391f Hydrogen Generation by Propane Reforming in a Novel Micro Channel Reactor

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Hydrogen generation from hydrocarbon fuels is a very promising technology provided material stability at high temperature is maintained. This includes reactor- catalyst substrate and the catalyst itself. Most catalytic activity at high temperature are susceptible to sintering and coking thereby resulting in decreased efficiency.

This presentation describes the production of hydrogen by oxidative reforming of propane. A novel high surface area mixed oxide substrate is used for catalyst deposition. Propane reforming over a Rh based single and mixed catalyst will be presented. Catalytic activity of a novel I-beam channel reactor washcoated with mixed oxide as substrate for propane reforming will also be discussed.