

## MIHA 6th Annual General Meeting

The 6th AGM was held on 28th March 2008 at Swiss Garden Hotel, Kuala Lumpur. The AGM was attended by 24 Full Members and 4 Associate Members.

President of MIHA, Zainal Mubarak Zainuddin commenced the AGM with his Welcome Message. The MIHA Annual Report 2006 was presented by Honorary Secretary, Mimala Arasaratnam and a copy of the "MIHA 2007 Annual Report" was distributed to all present.

One of the highlights of 2007 activities is MIHA won the bid to host the 2012 IOHA Conference. This also coincides with the 25th Anniversary of IOHA in Malaysia. Preparations are underway and we look forward to volunteers amongst us to make this event a success.



Sharing a light moment during the 6th AGM

More good news was in the pipeline when our Honorary Treasurer, Lim Geok Tian stepped up to present the Annual Financial report. For 2007, MIHA has a balance of RM 163, 297.19 at the closing of accounts.

## Thank you to the MIHA Committee 2007/2008

We would like to accord our thanks and gratitude the outgoing MIHA Committee members whom had contributed their invaluable time and resources for the past one year.

Again, our heartiest thanks and accolades for making 2007 a great year for MIHA to:

- Mimala Arasaratnam
- Alfred Manai Luang
- Abd Rahman Hashim
- Azizin bin Zainuddin
- Daryl Low Yong Leong
- Fadzil Osman
- Normahani
- Marina bte Zainal Farid
- Zaiton bin Sharif (resigned)
- Ridzwan Hj. Hussain (re-elected)

### More news inside!

- WELCOME TO OUR NEW MIHA EXECUTIVE, RAHMAWATI MOHAMAD
- CALL FOR PAPER FOR NATIONAL INDUSTRIAL HYGIENE CONFERENCE 2009
- MIHA MEMBERSHIP STATUS
- MIHA ACTIVITIES JAN – JULY 2008

### Inside this issue:

MIHA COMMITTEE 2008/2009	2
UPCOMING COURSES	2
NIHC 2009 - ANNOUNCEMENT	3
PROPOSED CLASS REGULATIONS	5
GUIDE ON SITTING CIH EXAM WITH ABIH	6
ARTICLE: SICK BUILDING SYNDROME	7
NEW ON THE BOOK-SHELF	8

### MIHA's VISION

MIHA is gearing towards achieving and maintaining the highest standards of Industrial Hygiene via overseeing and professionally certifying Malaysia Industrial Hygienist. MIHA also wishes to promote certification by awarding certification points through a variety of MIHA and associated programmers in pursuit of continually educating Industrial Hygiene professionals

“KEEP A  
LOOKOUT OF  
OUR TRAINING  
BROCHURES, IF  
YOU HAVE  
CHANGED YOUR  
EMAIL ADDRESS,  
CONTACT US AT  
ADMIN@MIHA2U  
.ORG”

## Office Bearers for MIHA 2008/2009

**President:** Zainal Mubarik Zainuddin

**Vice President:** Wan Sabrina Wan Mohamad

**Honorary Secretary:** Chan Kah Yin

**Honorary Treasurer:** Lim Geok Tian

### Ordinary Committee Members:

- Ridzwan Hj. Hussain: Education & Government Relations
- Keng Cheng Liew: IT
- Norhazlina Mydin: Special Projects
- Bakini Mohd Nor: Membership
- Rina Cheong Ronaldin: Training
- Thony Badak: Promotion
- Zarafina Abdul Rahman: Publications

## New MIHA Executive

We take this opportunity to welcome our new MIHA Executive, Ms. Rahmawati binti Mohamad. She brings with her more than 10 years of work experience in human resource and administration. MIHA Members can contact her via [admin@miha2u.org](mailto:admin@miha2u.org) if you have any queries with regards to administrative related matters or if you require information on up-coming MIHA activities.



Rahmawati Mohamad  
*MIHA Executive*

## Upcoming Courses by MIHA!

### Fundamentals of Industrial Hygiene Course

- 3 - 5 November 2008
- A comprehensive 3 days course for basic grounding in Industrial Hygiene
- Will be approved by Department of Occupational Safety & Health (DOSH) for Continuing Education Program (CEP) points

### Indoor Air Quality (IAQ) Assessor Course

- 17 - 21 November 2008
- 5-day course for those assuming Industrial Hygiene responsibilities within his/her organization.
- Will provide strategies, principles and practices in IAQ aspect. Provides practical applications used in IAQ monitoring.

### Guidelines on the Use of PPE Against Chemical Hazards

- 2 - 3 December 2008
- A 2-day course to provide comprehensive understanding on the selection and use personal protective equipment (PPE) as well as establishing and implementing PPE programs.

## NATIONAL INDUSTRIAL HYGIENE CONFERENCE 2009

The National Industrial Hygiene Conference is back! We had good turnout of participants in our Second edition of NIHC in 2007 and we look forward welcoming more participants in NIHC 2009. Preparations are underway and we seek members to come forward as volunteers in the NIHC 2009 Organising Committee. The theme for the 2009 Conference is "Industrial Hygiene - The KEY to Workers' Health Protection", reflects MIHA's continuous commitment and efforts in ensuring that industrial hygiene is given the primary focus in the workplace. This conference will cover both general and technical issues in industrial hygiene so as to provide safety and health professionals with information they need to effectively manage health related issues in the work-

THEME:

**"Industrial Hygiene - The KEY to Workers' Health Protection"**

## TOPIC AREAS

- Control Technology & Industrial Hygiene Support
- Exposure Assessment Strategies
- Indoor Air Quality (IAQ) & Emerging Issues
- Occupational Health & Ergonomics
- Research & Study

We seek individuals or group with research data, new perspectives, or other information relevant to promote better understanding, addressing current and emerging issues of industrial hygiene in the workplace. Presentation can be either oral or poster.

Please submit your 500 word abstracts in English with the completed registration form to [admin@miha2u.org](mailto:admin@miha2u.org). The abstracts will be reviewed by the technical program committee and you will be notified of acceptance by end of October 2008.

## MIHA Membership Status

Currently MIHA's membership stands at 47 Full members, 55 Associate members and 3 organizational members. We are looking forward to rejuvenate and increase our membership base through future promotions. Members are also reminded to keep their membership dues current. If your contact details have changed, please contact us at [admin@miha2u.org](mailto:admin@miha2u.org) so we can update our records.



## Announcements

A banner for the Professional Conference on Industrial Hygiene (PCIH) 2008. The banner features a yellow background with a palm tree silhouette on the left. The text "PCIH 2008" is prominently displayed in large, light blue letters. Below it, in smaller green text, it says "TAMPA, FLORIDA • NOVEMBER 8-11 • www.PCIH2008.org". At the bottom, the slogan "Where Science &amp; Sustainability Meet" is written in a cursive font. On the right side, there is a logo for the "ACADEMY OF INDUSTRIAL HYGIENE" with a star icon and the text "SPONSORED BY" above it.

The Professional Conference on Industrial Hygiene (PCIH) is THE conference to attend if you are an OEHS professional looking to stay abreast of current trends, find solutions to everyday issues, and network with experienced occupational and environmental health and safety professionals.



## Update on MIHA Activities (Jan - July 2008)

- Courtesy Visit to SOCSO by MIHA Committee members on 8 May 2008
- Exhibited during the “Occupational Safety & Health Week” organized by *Majlis Negara bagi Keselamatan & Kesihatan Pekerjaan* from 7 to 10 July at PWTC, Kuala Lumpur
- Co-organize the Regional Conference on Occupational Health 2008 held on 3 - 5 April 2008 with Society of Occupational and Environmental Medicine (SOME). The theme of the conference is “Occupational Health at Work: A Healthy Workplace”. MIHA also held a pre-conference workshop on Chemical Health Risk Assessment (CHRA).
- Fundamentals of Industrial Hygiene Course from 28 -30 April 2008.
- Indoor Air Quality (IAQ) Assessor Course from 23- 27 June 2008.
- Advanced Industrial Hygiene Course (21- 24th July 2008) conducted by Professor Park Doo Yong, Director General of Korean Occupational Safety and Health Agency (KOSHA) Occupational Safety and Health Research Institute.

“COURSES BY MIHA ARE APPROVED BY DOSH FOR ASSESSOR/ HYGEINE TECHNICIAN/ OHD CONTINUING EDUCATION PROGRAM”

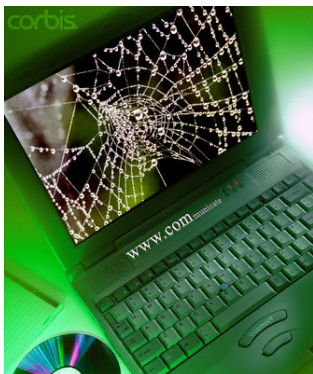
## Did you know

Love that new car smell? Did you know that pollutant in new cars can cause disorientation, headache, and irritation in some drivers of new cars? Chemicals found in the cars are volatile organic compounds (VOCs) which include benzene, cyclohexanone, MIBK, n-hexane styrene, toluene and xylene isomers. Measurements made during the CSIRO study found total VOCs were initially very high (up to 64,000 micrograms per cubic metre) in two Australian-made cars which reached the market 3-10 weeks after manufacture. The levels decrease by approximately 60% in the first month but still exceeded Australia’s National Health & Medical Research Council indoor air goal of 500 microgram per cubic metre.

Source: *New car drivers exposed to toxic emissions*, Commonwealth Scientific and Industrial Research Organization, December 19, 2001 (<http://www.csiro.au/files/mediaRelease/mr2001/newcars.htm>)

## Useful Links

- Korea Occupational Safety and Health Agency (KOSHA)- <http://www.kosha.or.kr/eng/english.htm>
- American Industrial Hygiene Association (AIHA)- <http://www.aiha.org/Content>
- American Society of Heating, Refrigerating and Air-Conditioning Engineers - <http://www.ashrae.org>
- U.S. National Institute for Occupational Safety and Health (NIOSH) - <http://www.cdc.gov/niosh>
- Searchable bibliographic database of occupational safety and health publications, documents, grant reports, and other communication products supported in whole or in part by NIOSH -<http://www2a.cdc.gov/nioshtic-2/default.asp>





## OCCUPATIONAL SAFETY AND HEALTH (CLASSIFICATION, LABELING AND SAFETY DATA SHEET FOR HAZARDOUS CHEMICALS) REGULATIONS [CLASS]



### What is GHS?

Globally Harmonized System of Classification and Labelling of Chemicals and Safety Data Sheets

**Goal of GHS:** To **identify intrinsic hazards** found in chemical substances & mixtures and to **convey hazard information** about these hazards. Primary component of GHS are classification criteria for pure substances and mixtures, labeling and Safety Data Sheet.

For more information on GHS:

Purple Book [http://www.unece.org/trans/danger/publi/ghs/ghs\\_welcome\\_e.html](http://www.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html)

CLASS, which stands for Classification, Labelling and Safety Data Sheet are a new set of regulations being drafted to replace the current OSH (Classification, Packaging and Labelling) Regulations 1997. CLASS is expected to be gazetted sometime early 2010.

In CLASS, the Globally Harmonised System (GHS) is adopted which will affect classification of chemicals, labeling and MSDS outcomes.

### CPL Regulations 1997 and proposed CLASS Regulation

#### CPL Regulations 1997

1. Citation and commencement
2. Interpretation
3. Application
4. Duty of supplier to classify
5. Packaging requirements
6. Seal of package
7. Labelling
8. Dimension of label
9. Duty of supplier to furnish Chemical Safety Data Sheet
10. Confidential Information on chemical

#### Proposed CLASS Regulations

1. Citation
2. Interpretation
3. Application
4. Duty to classify hazardous chemicals
5. Duty to label packaging
6. Dimension of hazard pictogram
7. Affixing of label
8. Special labelling arrangements
9. Duty to furnish safety data sheets
10. Confidential business information on chemical
11. Packaging requirement
12. Seal of package
13. Inventory of chemical supplied
14. Instruction and training

#### Hazards Listed under Part A & B Schedule I, CPL97

Physicochemical	Health Effect
<ul style="list-style-type: none"> <li>• Explosive</li> <li>• Oxidising</li> <li>• Extremely Flammable</li> <li>• Highly Flammable</li> <li>• Flammable</li> </ul>	<ul style="list-style-type: none"> <li>• Very Toxic</li> <li>• Toxic</li> <li>• Harmful</li> <li>• Corrosive</li> <li>• Irritant</li> </ul>

#### Hazard Class Listed under Schedule II, CLASS

Physical Hazards	Health Hazards
<ul style="list-style-type: none"> <li>• Explosives</li> <li>• Flammable gases</li> <li>• Flammable aerosols</li> <li>• Flammable liquids</li> <li>• Flammable solids</li> <li>• Oxidizing gases</li> <li>• Oxidizing liquids</li> <li>• Oxidizing solids</li> <li>• Gases under pressure</li> <li>• Self-reactive chemicals</li> <li>• Pyrophoric liquids</li> <li>• Pyrophoric solids</li> <li>• Self-heating chemicals</li> <li>• Chemicals which, in contact with water, emit flammable gases</li> <li>• Organic peroxides</li> <li>• Corrosive to metals</li> </ul>	<ul style="list-style-type: none"> <li>• Acute toxicity-oral</li> <li>• Acute toxicity-skin</li> <li>• Acute toxicity-inhalation</li> <li>• Skin corrosion/irritation</li> <li>• Serious eye damage/eye irritation</li> <li>• Respiratory sensitizer</li> <li>• Skin sensitizer</li> <li>• Germ cell mutagen</li> <li>• Carcinogen</li> <li>• Reproductive toxicant</li> <li>• Effect on or via lactation</li> <li>• Target organ systemic toxicant-single exposure</li> <li>• Target organ systemic toxicant-repeated exposure</li> <li>• Aspiration hazard</li> </ul>
<b>Environmental Hazards</b>	<ul style="list-style-type: none"> <li>• Acute</li> <li>• Chronic</li> </ul>

## Simple Guide on Sitting CIH Exam with ABIH

For those industrial hygiene practitioners whom intend to be certified by American Board of Industrial Hygienist (ABIH), here is a simplified guide to apply to sit for the “Certified Industrial Hygiene (CIH)” examination.

For detailed information, you can visit this website <http://www.abih.org/certified/handbook.html> to download the “CIH Candidate” handbook.

### Step1: Determine if you are qualified to sit for the examination

#### A. Meet academic requirement/ IH Coursework

- Graduate from accepted university with a Bachelor Degree in biology, chemistry, chemical engineering, mechanical engineering or sanitary engineering, physics or an ABET accredited program in industrial hygiene or safety
- 180 academic contact hours or 240 continuing education contact hours of specific industrial hygiene courses. At least half of the required coursework (90 academic or 120 continuing education contact hours) must cover the broad subjects of industrial hygiene toxicology, fundamentals of IH, measurements and controls.

#### B. Meet professional IH experience requirement supported by references

- Minimum 4 years of employment in the professional practice of industrial hygiene. Completed advanced degree in industrial hygiene may be considered for experience equivalent.

#### C. Be in the current practice of industrial hygiene

### Step 2: Apply to sit for the examination

#### A. Documents required

- Complete the application form . Download from <http://www.abih.org/certified/applicants/documents.html#App>
- Professional Reference Questionnaire from:
  - ◇ Your supervisor – seal the completed form in a separate envelope
  - ◇ A CIH who is familiar with your IH work and can describe, from first hand experience, the applicant’s IH responsibilities. This should also be mailed separately to ABIH.

- IH Coursework Documentation Form together with all the certificates as proof. If you’re claiming for the course you took in university, include the course syllabus.
- Official transcript of your Bachelor Degree work submitted to ABIH directly by the Registrar of your university.

#### B. Fee

- Application Fee - USD\$150 . This shall be submitted when you send your application
- Exam Fee – USD\$350. The Board will send a letter for you to pay this fee once you have been accepted to sit the exam.
- You may prepare a bank draft in USD to pay for the fees and submit together with you application documents. The fees are non-refundable, you must be sure when you would be ready to take the exam when you submit your application. If you apply before 1<sup>st</sup> February, once approved, you’d be expected to take the Spring exam .

#### C. Datelines for application

- If you plan to sit in Spring Exam – **1<sup>st</sup> February** of the year you plan to take the exam
- If you plan to sit in the Fall Exam – **1<sup>st</sup> August** of the year you plan to take the exam.

### When Is the Exam and Where?

- The exam is held in a Prometric Center in KL. You’d need to schedule yourself with the center within the allocated timeframe to take the exam. You must test within the window that you’re approved of. If you’re approved for Spring, you cannot change to Fall on your own. You may need to submit a re-application with a fee of USD\$75 if you plan to postpone your exam.
  - For Spring exam, the testing window will be from 1<sup>st</sup> April till 31<sup>st</sup> May.
  - For Fall exam, the testing window will be from 1<sup>st</sup> October till 30<sup>th</sup> November

### The EXAMINATION

The test will have 250 questions total. 125 questions to be answered in the morning for 3.5 hours and another 125 questions to be answered in the afternoon. One hour break is given in between. All questions are multiple choices

## Sick Building Syndrome (Excerpted from EPA Indoor Air Facts No. 4)

### Introduction

The term "sick building syndrome" (SBS) is used to describe situations in which building occupants experience acute health and comfort effects that appear to be linked to time spent in a building, but no specific illness or cause can be identified. The complaints may be localized in a particular room or zone, or may be widespread throughout the building. In contrast, the term "building related illness" (BRI) is used when symptoms of diagnosable illness are identified and can be attributed directly to airborne building contaminants.

A 1984 World Health Organization Committee report suggested that up to 30 percent of new and remodeled buildings worldwide may be the subject of excessive complaints related to indoor air quality (IAQ). Often this condition is temporary, but some buildings have long-term problems. Frequently, problems result when a building is operated or maintained in a manner that is inconsistent with its original design or prescribed operating procedures. Sometimes indoor air problems are a result of poor building design or occupant activities.

### Indicators of SBS include:

- Building occupants complain of symptoms associated with acute discomfort, e.g., headache; eye, nose, or throat irritation; dry cough; dry or itchy skin; dizziness and nausea; difficulty in concentrating; fatigue; and sensitivity to odors.
- The cause of the symptoms is not known.
- Most of the complainants report relief soon after leaving the building

### Indicators of BRI include:

- Building occupants complain of symptoms such as cough; chest tightness; fever, chills; and muscle aches.
- The symptoms can be clinically defined and have clearly identifiable causes.
- Complainants may require prolonged recovery times after leaving the building.

It is important to note that complaints may result from other causes. These may include an illness contracted outside the building, acute sensitivity (e.g., allergies), job related stress or dissatisfaction, and other psychosocial factors. Nevertheless, studies show that symptoms may be caused or

### Causes of Sick Building Syndrome

The following have been cited causes of or contributing factors to sick building syndrome:

**Inadequate ventilation:** In many cases reduced outdoor air ventilation rates were found to be inadequate to maintain the health and comfort of building occupants. Inadequate ventilation, which may also occur if heating, ventilating, and air conditioning (HVAC) systems do not effectively distribute air to people in the building, is thought to be an important factor in SBS.

### Chemical contaminants from indoor sources:

Most indoor air pollution comes from sources inside the building. For example, adhesives, carpeting, upholstery, manufactured wood products, copy machines, pesticides, and cleaning agents may emit volatile organic compounds (VOCs), including formaldehyde. Environmental tobacco smoke contributes high levels of VOCs, other toxic compounds, and respirable particulate matter.

“30 PERCENT OF NEW AND REMODELED BUILDINGS WORLDWIDE MAY BE THE SUBJECT OF EXCESSIVE COMPLAINTS RELATED TO INDOOR AIR

### Chemical contaminants from outdoor sources:

The outdoor air that enters a building can be a source of indoor air pollution. For example, pollutants from motor vehicle exhausts; plumbing vents, and building exhausts (e.g., bathrooms and kitchens) can enter the building through poorly located air intake vents, windows, and other openings.

**Biological contaminants:** Bacteria, molds, pollen, and viruses are types of biological contaminants. These contaminants may breed in stagnant water that has accumulated in ducts, humidifiers and drain pans, or where water has collected on ceiling tiles, carpeting, or insulation. Sometimes insects or bird droppings can be a source of biological contaminants. One indoor bacterium, Legionella, has caused both Legionnaire's Disease and Pontiac Fever.

These elements may act in combination, and may supplement other complaints such as inadequate temperature, humidity, or lighting.

Level 3, Green Wing,  
Bangunan Pro-Centre  
Lot 330, Batu 8,  
Jalan Ulu Klang  
Phone: 603-4106 8990  
Fax: 603-4107 8990  
E-mail: admin@miha2u.org

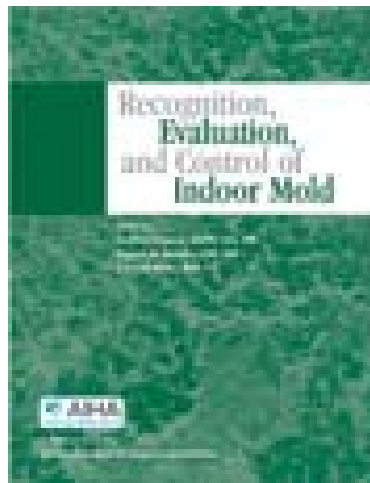
***Something interesting you wish to share amongst all of us? With the aim of sharing knowledge and experience within our fraternity, we invite all those interested in contributing to MIHA's Quarterly Newsletter, to please email your write-ups to the committee. We would like to increase the voice of this publication to not that of one, but all who make up this association.***

Visit us at  
[www.MIHA2U.org](http://www.MIHA2U.org)

**IMPORTANT DATES TO REMEMBER:**

- AUGUST 31, 2008 - Deadline for abstract submission for the National Industrial Hygiene Conference (NIHC) 2009
- NOVEMBER 3 - 5, 2008 - Fundamentals of Industrial Hygiene course
- NOVEMBER 17-21, 2008 - Indoor Air Quality (IAQ) course
- DECEMBER 2 - 3, 2008 - Guidelines on the Use of PPE Against Chemical Hazards
- DECEMBER 31, 2008 - Early Registration deadline for NIHC 2009

**New on the Bookshelf!**



Recognition, Evaluation,  
and Control of Indoor Mold

Edited by Bradley Prezant, Donald M. Weekes, and J. David Miller

Publisher: AIHA

Price: USD 115.00 (Member)  
USD 160.00 (Non-member)

**Recognition, Evaluation, and Control of Indoor Mold** provides the most current and comprehensive discussion on the basic practice of identifying mold damage, the evaluation of the samples that are collected, and the process of remediation. Its twenty chapters cover the underlying principles and background of evaluation and control, building evaluation, data interpretation, remediation and control, plus appendices containing advanced perspectives in mold prevention and control, and images of exterior and interior building mold.

This extensive management of indoor mold discussion was written by expert industrial hygiene practitioners, academics and government officials and scientists scrutinized by external peer review. Innovative methods and approaches for each assessed situation are provided.