## Novel CeMo $_xO_y$ -clay hybrid catalysts with layered structure for

## selective catalytic reduction of $NO_x$ by $NH_3$

Boyang Xu,<sup>a,b,c</sup> Youlin Liu, <sup>a,b,c,\*</sup> Yuesong Shen <sup>a,b,c,\*</sup> and Shemin Zhu <sup>a,b,c</sup>



Figure S1 TEM of the  $CeMo_{0.15}O_x$ -OC-550 catalyst



Figure S2 a)  $NH_3$ -TPD and b)  $H_2$ -TPR of CeMo<sub>x</sub>O<sub>y</sub>-OC-550 catalysts with different Mo/Ce ratios



Figure S3 XPS spectra of Ce 3d for CeO<sub>2</sub>-OC-550 and CeMo<sub>0.15</sub>O<sub>x</sub>-OC-550 catalysts.



Figure S4 a)  $NH_3$ -TPD and b)  $H_2$ -TPR of  $CeMo_{0.15}O_x$ -OC-T catalysts with different calcination temperature.