

## The Comparison of Calcination Atmosphere of $\text{LaNiO}_3$ perovskite Precursor and Its Application on Steam $\text{CO}_2$ Reforming of Methane

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Recently, GTL-FPSO (Floating Production Storage and Offloading) process which can produce clean fuels like GTL and MeOH have received much attention. In GTL-FPSO process, reforming is one of the key technologies which can produce synthesis gas for Fischer-Tropsch synthesis. Especially, carbon dioxide reforming of methane (dry reforming) is an attractive process due to use of greenhouse gases such as  $\text{CH}_4$  &  $\text{CO}_2$ . Perovskite oxides are well known materials for the use of various fields including catalysts. In this work, the effect of calcination atmosphere ( $\text{N}_2$  & air) of  $\text{LaNiO}_3$  perovskite precursors was investigated. It was found that  $\text{N}_2$  calcined perovskite precursor showed  $\text{Ni/La}_2\text{O}_3$  phase. On the other hands, Air calcined perovskite precursor showed  $\text{LaNiO}_3$  type perovskite phase. These two materials were applied for the dry reforming of methane.