

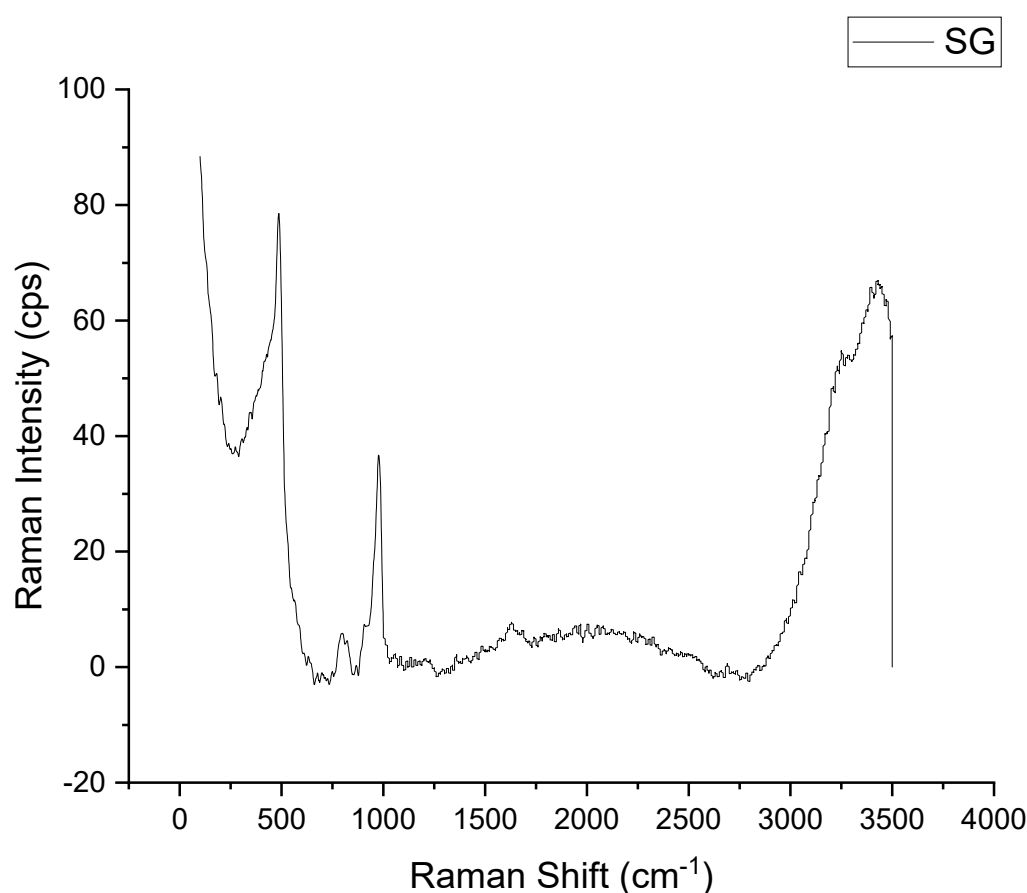
Supplementary Information

# Morphological: Optical, and Mechanical Characterizations of Non-activated and Activated Nanocomposites of SG and MWCNTs

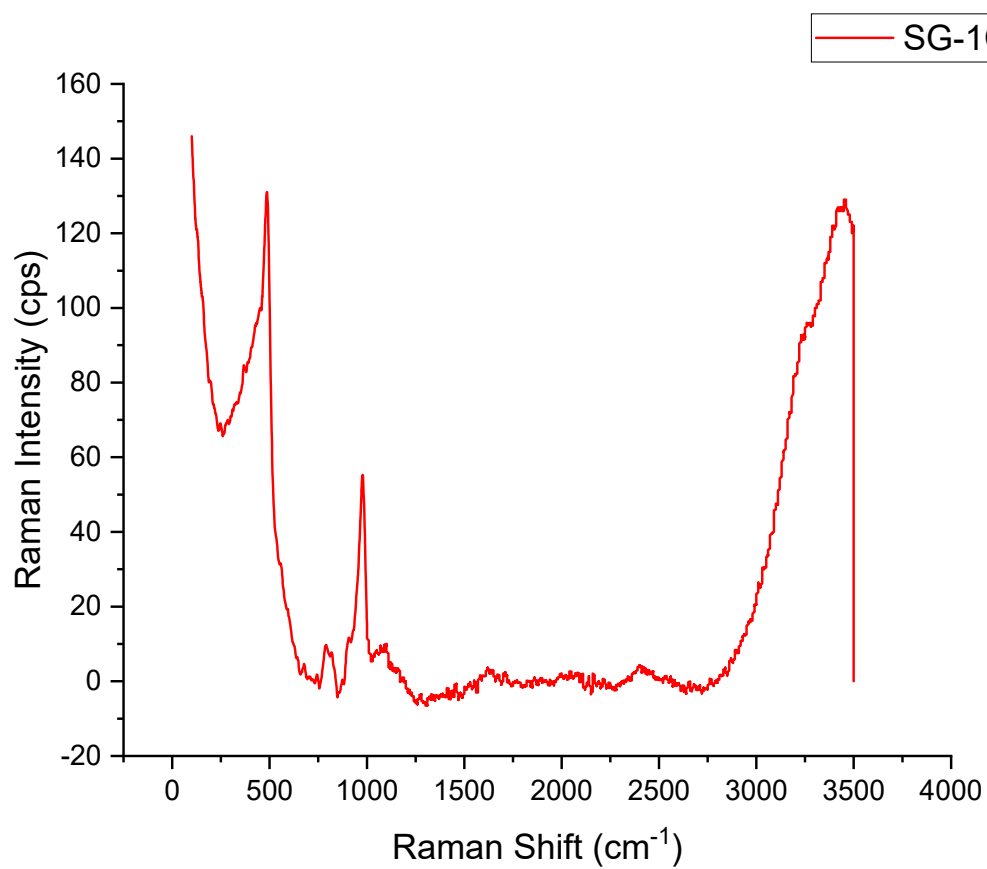
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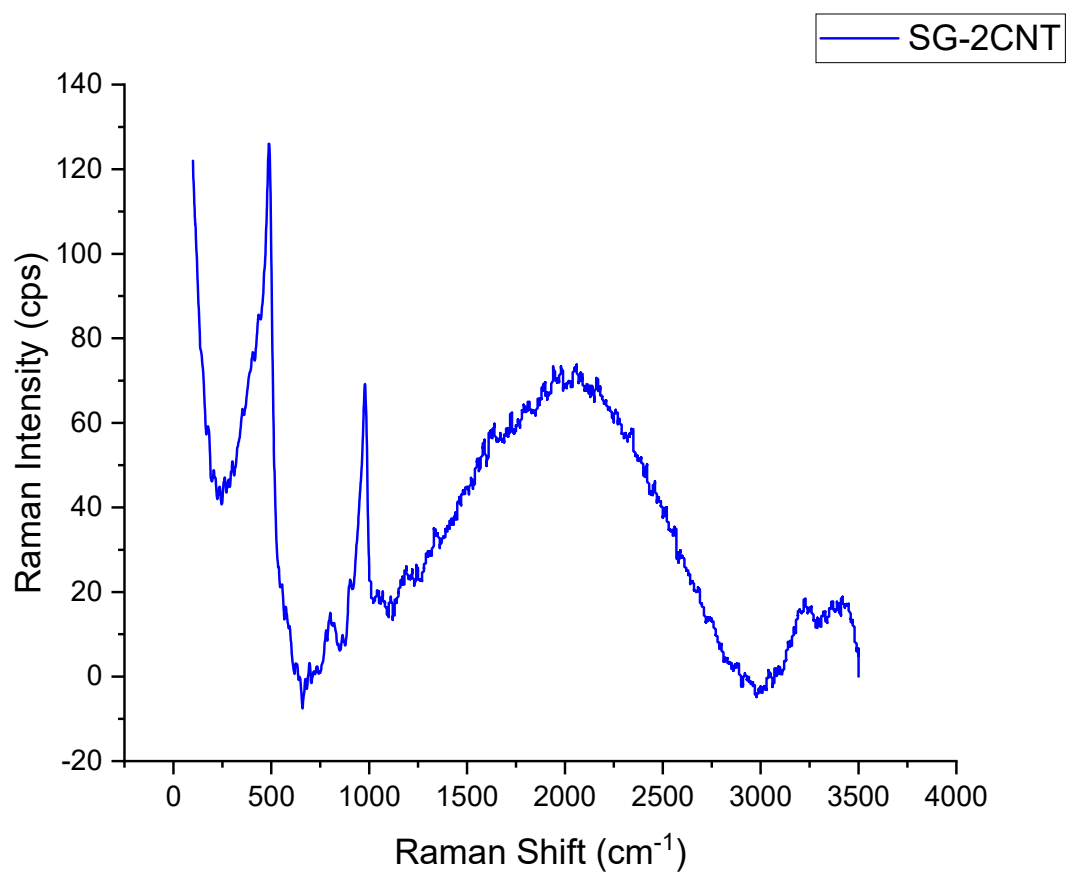
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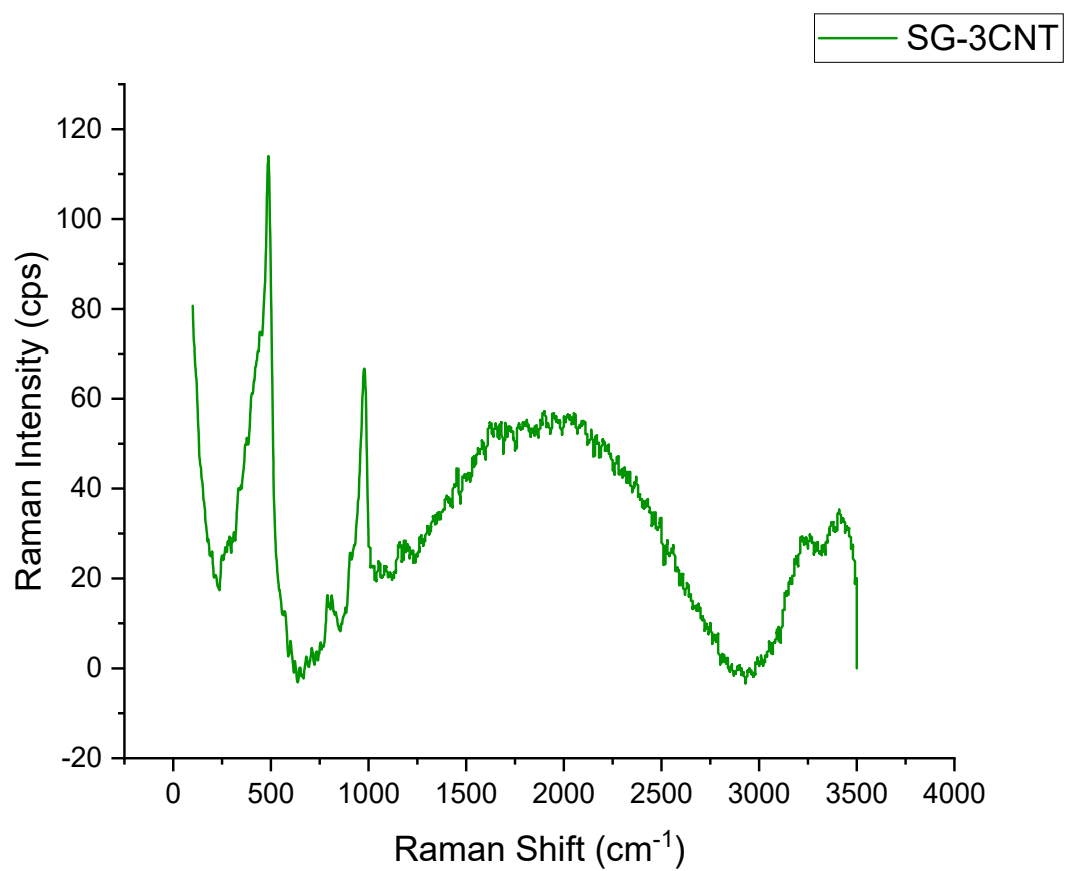
**Figure S1.** Raman spectrum of silica gel. There are sharp peaks at 480, 780, and 990  $\text{cm}^{-1}$  and a broad band centered at 2100  $\text{cm}^{-1}$  in addition to two Scheme 3250. and 3400  $\text{cm}^{-1}$ .



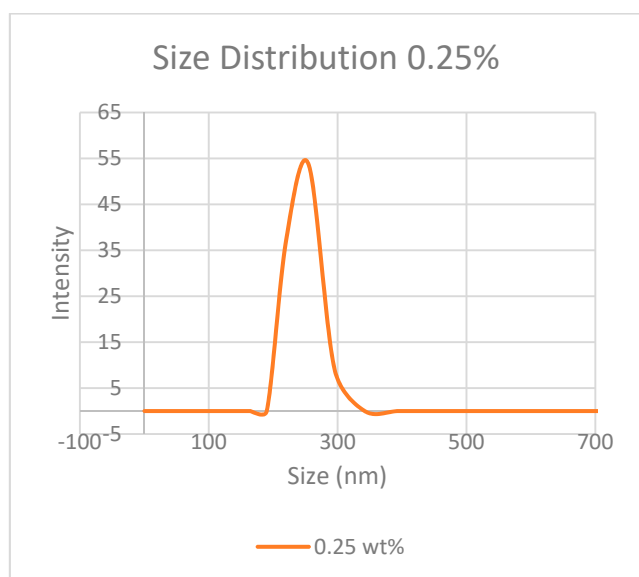
**Figure S2.** Raman scattering spectrum of silica gel and 0.25 wt% MWCNT composite.



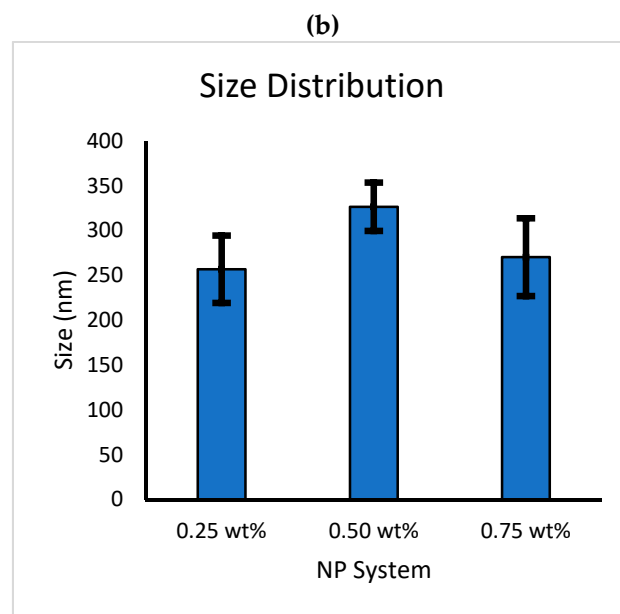
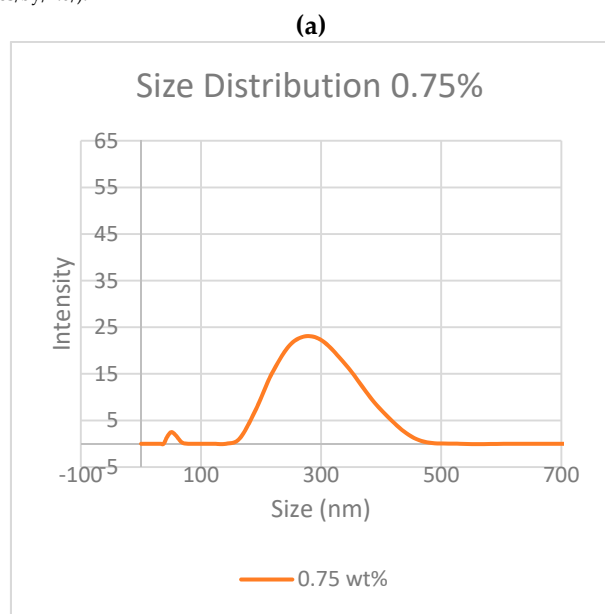
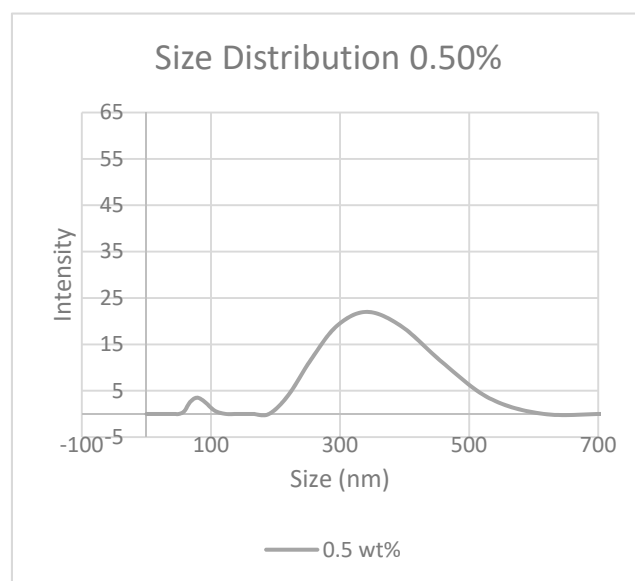
**Figure S3.** Raman scattering spectrum of silica gel and 0.50 wt% MWCNT composite.



**Figure S4.** Raman scattering spectrum of silica gel and 0.75 wt% MWCNT composite.



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**Figure S5.** Zetasizer spectra of intensity vs. particle size distribution at various concentrations of MWCNTs in the silica gel composites: (a) 0.25 wt%; (b) 0.5 wt%; (c) 0.75 wt%. (d) Bar chart shows statistical analysis size distributions of MWCNTs in composites; marks on each bar indicate standard deviations in size measurements.