Electronic Supplementary Material (ESI) for Catalysis Science & Technology.

Supporting Information

Magnetically retrievable silica based Nickel nanocatalyst for Suzuki-Miyaura Cross coupling reactions

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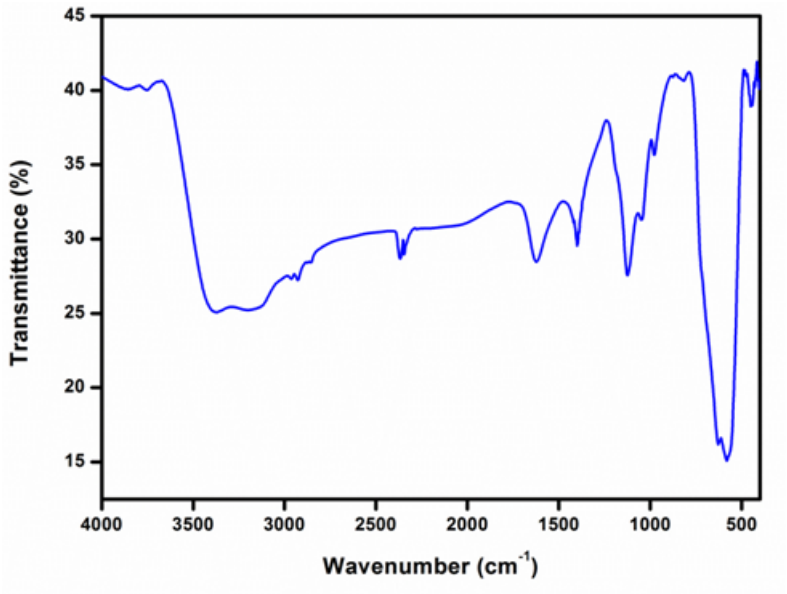
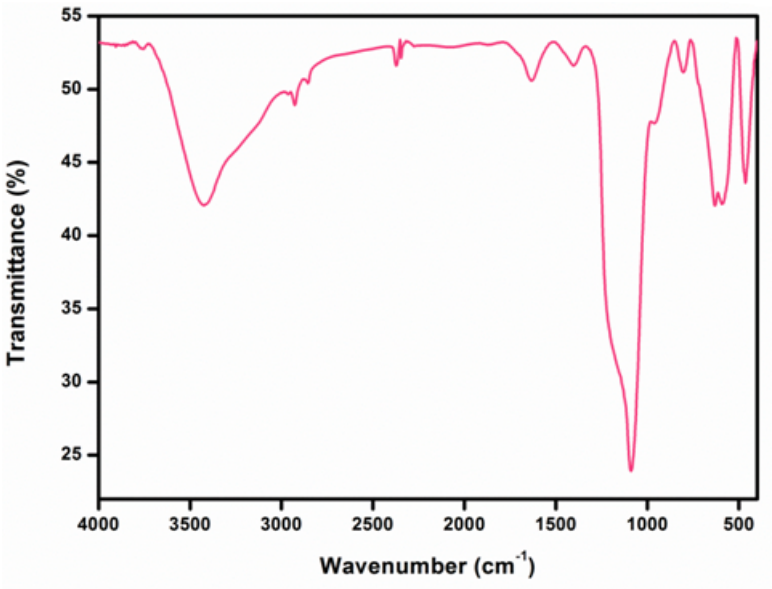
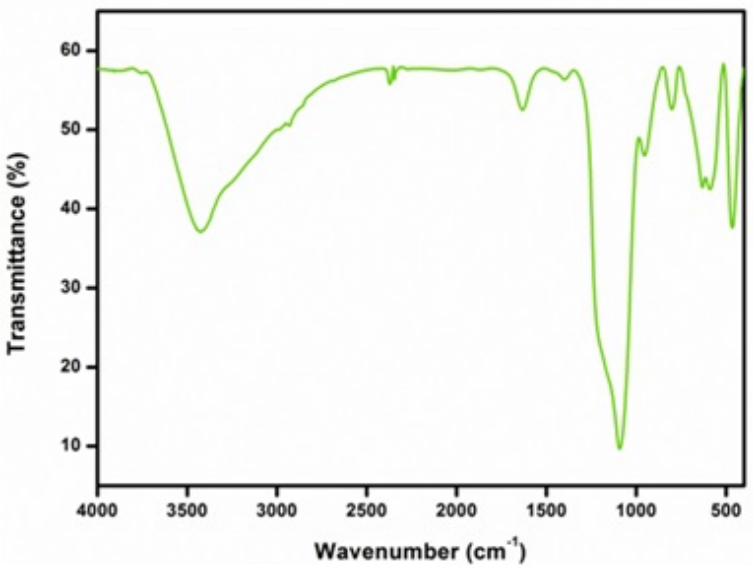
Figure S1. Individual FT-IR Spectra



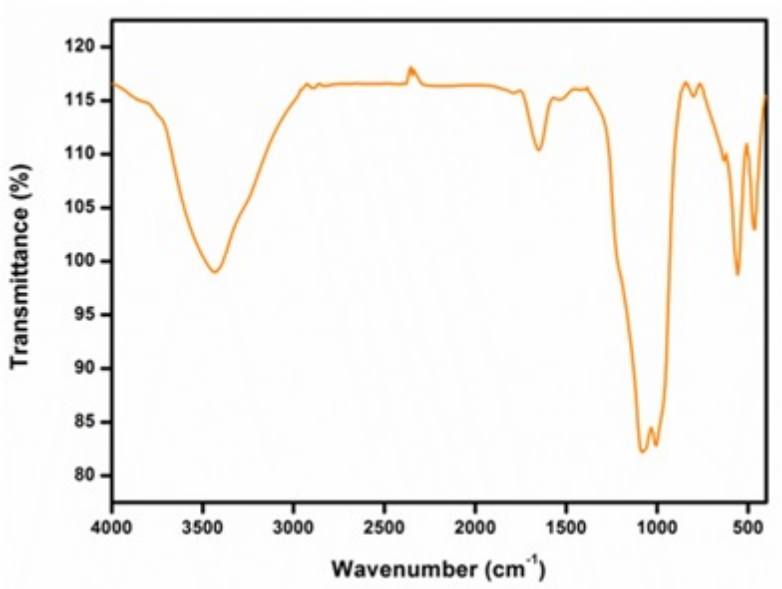
FT-IR spectra of MNP



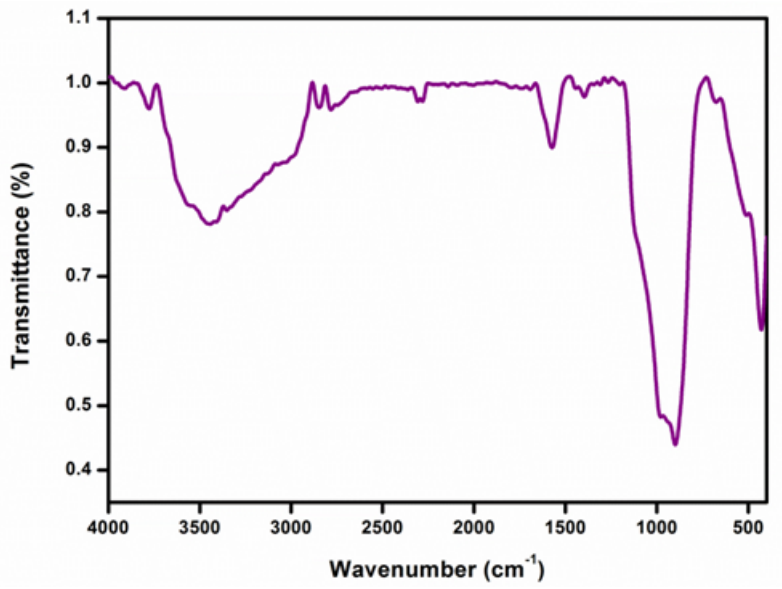
FT-IR spectra of SMNP



FT-IR spectra of ASMNP

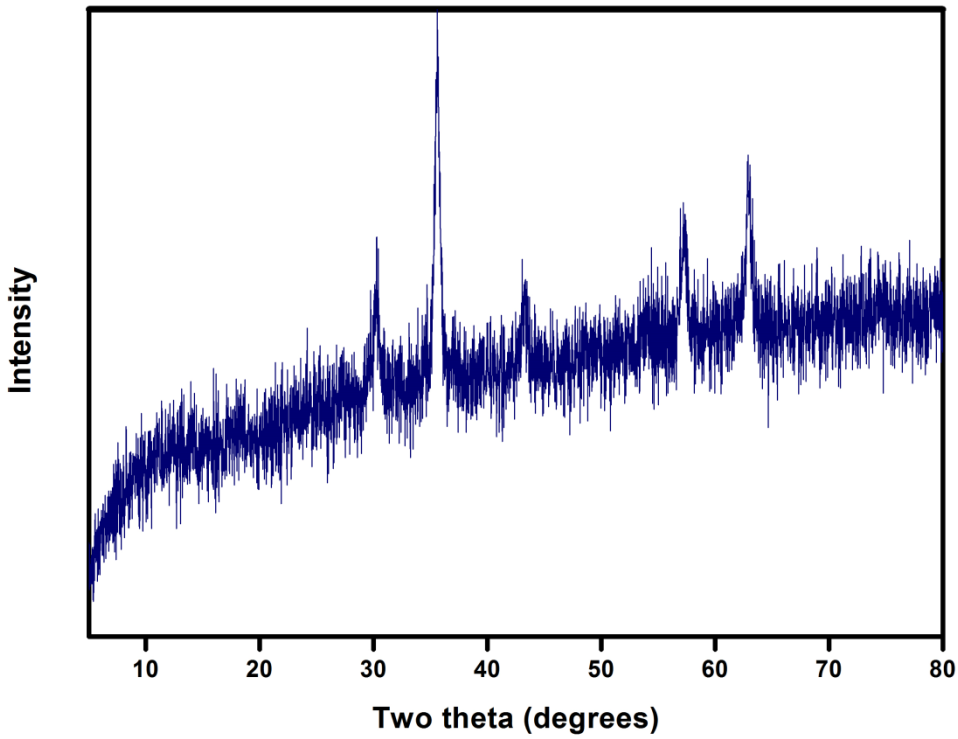


FT-IR spectra of TC@ASMNP

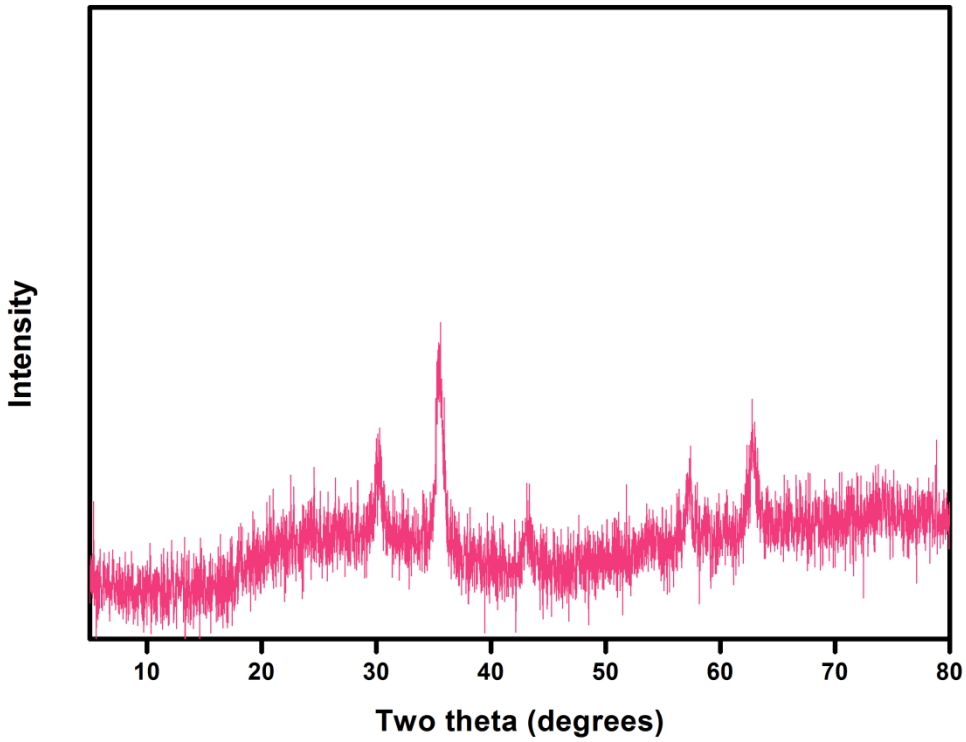


FT-IR spectra of Ni-TC@ASMNP

Figure S2. Individual XRD analysis of nanoparticles



XRD analysis of MNP



XRD analysis of SMNP

Figure S3. Size distribution histogram for MNPs

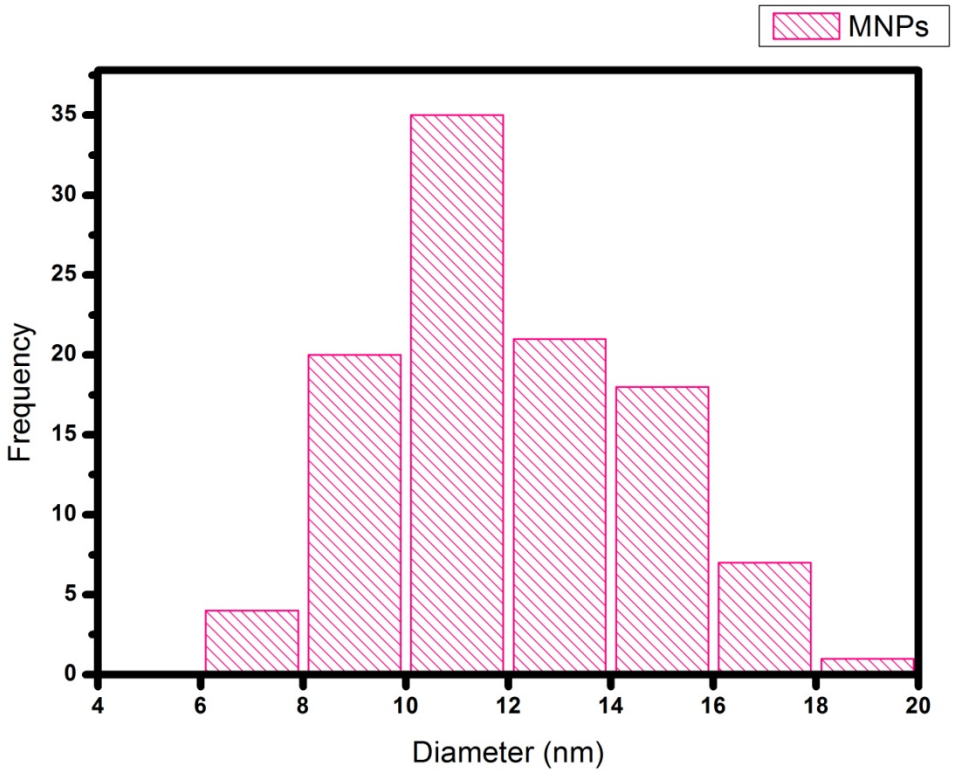


Figure S4. TEM micrograph of fresh catalyst

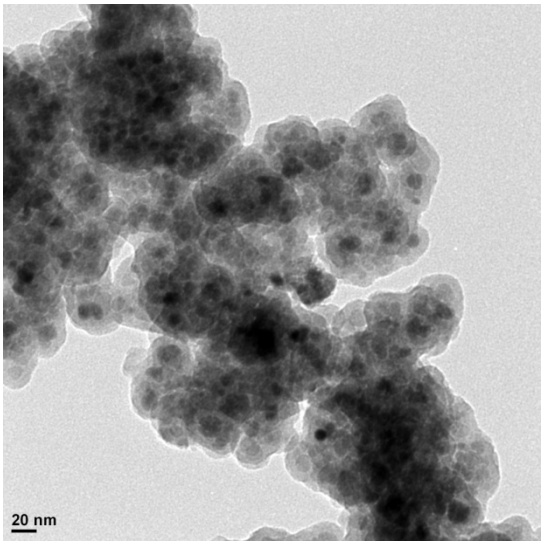
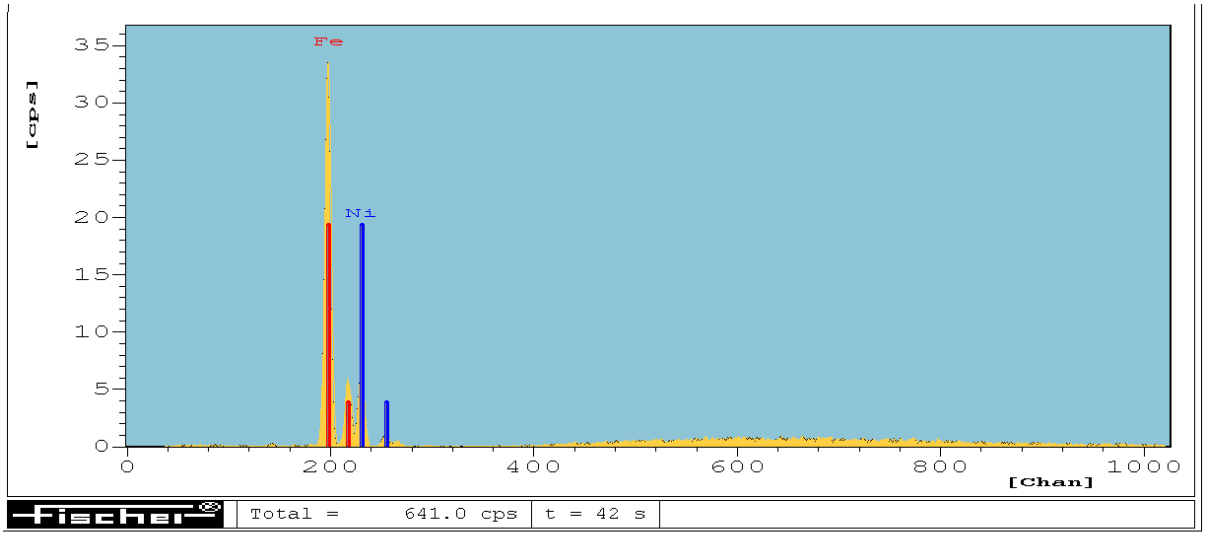


Figure S5. EDX Spectra of Ni-TC@ASMNP

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Meas. para. (foreground spectrum):
High voltage = 50 kV (875)  Prim. Filter =  Al1000
Collimator 4 =  2.00 Dm.    Anode current 138 uA
Meas. distance = 0.04 mm

List of spectra:
          Foreground: Measured spectrum
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Figure S6. TEM micrograph of recovered catalyst

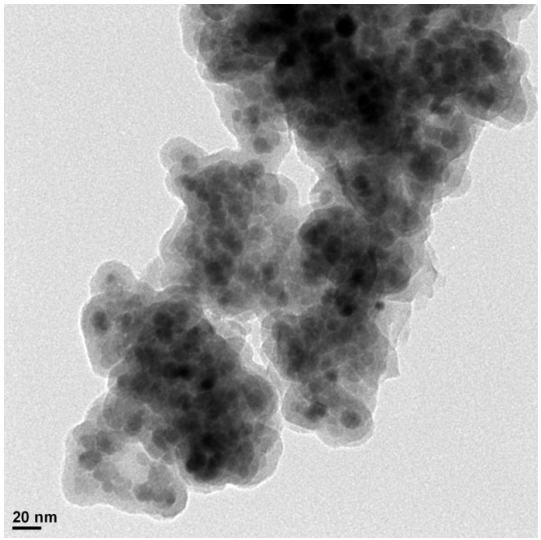

Figure S7. EDS pattern of recovered catalyst

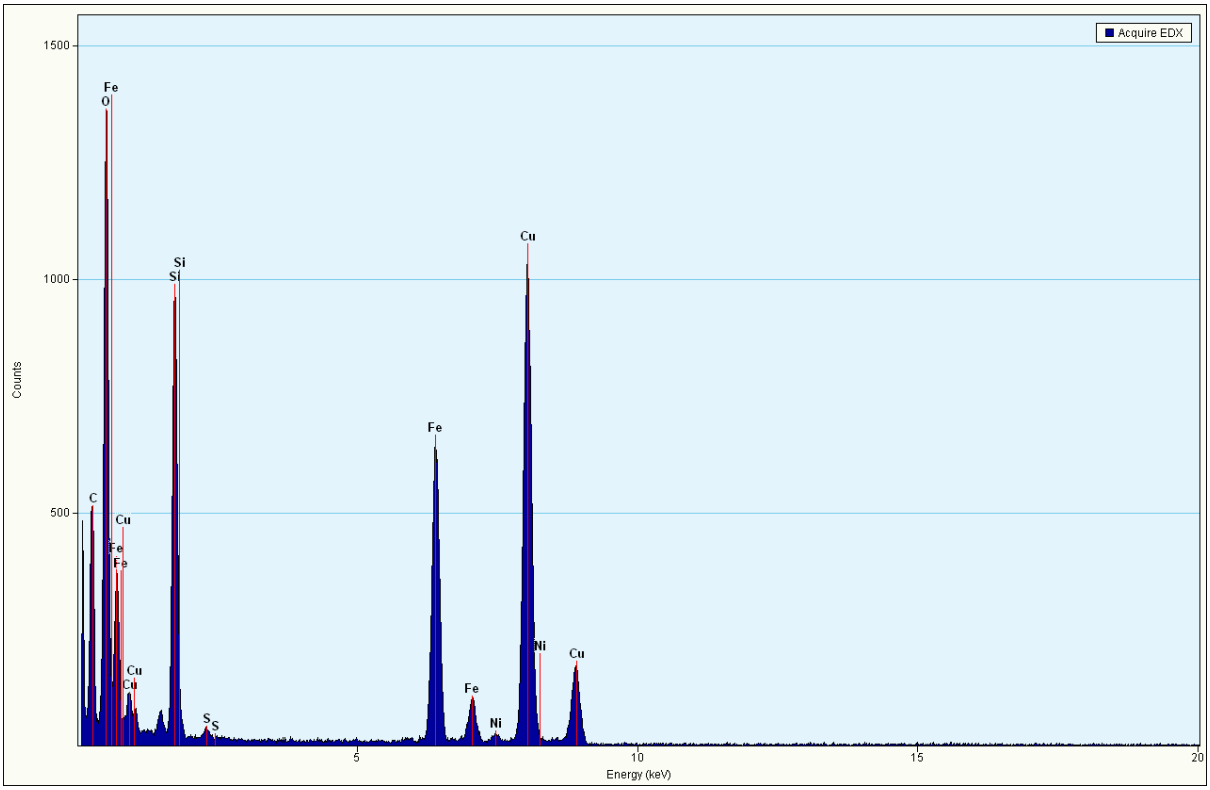

Figure S8. XPS Spectrum of Fresh catalyst

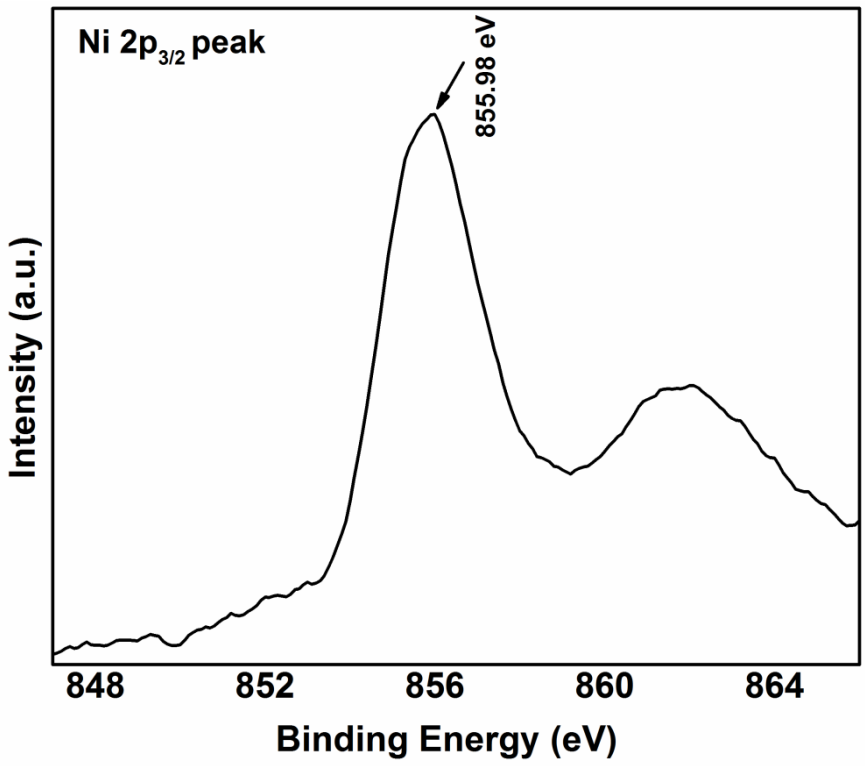

Figure S9. XPS Spectrum of Used catalyst

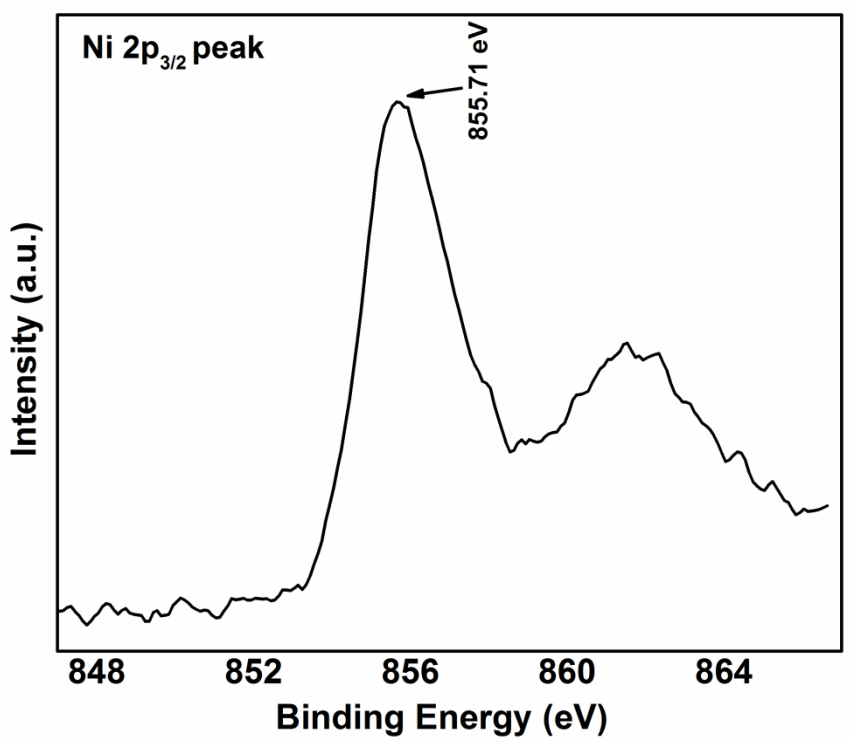

Figure S8 and S9 shows the XPS spectra of fresh and used Ni-TC@ASMNP catalyst. Reported value for NiO species at 852.0–853.0 eV while observed peaks at higher binding energy (855.98 eV and 855.71 eV) confirm Ni^{2+} ion in the catalyst.