Electronic Supplementary Material (ESI) for Catalysis Science & Technology

Supporting Information

for the manuscript

Sulfated zirconia: an efficient solid acid catalyst for esterification of myristic acid with short chain alcohols

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Additional Figures and Figure Captions

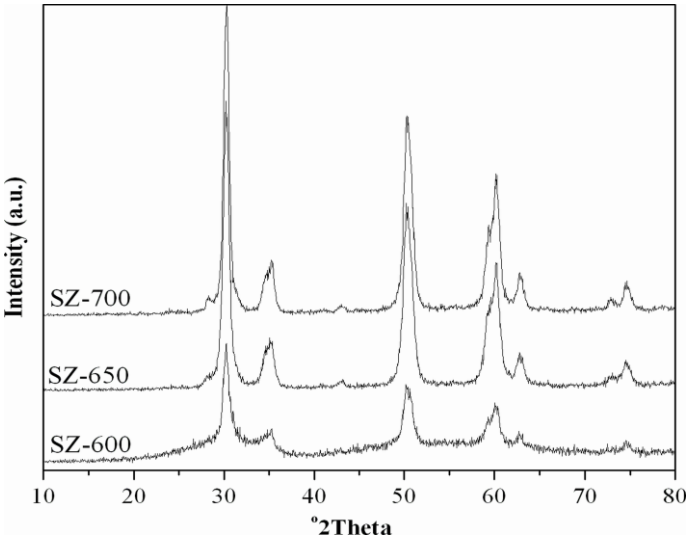

Figure S1: PXRD pattern of SZ catalysts calcined at different temperatures

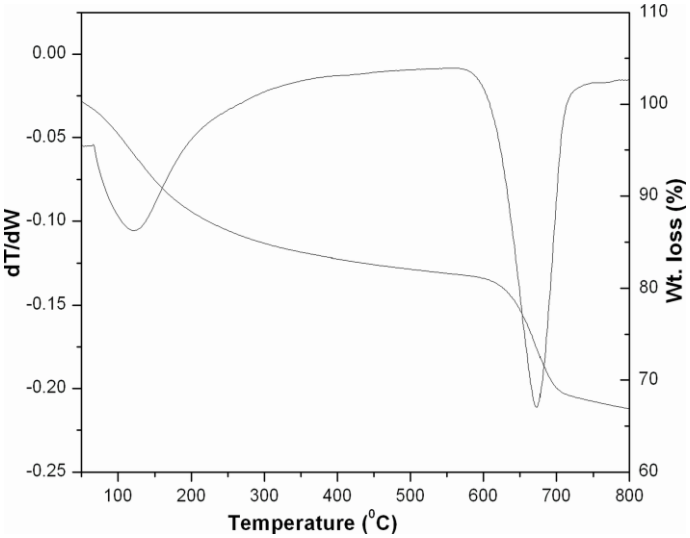

Figure S2: TGA and DTA profiles of sulfated zirconia sample

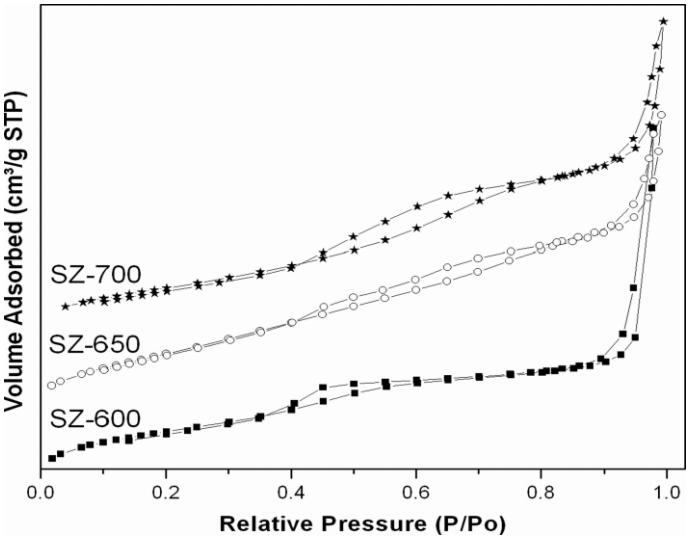

Figure S3: Nitrogen adsorption-desorption isotherms of SZ catalysts calcined at different temperatures

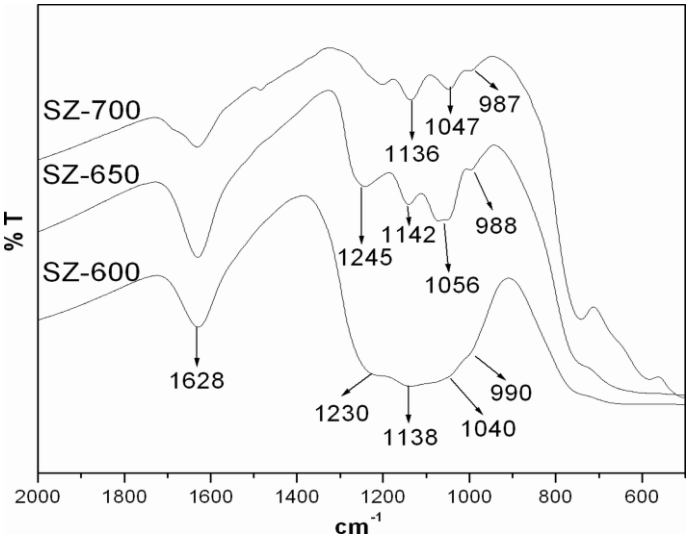

Figure S4: IR spectra of SZ catalysts calcined at different temperatures

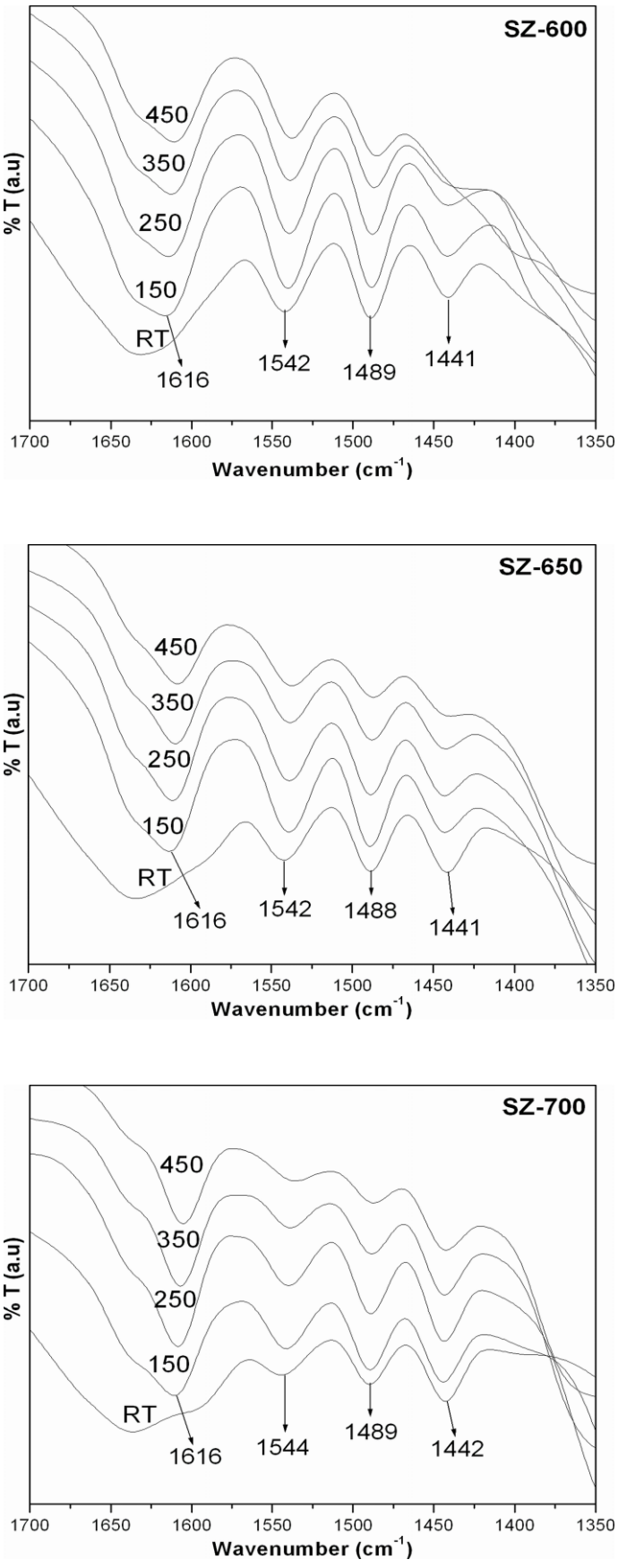

Figure S5: DRIFT spectra of SZ catalysts after pyridine desorption at different temperatures (from RT to 450°C)

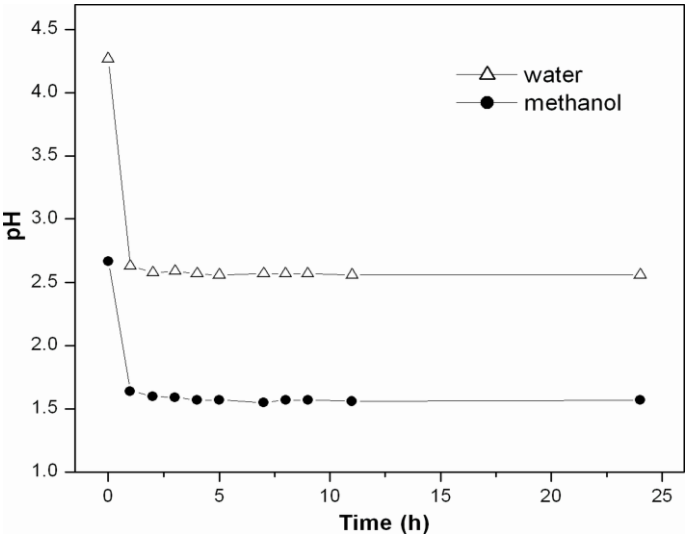

Figure S6: pH Vs. time after stirring SZ-600 catalyst in water and methanol

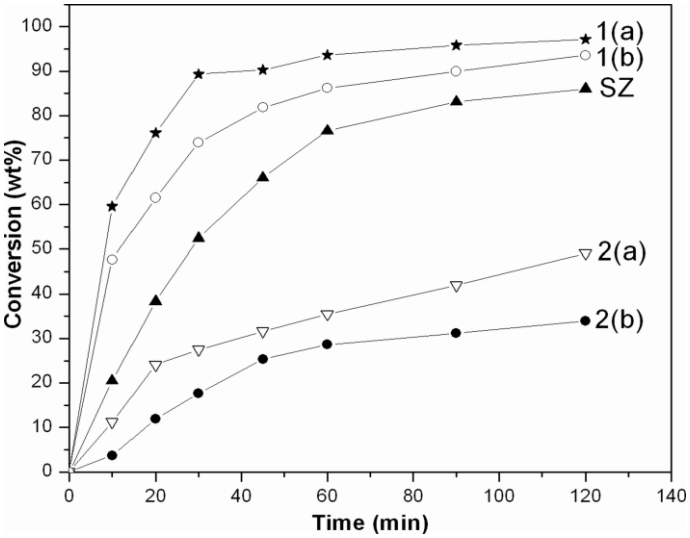

Figure S7: Esterification of myristic acid with liquid and solid acid catalysts. *Reaction conditions*: acid: methanol=1:10; SZ = 0.5 wt%; 1 = H_2SO_4: (a) 0.5 wt% and (b) 0.25 wt%; 2 = Amberlyst-15: (a) 1 wt% and (b) 0.5 wt%