

Supporting Information

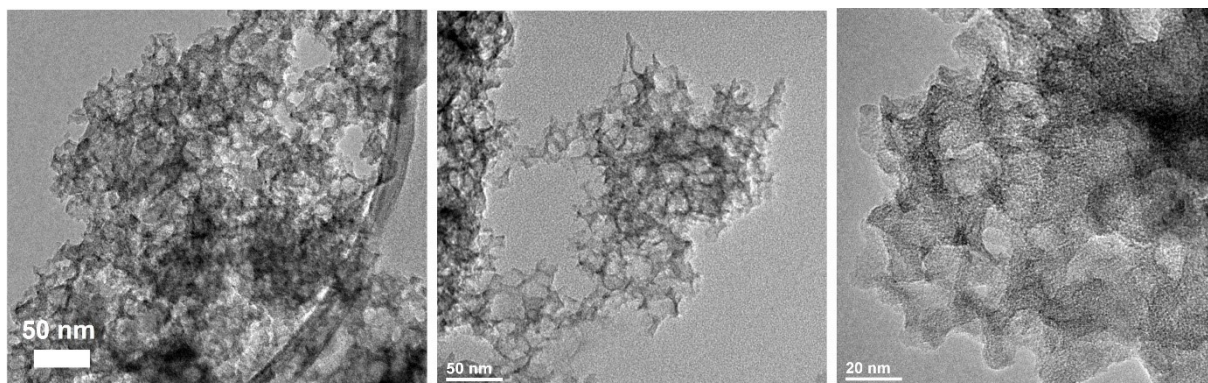


Figure S 1 TEM images of CN-meso

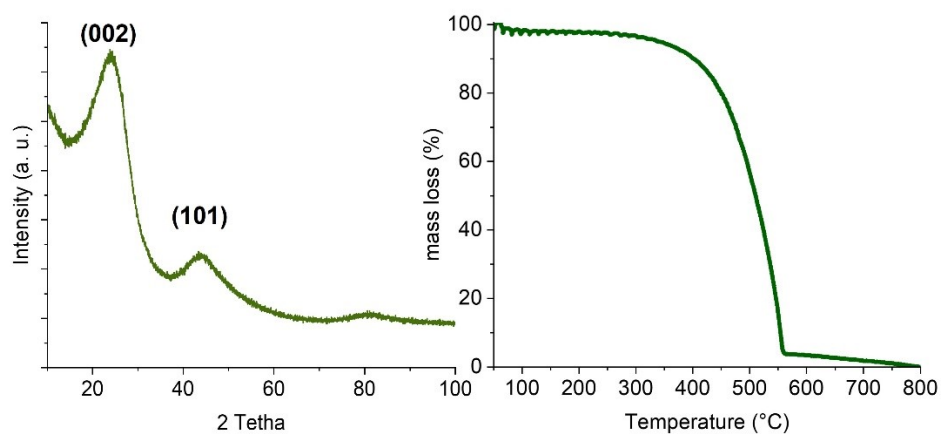


Figure S 2 XRD analysis (left frame) and TG analysis (right frame) of CN-meso

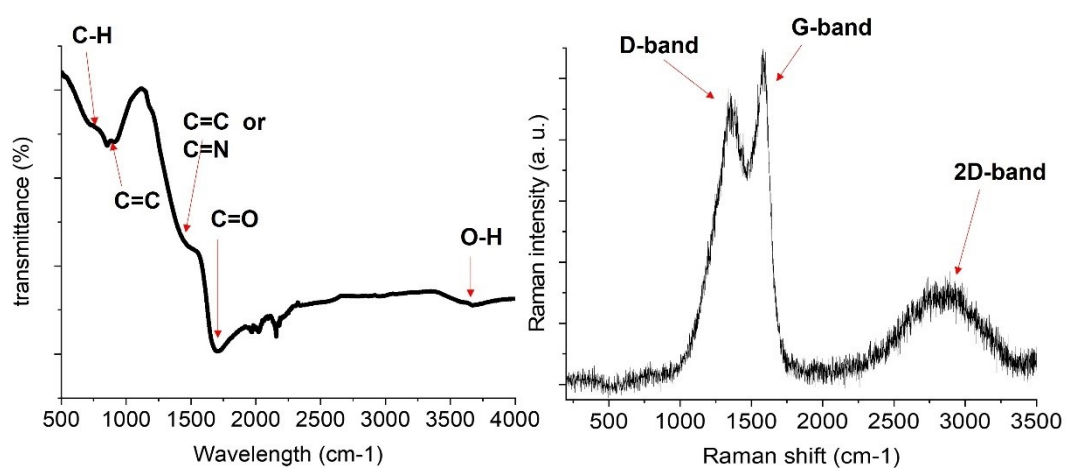


Figure S 3 FTIR of CN-meso (left) and Raman Spectra of CN-meso (right)

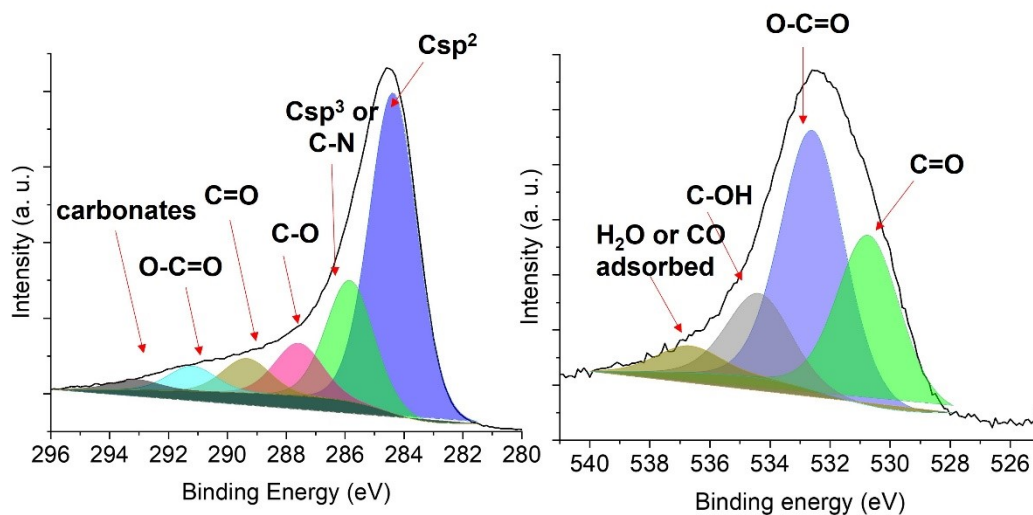


Figure S 4 High-resolution C1s XPS spectra (left) and high-resolution O1s XPS spectra of CN-meso.

Table S 1 Surface area and pore volume values of synthesized materials

Material	Surface area (m ² /g)	Pore volume (cm ³ /g)
CN-meso	834	3.3
CN-meso/Ni	789	3.1
CN-meso/Co	801	2.9
CN-meso/Cu	762	3.2
Cn-meso/Fe	720	3.0

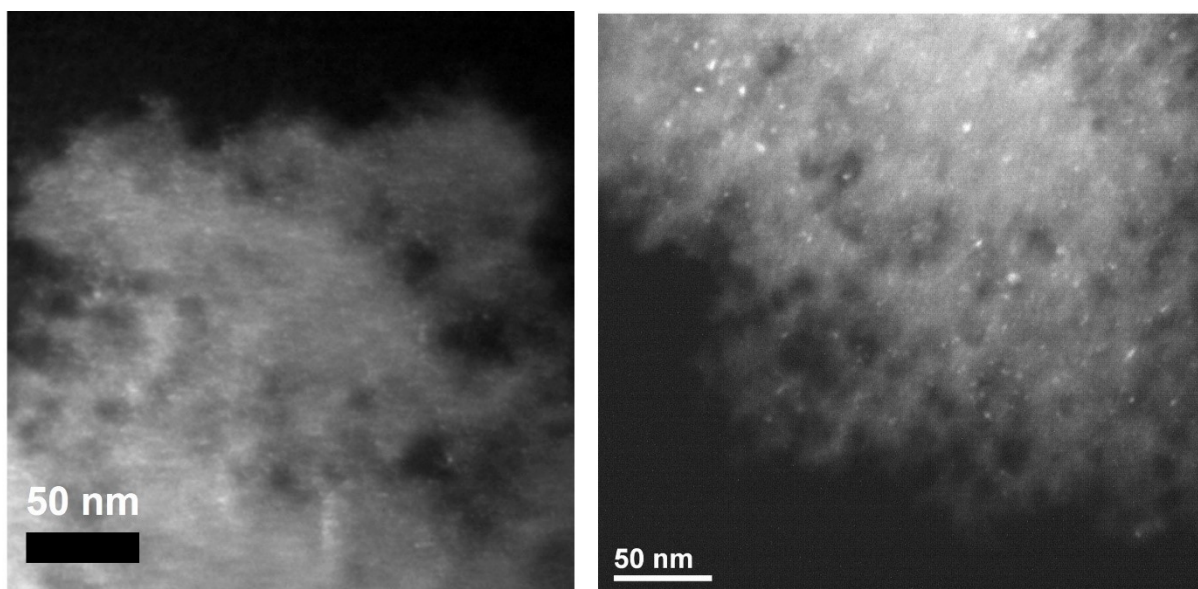


Figure S 5 Dark-field TEM images of CN-meso/Ni (left) and CN-meso/Fe (right)

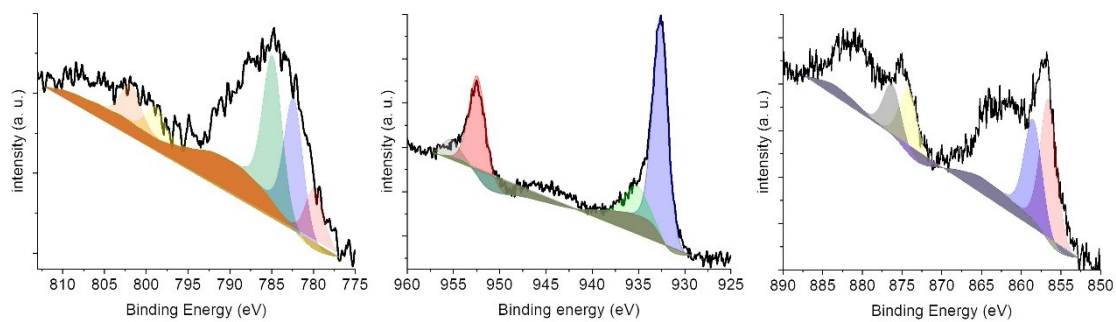


Figure S 6 High-resolution XPS of spent catalysts (a) CN-meso/Co; (b) CN-meso/Cu; (c) CN-meso/Ni

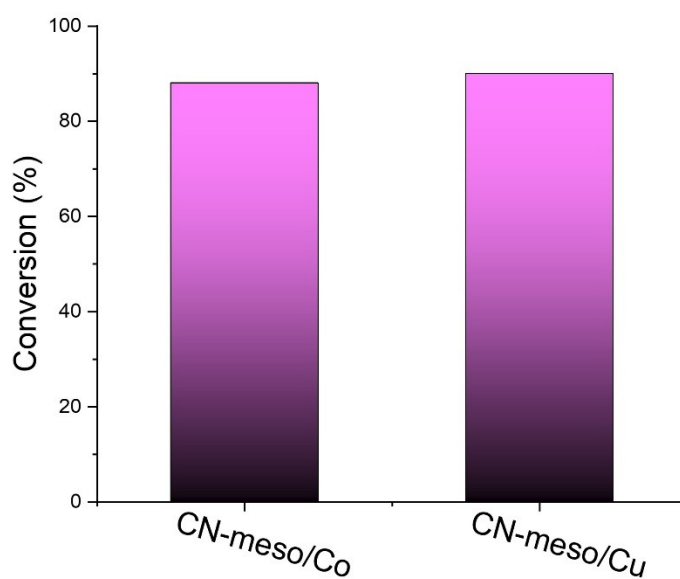


Figure S 7 Conversion of benzyl alcohol with the addition of sodium azide (25 eq.) as a scavenger

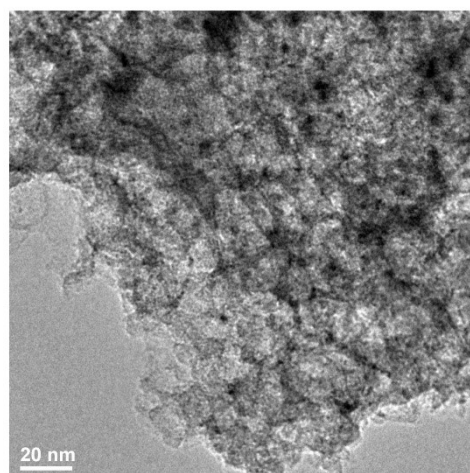
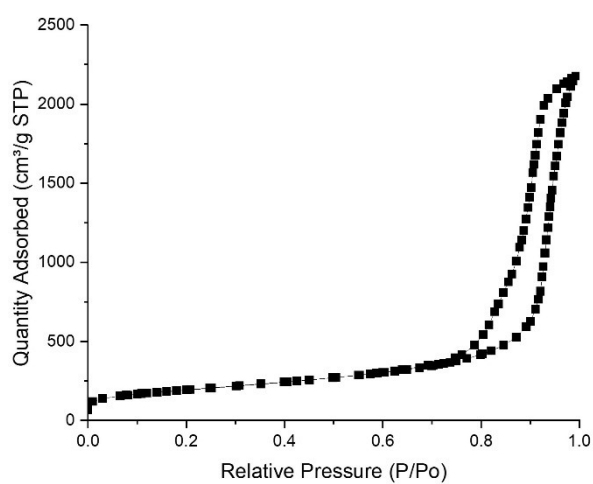


Figure S 8 N_2 physisorption isotherm of CN-meso/Cu (left) and TEM image of CN-meso/Cu after 5 cycles