Hydrogen Production from Methane: Steam Reforming by Heat Exchange Reacter

<u>양세일</u>, 정연규, 장성철, 남석우, 김성현¹, 최대기* 한국과학기술연구원; ¹고려대학교 (dkchoi@kist.re.kr*)

Steam reforming of natural gas is the main process for the production of hydrogen and synthesis gas needed in the chemical industry as reactants for the manufacturing of important products, mainly ammonia and methanol. Moreover, the development of fuel cell technology in many application fields (stationary and automotive) will increase the need of industrial quantities of pure hydrogen.

In this study, methane steam reformer is evaluated by channeled reformer of heat exchange type. The reformer consisted of the burning zone of five channels and the reforming zone of five channels.