

One-step selective synthesis of 2-chlorobenzonitrile from 2-chlorotoluene via ammoxidation

B. Hari Babu^{a,b,c*}, K.T. Venkateswara Rao^a, Y.W. Suh^{b,c}, P.S. Sai Prasad^{a*}, N. Lingaiah^{a*}

^aCatalysis Laboratory, I&PC Division, CSIR-Indian Institute of Chemical Technology, Hyderabad 500 007, India

^bDepartment of Chemical Engineering, Hanyang University, Seoul 133-691, Republic of Korea

^cResearch Institute of Industrial Science, Hanyang University, Seoul 133-691, Republic of Korea

E-mail: haribabu.bathula@gmail.com

For the section: 3. Results and Discussion

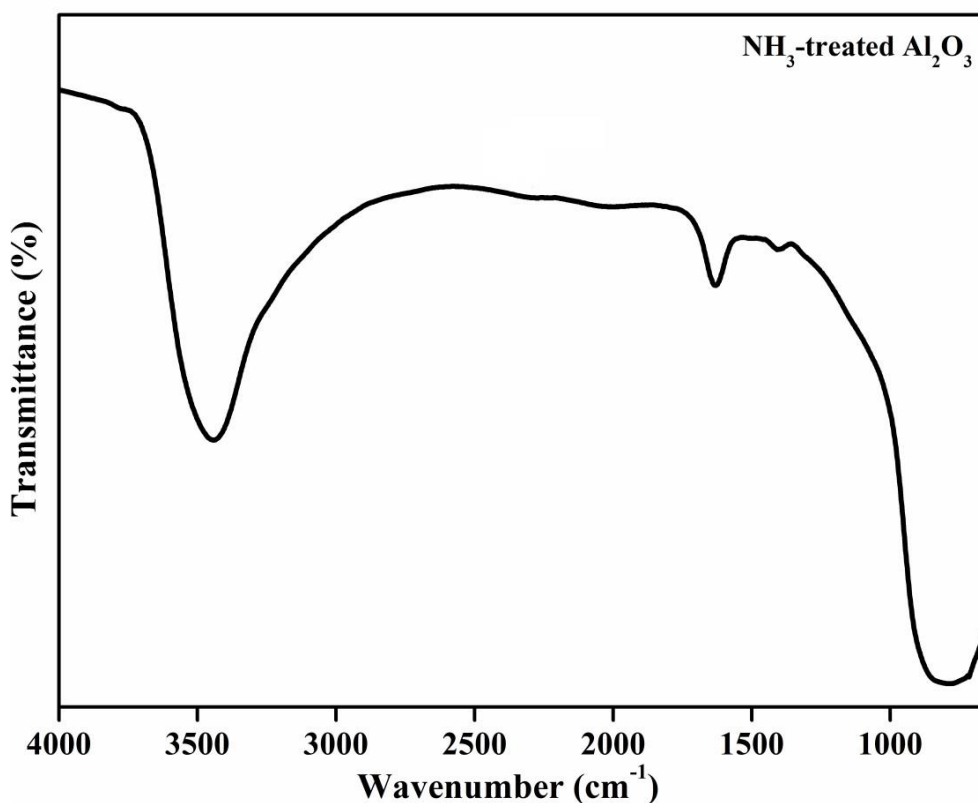


Fig. S1 FT-IR spectra of NH_3 -treated Al_2O_3

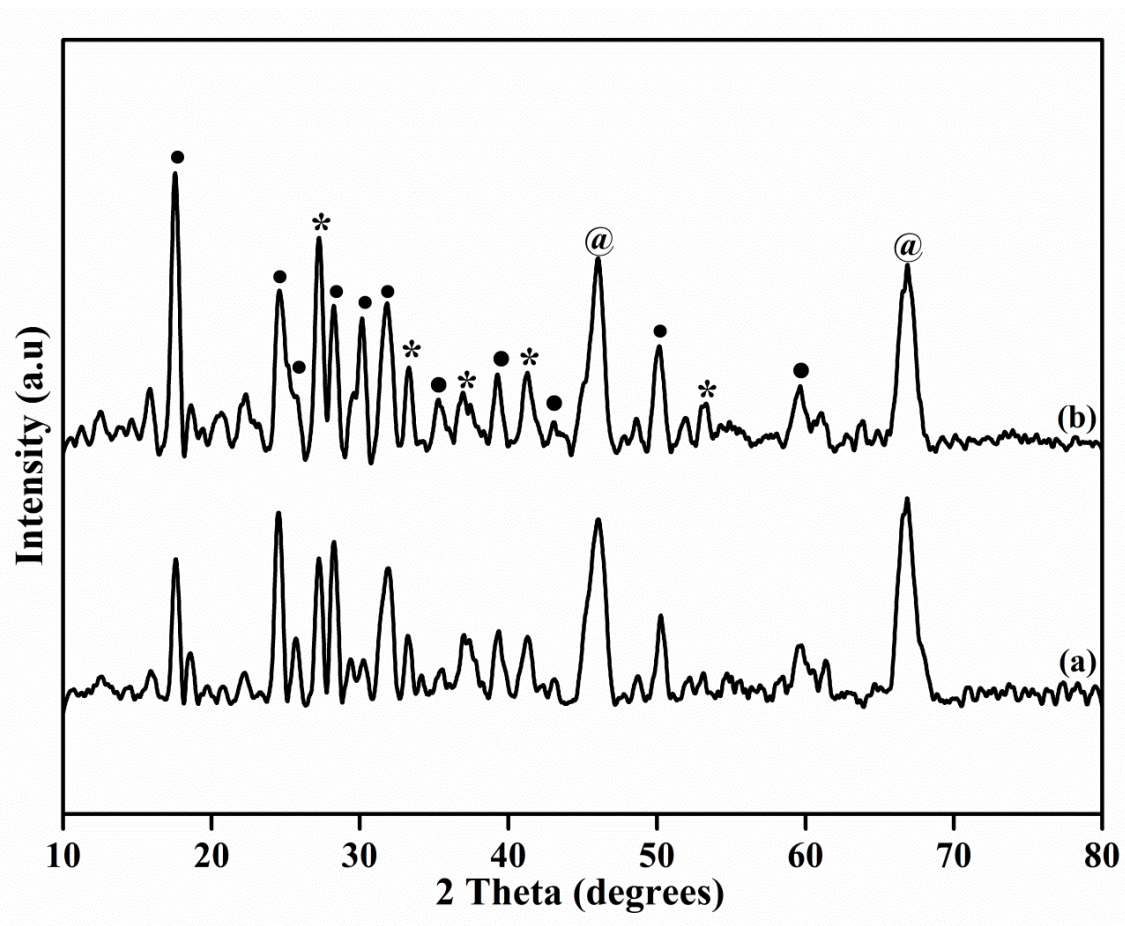


Fig. S2 XRD patterns of $\text{V}_2\text{O}_5/\text{Al}_2\text{O}_3$ catalysts (a) 20 wt% $\text{V}_2\text{O}_5/\text{Al}_2\text{O}_3$, (b) 25 wt% $\text{V}_2\text{O}_5/\text{Al}_2\text{O}_3$; (@) $\gamma\text{-Al}_2\text{O}_3$, (*) V_2O_5 , (●) AlVO_4 .