An overview of current and future development of International Occupational Hygiene

国际职业卫生的当前和未来发展综述

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Summary

• What is Occupational Hygiene?
• What is IOHA? – International Occupational Hygiene Association
• Current Developments - Global
• Future Developments – Global
• Who can help?
What is Occupational Hygiene?

The definition used by IOHA is:

'Occupational Hygiene is the discipline of anticipating, recognising, evaluating and controlling health hazards in the working environment with the objective of protecting worker health and well-being and safeguarding the community at large.'
What is Occupational Hygiene?

Occupational Hygiene has also been defined as the practice of identifying of hazardous agents; chemical, physical and biological; in the workplace that could cause disease or discomfort, evaluating the extent of the risk due to exposure to these hazardous agents, and the control of those risks to prevent ill-health in the long or short term.
Hong Kong Institute of Occupational and Environmental Hygiene

Occupational Hygiene is the science of anticipating, recognizing, evaluating and control of health hazards in the working environment.
What does an Occupational Hygienist do?

• Occupational hygienists keeps workers, and communities near workplaces, healthy and safe.
• Ensure compliance with workplace laws and regulations.
• Occupational hygienists assess health risks in a workplace;
• Sample air to determine if there are harmful substances present;
• Measure noise levels in factories;
• Supervise the safe removal of asbestos from buildings; and
• Provide practical advice on how workers can be protected from health and safety risks.
What is an Occupational Hygienist?

Occupational hygienists - committed to protecting the health and safety of people in the workplace and the community. Occupational hygienists work in manufacturing, petrochemical, pharmaceutical, steel, mining and other industries. Others work in national governments, hospitals and public utilities. Some are consultants or in research or academia.
How can you become an Occupational Hygienist?

Education - Education obtained through formal undergraduate or postgraduate degrees.

Training - training gained by specialised courses

Experience - experience achieved by working in the field under guidance of professional hygienist.

Education, Training and Experience are all important aspects of an occupational hygienist's career.
What is IOHA?

International Occupational Hygiene Association

国际职业卫生协会
Welcome to IOHA

The International Occupational Hygiene Association (IOHA) represents the global community of occupational hygienists.

Association of all Occupational Hygiene Associations

由世界各国职业卫生协会组成的协会

IOHA is an association of occupational hygiene organisations across the world, all dedicated to the discipline and application of the principles of occupational hygiene.
About IOHA

- IOHA was established to improve, promote, develop occupational hygiene worldwide through its member organisations, and to improve and maintain a safe and healthy working environment for all.
- Created in 1987, IOHA has grown to 27 member organisations, representing over 17,000 occupational hygienists worldwide, 13 languages.
About IOHA

• IOHA is the international ‘voice’ of the occupational hygiene profession.

• Recognised as a non-governmental organisation (NGO) by ILO (International Labour Organisation) and WHO (World Health Organisation).

• Links with WHO, ILO, ICOH (International Congress of Occupational Health)
IOHA Member organisations
IOHA's objectives (1)

- **Ethics** - Promote and maintain a high standard of ethics in occupational hygiene internationally.
- **Training** - Improve the standard of occupational hygiene practice internationally by through training.
- **Standards** - Maintain high levels of professional competence through recognition of national accreditation schemes. [IOHA National Accreditation Recognition (NAR) Committee]
- **Protect workers health** - Improve, promote and develop professional practice of occupational hygiene to protect worker health throughout the world.
IOHA's objectives (2)

• **Exchange Information** - Promote exchange of information about occupational hygiene among organisations and individuals internationally, e.g. international conferences and networking through websites.

• **Collaborate** - Collaborate and cooperate with other societies, national and international organisations in the promotion of occupational hygiene for the protection of work force.

• **International voice** of Occupational Hygiene - through recognition as non-governmental organisation (NGO) by ILO (International Labour Organisation), WHO (World Health Organisation).
Current Developments - Global

- Globalization of manufacturing
- Resource developments in remote areas
- Need for Occupational Hygiene resources in remote and new locations
- Professional certification through IOHA National Accreditation Recognition (NAR)
The impact of globalisation
Globalisation & availability of Hygienists

- Readily available
- Available
- Limited availability
Demand for Occupational Hygienists

Data from Deloitte 2007
Factors affecting OH resourcing

Data from Deloitte 2007
Regional needs

For which of the following regions do you have a need to hire IH's?
This chart shows the distribution of all responses to this question.

- 17.4% - Africa/Middle East (9)
- 17.3% - Asia (9)
- 5.8% - Australia (3)
- 15.4% - European Union (8)
- 3.8% - Former Soviet Union (2)
- 15.4% - North America (8)
- 11.5% - South America (6)
- 3.8% - Other (2)
- 9.6% - None (5)

Source: Deloitte 2007
IOHA National Accreditation Recognition (NAR) (1)

- National certification schemes recognised by IOHA as meeting certain criteria.
- Started 1999, in 2005 only 2 - British BOHS, US ABIH
- In 2010, now 11 National Certification Schemes recognised by IOHA - Australia, Canada, France, Holland, Italy, Norway, South Africa, Switzerland, Sweden, UK, US.
IOHA National Accreditation Recognition (NAR) (2)

• Becoming the internationally recognised professional standard for certified occupational hygienists
IOHA Board Strategy 2010-2015

• Based on existing data from IOHA member national associations and other national data, (population, GDP, labour force), IOHA have predicted/estimated the potential number of occupational hygienists and certified hygienist (COH) for various countries around the world.

• The purpose was to identify those countries which have the potential to form national occupational hygiene associations, and provide assistance where needed. - These include China, India, Russia, Turkey and Indonesia.
Estimated Occ. Hygienists – China by Gross Domestic Product (GDP)

- Estimated China OH by GDP = 1,700
  (Guangdong Province estimate = 226)
  (Japan estimated 1,940 actual 1,238)
  (Australia estimated 400, actual 573)

- Estimated China COH by GDP = 775
  (Guangdong Province estimate = 103)
  (Japan estimated 880 actual ?)
  (Australia estimated 181, actual 115 NAR)
Estimated Occ. Hygienists – China by working population

Estimated China OH for Working Population = 22,700

(Guangdong Province estimate =1,600)
(Japan estimated 1,870 actual 978)
(Australia estimated 320, actual 573)

Estimated China Certified OH/ Working Population =12,000

(Guangdong Province estimate = 845)
(Japan estimated 980 actual ?)
(Australia estimated 167, actual 115 NAR)
Future Developments – Global (1)

• Increasing coverage and complexity
  – science & engineering skills remain important
  – new exposure hazards from emerging technologies
  – ever increasing interface with environment and public health (cross-over of worker, environment, public)

• Increasing need for business / management skills
  – to move / motivate the organization
  – market / advocate continued recruiting, retention and training of occupational hygienists to business managers
  – lead OH program implementation regionally and globally
Future Developments – Global (2)

- Increasing need in many developing countries
  - “traditional” issues (asbestos, silica, benzene etc)
  - serious shortage of hygienists
  - not possible to recruit on the open market
  - “occupational hygiene” is interpreted differently around the world
  - training provision is limited
Who can help?

• IOHA through its international contacts
  http://www.ioha.net/

• Regional IOHA members
  HKIOEH http://www.hkioeh.org.hk/

• Training at international standard – OHTA
  http://www.ohlearning.com/
Hong Kong Institute of Occupational and Environmental Hygiene (HKIOEH)
香港职业及环境卫生学会
P.O. Box 9645 Central Post Office, Central, Hong Kong

http://www.hkioeh.org.hk/
The Important Questions

1. What is right for China and Guangdong Province?

2. How can we help?
Thank You
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