Supporting Information

A unique route to fabricate mesoporous carbon with abundant ferric species as heterogeneous Fenton catalyst under neutral condition

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Table S1. Pore structural parameters of the prepared KIT-6 and mesoporous Fe/mC catalysts.

catalyst	S_{BET} ($m^2 \cdot g^{-1}$)	d_{BJH} (nm)	Pore volume ($cm^3 \cdot g^{-1}$)
KIT-6	758.4	5.32	0.82
Fe/mC-450-H	689.2	3.96	0.36
Fe/mC-450-N	675.7	3.42	0.31
Fe/mC-800-H	340.8	4.36	0.27

Table S2. XPS of Fe 2p in mesoporous Fe/mC catalysts.

catalyst	Fe^{2+}	Fe^{3+}	Fe^{0}
Fe/mC-450-N	51.47%	48.53%	0
Fe/mC-450-H	42.58%	36.34%	21.08%

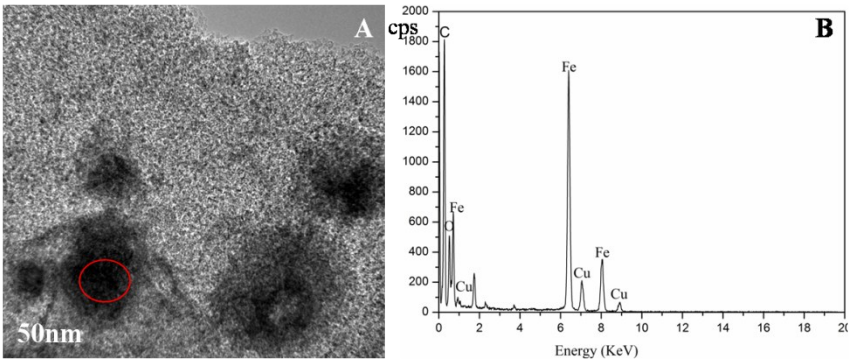

Figure S1. TEM images of the mesoporous Fe/mC-800-H (A) and the corresponding EDS pattern.

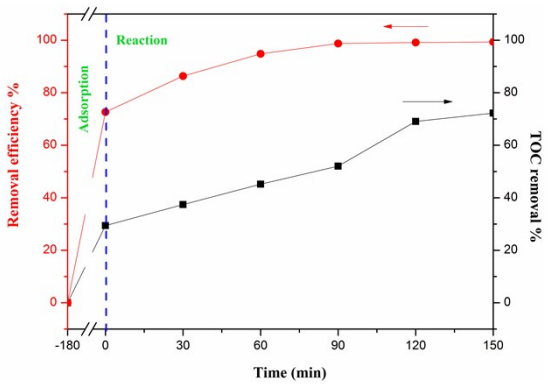

Figure S2 Removal efficiency and relative TOC removal of the MB solution (0.6 g. L^{-1} catalysts, 200 mg. L^{-1} MB, 150 mM H_2O_2, 25 ˚C) on the sample Fe/mC-450-H.

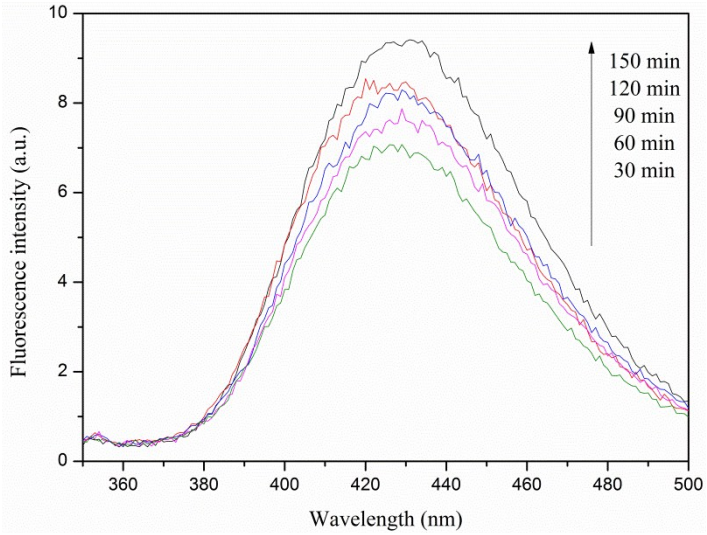

Figure S3 PL spectra recorded during the degradation on the Fe/mC-450-H sample in 2 mM NaOH solution in the presence of 0.5 mM terephthalic acid.