Supporting Information to
Polyethylene glycol (400) as superior solvent medium against ionic liquids for
catalytic hydrogenations with PtO₂

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Spectra :

S2-S11

General experimental procedure: To the substrate (1 mmol) in polyethylene glycol (400 MW) (5 mmol) was added PtO₂ (0.05 mmol) under hydrogen atmosphere and stirred at ambient temperature (25 °C) for given time (see table 1). The reaction mixture was diluted with ether and stirred for 5 minutes at 0 °C temperature. The ether layer was decanted and the procedure repeated for four times. The combined ether layers was washed with water, brine and dried over Na₂SO₄. The volatiles were removed on a rotary evaporator and subsequent column chromatography gave pure reduced product in excellent yield (tables 1 and 2). The PEG layer was reused for further hydrogenations. This procedure is followed for the reduction of all the substrates listed in Table 1 and 2.

^1H NMR of **4b**

^{13}C NMR of **4b**

^1H NMR of **5b**

^{13}C NMR of **5b**

^1H NMR of **7b**

^{13}C NMR of **7b**

^1H NMR of **9b**

^{13}C NMR of **9b**