Electronic Supplementary Information

Eco-friendly synthesis of bio-additive fuels from renewable glycerol using nanocrystalline SnO_2-based solid acids

Baithy Mallesham, Putla Sudarsanam, Benjaram M. Reddy*

Inorganic and Physical Chemistry Division, CSIR – Indian Institute of Chemical Technology, Uppal Road, Hyderabad – 500 607, India

---

* Corresponding author. Phone: +91 40 2719 1714; fax: +91 40 2716 0921.

E–mail addresses: bmreddy@iict.res.in; mreddyb@yahoo.com (B.M. Reddy).

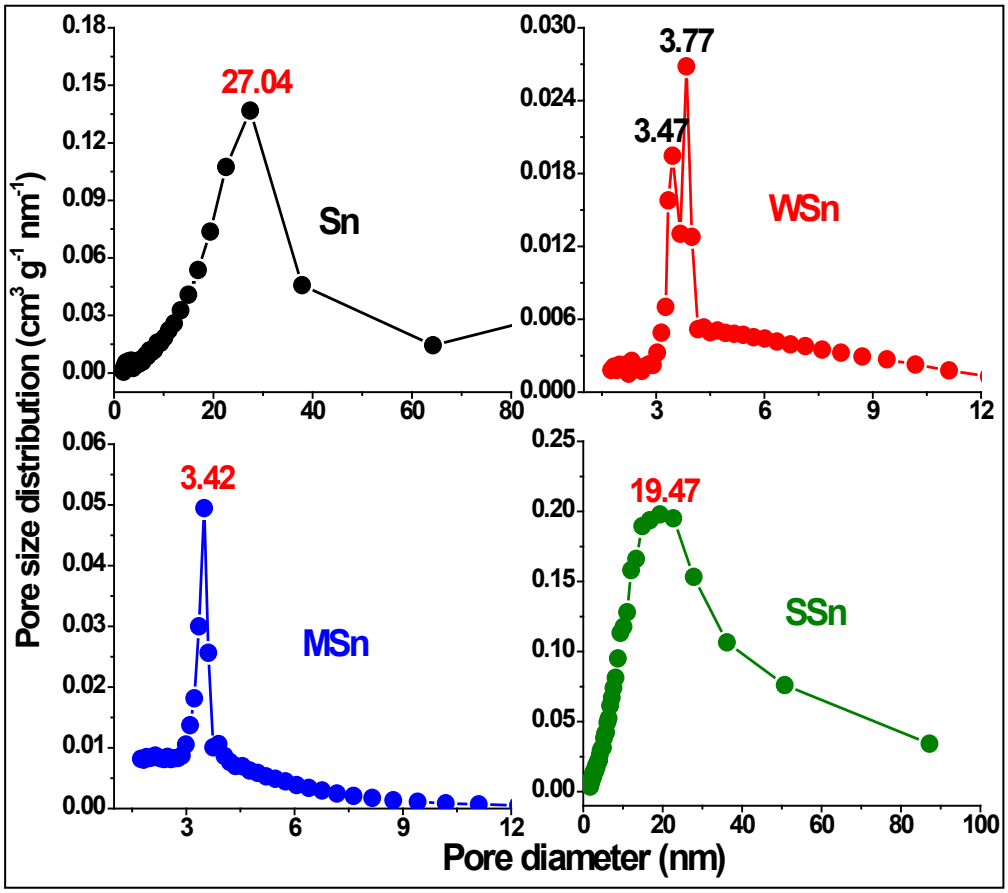

Fig. S1 Pore size distribution profiles of SnO_2 (Sn), WO_3/SnO_2 (WSn), MoO_3/SnO_2 (MSn) and SO_4^{2-}/SnO_2 (SSn) catalysts.

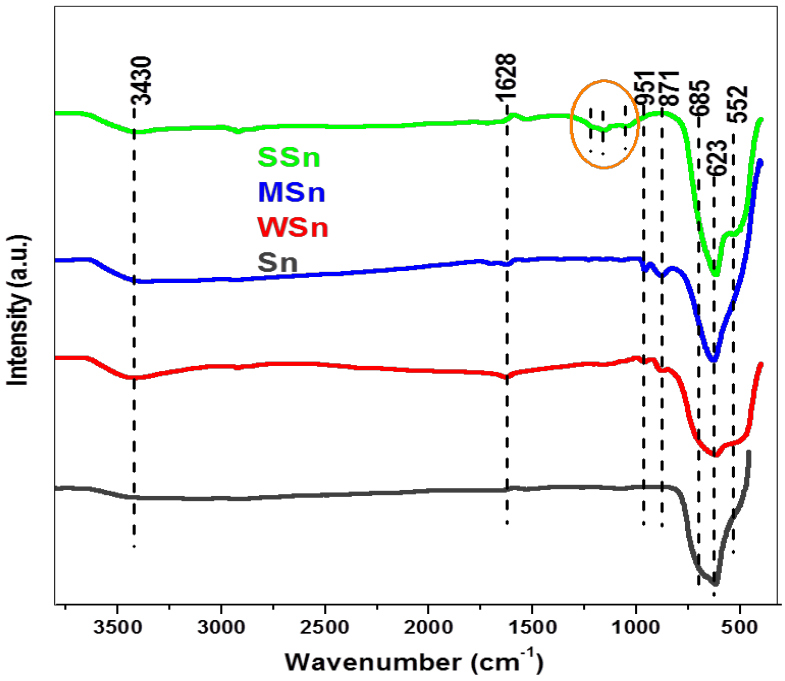

Fig. S2 FT-IR spectra of SnO_2 (Sn), WO_3/SnO_2 (WSn), MoO_3/SnO_2 (MSn) and SO_4^{2-}/SnO_2 (SSn) catalysts calcined at 923 K.

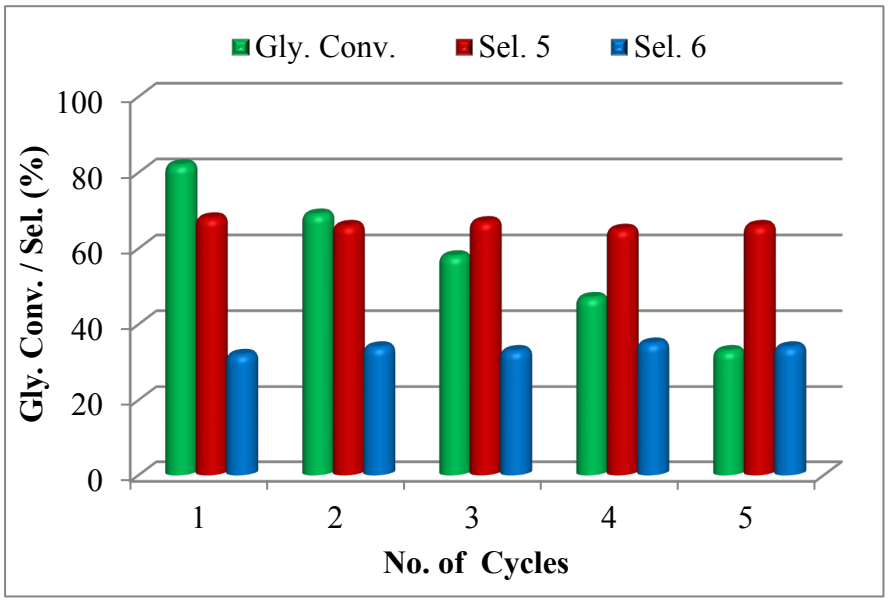

Fig. S3 Reusability analysis of SSn (SO_4^{2-}/SnO_2) catalyst for the acetalization of glycerol with acetone.

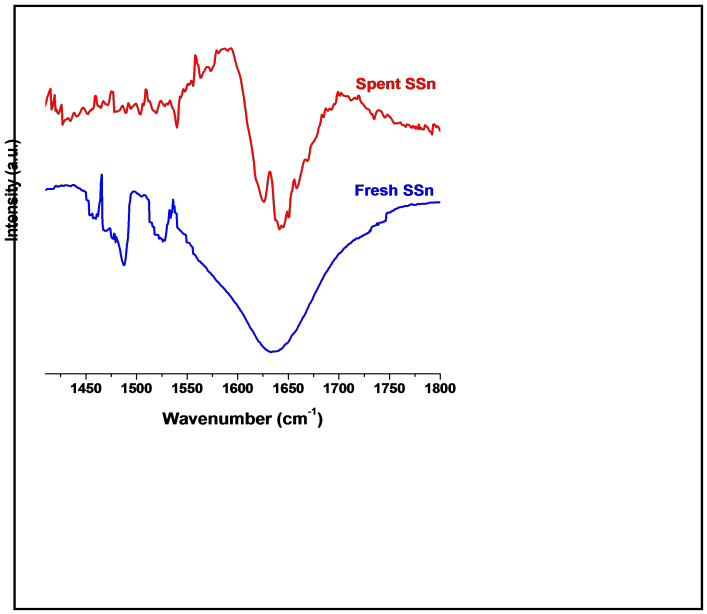

Fig. S4 Pyridine adsorbed FT-IR analysis of fresh and spent SO_4^{2-}/SnO_2 (SSn) samples.