

# Ni/H-ZSM-5 as a promising catalyst for vapour phase hydrogenation of levulinic acid at atmospheric pressure

Varkolu Mohan, Chakali Raghavendra, Chodimella Venkata Pramod, Burri David Raju, Kamaraju Seetha Rama Rao\*

## Supporting information

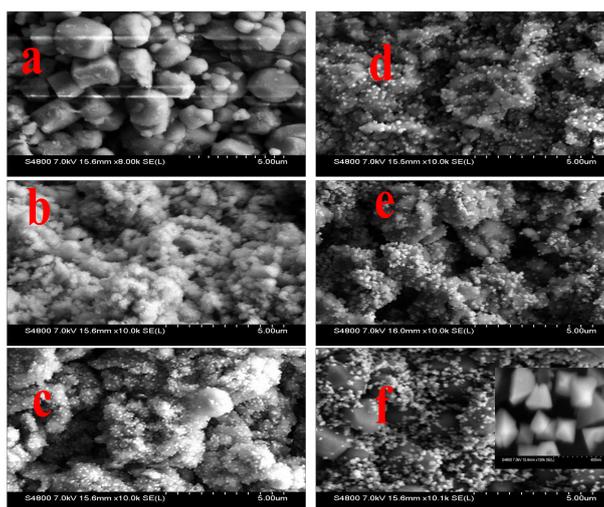


Fig.S1.FE-SEM profiles of Ni/HZSM-5 catalysts a) 5NHZ b) 10NHZ c) 20NHZ d) 30NHZ e) 40NHZ f) 50NHZ

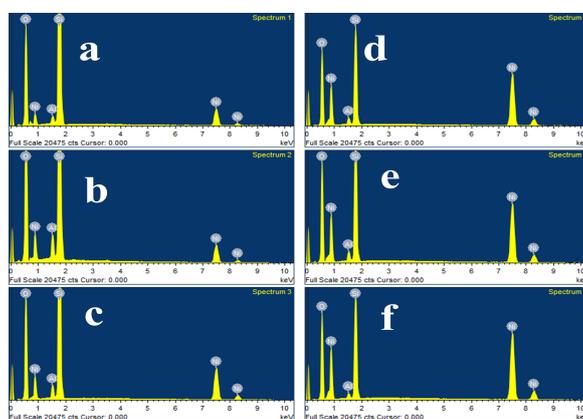


Fig. S2. EDS profiles of profiles of Ni/HZSM-5 catalysts a) 5NHZ b) 10NHZ c) 20NHZ d) 30NHZ e) 40NHZ f) 50NHZ

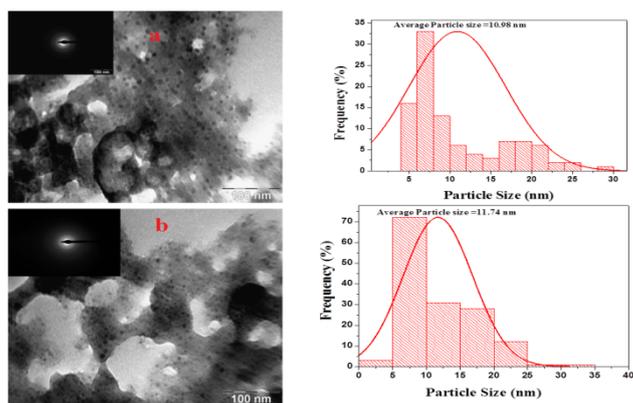


Fig.S3.TEM images and Particle size distribution of 30NHZ (a) reduced (b) used