

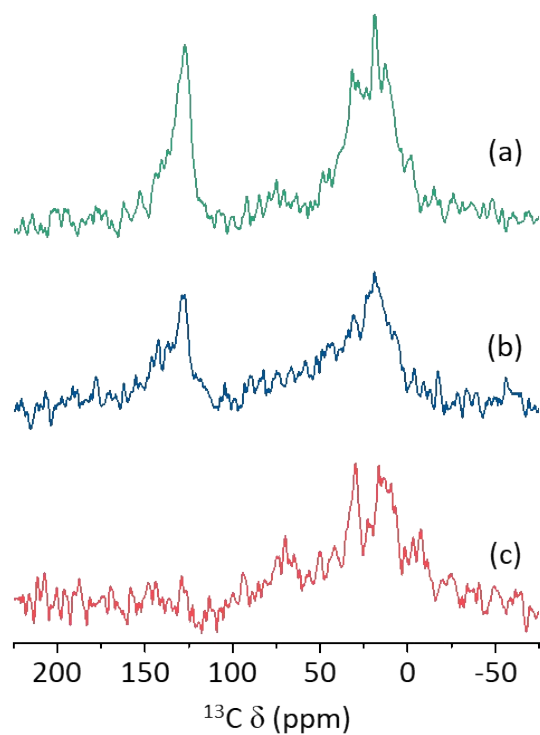
## Supplementary Information

### Disordered medium-pore zeolite PST-24 as an efficient low-temperature isobutanol dehydration catalyst

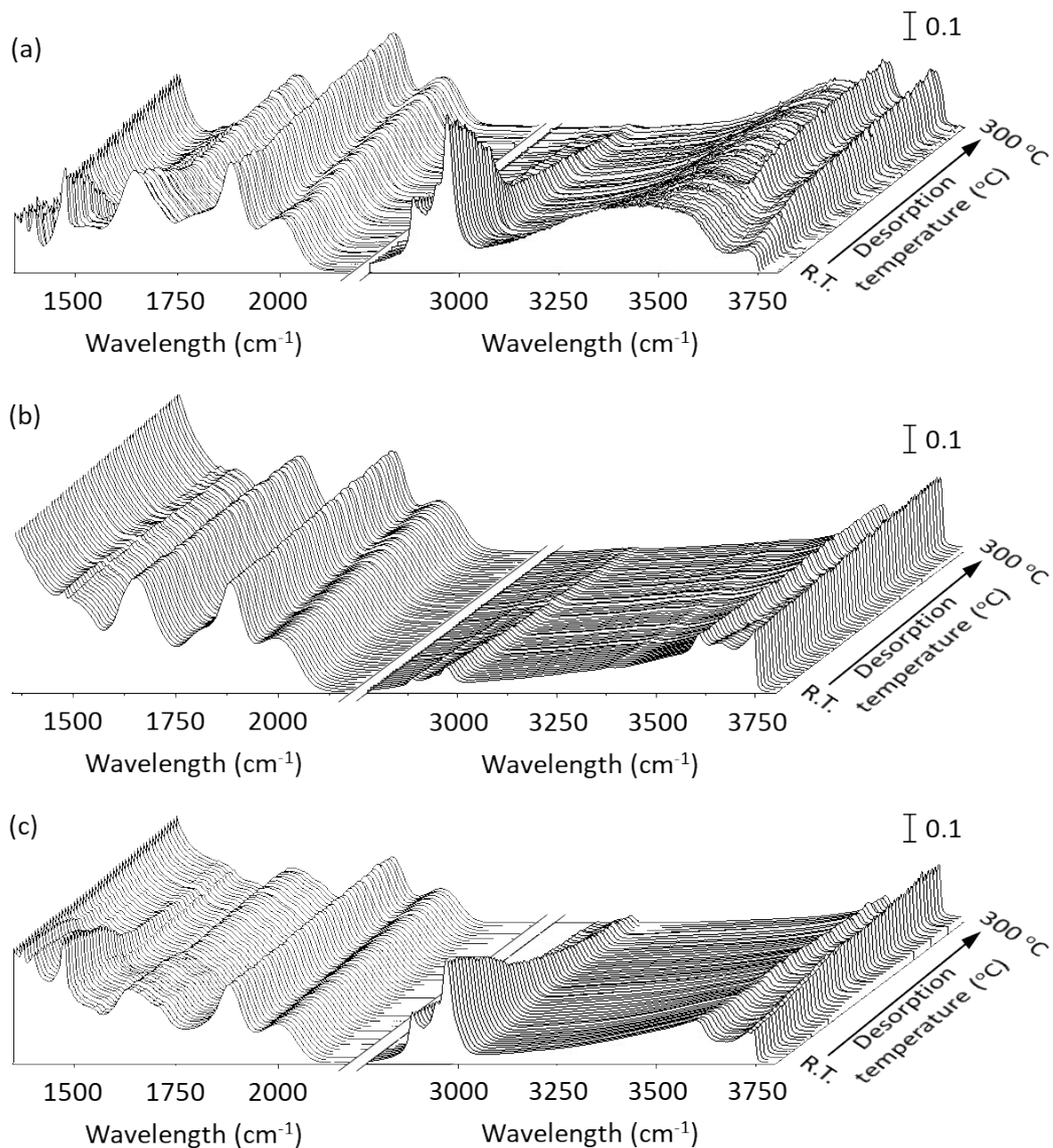
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**Fig. S1**  $^1\text{H}$ - $^{13}\text{C}$  CP MAS NMR spectra of (a) H-ZSM-5(50), (b) H-ferrierite(33) and (c) H-PST-24(47) after isobutanol dehydration at 250 °C and 24.8 h<sup>-1</sup> isobutanol WHSV with feed stream containing 9% H<sub>2</sub>O vapor for 30 h.



**Fig. S2** IR spectra of isobutanol adsorbed on (a) H-ZSM-5(50), (b) H-ferrierite(33) and (c) H-PST-24(47) at room temperature for 30 min and then desorbed under vacuum to a residual pressure of  $10^{-3}$  Torr at temperatures up to 300 °C with an interval of 5 °C and a holding time of 10 min at each temperature.