

• Editorial

Green chemistry management technology in Korea

We are pleased to publish this supplementary issue of *Environmental Health and Toxicology*, where we have eight articles related to the research achievement of the “Research group of green chemistry management technology.”

Since the European REACH (Registration, Evaluation Authorization and Restriction of Chemicals) program was initiated in June 2007, several countries including Japan, China, Taiwan, and Turkey, have adopted similar chemical management systems and strengthened the regulation of chemicals. In Korea, the Act on the Registration and Evaluation, etc. of Chemical Substances (K-REACH) was enforced in January 2015 after a long struggle over disagreement between stakeholders, and finally, a more systematic regulation on chemical substances could be started.

The research group, which has been financially supported by the Korea Environmental Industry and Technology Institute and Ministry of Environment since May 2011, has been dedicated to developing essential technology for governmental green chemistry management policies and its extended application to domestic chemical industries.

The fundamental purpose of the research group is to establish an execution-base for K-REACH. The specific goals are (1) the

establishment of database of toxicity information for chemicals, which should be registered by law, (2) the development of socioeconomic assessment methods for designation as restricted substances, (3) the development of prediction methods for chemical toxicity and management system, which are essential components to execute the K-REACH (4) the establishment of a database for substitute chemicals, (5) the development of assessment methods for green chemistry technology, and (6) the development of substitute chemicals for perfluorooctanesulfonic acid, which are aimed to support domestic chemical industries.

The research projects will be continued until March 2017, and the results are expected to be used by national institutes and domestic chemical industries that adhere to the requirement of stricter applications of green chemistry principles.

Mina Ha

Editor-in-Chief

Environmental Health and Toxicology

Department of Preventive Medicine, Dankook University

College of Medicine, Cheonan, Korea