

Supporting Information

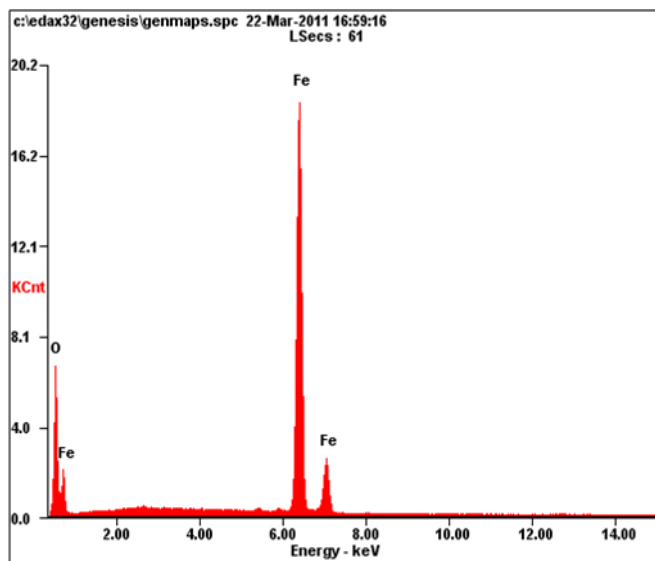


Figure S1. SEM - EDAX Spectrum of MNs

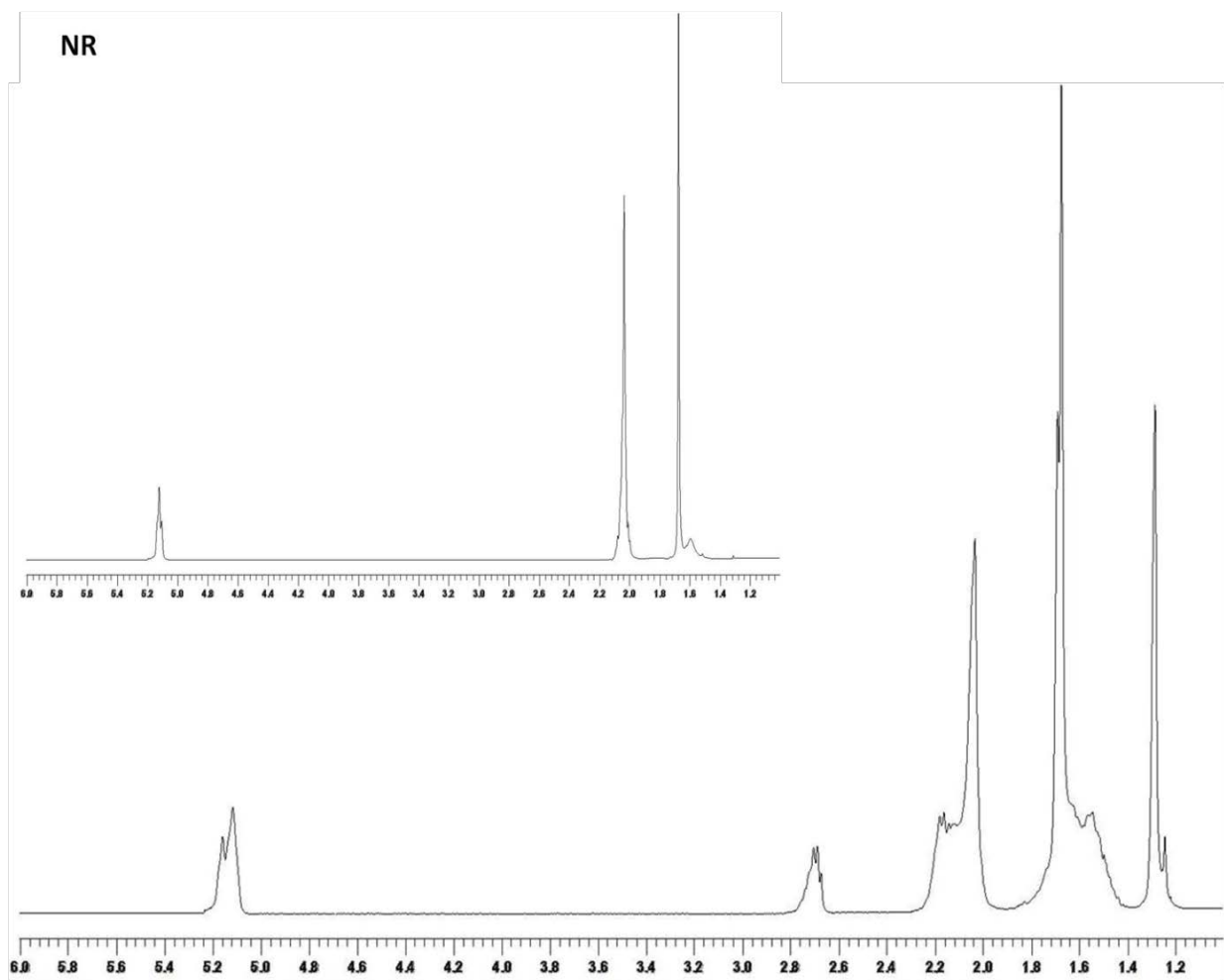


Figure S2. NMR Spectra of NR and ENR-6 h (ENR-37.5)

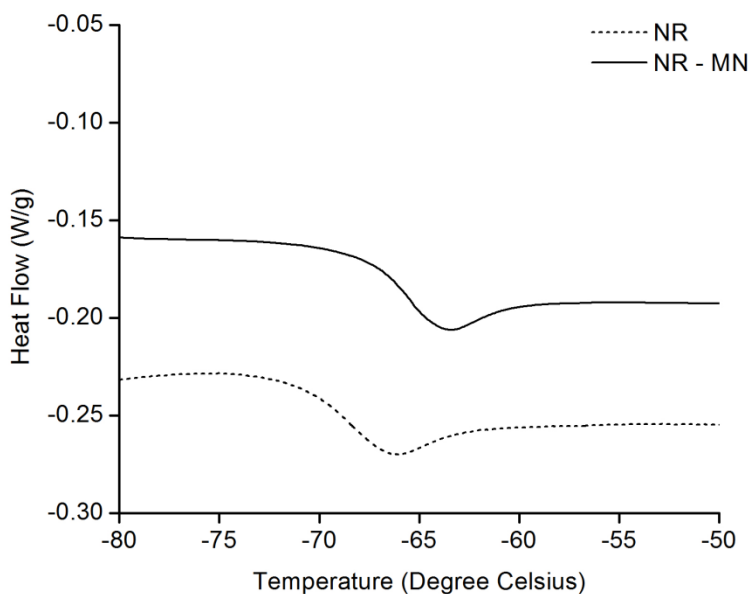


Figure S3. DSC Curves of NR and NR-MN (Heating Rate $10\text{ }^{\circ}\text{C min}^{-1}$)

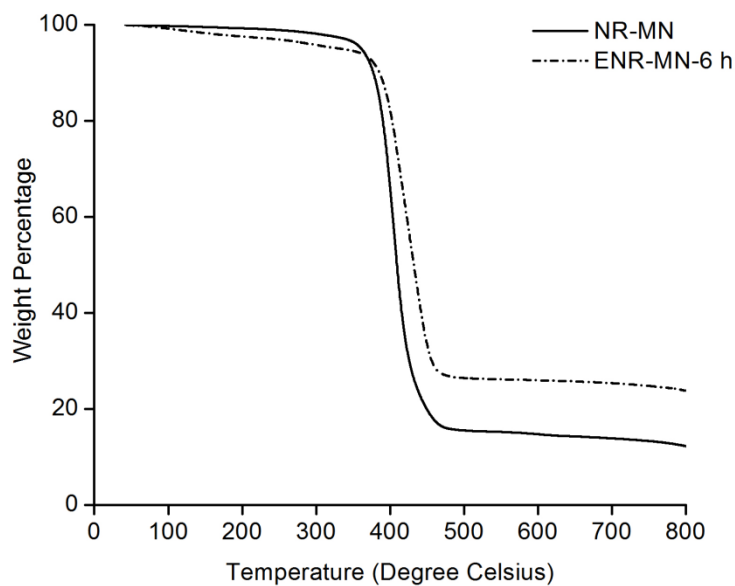


Figure S4. Thermogravimetric Plots of NR-MN and ENR-MN-6 h

Synthesis of Porous Epoxidized Natural Rubber (Porous ENR)

2.5 g of natural rubber was dissolved in 30 ml of chloroform in a 250 ml round bottom flask. Stober silica nanoparticles of average size 54 nm synthesized earlier in our lab were used for this purpose. The weight ratio of silica nanoparticles to rubber taken was 1:10. The silica nanoparticles were dispersed in chloroform and sonicated for about 30 min. Then the two solutions were mixed and stirred for 24 h. Then, 1.5 ml of formic acid was added followed by the addition of 3.5 ml of hydrogen peroxide. The reaction mixture was allowed to stir for 2 h. Then the reaction mass was poured into hydrofluoric acid diluted with methanol. ENR with porous structure generated by the dissolution of silica nanoparticles was filtered, compressed into sheets and dried in vacuum, at room temperature.

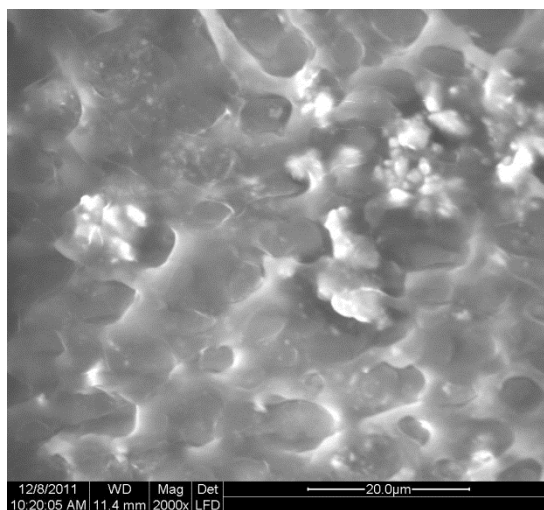


Figure S5. SEM Image of Porous ENR-2 h