

Annex1\_1.-6mPPR\_IOS



(a) Lab-scale equipment (reaction V=100 ml) & (b) Scale-up reactor for synthesis performance of magnetic nanomaterial (reaction V=4L)



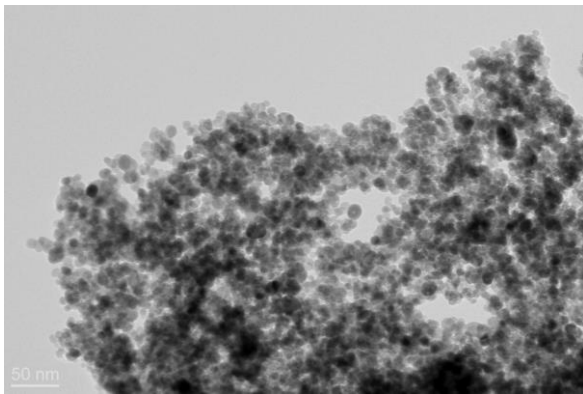
(a)

(b)



Figure: (a) Lab-scale (LS  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> MNPs) & (b) Scale-up (SUP  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> MNPs ) synthesized magnetic nanoparticles

(a)



(b)

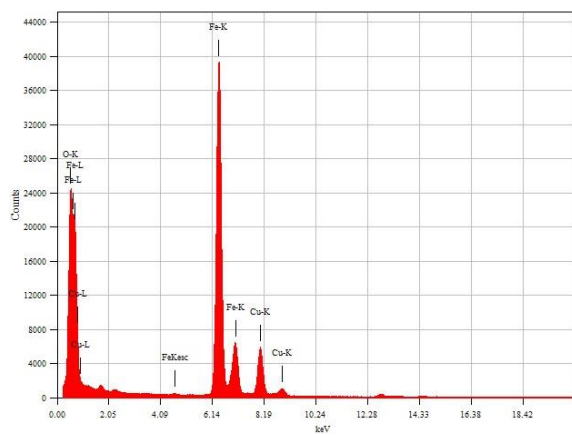
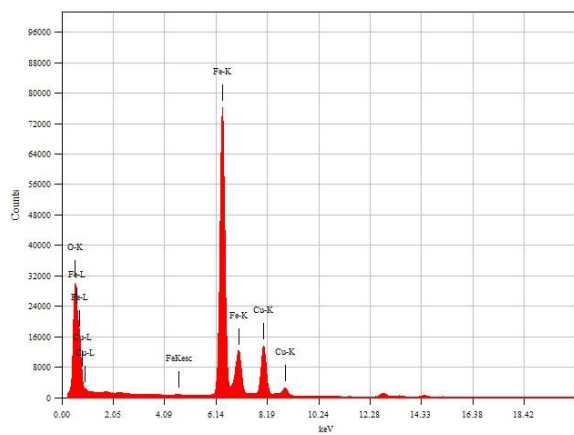
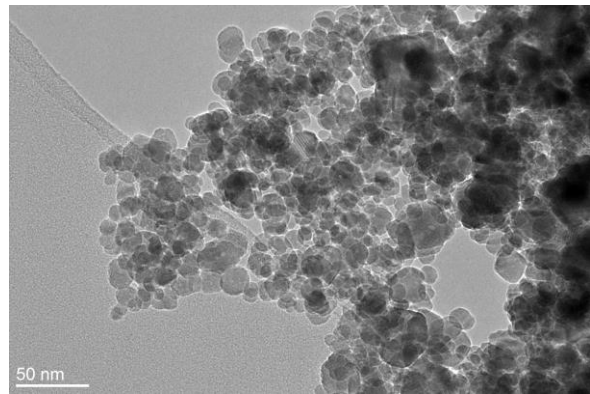


Figure: Transmission electron micrographs with corresponding EDX spectra of (a) Lab-scale (LS  $\gamma$ - $\text{Fe}_2\text{O}_3$  MNPs) produced MNs & (b) Scale-up (SUP  $\gamma$ - $\text{Fe}_2\text{O}_3$  MNPs) produced MNPs.