

Supplementary Information

Elucidating the roles of acid site nature and strength on the direct conversion of levulinic acid into ethyl valerate: the case of Zr-modified Beta zeolite-supported Pd catalysts

M. Muñoz-Olasagasti^a, I. Martínez-Salazar^a, M. López Granados^a, C. López-Aguado^b, J. Iglesias^b, G. Morales^b, Mariscal^{a†}

1) Textural properties of the ZAB supports were evaluated from argon adsorption-desorption isotherms, which were recorded at 87 K using an AutoSorb equipment (Quantachrome Instruments).

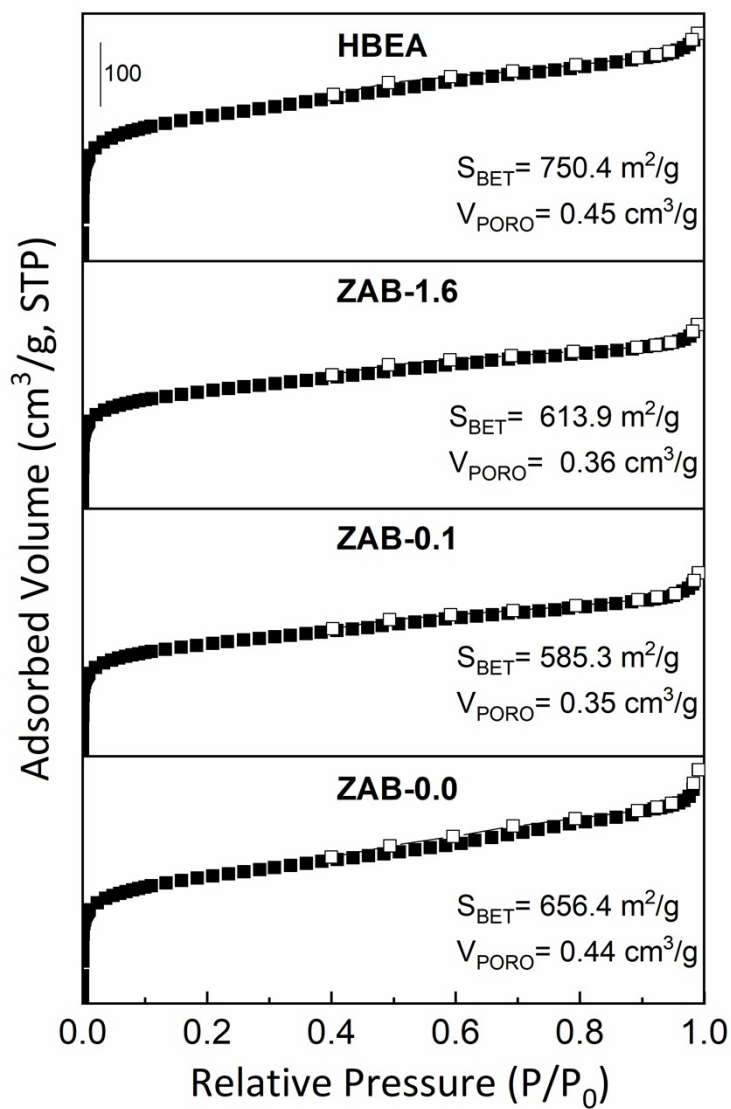


Figure S1. Argon adsorption-desorption isotherms of the ZAB zeolites.

2) Characterization of the ZAB supports using the XRD technique.

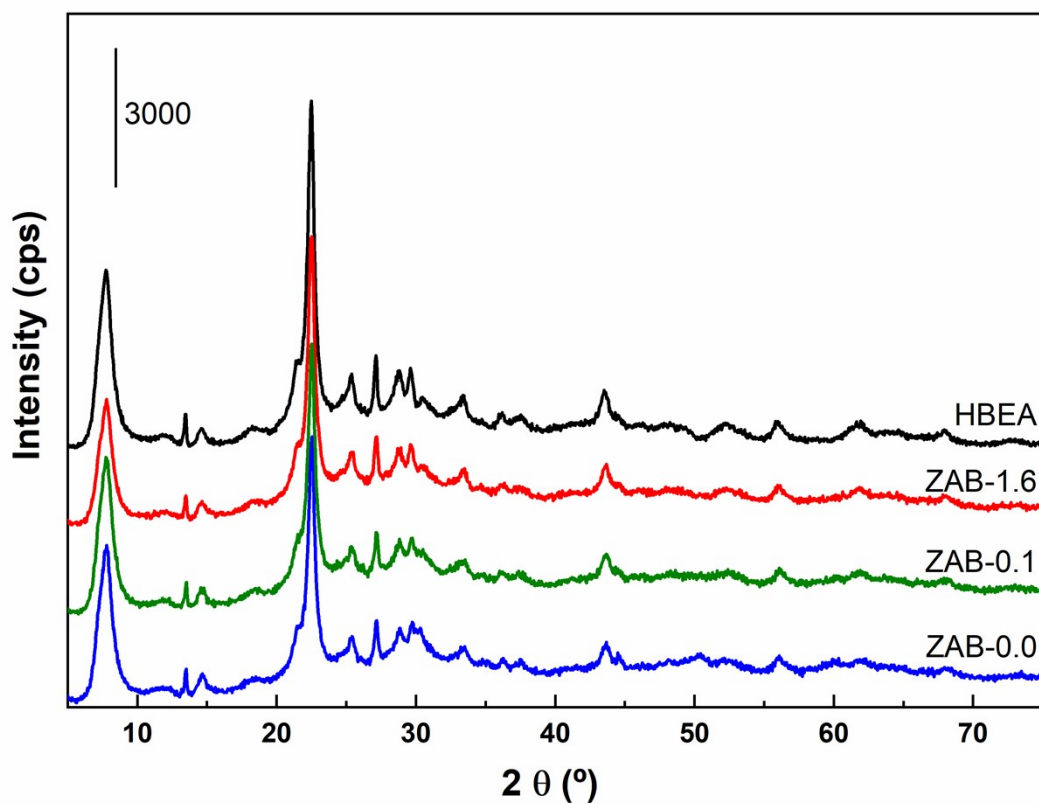


Figure S2. XRD patterns of the ZAB supports.

3) DRIFT spectra of ZAB acid supports using CD₃CN as probe molecule.

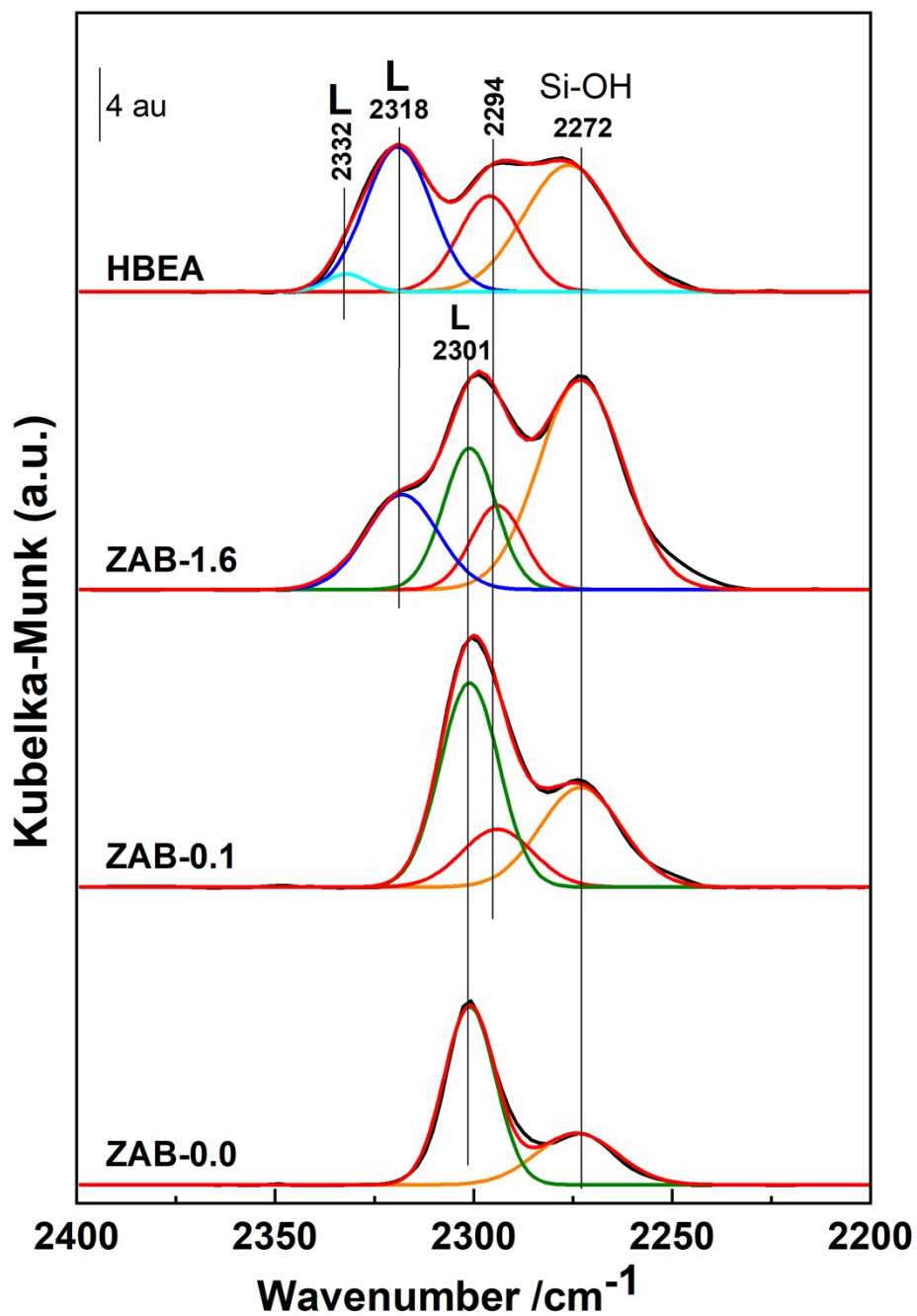


Figure S3. DRIFT spectra of the ZAB zeolites after adsorption of CD₃CN probe molecule.