## Process Trouble Investigation in the Complex Chemical Plants based on Hypothetico–Deductive Reasoning

## <u>귀영호</u>\* Y.H.KIM Eng. & Mfg. Consultant

## (yhkim1116@hotmail.com\*)

The purpose of this paper is to prevent and minimize recurrences of those process troubles by doing investigation of process troubles on the basis of the hypothetico-deductive reasoning in the complex chemical plants. These process troubles in the plants treating such as toxic, explosive and dangerous chemicals are caused to not only calling great losses of lives, but also bring environmental impacts. So, these process troubles should be thoroughly/timely investigated on the basis of the hypothetico-deductive reasoning. Those process troubles that may occur during both activated operation and long-term shut-down are due to various causes and conditions. These causes are sometimes very difficult to clear up the root causes. In general, this reasoning can be properly applied to find out causes through their own process knowledge-based system. And the development of hypotheses is required for in the starting line for scientific investigation. Accordingly, this paper is summarized with Process Trouble Investigation based on the Hypothetico-Deductive Reasoning.