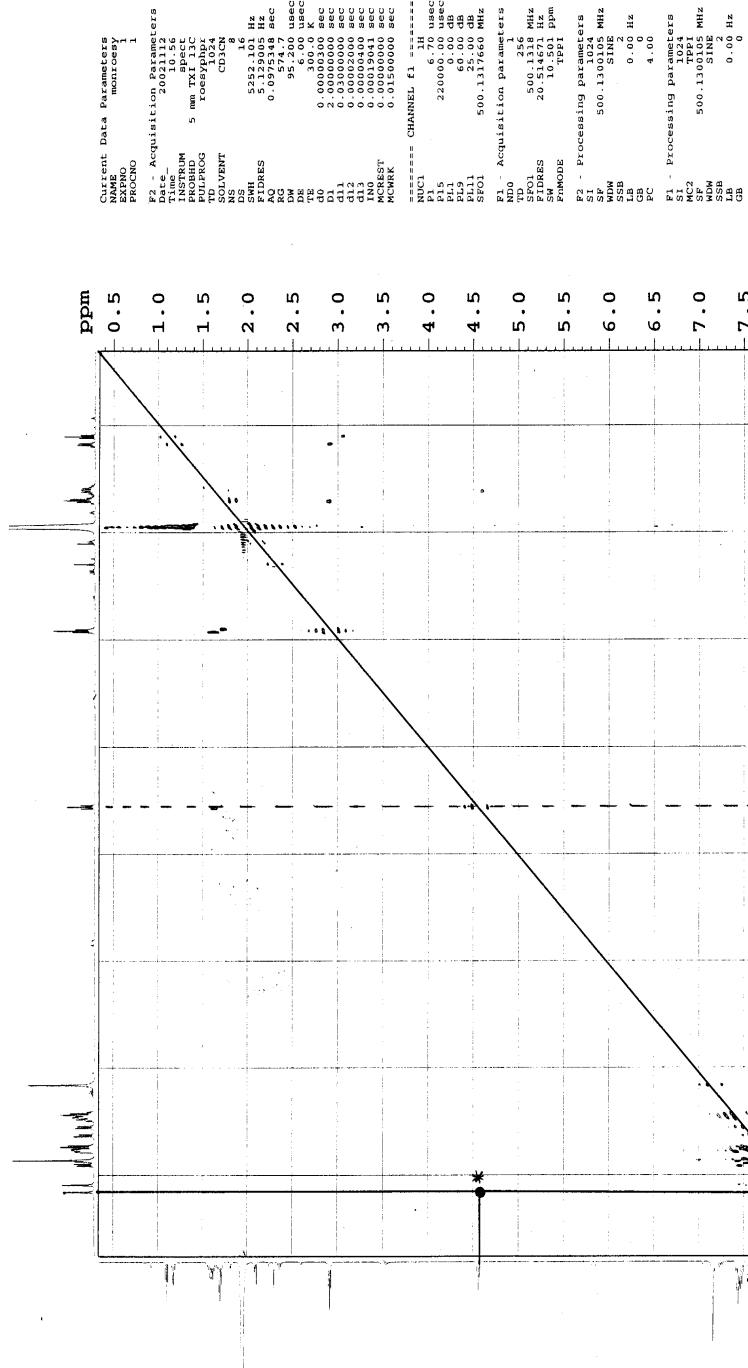
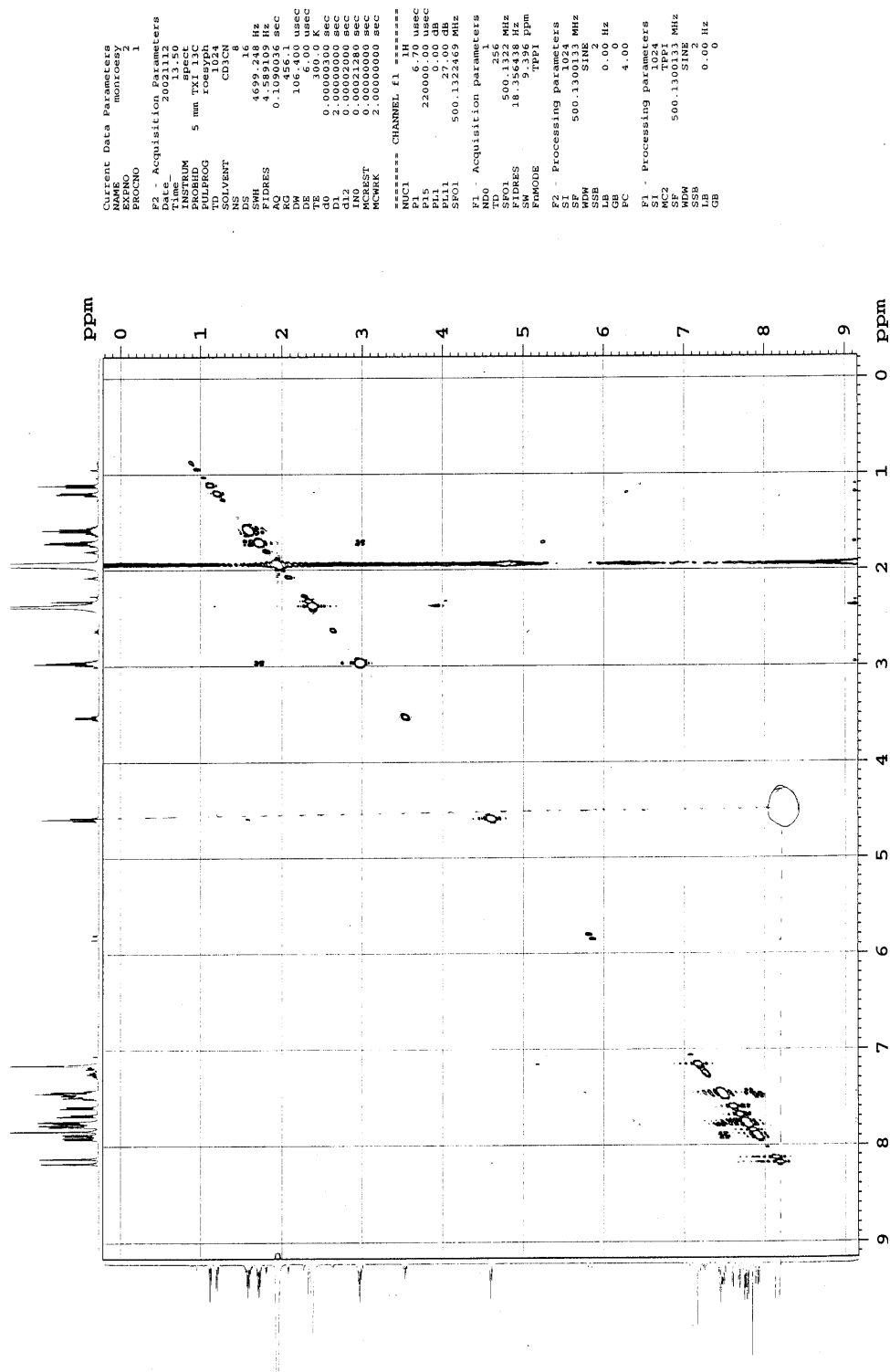


## Supporting Information

### 1. 2D-NMR spectrum of DNP molecule



2. 2D-NMR spectrum of DNP nanoparticles.



With comparison of the above two NMR spectra, it is deduced that there exists strong interaction between  $\alpha$ -H in case of monomers, while the interaction disappears in case of the nanoparticles.