

## Effects of Calcination Temperature on the Hydrogen Production by Aqueous Phase Reforming of Ethylene Glycol over Mesoporous Alumina Supported Pt Catalysts

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In this work, production of hydrogen by aqueous phase reforming (APR) process of ethylene glycol using mesoporous alumina supported platinum catalysts. Mesoporous alumina was prepared by surfactant-templating method. The catalysts were characterized by X-ray powder diffraction pattern, transmission electron microscopy, H<sub>2</sub> chemisorptions and N<sub>2</sub> adsorption/desorption techniques. The catalysts calcined with different temperature from 500 °C to 800 °C. From the activity test, the catalyst calcined at low temperature exhibits enhanced activity, due to large pore volumes, large pore size and high dispersion of platinum.