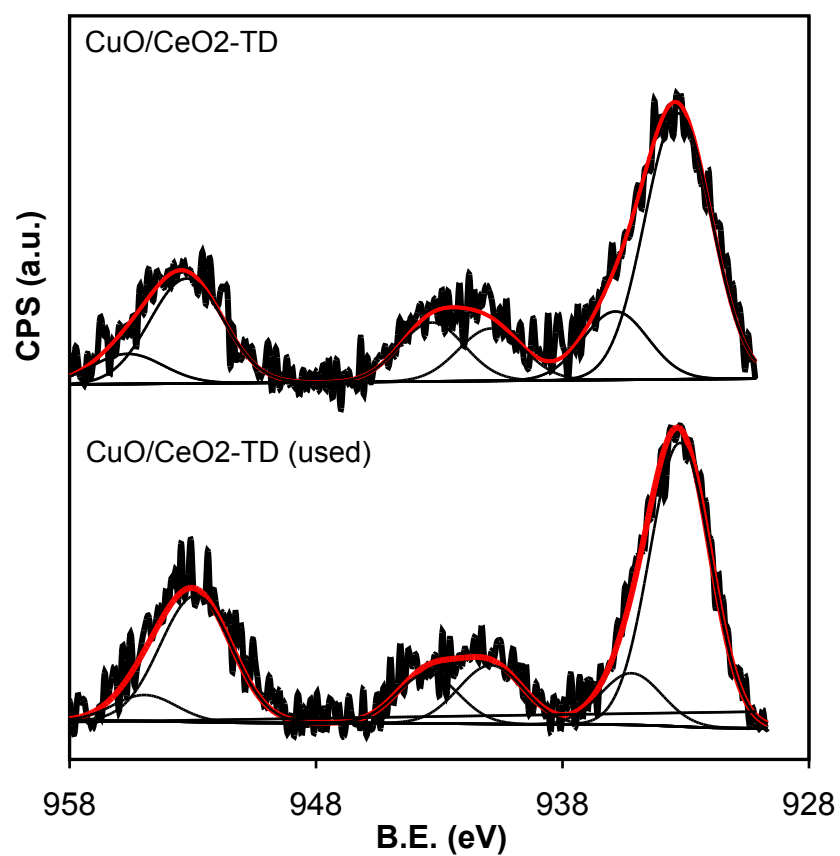
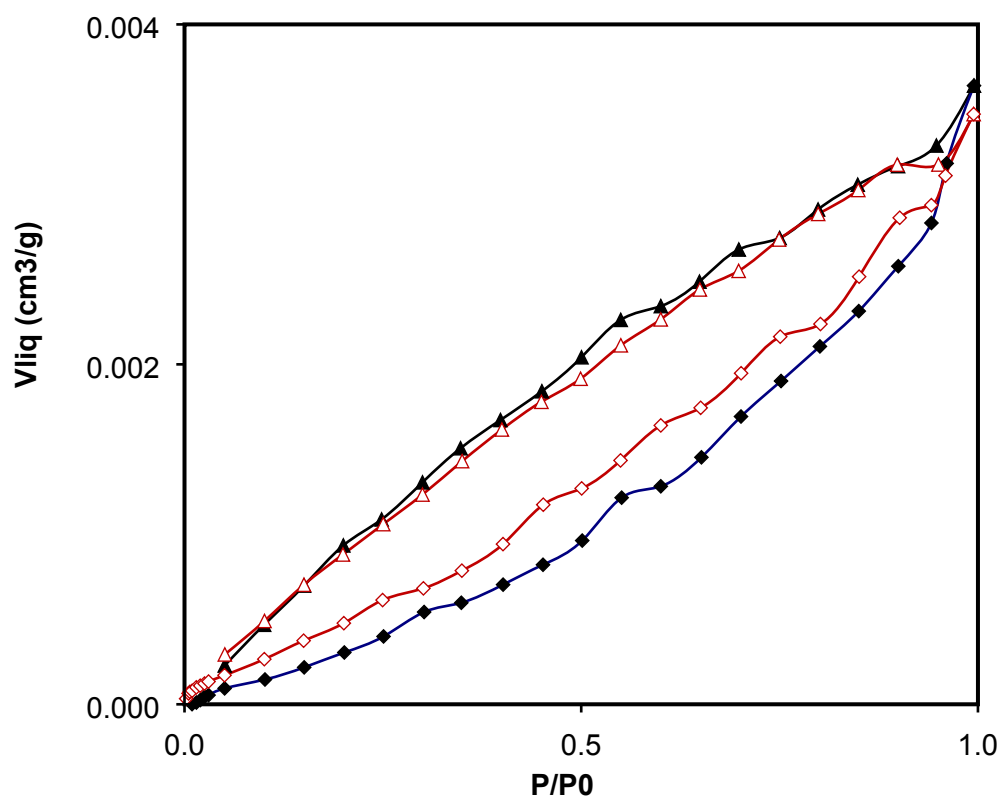


**Figure S1.** Selectivity to CO ( $S_{CO}$ ) of the CuO/CeO<sub>2</sub> active phase supported on carbon monolith with a) conventional design (CD) and b) tortuous design (TD) for CO oxidation in CO-PROX conditions: 2% CO, 2% O<sub>2</sub>, 30% H<sub>2</sub> in He balance at flows ranging from 90 to 300 mL/min.



**Figure S2.**  $\text{Cu}_{2p}$  spectral region of  $\text{CuO/CeO}_2\text{-TD}$  before and after reaction.



**Figure S3.** N<sub>2</sub>-adsorption isotherms of CuO/CeO<sub>2</sub>-TD before (close symbols) and after (open symbols) reaction.