## Analytical method

After separation from the solid catalyst, all liquid products were first identified by GC-MS (Varian CP3800). Quantitative analysis was carried out using a GC (HP 6890) equipped with Innowax capillary column (Agilent, 30 m x 0.32 mm, 0.25 μm) and a flame ionization detector. The GC method used was as follows: An initial oven temperature of 50 °C was held for 3 minutes. In the next step, the temperature was ramped at 10 °C/min. until it reached 100 °C and held at 100 °C for 2 minutes followed by the increase in temperature to 230 °C ramped at 7.5 °C/min. and held at 230 °C for 20 minutes. In this work, conversion and selectivity were calculated on carbon basis <sup>1, 2</sup>. Conversion of furfural is defined as moles of carbon in the furfural reacted (obtained from GC analysis) divided by the moles of carbon in furfural initially charged. Product selectivity (carbon basis) was calculated from the moles of carbon in the product divided by the moles of carbon in the reactant that reacted. Carbon balance was also checked, which lies between 85 to 100 %.

Ref.1: K. Chen, M. Tamura, Z. Yuan, Y. Nakagawa, and K. Tomishige, *ChemSusChem* 2013, 6, 613 – 621.

Ref. 2: J. Jae, W. Zheng, R. F. Lobo, and D. G. Vlachos, *ChemSusChem* 2013, **6**, 1158 – 1162.

Figure S1: Pre-equilibration time dependent color change of the reaction mixture (Furfural + 28 % aq. solution of ammonia)



Figure S2: Catalyst recycling



Figure S3: TEM image of the catalyst (a) before and (b) after reaction

