Electronic Supplementary Material (ESI) for Reaction Chemistry & Engineering.

Lipase immobilised silica monoliths as continuous-flow microreactors for triglyceride transesterification

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Characterisation

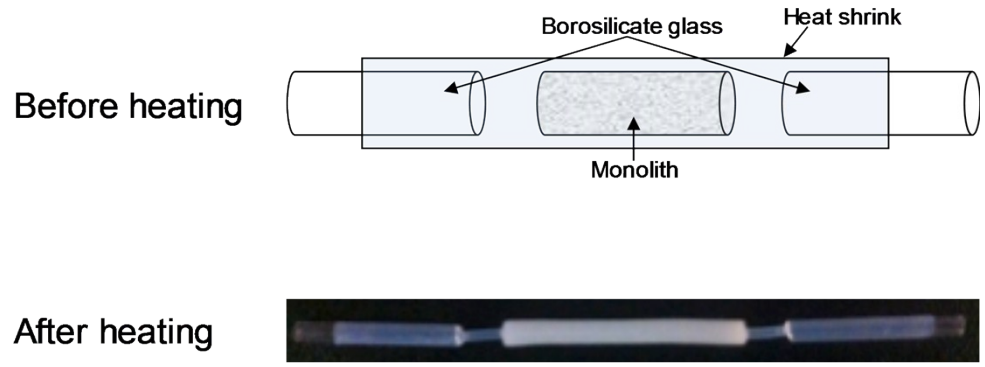

Fig. S1. Interfacing of monolithic microreactor to borosilicate glass tubes using PTFE heat shrinkable tubing.

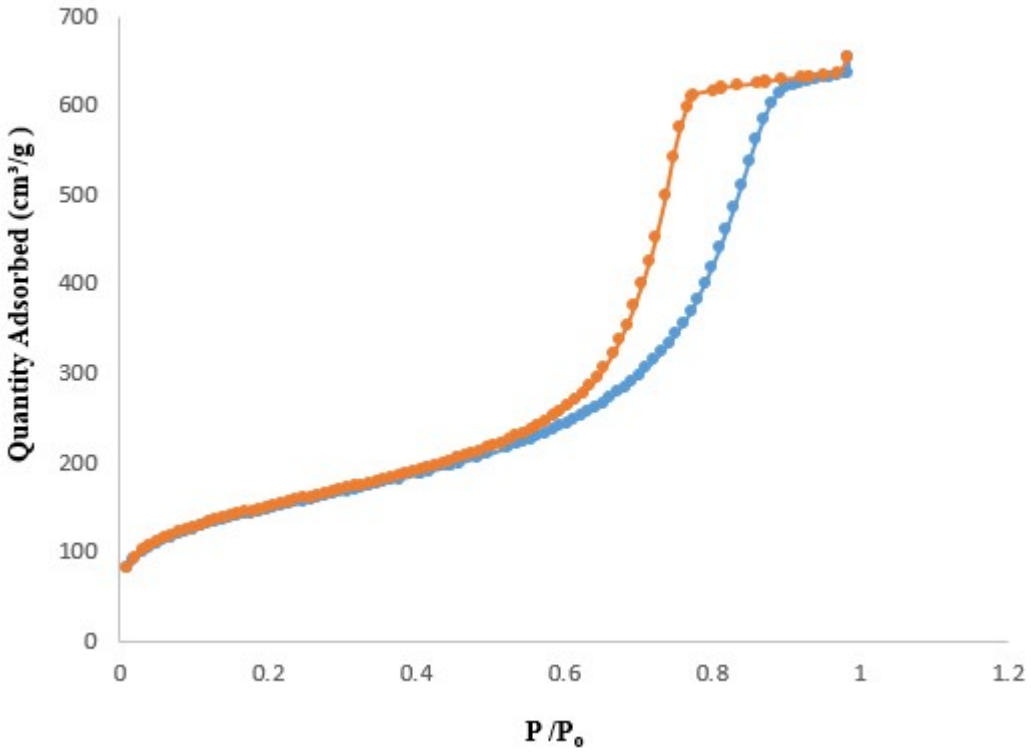

Fig. S2 Nitrogen adsorption-desorption isotherm for M1.

Reactivity

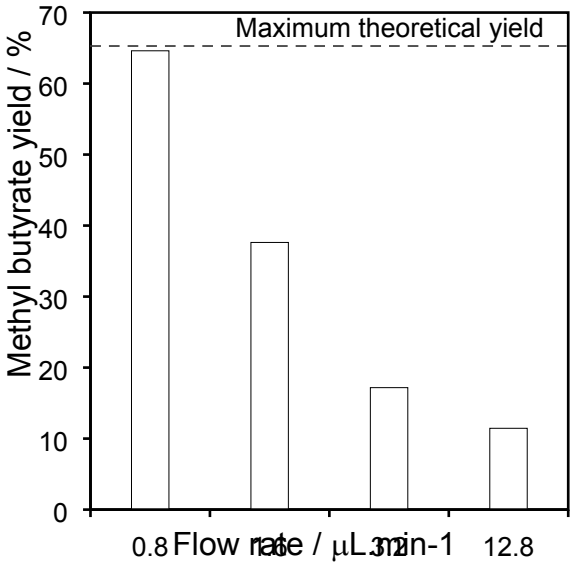

Fig. S3 Methyl butyrate yield over M2 catalyst as a function of flow rate. Reaction conditions: methanol:tributyrin molar ratio = 2:1, 30 °C and 20 h on-stream.

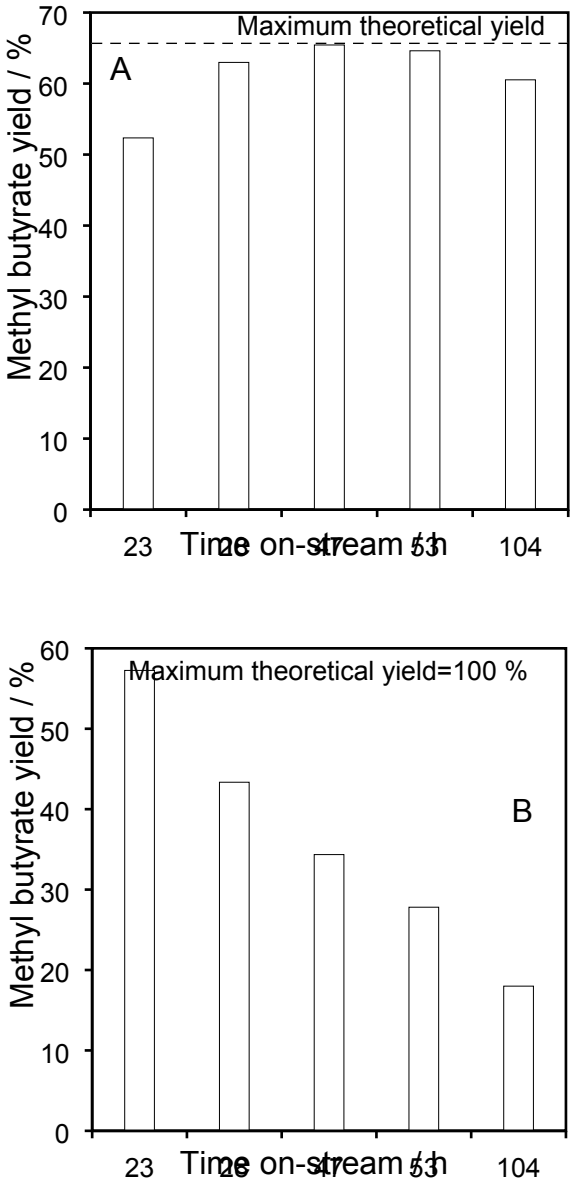

Fig. S4 Methyl butyrate yield over M2 catalyst as a function of time on-stream for (A) 2:1 and (B) 3:1 methanol: tributyrin molar ratio. Reaction conditions: 0.8 μL.min^{-1} and 30 °C.

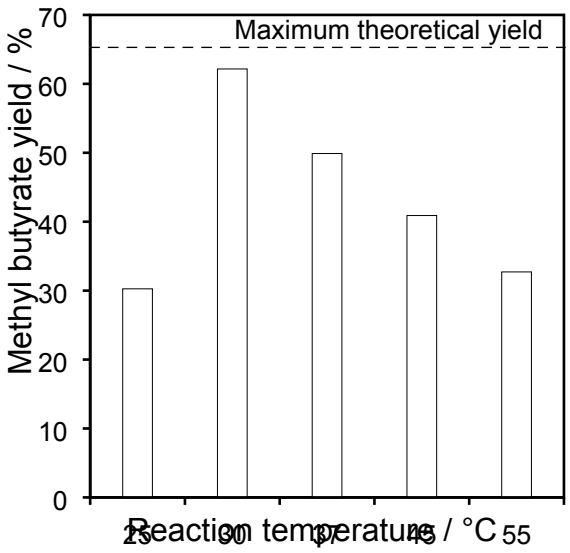

Fig. S5 Methyl butyrate yield over M2 catalyst as a function of reaction temperature. Reaction conditions: 0.8 µL.min^{-1}, methanol:tributyrin molar ratio = 2:1 and 20 h on-stream