

“Identifying Hazards of unknown toxic chemicals becomes possible”

KOSHA started the construction for Korea's first ‘Chronic inhalation toxicity test facility’

For prevention of workers' health problems of
low-level and long-term exposure to chemical materials

April 30, 2014

Korea's first ‘Chronic inhalation toxicity test facility’ will be established to identify occupational cancers or hazards to human body due to low-level and long-term exposure to chemical materials.

KOSHA (headed by President Baek, Hun-ki) held a groundbreaking ceremony for ‘Chronic inhalation toxicity test facility’ on April 30, which will be a three-floor building with 6,295 m² of total floor space, located in the Daedeok Science Town, Yuseong-gu, Daejeon-si.

This is the first time to build ‘Chronic inhalation toxicity test facility’ in Korea, while an ‘Acute inhalation toxicity test facility’ was introduced in the Daedeok Science Town in 1997.

‘Acute inhalation’ is related to workers' exposure to highly-concentrated chemicals for short-term period in the poor working environment. On the other hand, the test facility was designed on the need for studying chronic toxicity prediction and preventing occupational cancers due to workers' low-level and long-term exposure to chemical materials.

The test facility will be involved in studying occupational diseases caused by long-term exposure in the production process of electronics, automobiles, and tires and

assessing possibility of developing cancer and hazards of nano-materials and all sorts of unknown toxic materials using in the IT industry.

In addition, it is expected to contribute to protecting workers' health by providing information including hazard classification for chemical materials and set-up for exposure standards in working environment based on test results.

The construction of test facility is scheduled to be completed in November, 2015 on a budget of total 37 billion won. It will be equipped with 48 inhalation chambers, in which predictions and assessments of hazards to human body will be carried out by exposing laboratory rats to chemical materials.

The tests in the facility include a chronic toxicity test for laboratory animal's 2-year exposure to chemical materials, a subchronic toxicity test for 3-month exposure and an acute toxicity for 24-hour exposure.

KOSHA's Occupational Safety and Health Research Institute (OSHRI) will push ahead with earning 'AAALAC-I', an international standard for research ethics and 'GLP', an international standard for research credibility in order to secure credibility in terms of toxicity test results through the international accreditation.

* AAALAC-I (Association for Assessment and Accreditation of Laboratory Animal Care-International): Association for Assessment and Accreditation of Laboratory Animal Care

* GLP (Good Laboratory Practice): Laboratory practice for research manpower, test facilities and test methods

The groundbreaking ceremony held on Wednesday, April 30 was attended by some 100 participants including Baek, Hun-ki, president of KOSHA, An, Gyeong-deok, director of Industrial Accident Prevention and Compensation Bureau, Cho, Myung-

haing, president of Korean Society of Toxicology, regional assembly men, related officials from Daejeon-si, and representatives of labor and management and academic organizations.

Baek, Hun-ki, president of KOSHA in his greetings in the ceremony said, “In Korea, the number and use of new chemical materials is consistently increasing with the industrial development.” “The establishment of ‘Chronic inhalation toxicity test facility’ is expected to significantly contribute to preventing workers’ health problems and occupational cancers to secure safety of chemical materials,” he added.

