## Applied Design and Management against Natural Disaster, Earthquake in the Complex Chemical Plants

<u>김영호</u>\* Y.H.KIM Eng. & Mfg. Consultant (yhkim1116@hotmail.com\*)

Along the coast of the Korean Peninsula, many different kinds of dangerous and toxic chemical plants are located in the complex chemical plants.

In particular, earthquake is on an increasing trend over double compared with 1980's in the Korean Peninsula.

What is worse, in case those earthquakes happen along the coastline, those accompany tsunami. These chemical plants are constructed and erected on the low elevation based on the sea level.

Against these earthquakes and tsunamis, these plants are exposed to weakness/danger and critical situation because these plants have been growing old since constructed, and also constructed and erected on the low elevation on the sea level.

Even if the most suitable works to cope with these conditions are on behind time, it is high time to review these categories and to fulfill solutions on review and studies.

Accordingly, this paper shows review and some solution to be applied to protect complex chemical plants from natural disaster, earthquake and tsunami.