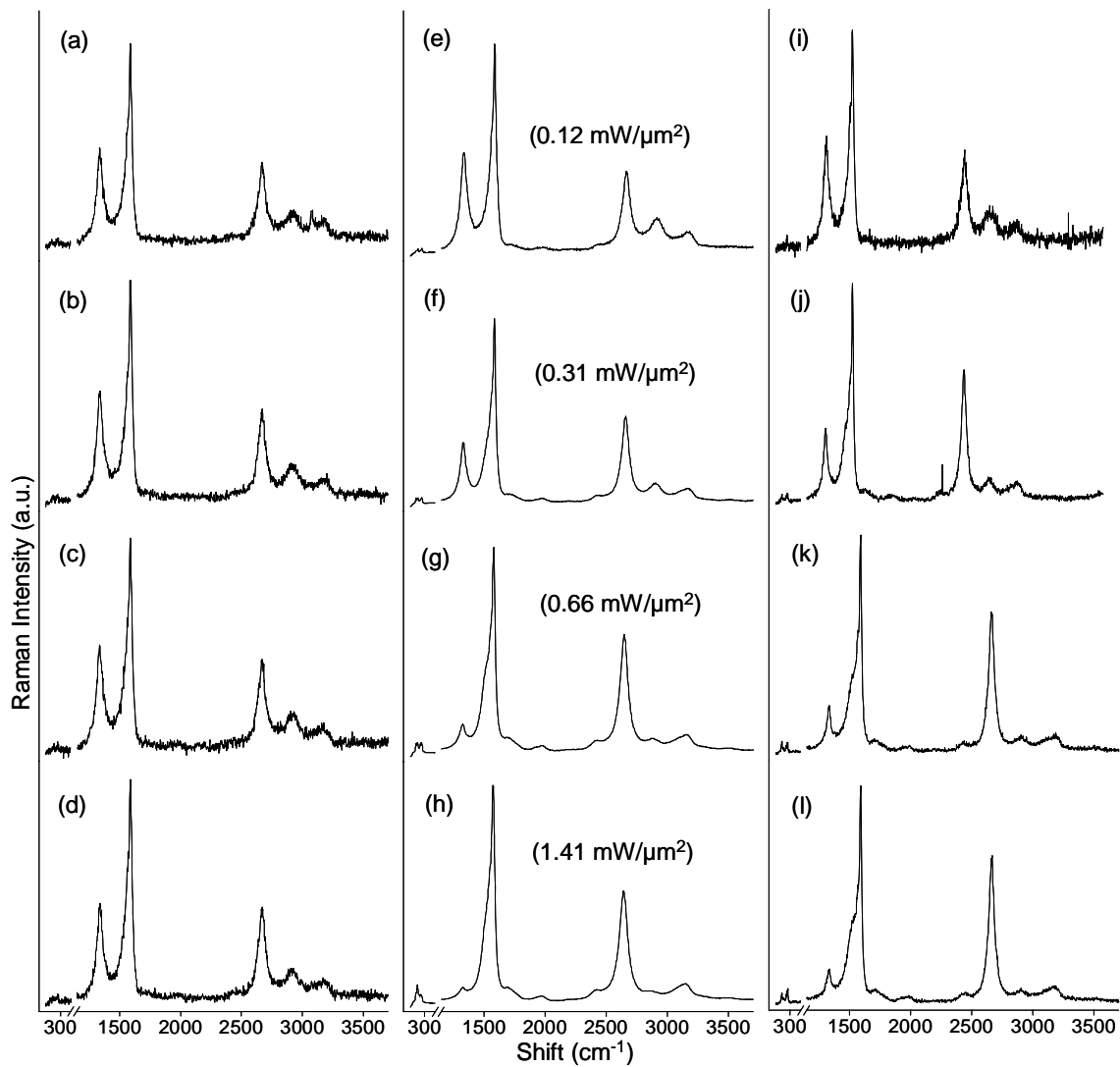


Supporting info for

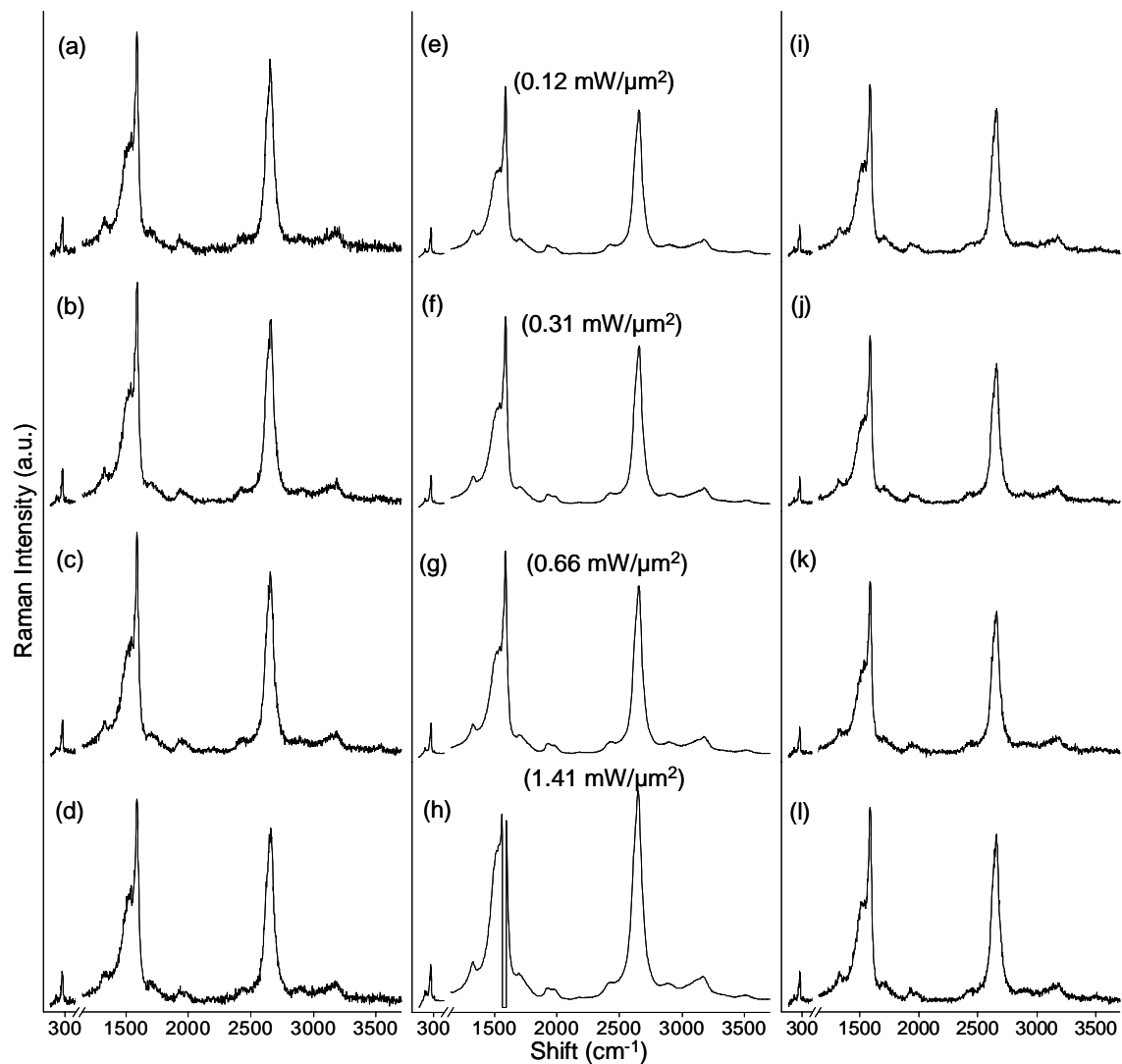
# Ambiguity in the Characterization of Chemically Modified Single-Wall Carbon Nanotubes: A Raman and UV-vis-NIR study

*Kevin R. Moonosawmy, Peter Kruse\**

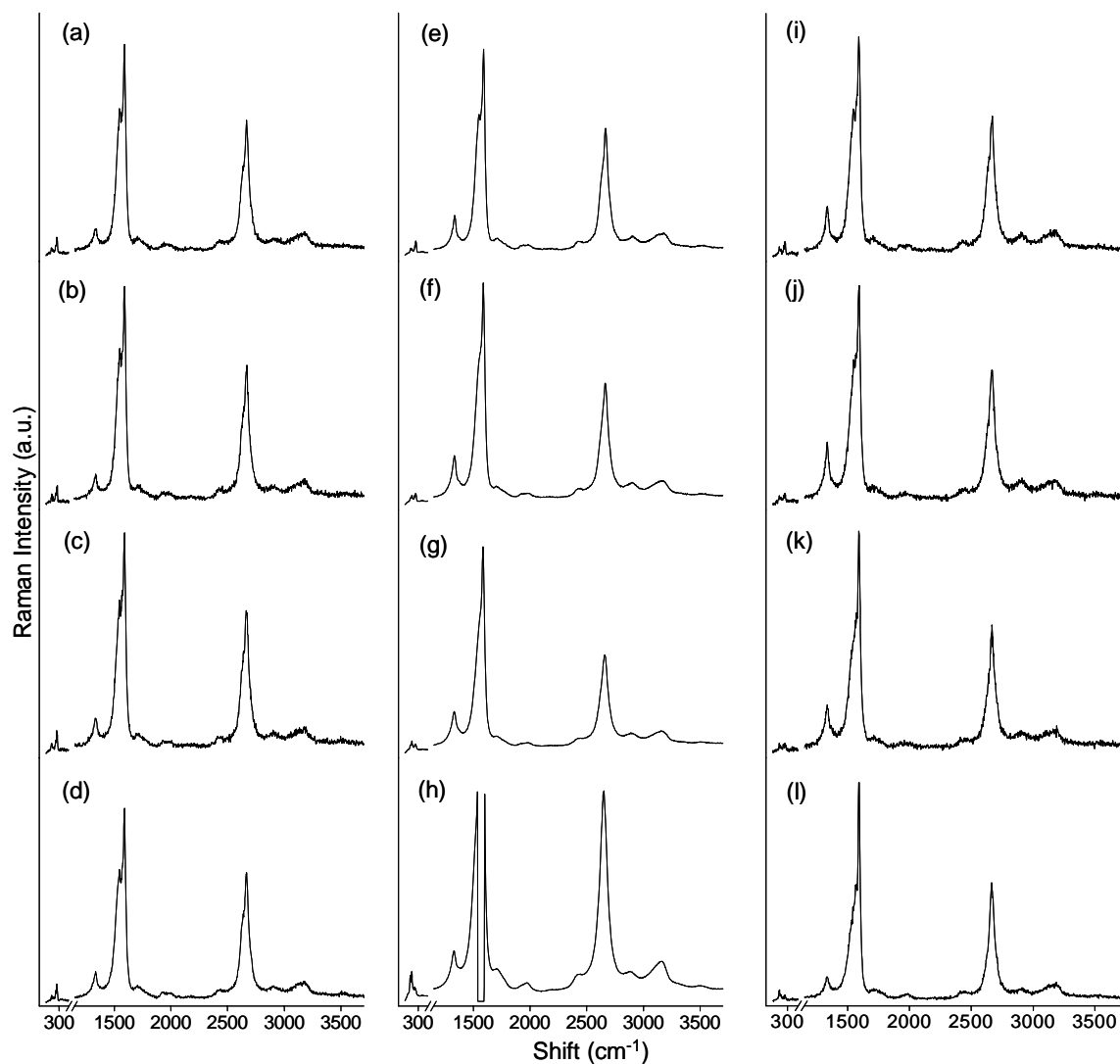
Department of Chemistry, McMaster University, 1280 Main Street West, Hamilton, ON, L8S4M1,  
Canada.



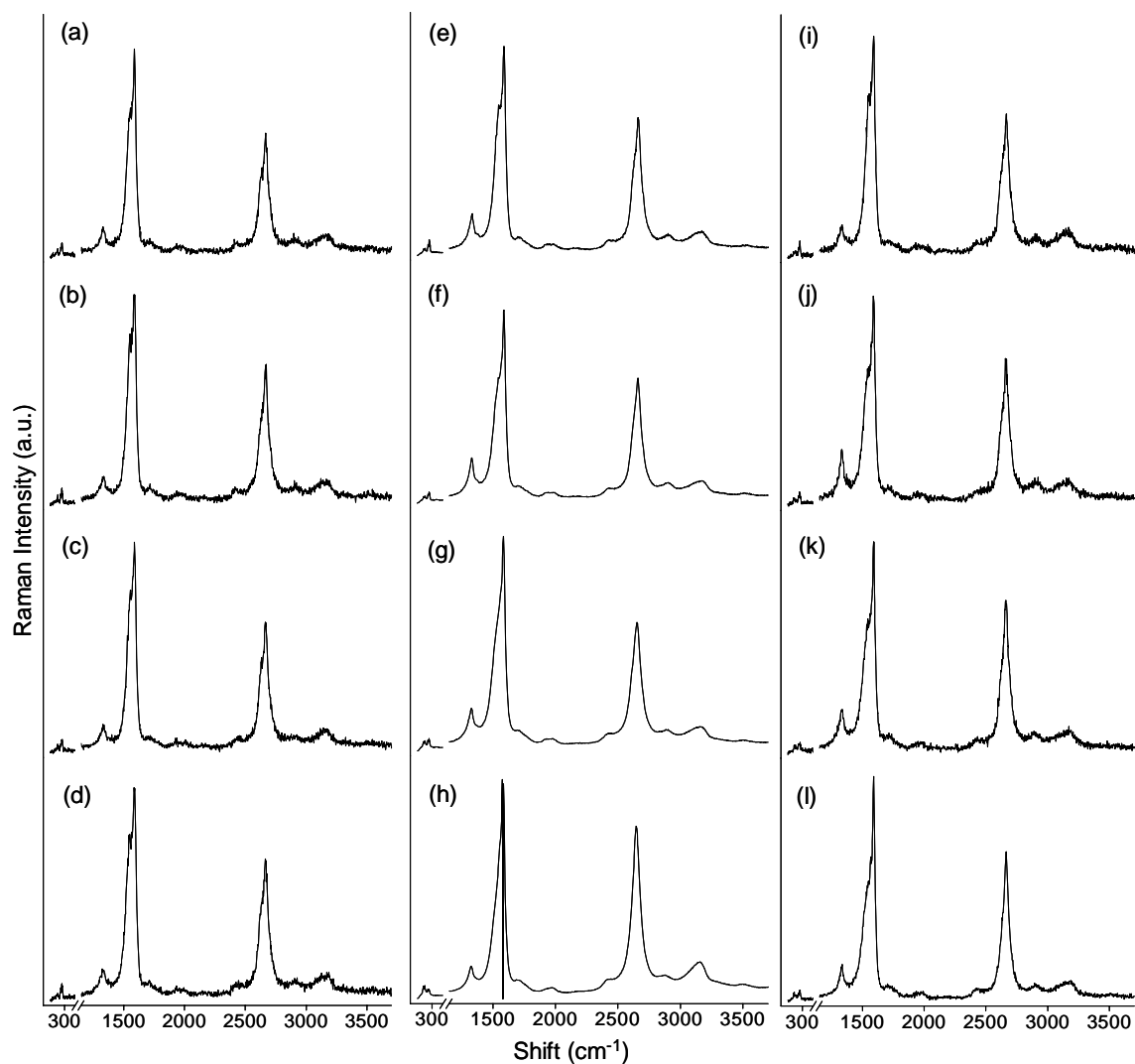
**Figure S1.** Raman spectra of functionalized SWCNTs at four different spots on the same sample (a)-(d) with 1% laser power, (e)-(h) the same respective spots irradiated with different laser power (i)-(l) spectra collected with 1% laser power again on the same respective spots, showing the changes in the spectra.



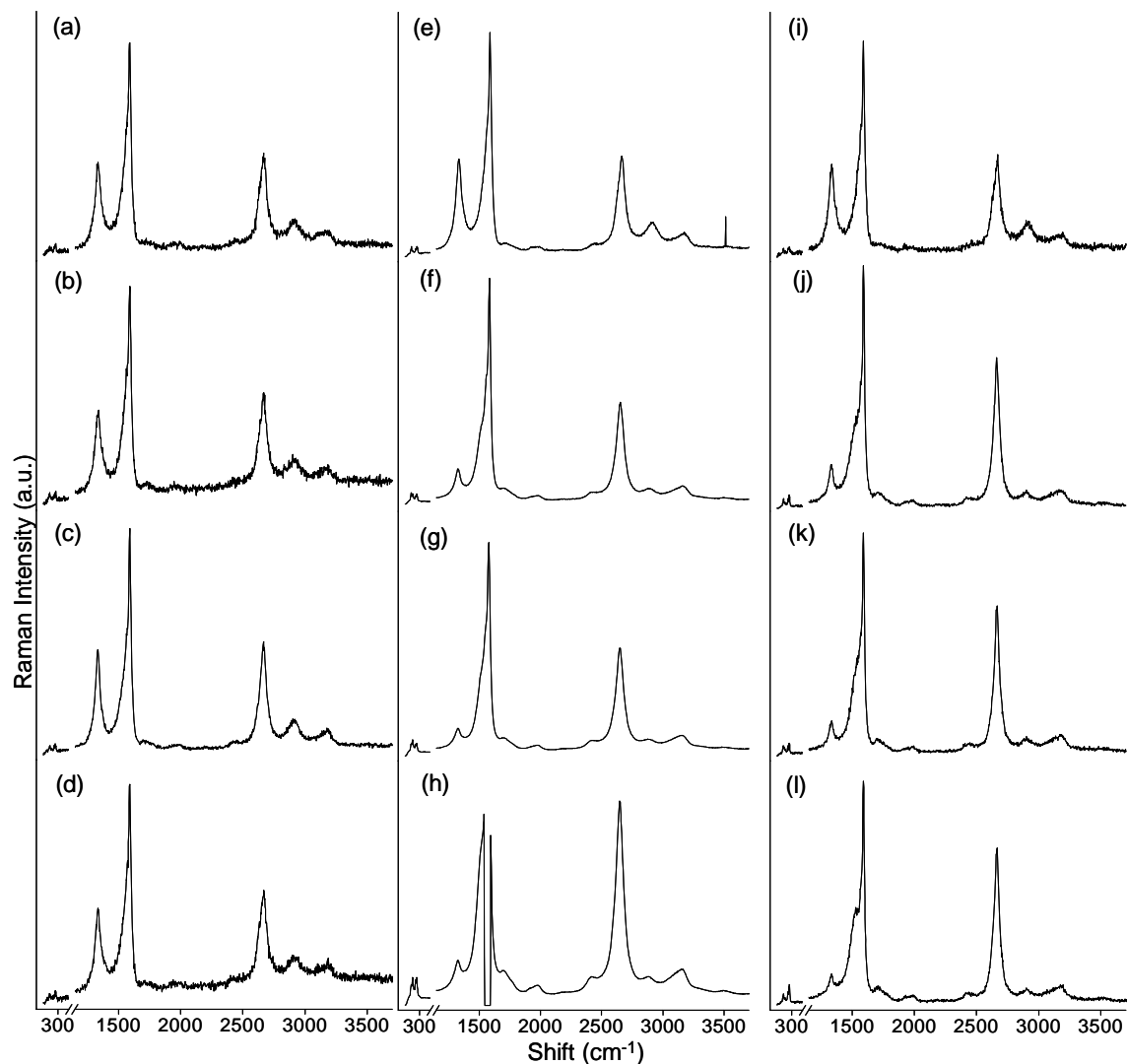
**Figure S2.** Raman spectra of un-functionalized SWCNTs at four different spots on the same sample (a)-(d) with 1% laser power, (e)-(h) the same respective spots irradiated with different laser power (i)-(l) spectra collected with 1% laser power again on the same respective spots, showing the changes in the spectra.



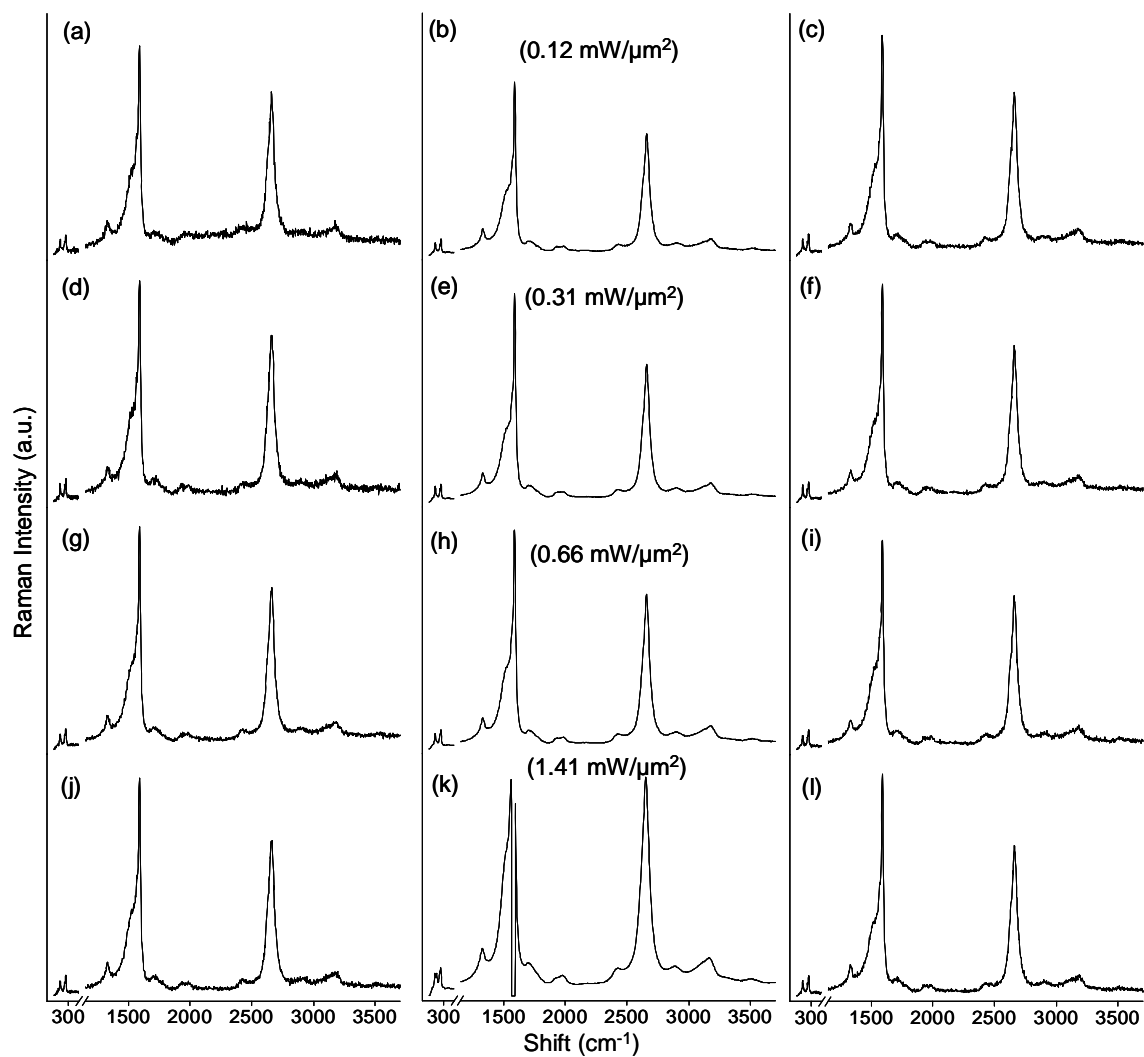
**Figure S3.** Raman spectra of SWCNTs sonicated in BzCl, b-SWCNTs at four different spots on the same sample (a)-(d) with 1% laser power, (e)-(h) the same respective spots irradiated with different laser power (i)-(l) spectra collected with 1% laser power again on the same respective spots, showing the changes in the spectra.



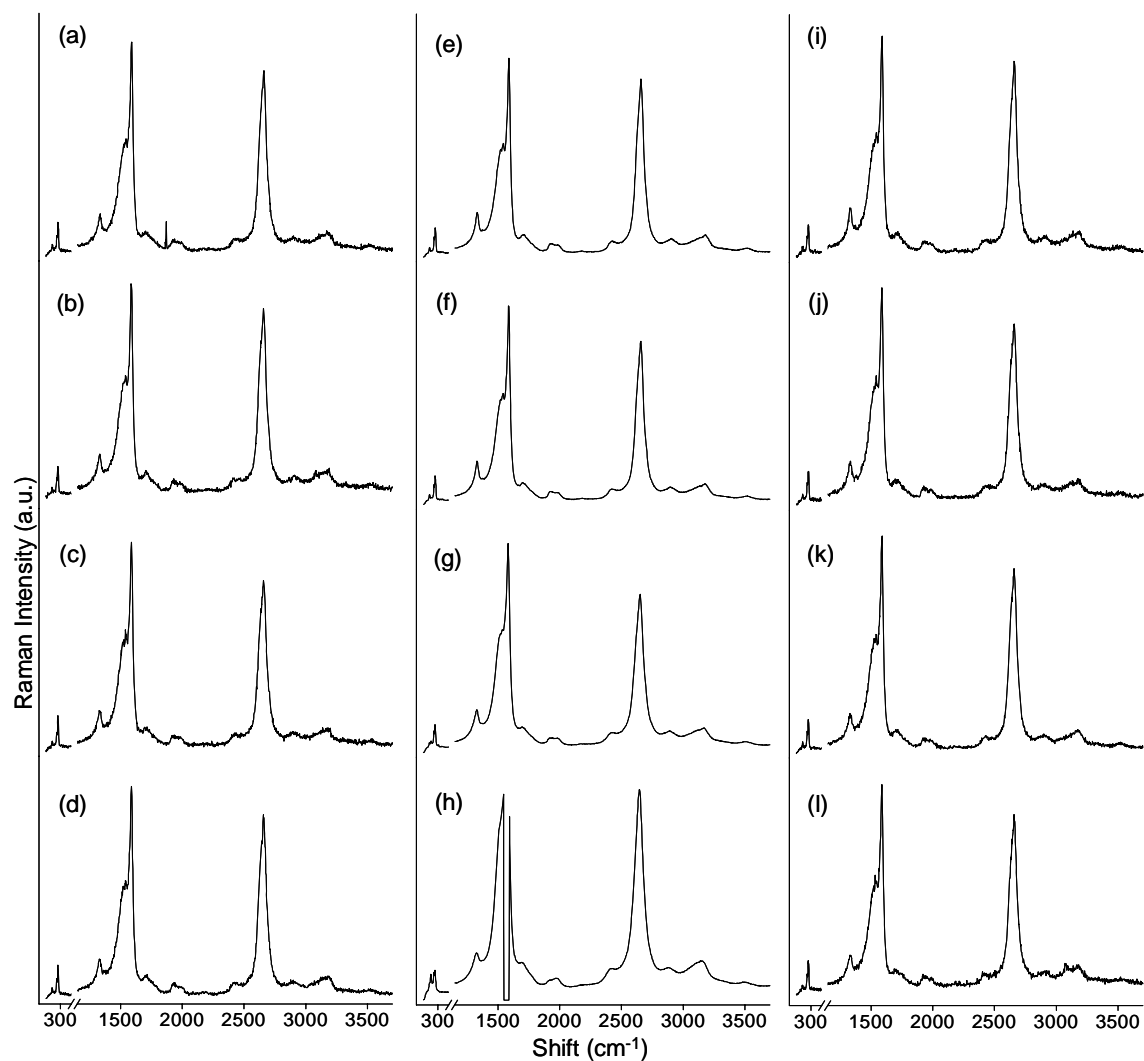
**Figure S4.** Raman spectra of SWCNTs sonicated in ODCB, o-SWCNTs at four different spots on the same sample (a)-(d) with 1% laser power, (e)-(h) the same respective spots irradiated with different laser power (i)-(l) spectra collected with 1% laser power again on the same respective spots, showing the changes in the spectra.



**Figure S5.** Raman spectra of washed functionalized SWCNTs (Wf-SWCNTs) at four different spots on the same sample (a)-(d) with 1% laser power, (e)-(h) the same respective spots irradiated with different laser power (i)-(l) spectra collected with 1% laser power again on the same respective spots, showing the changes in the spectra.



**Figure S6.** Raman spectra of Wo-SWCNTs at four different spots on the same sample (a)-(d) with 1% laser power, (e)-(h) the same respective spots irradiated with different laser power (i)-(l) spectra collected with 1% laser power again on the same respective spots, showing the changes in the spectra.



**Figure S7.** Raman spectra of Wb-SWCNTs at four different spots on the same sample (a)-(d) with 1% laser power, (e)-(h) the same respective spots irradiated with different laser power (i)-(l) spectra collected with 1% laser power again on the same respective spots, showing the changes in the spectra.