

SUPPLEMENTARY INFORMATION



Fig. S1: Parallel reactor employed for the catalytic reactions.

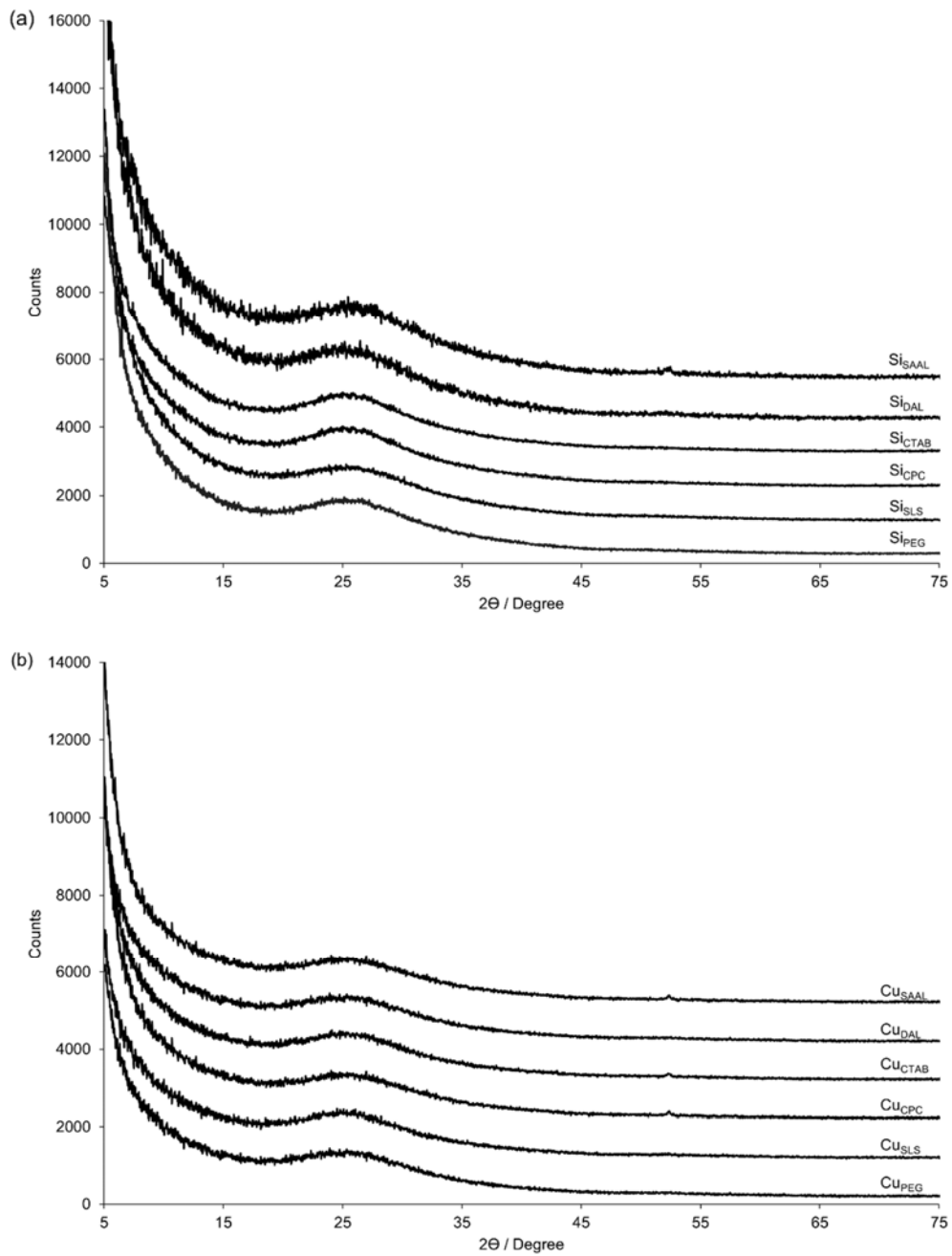


Fig. S2 XRD analysis of (a) the silica catalyst supports, and (b) their respective immobilised catalysts

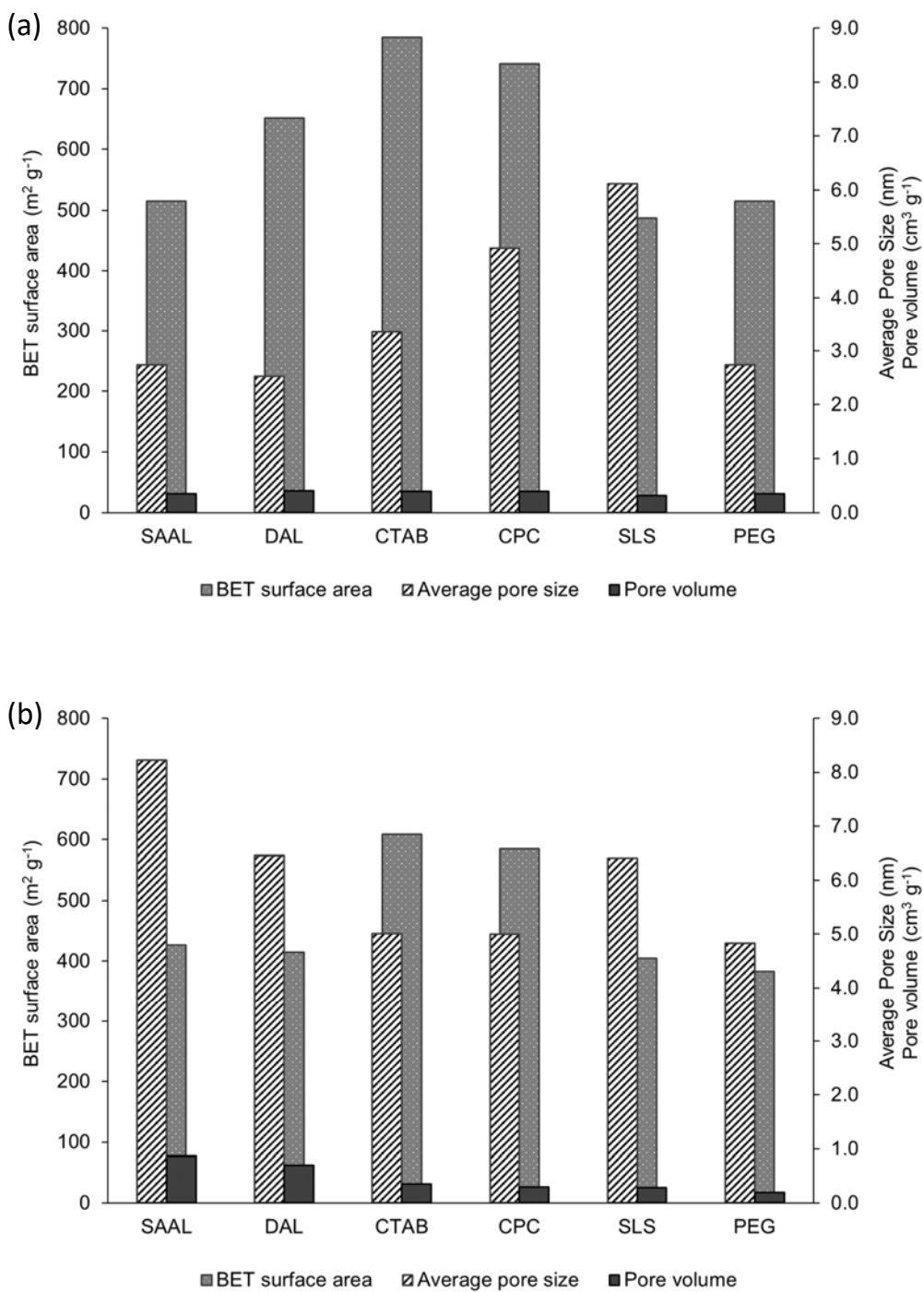
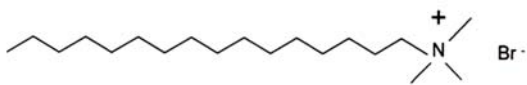
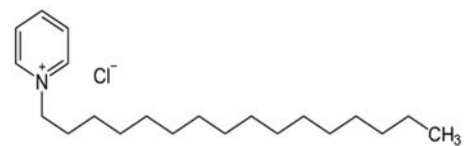


Fig. S3 Textural properties of the (a) silica catalyst supports and (b) immobilized catalysts

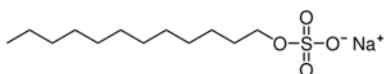
CTAB: Cetyl-trimethyl ammonium bromide ($C_{19}H_{42}NBr$)



CPC: Cetyl-pyridinium chloride ($C_{21}H_{40}NCl$)



SLS: sodium lauryl sulphate ($C_{12}H_{25}O_4NaS$)



PEG: Polyethylene glycol ($C_{2n}H_{4n}O_{n+1}$)

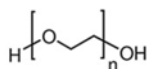


Fig. S4 Surfactants applied during the synthesis of CFA-derived silica catalyst supports

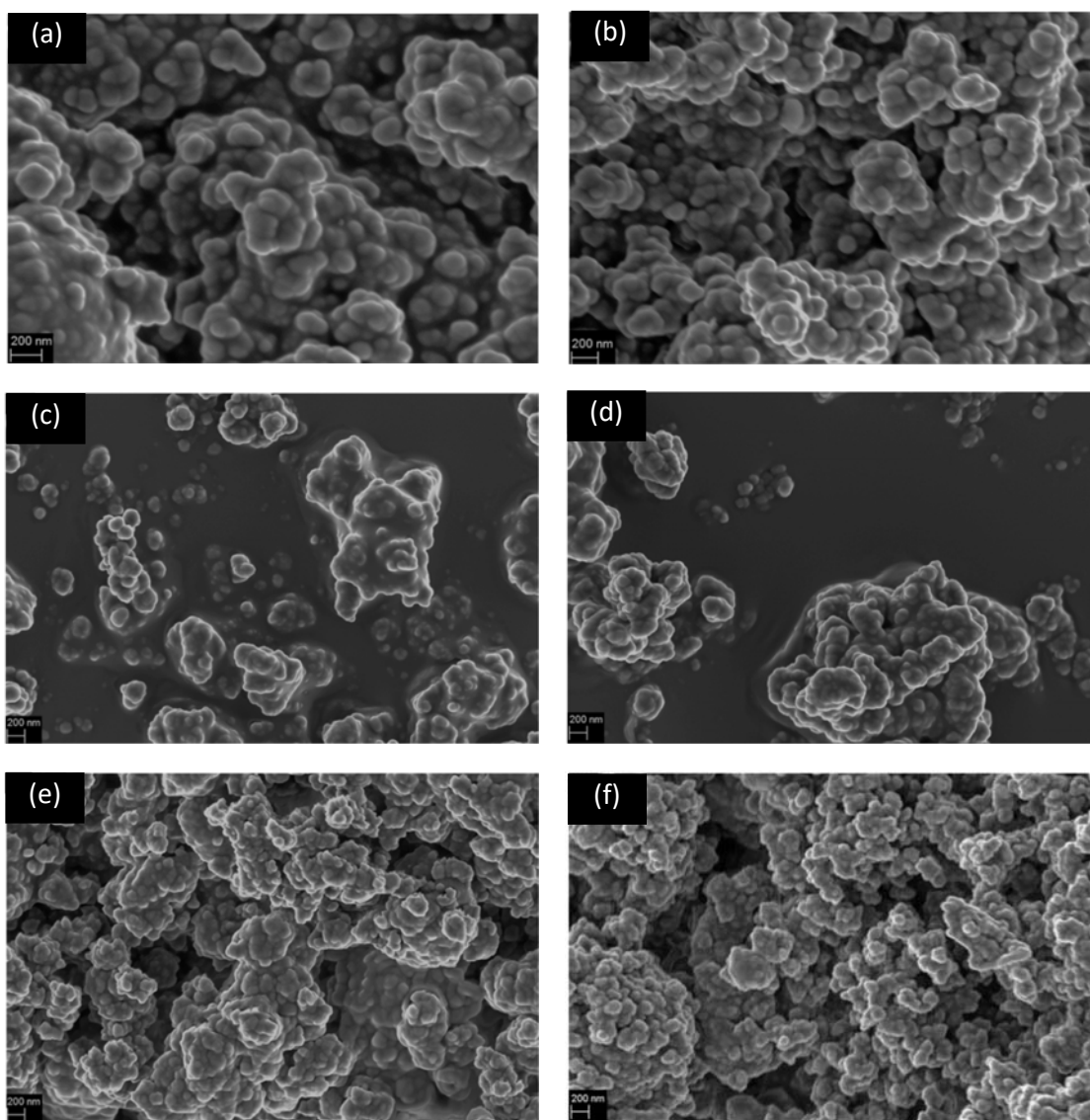


Fig. S5 FESEM images of (a) Cu_{SAAAL} , (b) Cu_{DAL} , (c) Cu_{CTAB} , (d) Cu_{CPC} , (e) Cu_{SLS} and (f) Cu_{PEG}

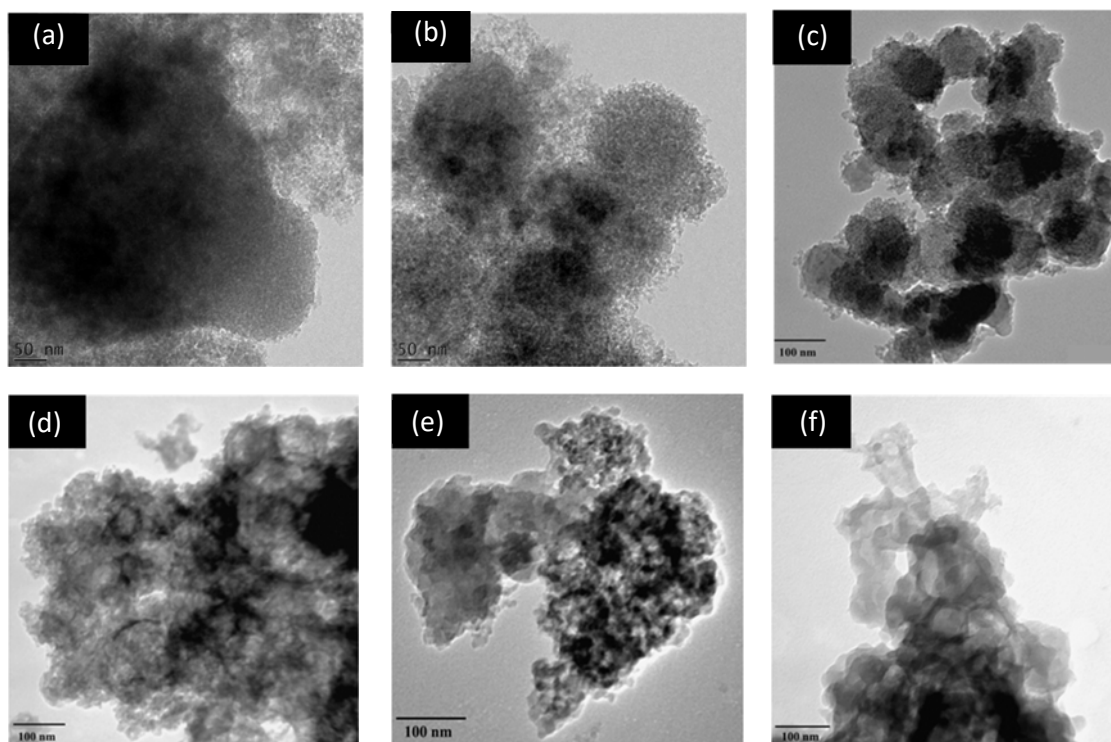


Fig. S6 TEM images of (a) Cu_{SAAL}, (b) Cu_{DAL}, (c) Cu_{CTAB}, (d) Cu_{CPC}, (e) Cu_{SLS} and (f) Cu_{PEG}

Table S1 Oxidation of veratryl alcohol with TBHP, heterogeneously catalyzed by a Cu(II) complex immobilized on MCM-41, SBA-15 and CFA-derived catalyst supports. Reaction conditions: veratryl alcohol (1 mmol), 2 mol % catalyst, temperature (25 °C), TBHP (2 mmol), acetonitrile (10 ml) and NaOH (0.2 mmol).

Catalyst	Conversion (%)	Aldehyde yield (%)	Acid yield (%)
Cu _{MCM-41}	30	80	20
Cu _{SBA-15}	36	90	10
Cu _{SAAAL}	24	96	4
Cu _{DAL}	31	90	10
Cu _{CTAB}	51	50	50
Cu _{CPC}	52	53	47
Cu _{SLS}	50	54	46
Cu _{PEG}	50	53	47