawa, Executive Director JAWE, director@jawe.or.jp and Professor Norihiko Kohyama, JOHA

The Japan Association for Working Environment Measurement (JAWE), whose Chairman is Mr. Kizoh, Hirayama, General Manager, Personnel & Labour Relations Division, Nippon Steel Corporation, and the Japan Occupational Hygiene Association (JOHA), whose chairman is Dr. Haruhiko Sakurai, Professor emeritus of Keio University, held their "Joint Conference and Exhibition on Occupational Hygiene and Working Environment Measurement 2006" in Sendai, 15-17 November 2006. Sendai City is located in the Northeastern Region of Japan and also it is the biggest city in the Region.



The Joint Conference and Exhibition 2006 in Sendai consisted of three parts, namely presentations, symposium and exhibition.

There were 73 scientific presentations, as well as 12 manufacturers' presentations. The scientific presentations reported on research in occupational hygiene and working environment measurement, and included topics such as:

- airborne asbestos concentration in removing work of asbestos-containing construction materials;
- present situations of working environment management prevailing after tightened revision of Administrative Control Levels in Working Environment regarding dust, asbestos, organic solvents, heavy metals and other specified chemical substances;
- mass concentration conversion factor (K value) for a collection time of 10 minutes using a high volume air sampler;
- study on the development of multi-stage particle size selective dust sampler coping with the international definition of respirable dust;
- a preparation of particle type photo-catalyst using TiO₂ and an evaluation of a decomposition efficiency of tetrachloroethylene as a target chemical;
- a study of double equipping noise proof personal protective equipments for workers engaged in moving works in noisy environment; and many others. (Further information on the presentations and detailed programme may be obtained from the author of this contribution).



The manufacturers' exhibits presented new analytical instruments and apparatus such as: new types of phase-contrast and polarizing optical microscopes for asbestos analysis (including peripheral equipments for asbestos analysis), equipped with the new 40-power dispersion object lens; particle size-selective sampling apparatus; sampling pumps; detector tubes, and, new personal computer systems to assist in working environment measurements, personal protective equipment and clothing were also exhibited.

The joint symposium theme was "The Present Status, Trend and Future Development regarding Risk Assessment of Chemical Substances". It was planned in order to deepen the understanding as well as to cope properly with the recent tightened revision of the Occupational Safety and Health Law, Japan as well as related regulations especially regarding risk

assessment and risk management in work places, which were enforced on 1st, April, 2006.

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

- "Guidelines for the Necessary Measures to Prevent Risk and Health Hazards to Workers Due to Chemical Substances", by Mr. Kazuhiro Nagata, from the headquarters of the Ministry of Health, Labour and Welfare, Japan;
- "The future certification programme of Occupational/ Industrial Hygienists by JAWWE as well as the National Accreditation and Recognition Scheme of Occupational/ Industrial Hygienists by the International Occupational Hygiene Association (IOHA), especially regarding risk assessment of chemical substances" (by Mr. Masayoshi Karasawa from JAWWE);
- "Practice of Risk Assessment of chemical substances in an enterprise" (by Mr. Haruo Hashimoto, MPH, CIH, from Exxon Mobile Yugen Kaisha)
- "The Risk Assessment of Crystalline Silica as fibrous and particulate substances (by Mr. Masayuki Tomita, from Nichias Corporation).

This was followed by a discussion on these topics, conducted by Mr. Tadashi Takayama (Takayama Industrial Hygiene Office) and Assistant Professor Jyuji Yabuta (Kitasato University).

In the Conference, Professor Emeritus Tsutomu Takata (Kitasato University), as the Vice Chairman of JAWWE, granted the Superior Award to Mr. Tetsu Yoshida et al. (Kyushu Regional Safety and Health Service Centre, and Shikoku Regional Safety and Health Service Centre, Japan Industrial Safety and Health Association - JISHA), as a winner of the Best Scientific Presentation Award in 26th Conference and Exhibition of JAWWE on Occupational Hygiene and Working Environment Measurement 2005, Takamatsu, regarding "An Occupational Hygiene Countermeasure in a Workplace handling Lead Compounds, 2nd report " (presented by Mr. Tetsu Yoshida).

In addition, a best manufacture's presentation award was granted to KOKEN LTD., Japan and a best manufacturer's exhibition award was granted to Research Institute for Working Environment Measurement Co. Ltd., Japan, in the Conference in Sendai, respectively.

In addition, Mr. Arimichi Handa, Director, Office of Working Environment Improvement, Ministry of Health, Labour and Welfare, Japan, and Mr. Yukio Yanagawa, Director, Department of Labour Standards, Miyagi Prefectural Labour Bureau, addressed congratulatory messages, respectively.

In the evening of the first day, the Reception for Exchange was held; it was opened with welcoming speeches by Professor Isamu Tanaka (University of Occupational and Environmental Health, Japan), Chairman of the Organizing Committee of JOHA and by Dr. Kuniaki Matsui, Chairman of the Organizing Committee of JAWWE. Then, Professor Emeritus Tsutomu Takata, Kitasato University, as JAWWE Vice Chairman, addressed a greeting and proposed a toast.



The Joint Conference was attended by more than 300 participants, as well as guests including from the Headquarters of the Ministry of Health, Labour and Welfare, as well as from Miyagi Prefectural Labour Bureau.

The next Joint Conference on Occupational Hygiene and Working Environment Measurement will be held in Nagoya City, located in Tokai Region of Japan, from 14th to 16th, November, 2007.

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

From the USA (ACGIH and AIHA)

ACGIH® New Strategic Long-Range Plan

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

Cincinnati, Ohio – December 19, 2006 – ACGIH® announced today that it has revised its strategic long-range plan to begin in 2007.

In July 2006, a strategic planning group consisting of the ACGIH Board of Directors, invited members and senior staff came together to develop a long-range strategic direction. The Strategic Long-Range Plan document that resulted is the group's consensus on what will constitute ACGIH's success in the future.

Bob Soule, ACGIH Immediate Past Chair, set the finalization of an improved Strategic Plan as a major goal during his term as Board Chair. Dr. Soule noted, "I have been blessed with a dedicated Board of Directors who pitched in and helped me to accomplish a goal I had set just a little more than a year ago – to undertake a comprehensive review of our Strategic Long-Range Plan; to assure that it met the contemporary needs of ACGIH, its members and its customers; to fix it where it needed fixing; and to assure that it would be used and kept up-to-date by future Board" and added, "Following a full day with a preeminent consultant to voluntary association boards, our Board worked diligently to arrive at a revised strategic plan for ACGIH, and I am pleased with the results."

From the core purpose "To advance occupational and environmental health", emanate three long-range goals, which encompass its three to five year direction and are outcome-oriented statements, with the objective to lead ACGIH towards its envisioned future. These goals, to be accomplished by 2012, are:

- ACGIH will be its members' dominant resource for the integration and exchange of scientific and technical knowledge.
- ACGIH will be a leading source for information and knowledge about occupational and environmental health.
- ACGIH will be a powerful force for creating an environment to improve worker health.

The entire ACGIH strategic long-range plan is available for review online at

http://www.acgih.org/About/Approved_ACGIH_Strategic_Long_Range_Plan_2007-2011.pdf.

For more information, please contact Tony Rizzuto, ACGIH Executive Director, at +1 (513) 742-6172 or trizzuto@acgih.org.

AIHA

International Affairs - All the Ingredients Are There

Sent by Tom Grumbles, IOHA Board Member, Tom.Grumbles@us.sasol.com

Outreach by individual members has been a key ingredient in AIHA success to promote the profession internationally. A second key ingredient is the organizational framework and dedication of our International Affairs Committee, led by chairman Brian Daly, and the IAC's official ambassadors such as Nick Yin for China and Aleksandra Nawakowski for Poland.

A third ingredient is AIHA affiliation at the board and executive director level with the International Occupational Hygiene Association, whose vice chair is AIHA past president Tom Grumbles, and our sister organizations in Australia, Brazil, Italy and the United Kingdom. The fourth ingredient is AIHA's more than 700 international members, distributed throughout 50 countries.

International Task Force Makes Its Mark

The International Task Force, a group formed in September 2005, was charged with developing and recommending tactics to the AIHA board on how best to achieve the IOHA Newsletter, Vol 15 No. 1, April 2007

international goals identified in the new strategic plan. The task force was chaired by Marshall Denhoff, past director of AIHA and long-time member of the BC-Yukon Local Section. The task force began by surveying current AIHA international members and conducting an audit of international services provided by other non-profit associations. This research enabled the group to form fact-based ideas on how to better reach our international constituency. In February 2006, the group developed several concrete recommendations to point AIHA in the direction of becoming a stronger international entity.

Establishing a New Membership Category

One of the most significant recommendations of the task force was that AIHA introduce a new "international affiliate" membership category. This has been approved by the board of directors. It applies to an individual who resides in, and is a citizen of, a country classified by the World Bank as a low, lower-middle or middle-income economy, and who is practicing occupational and environmental health and safety.

The dues for this membership would be one-quarter of the full member dues and would entitle affiliates to electronic-only access to AIHA products and services. Creating this new category requires a bylaws change that must be approved by the full membership. AIHA members will vote on this measure when they elect 2007-2008 officers in the first quarter of 2007. If approved, international affiliate membership not only will help AIHA expand its reach, but also will reflect the true altruistic spirit of AIHA.

Identifying New Opportunities

The International Task Force recommended several key strategies that are designed to help the association move forward in a more focused way in international affairs. The task force developed a roles and responsibilities document that provides guidelines for the board of directors, the IAC and AIHA staff in international affairs. It clearly defines roles to ensure that each entity is managing a key component of AIHA international strategy and not overlapping. In addition,

From the UK (BOHS)

Bedford Prize awarded for paper on benzene in Chinese shoe factories Sent by Anthea Page, Communications Manager, BOHS, anthea@bohs.org

The latest Bedford Prize by the British Occupational Hygiene Society has been awarded for a paper which Dr Roel Vermeulen wrote, with 14 collaborators, on benzene and toluene exposure levels in two shoe factories in Tianjin, China. Dr Vermeulen was at the Occupational Epidemiology Branch of the National Cancer Institute in Bethesda, Maryland when he wrote the paper, but has now returned to his earlier base at the University of Utrecht in the Netherlands, at its Institute for Risk Assessment Sciences.

The paper is part of a long-term collaborative study on benzene exposure and its effects, mainly between the US National Cancer Institute, University of California, Berkeley, and the Institute of Occupational Health and Poison Control in Beijing. The Bedford Prize is awarded for the best paper in BOHS's journal, *Annals of Occupational Hygiene*. Commenting on the paper, the Editor in Chief of the *Annals*, Dr Trevor Ogden, said "This is an excellent example of a thorough long-term study of exposure, which used modern statistical techniques to plan and analyse the sampling. The authors were able to quantify the main contributing factors using principal component analysis. No doubt it was this high-quality and thorough approach which attracted the judging panel to this paper."

The Bedford Prize is awarded every other year. Anyone can nominate papers to the shortlist, and the choice is then made by a panel of the journal Editorial Board and recent presidents of BOHS. This was the paper judged to be the best from the years 2004 and 2005, and the prize will be

this document examines the function of IOHA in relation to AIHA and recommends continued open dialogue with that organization.

Another tangible outcome of the task force's efforts is procedures for evaluating and authorizing potential international programs. These procedures include a process flow chart, strategic assessment framework and an activity/project/meeting assessment form to help guide all future decisions.

The task force also recommended that AIHA focus new initiatives in the next few years on three emerging market countries, China, India and Mexico. However, this does not mean AIHA will focus exclusively on these countries. AIHA fully intends to meet commitments with existing affiliations and initiatives, and will use the task force criteria to continue to search for new opportunities that are aligned with AIHA strategic goals and objectives.

presented to Roel at *Occupational Hygiene 2007*, BOHS's Annual Conference which is to be held next year in Glasgow from 17th to 19th April. The winner two years ago, Professor Dick Heederik, was also from the Utrecht Institute, confirming its position as one of the leading occupational hygiene centres in Europe.

Since the award was made, Roel Vermeulen has joined the Editorial Board of the *Annals*, and is now one of its assistant editors. Roel obtained his MSc in Environmental Sciences with honours in 1995 at Wageningen University and his PhD in 2001 at Utrecht University. Besides his PhD fellowship he co-worked as a research assistant in several national and international projects with special focus on exposure assessment methodologies before joining the National Cancer Institute in 2001. In 2006 he took up his current position as an investigator at the Environmental Epidemiology Group of the Institute for Risk Assessment Sciences, at Utrecht University. He has (co-)authored over 65 peer-reviewed papers and has served as a consultant to several institutions and European Union projects.

His research activities focus on the assessment of occupational exposures and the use of biological markers of exposure and effect in epidemiological and cross-sectional biomarker studies and methodological studies to improve exposure assessment techniques. He is currently involved in studies on the carcinogenic effect of benzene, diesel, and pesticides and the etiology of bladder, lung and hematopoietic and lymphatic malignancies.

Latest round of BOHS Bursary Awards

BOHS is delighted to announce the latest Bursary Award winners. **Scott Clark**, studying for an MSc in Occupational Hygiene at the University of Manchester, and **Iyenoma Osazee**, studying for an MSc in Occupational and Environmental Health and Safety Management at the University of Portsmouth, have each been awarded a bursary to cover one year's tuition fee. With yet more high quality applications for this second round of awards, both are worthy winners.

Scott is 33, has a BEng in Environmental and Ecological Engineering and is currently a Cleanroom and

Environmental Engineer with Vega Environmental Consultants in Whitley Bay. Iyenoma is a 44 year old Health, Safety & Environment Manager with Julius Berger Nigerian plc, in Abuja, Nigeria; he has an HND in Civil & Building Engineering and a British Safety Council International Certificate in Occupational Safety & Health. Both are self-funding their MSc studies, and plan to increasingly focus on occupational hygiene as their careers progress

BOHS's bursary scheme is for students wanting to gain a higher education qualification in Occupational Hygiene, with

up to five bursaries every year to be awarded biannually, each of up to £4,000 towards the payment of academic fees. The closing date for the next round of applications is **31st July 2007**.

For full information visit the Education & Training section of BOHS's website, www.bohs.org

News from WHO

WHO Online

There are three new publications related to Occupational Health, available on the WHO Website (free of charge), namely:

"Raising Awareness of Stress at Work in Developing Countries" - in the Protecting Workers' Health Series, available at:

http://www.who.int/occupational_health/publications/pwh6/en/index.html

"Compendium of final products", developed in the 2001-2005 Global Work plan, by the WHO Network of

Collaborating Centres in Occupational Health, available at:

http://www.who.int/occupational_health/publication/compendium/en/index.html

The last issue of the Newsletter of the Global Occupational Health Network (GOHNET), dedicated to the important topic of "Elimination of Silicosis", available at:

http://www.who.int/occupational_health/publications/newletter/gohnet12e.pdf

WHO Network of Collaborating Centres in Occupational Health

The WHO Collaborating Centres are now working on their projects within the Work Plan 2006-2010. IOHA is a partner in some of these projects. IOHA partnerships can be identified by using the search function in the WHO 2006-2010 Compendium of projects at:

http://www.who.int/occupational_health/network/2006compendium/en/index.html.

Important information is that a quarterly e-newsletter of the WHO Global Network of Collaborating Centres (CCs) in Occupational Health – the "Collaborating Centre Connection" - has been created with the objective of facilitating

communication within the Network, sharing successes, and informing on opportunities and developments, as well as linking projects, CCs and Activity Area (AA) managers. The first issue of "Collaborating Centre Connection" (March 2007) is already available at:

<http://www.cdc.gov/niosh/CCC/CCCnewsV1N1.html>

In this context, I would like to remind the (I believe, very few) readers who are not yet aware of the excellent NIOSH Newsletter, that it is available, free of charge at: <http://www.cdc.gov/niosh/enews/>

Workshop on the Prevention and Control of Occupational Exposure to Dust (PACE) 5 – 6 December 2006, São Paulo, Brazil

The workshop was organized and co-hosted by two Brazilian institutes of occupational health based in São Paulo: FUNDACENTRO (Brazilian Institute for Safety and Health at Work), a WHO Collaborating Centre in Occupational Health and the Jabaquara Training Unit of SENAC-SP (São Paulo Division of the National Service for Commercial Education), and a candidate to become a WHO Collaborating Centre. Another WHO Collaborating Centre in Occupational Health participated in this event: the National Institute for Occupational Health (NIOH), South Africa, as well as two institutions that are also candidates to become WHO Collaborating Centres, namely the National Institute of Health Dr. Ricardo Jorge (INSA), Porto, Portugal, and SESI (Social Service for Industry), Brazil.

The participating institutions decided to join forces concerning collaborative activities with WHO, in the context of the 2006-2010 Work Plan of the Global Network of WHO Collaborating Centres for Occupational Health. This will include continued exchanges of information on planned activities, aiming at mutual help and avoidance of duplication

of efforts, with particular focus on Portuguese-speaking countries.



The preparatory work leading up to the workshop included the submission of presentations by various delegates, with regard to the dust control situations in certain sectors of their specific countries, so as to prepare a summary of the

country-specific situations to serve as a basis for discussions at the workshop.

The main objectives of the workshop and associated meetings and discussion groups were:

- To review why exposure to dust is not yet systematically prevented and/or controlled
- To elaborate a joint strategy to raise awareness and emphasize the importance of the prevention control of exposure to dust
- To define a strategy for promoting the prevention of occupational exposure to dust (with emphasis on small enterprises in Portuguese-speaking countries) through the development of human and information resources
- To allocate responsibilities and tasks for the way forward, among institutions collaborating in this effort

As a follow up to the São Paulo workshop, an international seminar on the "Prevention of Occupational Diseases", for Portuguese-speaking participants, is being planned to be held in Portugal, later in 2007. This seminar, under the leadership of WHO and the institutions that participated in the São Paulo workshop, will hopefully constitute a milestone in the creation of a new Network for Occupational Health Development in Portuguese-speaking Countries (Brazil, Portugal and a number of African countries).

The Report from this workshop (in Portuguese) will be soon posted on the FUNDACENTRO website (<http://www.fundacentro.gov.br>).

An article on this workshop (in English) was prepared by Claudina Nogueira from NIOH, South Africa, and is available online at: <http://www.cdc.gov/niosh/CCC/CCCnewsV1N1.html>

New WHO publication on Prevention and Control of Exposure to Dust

In 1999 WHO published the document "Prevention And Control Exchange: PACE, Hazard Prevention and Control in the Work Environment: Airborne Dust", which has been widely used in many countries particularly for training activities. In Sweden, with basis on this document, a visual training package (with 2 CDs) - entitled "Hazard Prevention and Control in the Work Environment: Airborne Dust", was prepared (in 2005) by Ing-Marie Andersson, Gunnar Rosén, Lars-Erik Byström and Marit Skoglund, intended for trainers organizing courses in prevention of occupational dust exposure as well as for self-studies.

However, occupational health is a very dynamic field and, since then, there have been many relevant studies on the effects of exposure to dust, as well as many advances and development of new practical solutions for dust control.

Therefore, this document will be revised and updated in the near future. It should be pointed out, though, that the basic prevention and control guidelines covered in the initial publication are still valid and can be applied.

This updating process will also be a means of sharing practical experiences in this field from many occupational hygienists around the world. The new document and case studies will be posted in due course on the WHO website. Many colleagues in different countries, as well as many WHO Collaborating Centres, have already been consulted and extremely valuable information has already been sent to WHO. However, readers are encouraged to send their experiences in dust control to Gerry Eijkemans (eijkemansg@who.int) and B. Goelzer (berenice@goelzer.net).

News from the European Union

Brussels, 21st February 2007 - 25% cut in accidents at work by 2012 – new EU strategy

Sent by Kurt Lechnitz, IOHA Board Member, Kurt.Lechnitz@t-online.de

Work-related illness and accidents should be cut by a quarter across the EU under a new five-year strategy for health and safety at work, adopted by the Commission today. It follows a 17% reduction in fatal accidents from 2002-2004 and a 20% fall in accidents leading to absence from work of three days or more. But progress remains uneven across different countries, sectors, companies and categories of workers. Changes in working life are leading to new occupational risks, while certain workplace illnesses are on the rise.

"Occupational illness and accidents at work are a heavy burden on both workers and employers in Europe. Every year there are 4 million accidents at work which represent enormous economic costs for the European economy. A considerable share of these costs falls upon social security systems and public finances," said Vladimír Špidla, IOHA Newsletter, Vol 15 No. 1, April 2007

Commissioner for Employment, Social Affairs and Equal Opportunities. "Improving the health and safety of workers is key to the EU's Growth and Jobs agenda. By bolstering productivity and quality at work, we will boost European growth and competitiveness."

Despite major advances over the past five years, there is still considerable room for improvement. The costs of accidents at work and work-related ill health do not fall equally on all players. Loss of income due to absence from work costs European workers around EUR 1 billion a year. Employers face costs linked to sick pay, replacement of absent workers and loss of productivity – many of which are not covered by insurance.

Small and medium-sized enterprises are particularly exposed, accounting for 82% of all occupational injuries and

90% of all fatal accidents. Sectors such as construction, agriculture, transport and health all present higher than average risks of accidents at work, while young workers, migrants, older workers and those with insecure working conditions are disproportionately affected. Specific illnesses are on the rise, including musculoskeletal diseases – such as back pain, joint injuries and repetitive strain injuries – and illnesses caused by psychological strain.

The new strategy for 2007-2012 aims to achieve an overall 25% reduction of occupational accidents and diseases in the EU. It sets out a series of actions at European and national levels in the following main areas:

- **Improving and simplifying** existing legislation and enhancing its **implementation** in practice through non-binding instruments such as exchange of good practices, awareness-raising campaigns and better information and training;

- Defining and implementing **national strategies** adjusted to the specific context of each Member State. These strategies should target the sectors and companies most affected and fix national targets for reducing occupational accidents and illness;

- **Mainstreaming** of health and safety at work in other national and European policy areas (education, public health, research) and finding new synergies;

- Better **identifying and assessing** potential new risks through more research, exchange of knowledge and practical application of results.

Further information is available at:

http://ec.europa.eu/employment_social/health_safety/index_en.htm

REACH the new EU Regulation on Registration, Evaluation and Authorisation of Chemicals

Sent by Kurt Lechnitz, IOHA Board Member, Kurt.Lechnitz@t-online.de

The REACH Regulation was formally adopted on 18 December 2006 by the Council of Environment Ministers of the EU Members. REACH will enter into force on 1 June 2007. The text of the Regulation was published on 30 December 2006 in the [Official Journal of the European Union L 396](#).

The Commission proposed a new EU regulatory framework for the Registration, Evaluation and Authorisation of Chemicals (REACH) on 29 October 2003. The aim is to improve the protection of human health and the environment through the better and earlier identification of the properties of chemical substances. At the same time, innovative capability and competitiveness of the EU chemicals industry should be enhanced. The benefits of the REACH system will come gradually, as more and more substances are phased into REACH.

The REACH Regulation gives greater responsibility to industry to manage the risks from chemicals and to provide safety information on the substances. Manufacturers and importers will be required to gather information on the properties of their substances, which will help them manage them safely, and to register the information in a central database. A Chemicals Agency will act as the central point in the REACH system: it will run the databases necessary to operate the system, co-ordinate the in-depth evaluation of suspicious chemicals and run a public database in which consumers and professionals can find hazard information.

The Regulation also calls for the progressive substitution of the most dangerous chemicals when suitable alternatives have been identified.

CEN Strategy 2010

At its General Assembly in October 1999, CEN approved a strategic vision and direction looking towards the year 2010. Since that time, however, the political and economic environment in which European standardization is working has gone through noticeable changes. There was therefore a need to review the “CEN Strategy 2010” to respond to these changes and to anticipate future developments.

The **key objectives** of the updated “CEN Strategy 2010” are:

1. Promoting the development of a coherent European Standardization System.
2. Ensuring a business-like approach within CEN, together with an effective marketing strategy, to strengthen the provision of services to customers and to improve the visibility of the CEN Standardization System.
3. Providing customers with timely and market relevant products and services which meet their needs, whilst upholding the values of openness, transparency and consensus.
4. Securing stable financing for the CEN Standardization System and the CMC in order to

enable CEN to concentrate on its primary objective of developing European Standards.

5. Developing effective relations with the EC and EFTA in order to promote and reinforce the role of European standardization as a tool for supporting European policies and for simplifying legislation in Europe.
6. Being the recognized provider of European Standards relating to Conformity Assessment and promoting a European mark of conformity.
7. Reviewing the corporate governance structures with a view to facilitating the decision-making processes and ensuring effective policy making within CEN.
8. Being open to partnerships for the efficient development of European Standards, ensuring a close collaboration with international partner organizations.

The complete text of “CEN Strategy 2010” (updated January 2007) can be obtained from site: <http://www.cen.eu/cenorm/aboutus/generalities/strategy/strategy.asp#>

CONTRIBUTIONS FROM READERS

From Canada

Occupational Health and Safety Research Institute, Canada

The Occupational Health and Safety Research Institute (IRSST), located in Montreal (QC), Canada, carries out scientific activities concentrated in seven research fields: accidents, chemical substances and biological agents, musculoskeletal disorders, noise and vibration, protective equipment, occupational rehabilitation, safety of industrial tools, machines and processes. More information about the Institute and its research activities, as well as about 1000 research reports are available for free download at: <http://www.irsst.qc.ca/en/home.html>

Specific information on IRSST research on formaldehyde is hereby presented.

Workplace Exposure to Formaldehyde - Prevention Guide

by Jacques Millette

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The Occupational Health and Safety Research Institute (IRSST) has published a practical guide as well as three technical fact sheets that constitute a summary of the research work on the risks associated with formaldehyde exposure and on the means of prevention to be implemented. The fact sheets are aimed at three sectors, namely wood panel manufacturing, wood furniture manufacturing, and embalming.

In Québec only, the number of workers potentially exposed to formaldehyde has been evaluated at 150,000. Health effects, which vary with the duration of exposure and the concentration of the product, include eye, mucosa and respiratory tract irritation, and nasopharyngeal cancer.

The Institute's researchers directed a multidisciplinary team comprised of about ten scientists, who documented the exposure of workers in 31 activity sectors in Québec. This vast study led to the publication of a report and 12 appendices, 10 of which relate to specific economic activity sectors. All these documents are available free of charge on the IRSST's website. Researchers on these topics include Nicole GOYER, Denis BÉGIN, Charles BEAUDRY, Michèle BOUCHARD, Gaétan CARRIER, Jérôme LAVOUÉ, Nolwenn NOISEL and Michel GÉRIN.

The prevention guide and the three fact sheets can be downloaded free of charge from the IRSST's Web site, as follows:

Formaldehyde in the workplace: Prevention guide:

www.irsst.qc.ca/files/documents/pubIRSST/RG-473.pdf

Exposure to formaldehyde in the workplace - Wood panel manufacturing, Fact sheet:

www.irsst.qc.ca/files/documents/pubIRSST/RG1-473.pdf

Exposure to formaldehyde in the workplace - Wood furniture manufacturing: Fact sheet:

www.irsst.qc.ca/files/documents/pubIRSST/RG2-473.pdf

Exposure to formaldehyde in the workplace - Embalming, Fact sheet:

www.irsst.qc.ca/files/documents/pubIRSST/RG4-473.pdf

Impact of lowering of the permissible exposure value for formaldehyde - Health impact of an occupational exposure to formaldehyde:

http://www.irsst.qc.ca/en/publicationirsst_100178.html

From Japan

Analytical Method for Asbestos - February, 2007

***Sent by: Masayoshi Karasawa, Executive Director,
The Japan Association for Working Environment Measurement, director@jawe.or.jp***

Norihiko Kohyama*, Professor, Toyo University, kohyama@toyonet.toyo.ac.jp

The Japan Association for Working Environment Measurement (JAWME) developed a new analytical method for analyzing the content of asbestos in bulk samples down to 0.1% in weight, utilizing an X-ray diffraction (XRD) and a derivative thermogravimetric (DTG) method. This work met the requirements of the revision of the Occupational Safety and Health Law in Japan, concerning the definition of asbestos products, i.e. the lower cut off value of the content of asbestos was altered from 1% to 0.1% in weight in asbestos containing materials, such as construction materials and minerals resources suspected of contamination by asbestos.

JAWME, whose Chairman is Mr. Kizoh, Hirayama, Managing Director, General Manager, Personnel & Labour Relations Division, Nippon Steel Corporation, had been developing independently an analytical method of asbestos content for bulk samples mainly for construction materials using X-ray

diffraction (XRD) method and dispersion staining microscopy (DSM), in order to cope with the tightened revision of the lower exemption content limit, namely lower cut off value, with respect to the regulations of the Occupational Safety and Health Law, Japan, from 1% to 0.1% in weight. In fiscal year 2004, JAWME completed already the development of the analytical method, and this method was adopted as the standard analytical method for bulk samples containing asbestos such as construction materials by the Circular of No.0622001, dated 22nd, July, 2005 from the Director of the Chemical Hazards Control Division, Industrial Safety and Health Department, Labour Standards Bureau, Ministry of Health, Labour and Welfare, Japan.

After then, the analytical method has been improved by the Japanese Industrial Standards Committee and adopted as the "JAPANESE INDUSTRIAL STANDARD, Determination of asbestos in building material products, JIS A 1481:2006",

on 25th, March, 2006. This Standard is basically depended on the result of the study conducted by the experts committee of JAWE and also substituted the Circular of No.0622001 by the Circular of No.0821002, dated 21st, August, 2006 from the Director General, Labour Standards Bureau, Ministry of Health, Labour and Welfare.

However, this method, JIS A 1481:2006 cannot be applied to mineral products made from minerals as natural resources containing asbestos as impurities, because for most mineral products, it is difficult to condense contents of asbestos which is contained as impurity in minerals as natural resources.

The mineral products, such as talc, sepiolite, vermiculite and brucite, have been used for construction materials and others. Talc sample is sometimes contaminated by tremolite and/or chrysotile as impurity, sepiolite by tremolite, vermiculite by tremolite and/or chrysotile and brucite by chrysotile. So, the Ministry of Health, Labour and Welfare, Japan entrusted JAWE to develop a new analytical method for control these asbestos impurities.

In response to this trust, since June, fiscal year 2006, JAWE organized the Experts Committee for the development of analytical methods of asbestos content for mineral products as natural resources" (Chairman, Professor Toshio Nagoya, Waseda University) and this Committee studied continuously and energetically giving up their summer vacation from July to August, in order to complete the new analytical methods mentioned above within the time limit by the time of the tightened revision of the lower exemption content limit in weight will be enforced on 1st, September, 2006.

The new analytical method employing XRD and DTG can be applied to some mineral products in order to cope with the lower cut-off value of 0.1% in weight. The abstracts of these new analytical methods are as follows:

Natural minerals such as talc, sepiolite and vermiculite sometimes contain asbestos, i.e. chrysotile and/or fibrous tremolite, as impurity minerals. Since these natural minerals have similar refractive index with chrysotile and/or fibrous tremolite, application of the dispersive staining method using phase contrast microscopy is difficult to detect and count these asbestos fibers quantitatively. On the other hand, analytical transmission electron microscopy (ATEM) is useful to recognize asbestos even in these minerals, but ATEM method has not come into wide use and it is difficult to find the analysts of ATEM in common measurement organs at the present. Under such circumstance, we have to employ X-ray diffraction method (XRD) for the measurement of trace amount of asbestos in bulk samples of these natural minerals.

The lower detection limit of XRD depends on the power of X-ray generator, i.e. the higher the power, the lower the detection limits. Conventional XRD machine can detect a crystalline material of about 1 weight %, while high power XRD machine employing rotating cathode-ray tube can detect a crystalline material down to about 0.1 weight %. However, because such high power XRD machine has not been used popularly in common measurement organs, a conventional XRD machine has to be employed in asbestos analysis of natural mineral samples at the present.

The quantitative analysis of 0.1 weight % level is difficult when a conventional XRD machine is employed. But as the diffraction peak of tremolite in 0.5 weight % and that of chrysotile in 0.8 weight % can be recognized without failure, standard samples containing tremolite in 0.5 and chrysotile in 0.8 weight % are prepared by JAWA. Using these standard samples, analytical condition of a XRD machine is calibrated to produce a clear diffraction peak of asbestos in each standard sample. Under the same analytical condition using the same XRD machine, each analysis is performed for asbestos.

To say it concretely, when the diffraction intensities of serpentine and/or tremolite in an analytical sample do not exceed those of standard sample, it is concluded that the amount of asbestos in analytical sample does not exceed the amount of 0.1 weight %. The reasons to conclude above are:

(1) diffraction peak of tremolite would not be all from fibrous form, i.e. asbestos, and

(2) existence of serpentine minerals can be recognized in XRD pattern but we do not know if the pattern derives all from chrysotile because these serpentine minerals show similar XRD pattern.

The abstracts of each XRD method coping with Talc, Sepiolite, Vermiculite or Brucite are clearly explained in the original paper, which can be obtained from one of the authors.

These new analytical methods are adopted by the Circular of No.0828001, dated 28 August, 2006 from the Director of the Chemical Hazards Control Division, Industrial Safety and Health Department, Labour Standards Bureau, Ministry of Health, Labour and Welfare, Japan.

By the way, as already mentioned on the IOHA Newsletters of July and December 2005 as well as June 2006, the asbestos problem is still one of the most serious social issues in Japan. In order to cope with the change of the serious situation regarding the asbestos problems, including the increase of lung cancer, mesothelioma and other diseases due to the exposure to asbestos, in Japan, the Ministry of Health, Labour and Welfare amended partially the Cabinet Enforcement Order of Occupational Safety and Health Law as well as the Ordinance on Prevention of Hazards due to Asbestos on 2nd, August, 2006 and enforced since 1st, September, 2006.

These analytical methods supported the tightened revision of the regulations for safety and health coping with asbestos problem, and will contribute to the solution of asbestos problems not only in the Japanese community but the international community.

The details of the new analytical methods concerned as well as the main contents of the complete tightened amendments can be obtained from one of the authors.

*Member of the "Experts Committee for the development of analytical methods of asbestos content for mineral products as natural resources" organized by JAWE

More on the Global Harmonization of Labeling and Classification of Chemicals (GHS)

by Berenice Goelzer, berenice@goelzer.net

Following on previous information on the GHS presented on past IOHA Newsletters, it is timely to remind readers that the full GHS guidelines are available free of charge at:

http://www.unece.org/trans/danger/publi/ghs/ghs_rev00/00files_e.html

In view of the great benefits it may bring, it is important that such guidance be adopted at the national level everywhere.

Excerpts from an interesting Press Release (29 March 2007), by the American Society of Safety Engineers are presented below, as this subject is of great importance also to occupational hygienists.

"During an American Society of Safety Engineers (ASSE) Global Harmonization of Labeling and Classification of Chemicals (GHS) technical audio conference yesterday, participants in a web poll voted overwhelmingly, 98 percent "yes" and two percent "no", that they see hazardous communications systems improving as a result of GHS implementation." "GHS is an international system for standardizing and harmonizing the classification and labeling of chemicals as a way to increase safety. ... The GHS is intended to provide a comprehensive approach to defining health, physical and environmental hazards of chemicals;

creating classification processes that use available data on chemicals for comparison with the defined hazard criteria; and communicating hazard information, as well as protective measures, on labels and Material Safety Data Sheets (MSDS)."

"The ASSE GHS conference call featured Jennifer Silk, former Deputy Director, Directorate of Standards and Guidance at OSHA, and Mary Frances Lowe of the EPA Office of Pesticide Programs, discussing the impact of GHS on hazard communications for all industries, whether a manufacturer, importer, distributor, or end user. They also discussed how GHS would change MSDS, company Hazard Communication (HAZCOM) Programs and the impact it will have on safety, health and environmental professionals."

The full Press Release in question – entitled "American Society of Safety Engineers Poll Shows Members See Global Program Increasing Chemical Use Safety" is available online at:

<http://www.asse.org/newsroom/release.php?pressRelease=808>

Contributions for the IOHA Newsletter should be sent by email to the Editor, berenice@goelzer.net

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