Sustainable Approach to Safety Total Management of Complex Chemical Plants and its Industry

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

As high technological processes are applied to those complex chemical plants and its industry, unexpected problems have been sometimes encountered with danger and disaster in these areas. To make us more miserable, a lot of officials as well as decision—making tops concerned in these areas are unfortunately very poor not only to take precautions against foreseeable natural and manmade disasters, but also to develop and search existing safety total management system in rapidly changing environment. Furthermore, we understand there is much gap between academy education and plant application after college graduation. Accordingly, sustainable approaches are required in above areas for safety further development for workers, adjacent territory, community and country. Consequently, this paper presents following major fields for sustainable approach to safety total management in these areas; 1) Life cycle assessment, 2) Evaluation of associated risks, 3) Development of critical scenarios against disaster, 4) Impact minimization on natural and manmade disasters, 5) Curriculum development in chemical engineering, etc.