

Occupational Hygiene Practice and Development in Taiwan

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The separation of powers, also known as trias politica (**three branches**), is a model for the governance of democratic states.

Central government organization chart



All five branches operate in support of one another

- The **Examination Yuan** oversees the certification of professional and technical personnel.

Taiwan CIH?

- The professional certificate issued by the Examination Yuan meets most of the IOHA/NAR criteria.
- BUT no work experience and loose continuing education.

Big government?

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After re-organization of the central government,

- Taiwan's Occupational Safety and Health Administration (OSHA) was established in February 17, 2014.
- The newly formed OSHA aims to provide comprehensive services for prevention, compensation, and rehabilitation of occupational injuries and diseases.

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Hygienist in Taiwan

- **Professional Industrial and Mining Hygienist**
(工礦衛生技師) **Examination Yuan**
 - licensed;
 - pass national exams;
 - technical oriented
- **Labor hygiene technician** (勞工衛生管理師) **Taiwan OSHA**
 - not necessarily licensed;
 - no need to take the national exams
 - management oriented

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Professional Industrial and Mining Hygienist (Taiwan CIH)

- Qualification for the national exam
 - Mainly education
- Profession
 - Join the association
 - Act as the Labor hygienist
 - Workplace monitoring
 - Independent consultants
 - ...
- Current #: (~200)

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Labor hygiene technician

(勞工衛生管理師)

- Multiple entry pathways
 - Professional Industrial and Mining Hygienist
 - Licensed 'industrial hygiene technician' (勞工衛生管理甲級技術士)
 - education, training, and/or working experiences, then take national exams
 - was a labor inspector and has working experience
 - Master degree from IH programs (w/ related credits)

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Labor hygiene technician

(勞工衛生管理師)

- Serving in business (company employee)
 - Required by Taiwan OSHA
 - Depends on the type of industry and employee #
- Current #: (>2000)

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Applicability of NAR Model

- Not officially discussed in Taiwan yet
- Difficulties to apply current model
 - Need to identify the main representative organization
 - e.g. union? Councils of Labor Affairs? TOHA?
 - May need to modify the laws/rules/regulations
 - Government!
 - Others
- Solutions?
 - A new organization or certification system?
 - IOHA's flexibility on accepting extra/post-hoc requirement?

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On OSHA side

- ~650,000 enterprises are currently supervised by ~350 OSHA inspectors.
- Only about 60 are responsible for OH inspections.
 - ✓ Hazard communication
 - ✓ Environmental monitoring
 - ✓ Physical examination
 - ✓ Exposure abatement measures
- Annual routine OH inspections to ~3,000 enterprises

Quality of inspection?

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OH research in Taiwan

- Ministry of Science and Technology (*MoST*)
- Institute of Labor, Occupational Safety and Health, ILOSH (*Taiwan NIOSH*)
- Taiwan OSHA

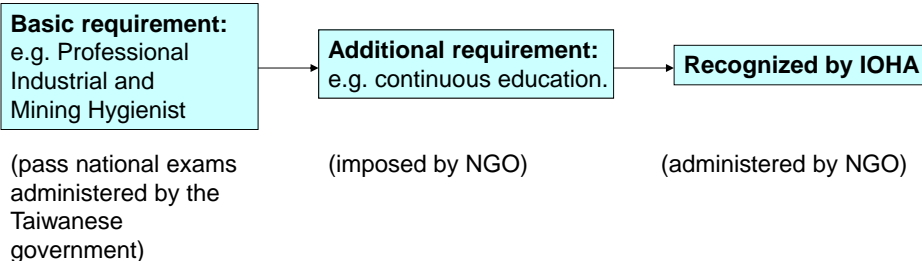
Taiwan ranked **7th** in terms of number of publication/GDP.

9th IOHA International Conference held in Rome
Trevor Odgen, editor in chief, *Annals of Occupational Hygiene*

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What to do?

- Promote the ideas of having internationally recognized OH certification scheme
- Model 1: a whole new system (new certification board, new exam systems...)
- Model 2:



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Providing Occupational Safety and Health Education (in USA)

- To meet the needs of national and regional safety and health professionals, NIOSH developed the Educational Resource Centers (ERCs) in 1977. NIOSH currently funds 18 university-based ERCs.
- The goal of the ERCs is to help NIOSH achieve its mandate of "providing an adequate supply of qualified personnel to carry out the purposes of the Occupational Safety and Health Act" by providing education for occupational health and safety (OH&S) professionals.
- For occupational hygienists and occupational hygiene educators in the Asian region, the **NIOSH-ERC**-type model provides a good example.

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Taiwan ERC 2003-2007

- At one time, the Taiwan Ministry of Education initiated a NIOSH-ERC like health and safety management programs. An important component is the support provided for doctoral level study which resulted in 12–15 advanced-level entrants into occupational hygiene each year.
- Teaching and research capability remains strong and competitive.

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- Ministry of Labor (勞動部)
Occupational Safety and Health Administration
- ROC Association of Professional Industrial and Mining Hygienists (中華民國工礦安全衛生技師公會全國聯合會) ([Coalition of Taiwan CIH](#))
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