Supplemental to the Solvent-Free Functionalization of Carbon Nanotubes by Christopher A. Dyke and James M. Tour*

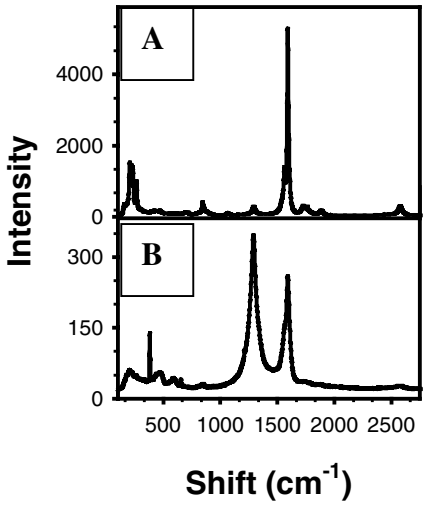
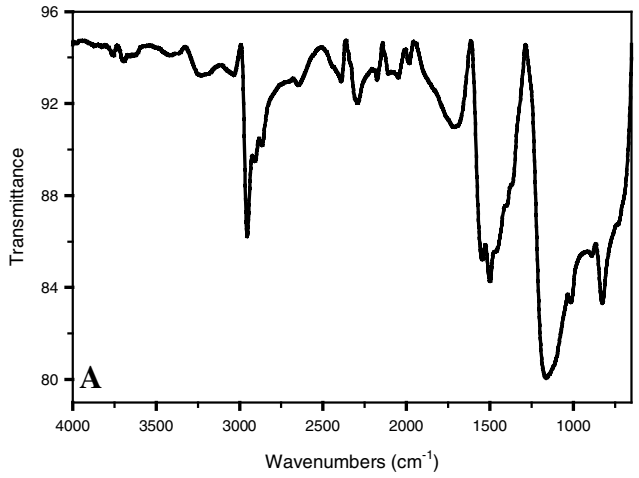


Figure A. Raman spectra (780.6 nm excitation) of (**A**) pristine SWNTs, and (**B**) the product of the diazonium salt of 4-chloroaniline and SWNTs in a ball-miller. Spectrum **B** displays an increased disorder mode compared to pristine SWNTs.

NMR analysis was attempted on the **3** and **4**. However, as is typical in the NMR analysis of SWNTs, we were unable to obtain meaningful ^{1}H NMR signals (500 MHz, inverse probe) due to any one or more of the following reasons: low concentration, the exceedingly short T_2 relaxation times for these large molecules with their slow tumbling rates, and traces of Fe impurities. CP-MAS NMR (200 MHz wide bore) was equally uninformative showing signals that were too broad to meaningfully interpret.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92
88
84
80
Transmittance
A
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3500
3000
2500
2000
1500
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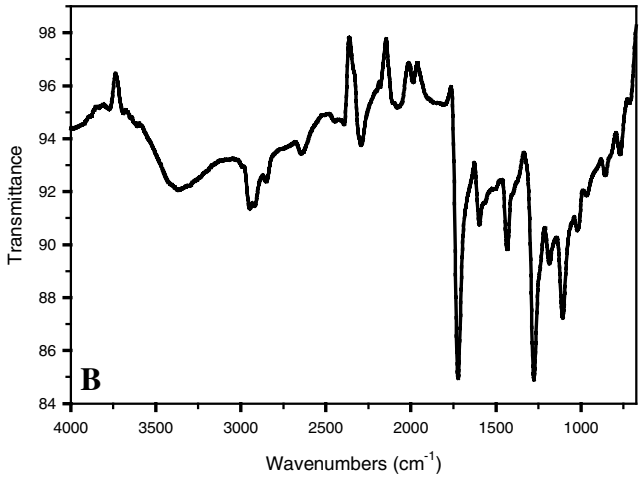
Wavenumbers (cm-1)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Wavenumbers (cm-1)

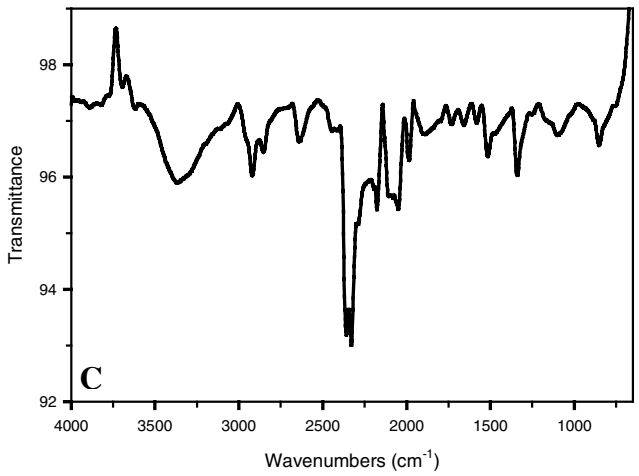

Figure B. ATR-IR spectra of (**A**) *tert*-butyl-substituted product **3**, (**B**) aryl ester **4**, and (**C**) aryl nitro **5**.