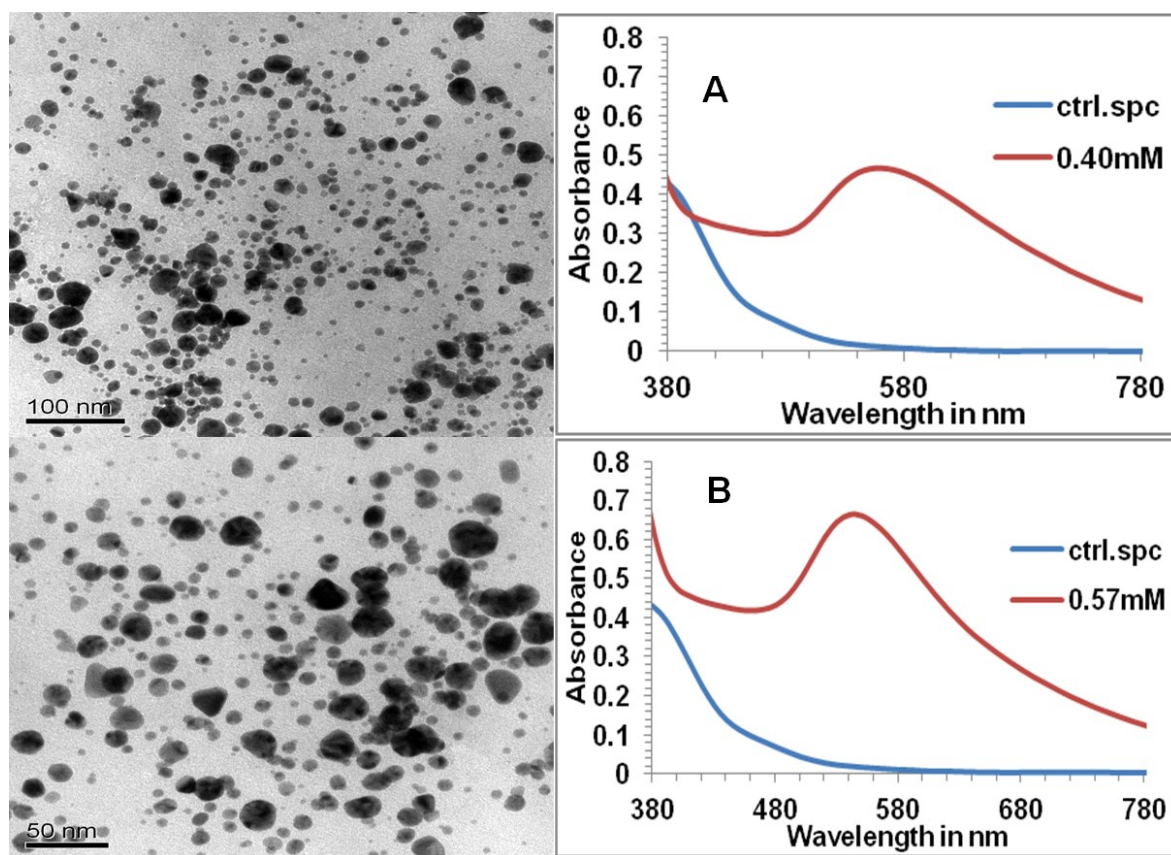
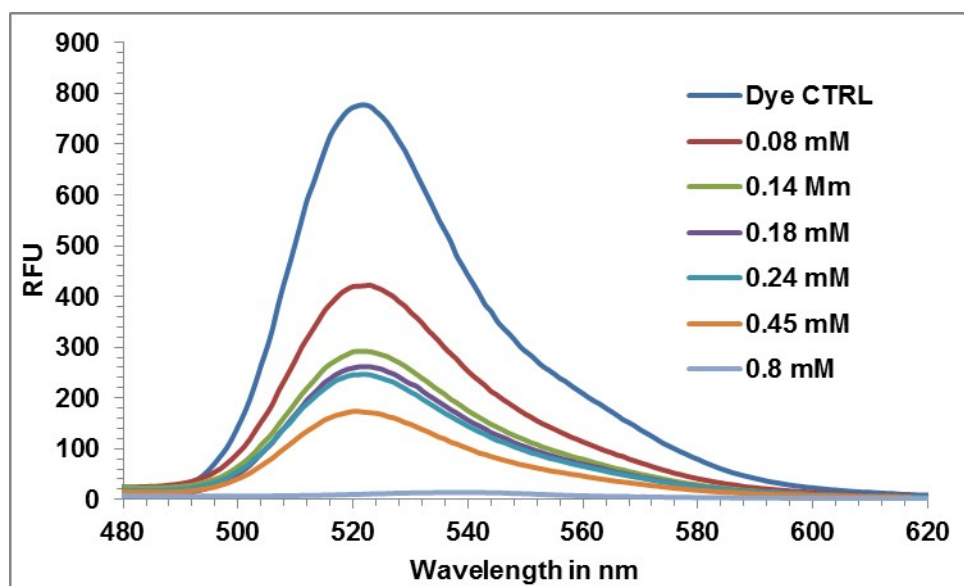


**Supplementary information of MS entitled “Gold nanoparticle synthesis coupled to fluorescence turn-on for sensitive detection of formaldehyde using formaldehyde dehydrogenase”**

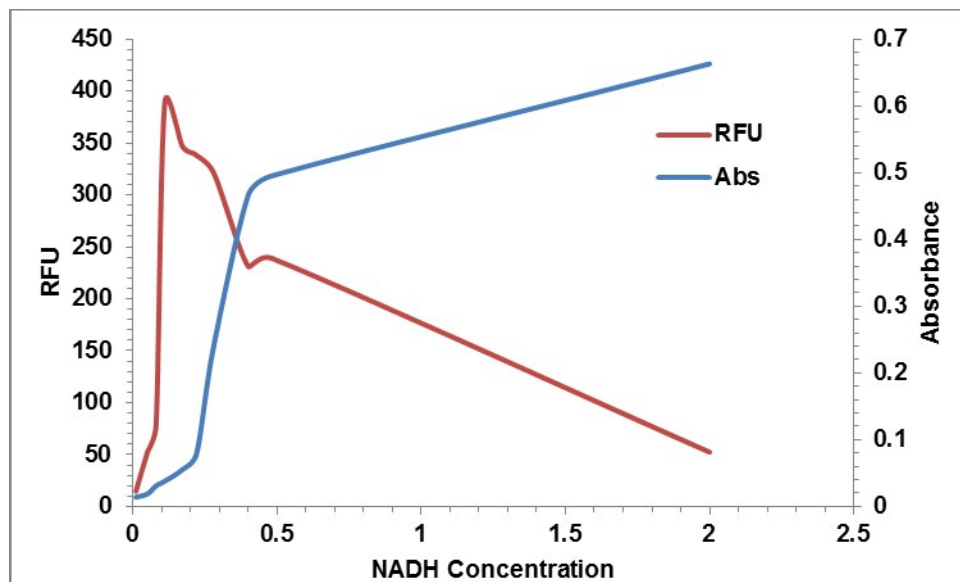


**Figure S1 depicts the TEM images with respect to NADH concentration**

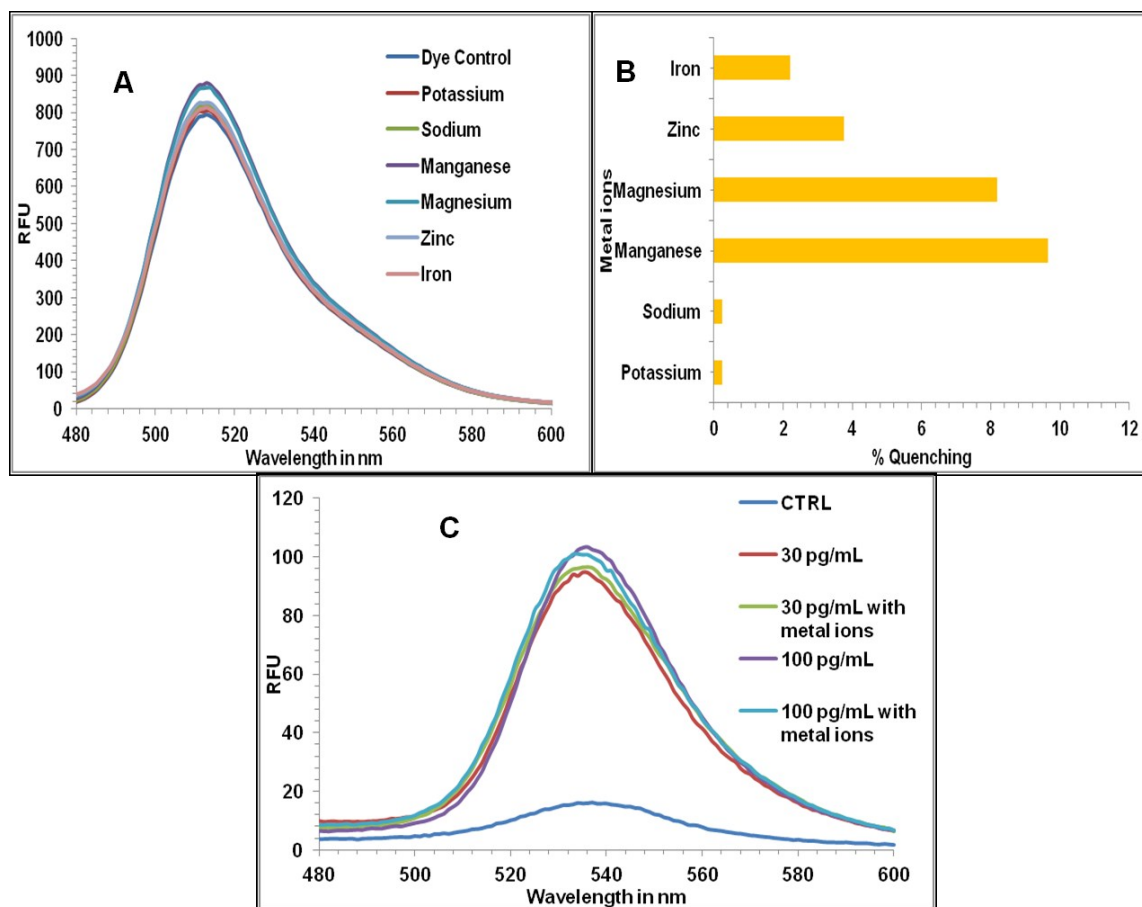
- (A) Depicts absorbance spectra of GNPs synthesized at 0.40 mM of NADH and corresponding TEM images showing 100 nm GNPs.
- (B) Depicts absorbance spectra of GNPs synthesized at 0.57 mM NADH and corresponding TEM image showing 50 nm GNPs.



**Figure S2** depicting fluorescence quenching by various concentration of gold chloride.



**Figure S3** depicting absorbance of GNPs and fluorescence of dye at varying NADH concentration



**Figure S4** depicting interference of metal ions in proposed assay.  
 (A) Depicts interaction of metal ions with fluorescein  
 (B) Percent quenching of the same  
 (C) Interaction metal ions in proposed assay system consisting of growth solution and fluorescein.