

Supplementary Documents

Kinetic Study of Pd Promoting Effect on Cu/ZnO/Al₂O₃ Catalyst for Glycerol Hydrogenolysis to Produce 1,2-Propanediol at Low Hydrogen Pressure

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[†] Deceased 2 November 2018, this paper is dedicated to the memory of Professor Garry L. Rempel.

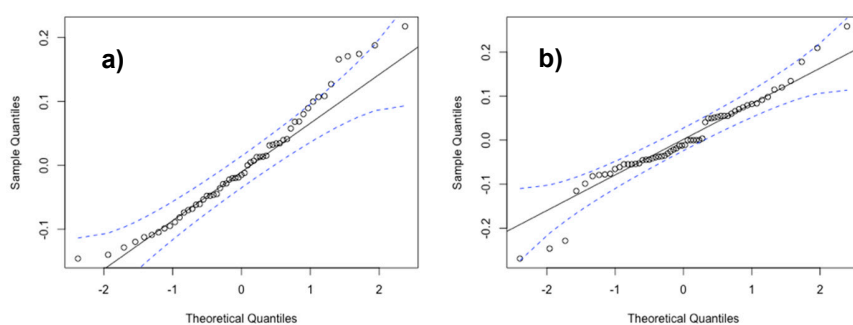


Figure S1 Normal probability plots of residuals for acetol hydrogenation reactions using two catalysts: a) CZA catalyst; b) 2Pd/CZA catalyst. Dotted curve: 95% confidence interval.

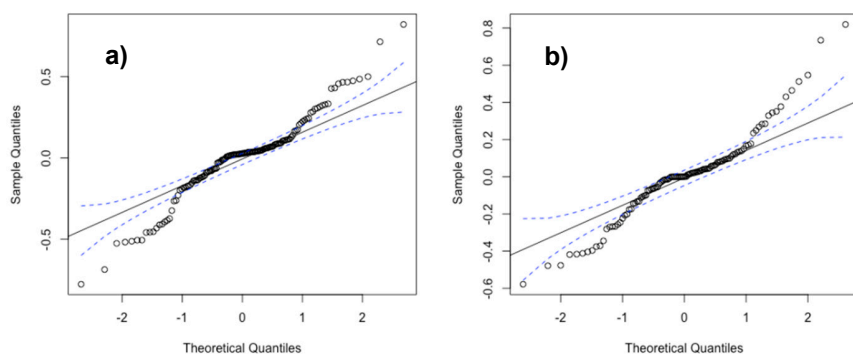


Figure S2. Normal probability plots of residuals for glycerol hydrogenolysis reactions using two catalysts: a) CZA catalyst; b) 2Pd/CZA catalyst. Dotted curve: 95% confidence interval.

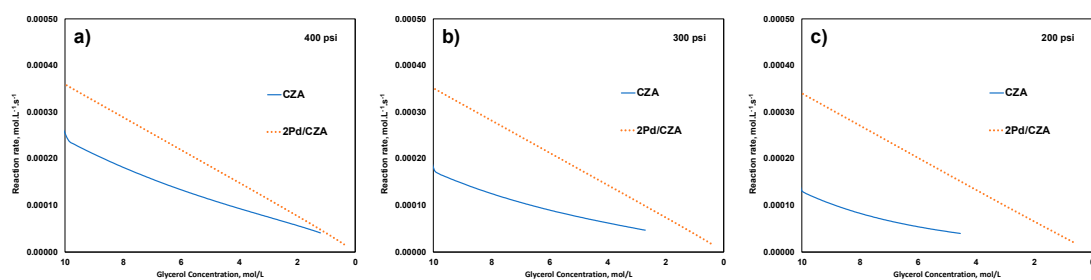


Figure S3. Effect of Pd on the glycerol conversion rates over the reaction time at different hydrogen pressures. Other reaction conditions: 200 °C, 500 RPM, 80 wt% aqueous glycerol, 5 wt% catalyst with respect to the weight of glycerol.