

## Supporting information

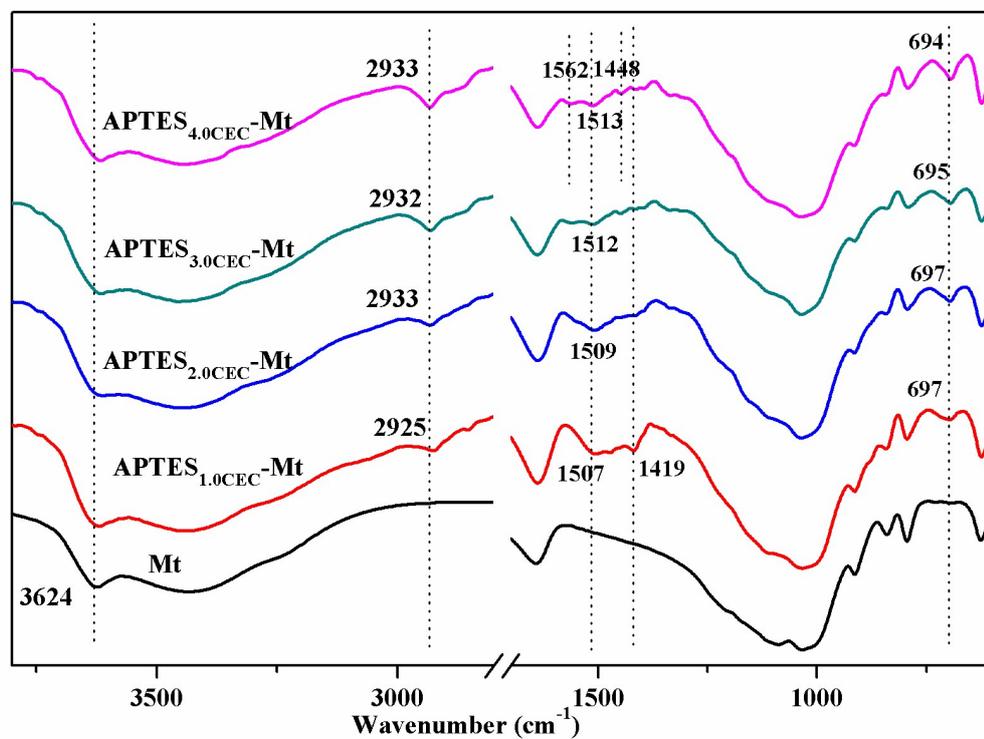


Fig. S1 Infrared spectra of Mt and APTES-Mts

Table S1 Point of zero charge and structural data of Mt and APTES-Mts

( $S_{\text{ext}}$ =external surface area,  $D_a$ =average pore diameter,  $V_t$ =total porous volume,  $V_{\text{micro}}$ =microporous volume).

Samples	pH <sub>zpc</sub>	$S_{\text{BET}}$ (m <sup>2</sup> /g)	$S_{\text{ext}}$ (m <sup>2</sup> /g)	$D_a$ (nm)	$V_{\text{micro}}$ (cm <sup>3</sup> / g)	$V_t$ (cm <sup>3</sup> /g)
Mt	<1.0	71.15	51.90	13.629	0.00844	0.141403
APTES <sub>1.0CEC</sub> -Mt	2.2	81.54	33.62	196.22	0.02198	0.105614
APTES <sub>2.0CEC</sub> -Mt	6.0	16.48	14.17	290.56	0.00078	0.065644
APTES <sub>3.0CEC</sub> -Mt	7.8	17.59	15.07	264.43	0.00084	0.064276
APTES <sub>4.0CEC</sub> -Mt	8.3	11.91	9.94	341.42	0.00067	0.052098