

### Is There Formation of HNCO as a Reductant in Hydrocarbon-SCR?

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This study have explored the potential energy surface on the chemical reaction of  $\text{CH}_2\text{OH}$  with NO by using ab initio calculation. We have found the new reation pathway producing N-hydroxy formaide (HFA). Then HFA decomposes to generate isocyanic acid and water. In this presentation, we'll discuss possible implication of this observation for the formation of HFA and subsequent release of HNCO toward chemical processes concerning the removal of NOx in hydrocarbon SCR.