Supporting Information

Grafting of Rhenium-oxo complex to Schiff base functionalized graphene oxide: an efficient catalyst for the oxidation of amines.

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Table S1: Infrared vibration frequencies of GrO, GrO-MTO, and intermediate products with their vibrational assignments.

GrO	GrO-APTMS	GrO-SB	GrO-MTO	Assignment
3409.4		3459.2	3424.9	O-H stretch
	3423.7			N-H / O-H stretch
	2926.5	2928.3	2930.1	C-H asym stretch (CH_2)
	2858.9			C-H sym stretch (CH_2)
	2960.9			C-H asym stretch (CH_3)
1724.9				C=O stretch
1622.0	1630.4	1632.4	1632.6	C=C stretch
		1582.0	1591.8	C=N stretch
	1573.2			N-H bending
1229.0			1229.0	C-O stretch
	1195.9	1195.3		C-N stretch
	1121.5	1117.7	1131.1	Si-O-Si stretch
1073.9				C-O-C stretch (epoxy)
	1034.6	1050.5	1048.0	Si-O-C stretch
			912.2	Re=O stretch
		756.6	768.8	C-H bending (ortho)

Fig. S1: TG-DTA curve of graphene oxide

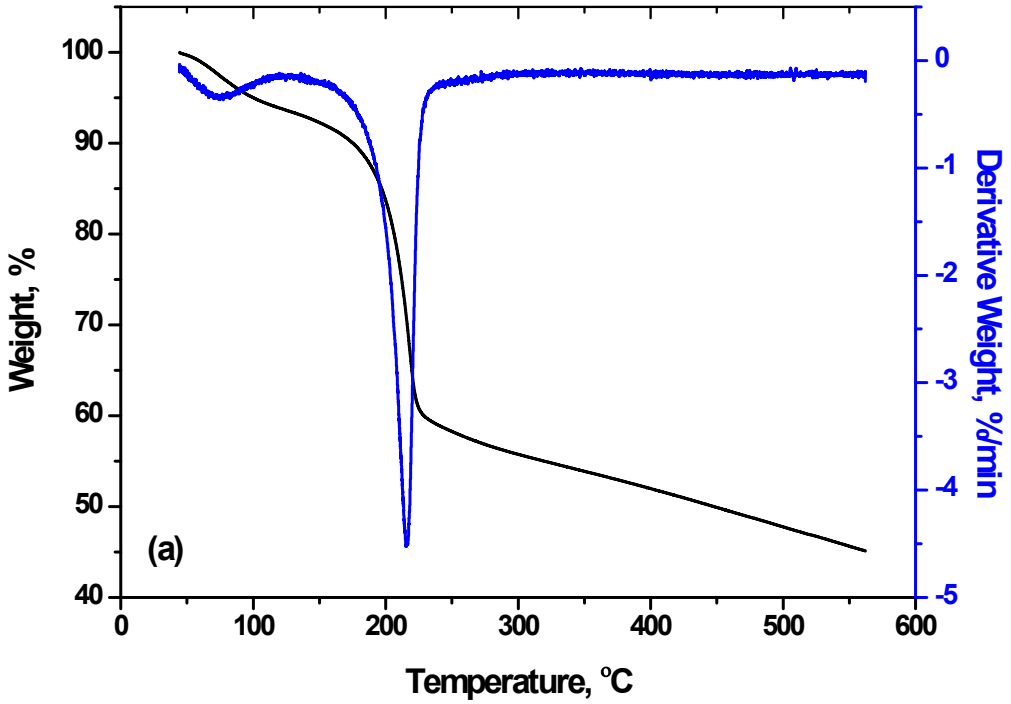


Fig. S2: TG-DTA curve for the GrO-MTO catalyst

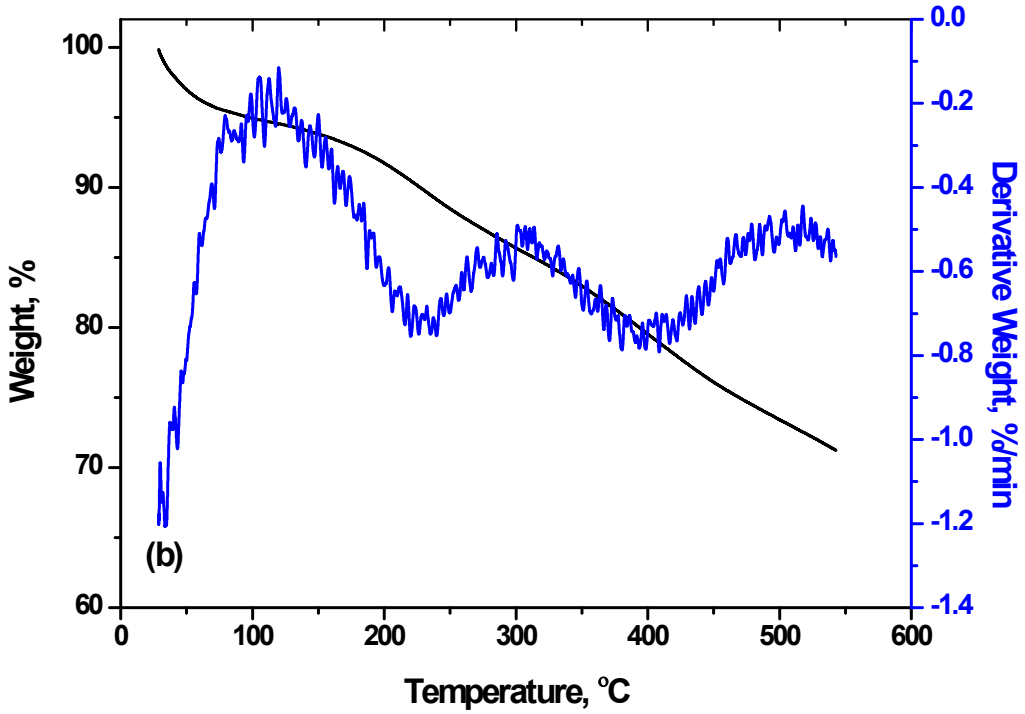
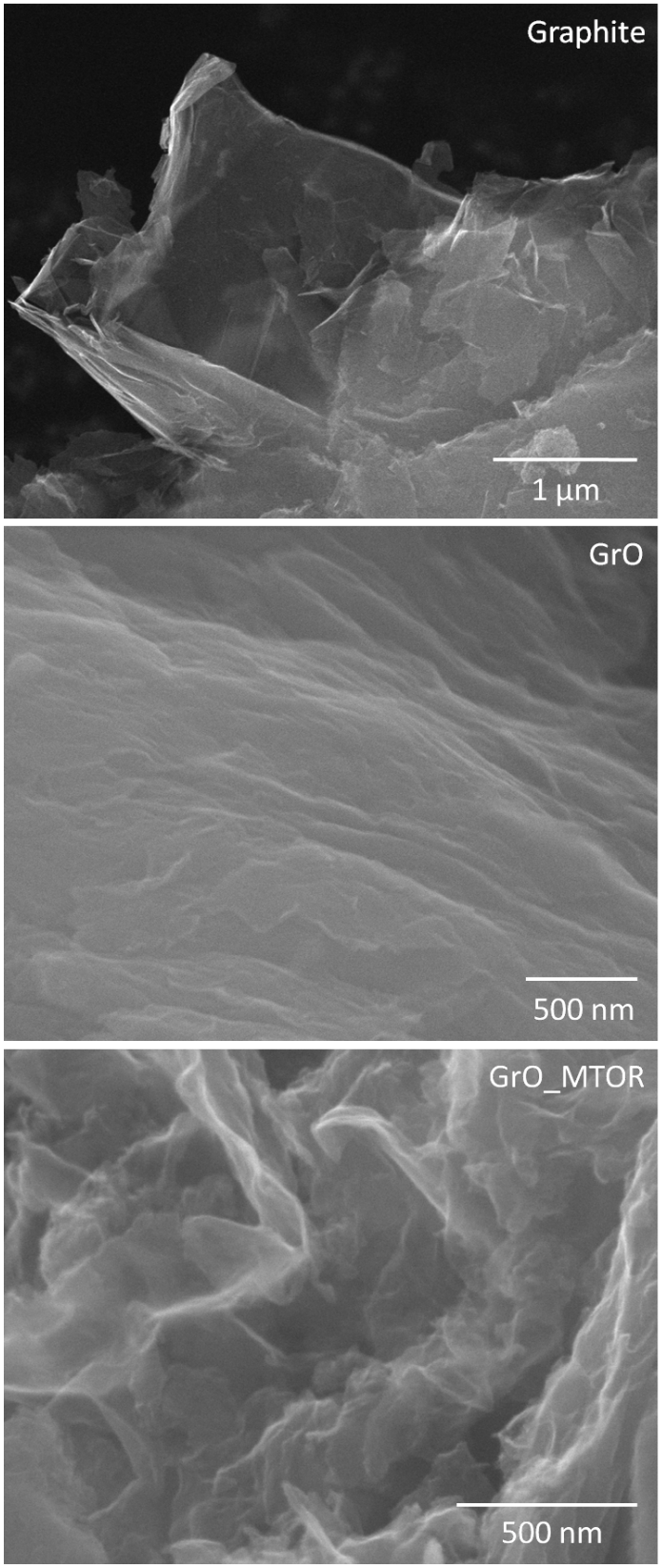


Fig. S3: FESEM images of (a) pristine graphite powder used for preparation of graphene oxide, (b) graphene oxide, and (c) GrO-MTO catalyst.



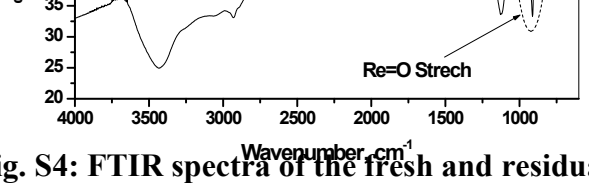


Fig. S4: FTIR spectra of the fresh and residual (recovered) catalysts IV after third run

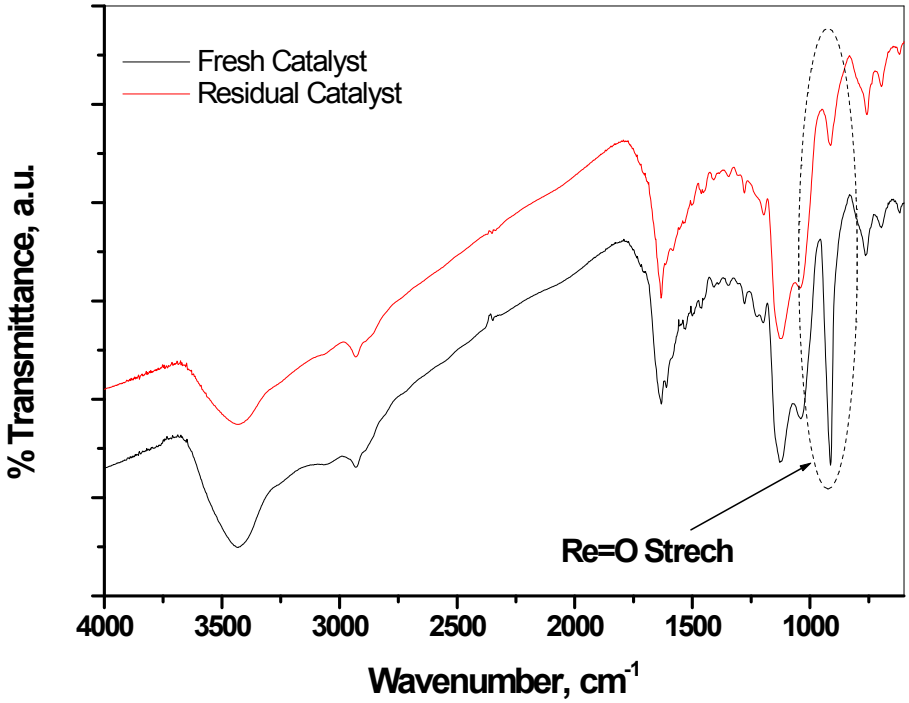


Fig. S5: FTIR of Fresh GrO and after its reaction with H_2O_2 at 60 °C in methanol.