

Supplementary Information

Dehydrative etherification of carbohydrates to 5-ethoxymethylfurfural over SBA-15 supported Sn modified heteropoly silicate catalysts[†]

B. Srinivasa Rao ^{a,b}, D. Dhana Lakshmi ^{a,b}, P. Krishna Kumari ^{a,b}, P. Rajitha ^{a,b} and

N. Lingaiah ^{a,b} *

^aDepartment of Catalysis and Fine Chemicals, CSIR-Indian Institute of Chemical Technology, Hyderabad-500 007, India.

^bCSIR-Academy of Scientific and Innovative Research (CSIR-AcSIR), New Delhi, India.

*Corresponding author

Email: nakkalingaiah@iict.res.in; Tel: +91-40-27191722

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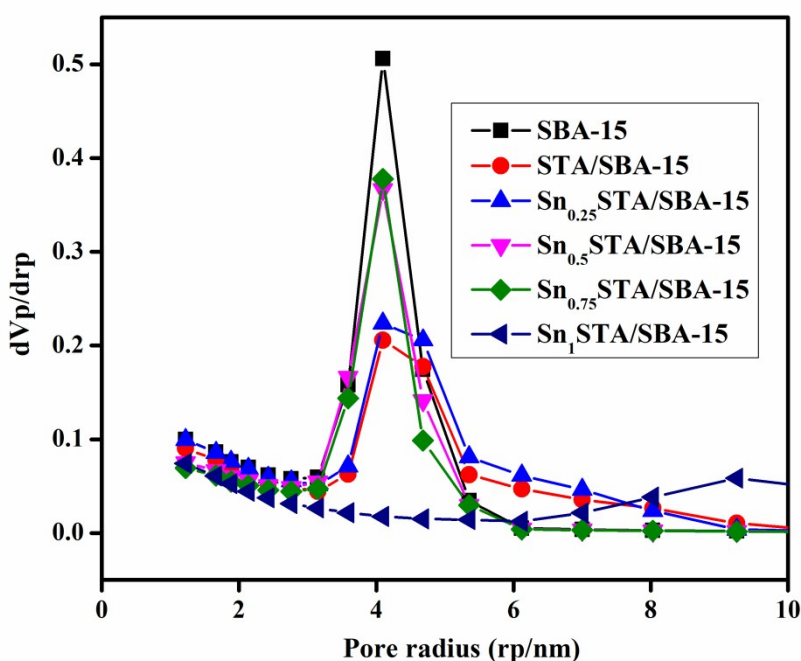


Fig. S1. Pore size distribution curves of the catalysts

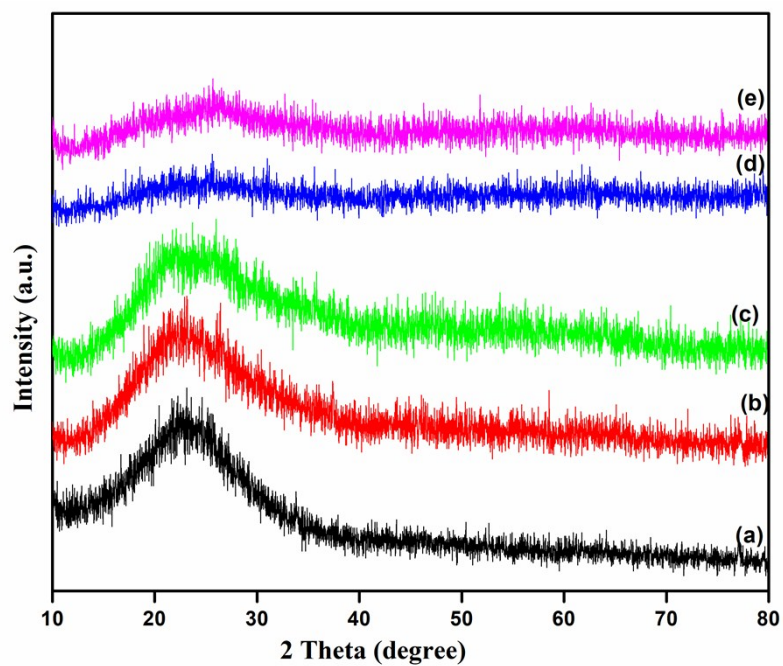


Fig. S2. Wide angle XRD patterns of $\text{Sn}_{x/4}\text{H}_{4-x}\text{STA}$ supported on SBA-15 catalysts. (a) SBA-15, (b) 20% $\text{Sn}_{0.2}\text{5STA}$, (c) 20% $\text{Sn}_{0.5}\text{5STA}$, (d) 20% $\text{Sn}_{0.7}\text{5STA}$, (e) 20% Sn_1STA .

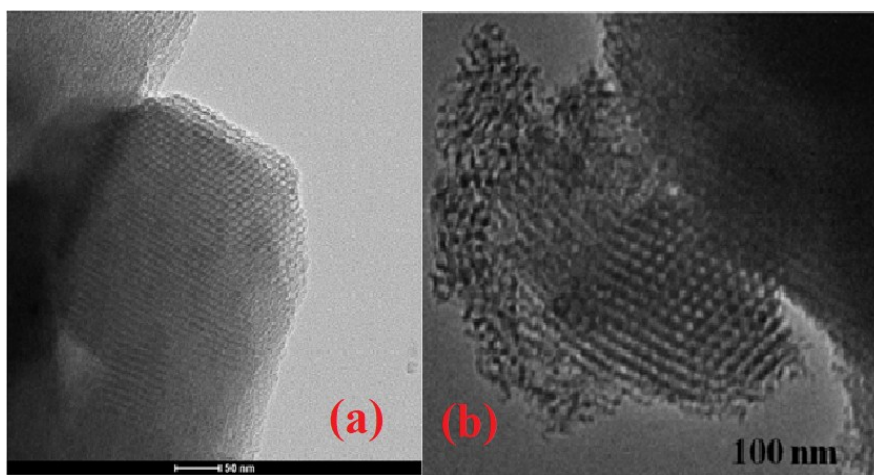


Fig. S3. TEM analysis of (a) SBA-15 and (b) 20% $\text{Sn}_{0.75}\text{STA/SBA-15}$ catalysts.

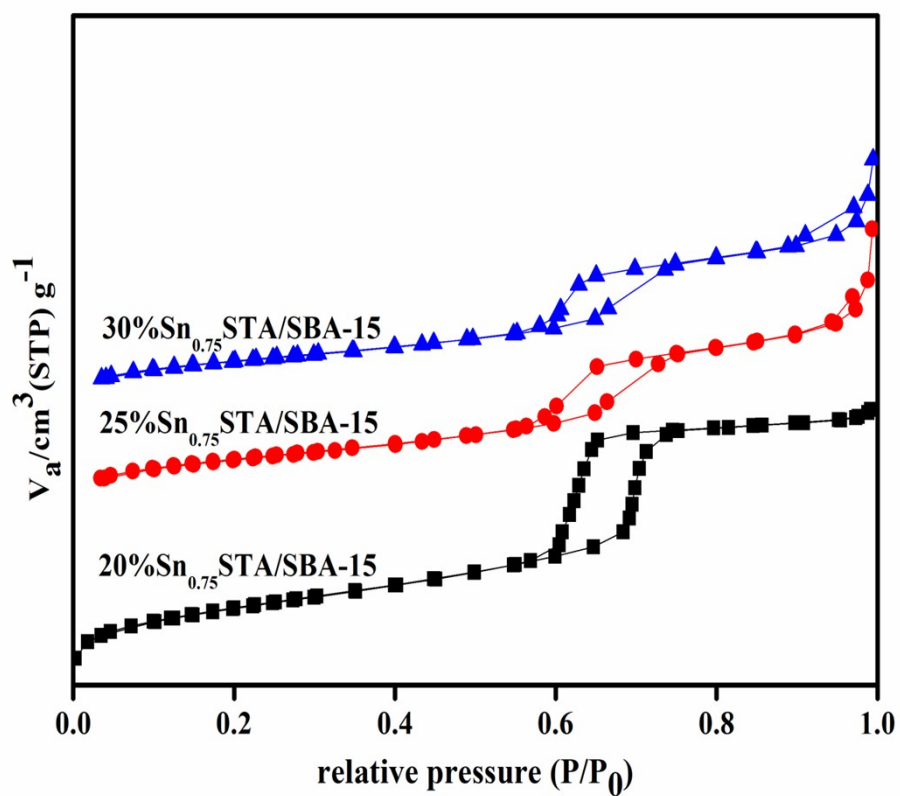


Fig. S4. N₂ adsorption-desorption isotherms of different loadings of 20%Sn_{0.75}STA/SBA-15 catalysts.

Table S1. Textural properties of Sn_{0.75}STA/SBA-15 catalysts with different loadings.

Catalyst	S _{BET}	Total pore volume	Mean pore
	(m ² g ⁻¹)	(cm ³ g ⁻¹)	Diameter (nm)
20% Sn _{0.75} STA/SBA-15	450	0.57	8.03
25% Sn _{0.75} STA/SBA-15	362	0.53	6.79
30% Sn _{0.75} STA/SBA-15	347	0.51	6.45