

**Present and Future Program
for Training and Certification
of Occupational/Industrial Hygienists
by the Japan Association for Working
Environment Measurement**

*Takeshi Honma,
Director of Training Institute,
Japan Association for Working
Environment Measurement*



Japan, Dream islands?

◆ Profile of Japan

Population: About 128 million,
2.0 % of the world

Area: 0.28 % of the world

◆ Targets of Occupational Hygiene

◇ 55 million employees

◇ 4.4 million enterprises

◆ Diseases in Industry (2006)

◇ About 8,400 cases of occupational
diseases (0.015% of workers)

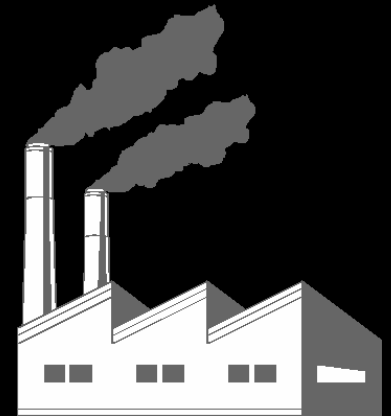
◇ Asbestos panic!



Workplaces where airborne chemicals must be measured by Certified Industrial Hygienists in the field of Working Environment Measurement (IHWEM)


Workplaces

- 1. that emit unusual amounts of dust --- dust / silica content**
- 2. that manufacture or handle specified chemical substances --- 42 chemicals including carcinogens**
- 3. that handle asbestos --- asbestos**
- 4. that handle lead --- lead**
- 5. that manufacture or handle organic solvents --- 54 solvents**



Industrial Hygienist Registration Process

The State Examination (written exam) for Industrial Hygienists in the field of Working Environment Measurement (IHWEM)



Registered Training Course for Industrial Hygienists in the field of Working Environment Measurement (IHWEM) at JAWE

(Japan Association for Working Environment Measurement)

Registration of IHWEM at JAWE
(Designated register agency for IHWEM by the Minister of Health, Labour, and Welfare)



Training and Education of Industrial Hygienist at Japan Association for Working Environment Measurement

- Registered training to acquire the qualification of Industrial Hygienists in the field of Working Environment Measurement (IHWEM)**
- Post-registration training for the improvement of techniques for new and experienced IHWEM**
- Training and certification of instructors for IHWEM**



Registered training to acquire the qualification of Industrial Hygienist in the field of Working Environment Measurement (IHWEM) (Course I - Common Subjects)

♠ Outline of occupational hygiene & health

- ▶ Hazardous factors and health disorders**
- ▶ Body intake of hazardous substances**

♥ Occupational hygiene-related laws

♣ Procedure for work environment measurement

♦ Sampling and outline of measurement

- ▶ Sampling design for the evaluation of work environment (sampling points $N \geq 5$)**
- ▶ Evaluation of measured values and classification of workplaces into class I, II, III**

**Registered training to acquire the qualification of
Industrial Hygienists in the field of Working
Environment Measurement (IHWEM)
(Course II - Selective Subjects)**

- 1. Mineral dust & asbestos**
- 2. Radiation**
- 3. Specified chemicals**
- 4. Metals**
- 5. Organic solvents**

- Mineral dust & asbestos (Lecture, Gravimetric analysis of dust, Fiber counting of asbestos)**
- Specified chemicals & Organic solvents (Lecture, Sampling method - Solid absorption/ Direct sampling/ Liquid absorption, Colorimetry, Gas chromatography)**
- Metals (Lecture, Colorimetry, Atomic absorption analysis)**

New Certification for Occupational/Industrial Hygienists

- **New Certification for advanced Industrial Hygienists in the field of Working Environment Measurement (IHWEM) and other highly competent experts in industrial hygiene.
(Professional Occupational/Industrial Hygienists)**
- **Education and training course for the new certification.**
- **This course includes subjects concerning risk assessment & management in workplaces & other environments.**

Curriculum of the education and training course for the Professional Occupational/Industrial Hygienists

The curriculum covers:

- 1. Identification and evaluation of the hazards of chemical substances and other environmental factors**
- 2. Monitoring and evaluation of exposure to hazardous factors**
- 3. Risk assessment, risk management, risk communication (MSDS or SDS, GHS, . . .)**
- 4. Medical sciences including occupational health, public health, toxicology, epidemiology, etc.**
- 5. Environment protection engineering, etc.**

International Application of Model Program Criteria

- 1. Differences in the situation of industrial hygiene in each country.**
- 2. Non-English speaking country.**

The training for Occupational/Industrial Hygienists given in Non-English should not be a reason why the application is not acceptable.
- 3. Past experiences of the Certification/Accreditation process.**

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