

## Supporting Information for

# Synthesis and Characterization of Zero-Valent Fe-Cu and Fe-Ni Bimetals for the Dehalogenation of Trichloroethylene Vapors

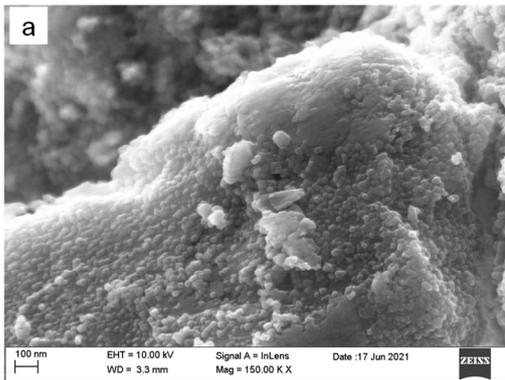
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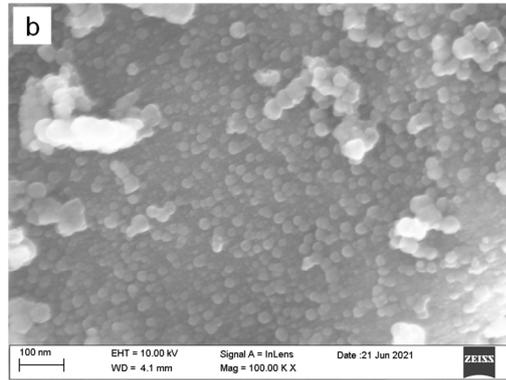
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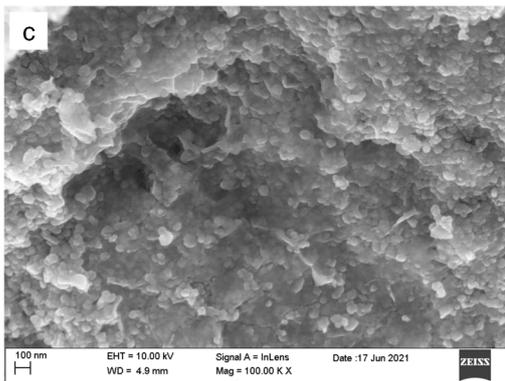
Bimetal Fe-1%Cu



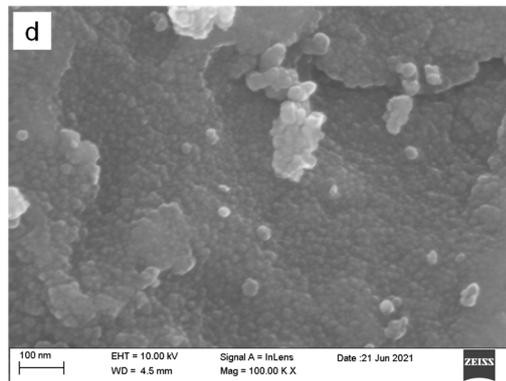
Bimetal Fe-1%Ni



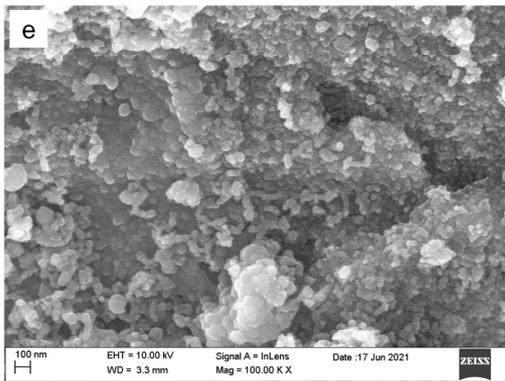
Bimetal Fe-5%Cu



Bimetal Fe-5%Ni



Bimetal Fe-20%Cu



Bimetal Fe-20%Ni

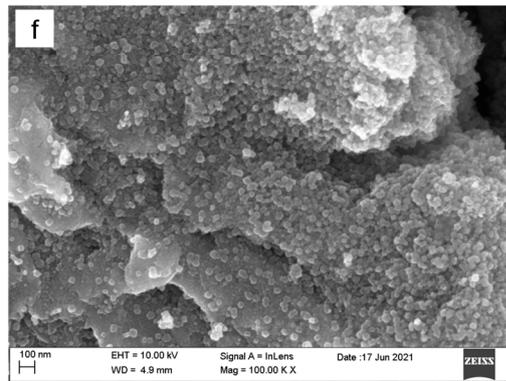
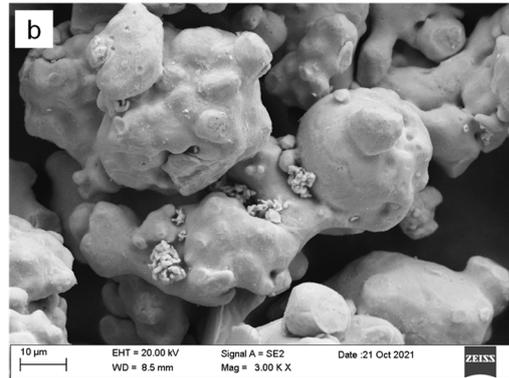
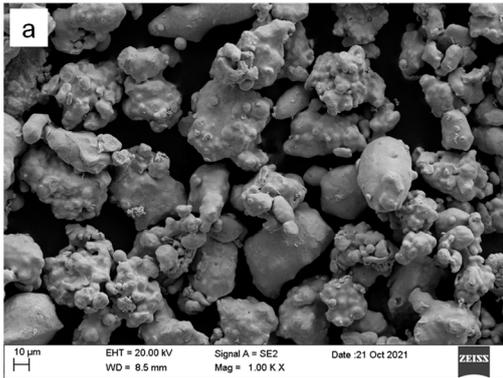


Figure S1: SEM images of Fe-Cu and Fe-Ni bimetals at high magnification: Fe-1%Cu (a), Fe- 5-%Cu (c), Fe-20%Cu (e), Fe-1%Ni (b), Fe-5%Ni (d), Fe-20%Ni (f)

Mixture Fe-5%Cu\*



Mixture Fe-5%Ni\*

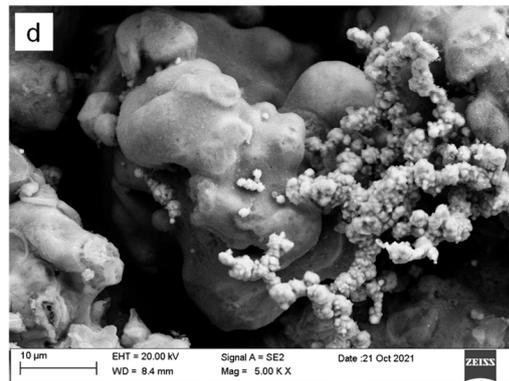
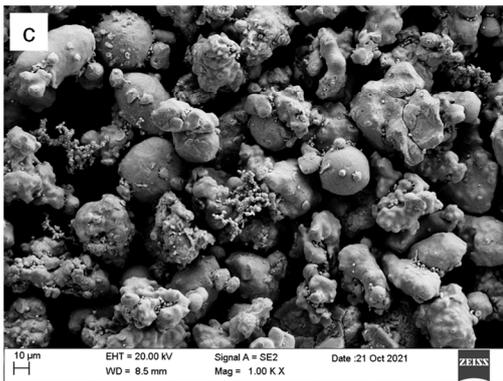


Figure S2: SEM images of Fe-5%Cu\* (a,b) and Fe-5%Ni\*(c,d) mixtures

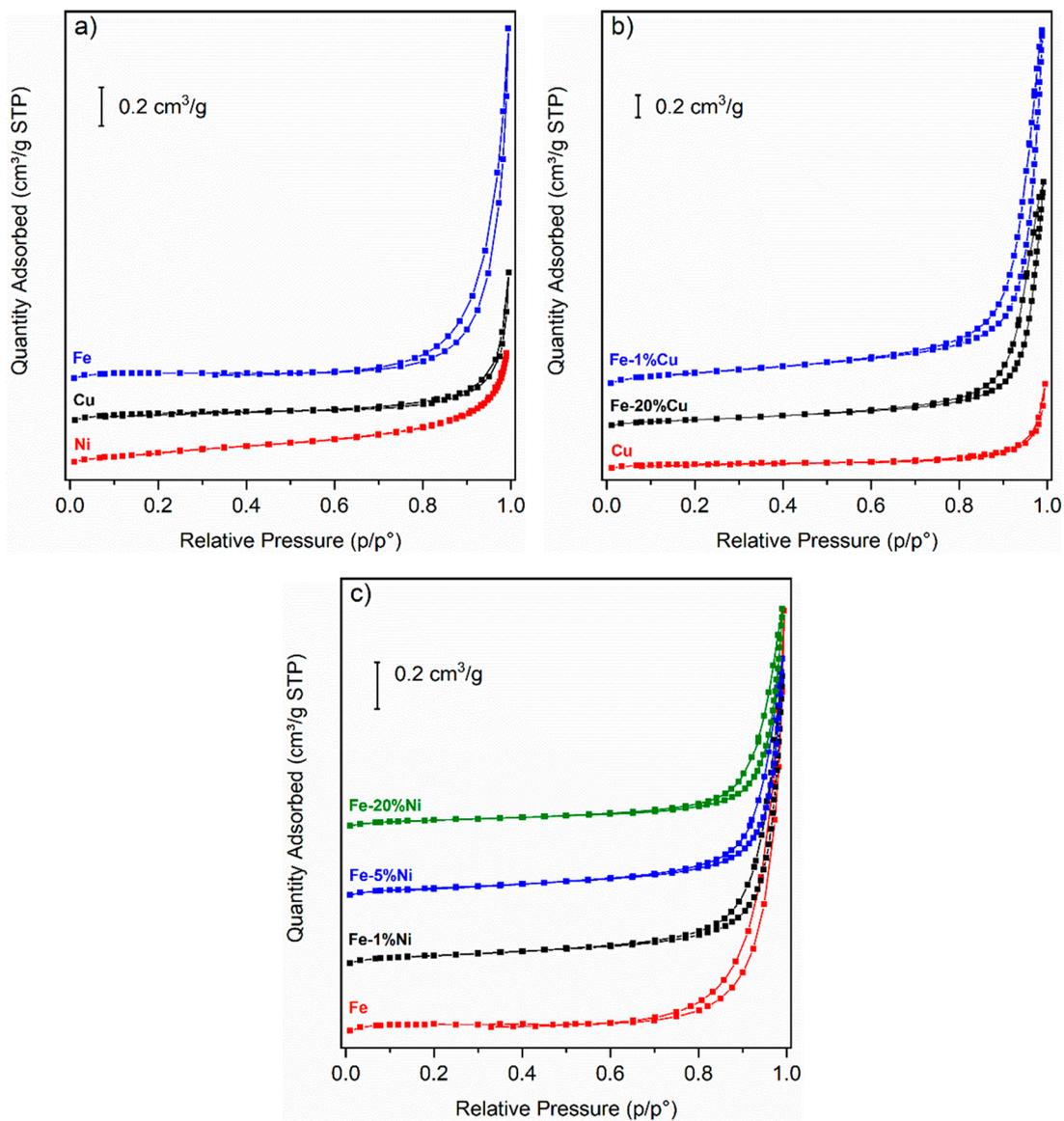


Figure S3: Adsorption-desorption isotherms of  $N_2$  for the samples: Fe, Cu, Ni (a); Cu, Fe-1% Cu, Fe-20% Cu (b); Fe, Fe-1% Ni, Fe-5% Ni, Fe-20% Ni (c). Note that data for the Fe-5%Cu sample are not reported as lower than the LOQ.