

Supporting Information

Fig. S1 In situ Raman spectra of the TS-1 $/H_2O_2/H_2O/CH_3OH$ system obtained at different times during the methanol-included epoxidation reaction, collected with a 244 nm laser: (a) Raman spectrum obtained at the 6th minute, (b) 12th minute, (c) 18th minute, (d) 25th minute, (e) 32th minute, (f) 38th minute, (g) 46th minute, (h) 54th minute and (I) 60th minute.



Fig. S2 In situ Raman spectra of the TS-1 $/H_2O_2/H_2O/CH_3OH$ system obtained at different times during the methanol-included epoxidation reaction, collected with a 244 nm laser: (a) Raman spectrum obtained at the 6th minute, (b) 12th minute, (c) 18th minute, (d) 25th minute, (e) 32th minute, (f) 54th minute.