

Decarboxylation of glycerol carbonate over various metal oxide catalyst

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Glycerol is a major by-product in biodiesel manufacturing, the raise in surplus needs to be transformed into high added-value products. In particular, glycerol carbonate is an important glycerol derivative being the most valuable intermediate for the production of glycidol. In this study, catalytic decarboxylation of glycerol carbonate was investigated using various metal oxide catalyst. The characterization of catalysts were investigated by XRD, N<sub>2</sub> adsorption and desorption isotherms, FE-SEM and NH<sub>3</sub>/CO<sub>2</sub>-TPD. From the analysis results we confirm the correlation of catalyst property and catalytic activity.