

Supplemental Data

Relevance of Octanol-Water Distribution Measurements to the Potential Ecological Uptake of Multi-Walled Carbon Nanotubes

Elijah J. Petersen^{†**}, Qingguo Huang[‡], and Walter J. Weber Jr. ^{†*}

[†] Energy and Environment Program, Department of Chemical Engineering

The University of Michigan, Ann Arbor, MI 48109-2099

[‡] Department of Crop and Soil Sciences

University of Georgia Griffin Campus

Griffin, GA 30223

* To whom correspondence may be addressed (wjwjr@umich.edu)

** Current address for EJP: Chemical Science and Technology Laboratory,
National Institute of Standards and Technology, Gaithersburg, MD 20899

Figure 1: Characterization of purified and 3:1 acid treated MWNTs. A) Transmission electron micrograph of purified MWNTs (30 kx). B) Transmission electron micrograph of 3:1 MWNTs (150 kx magnification). The arrow points to an opened end of one of the multi-walled carbon nanotubes. C) Scanning electron micrograph of purified MWNTs (20 kx magnification). D) Length distribution plot of purified MWNTs (n=239). E) Scanning electron micrograph of 3:1 MWNTs (20 kx magnification). F) X-ray photoelectron spectrum of purified MWNTs with elemental analysis. G) X-ray photoelectron spectrum of 3:1 MWNTs with elemental analysis.

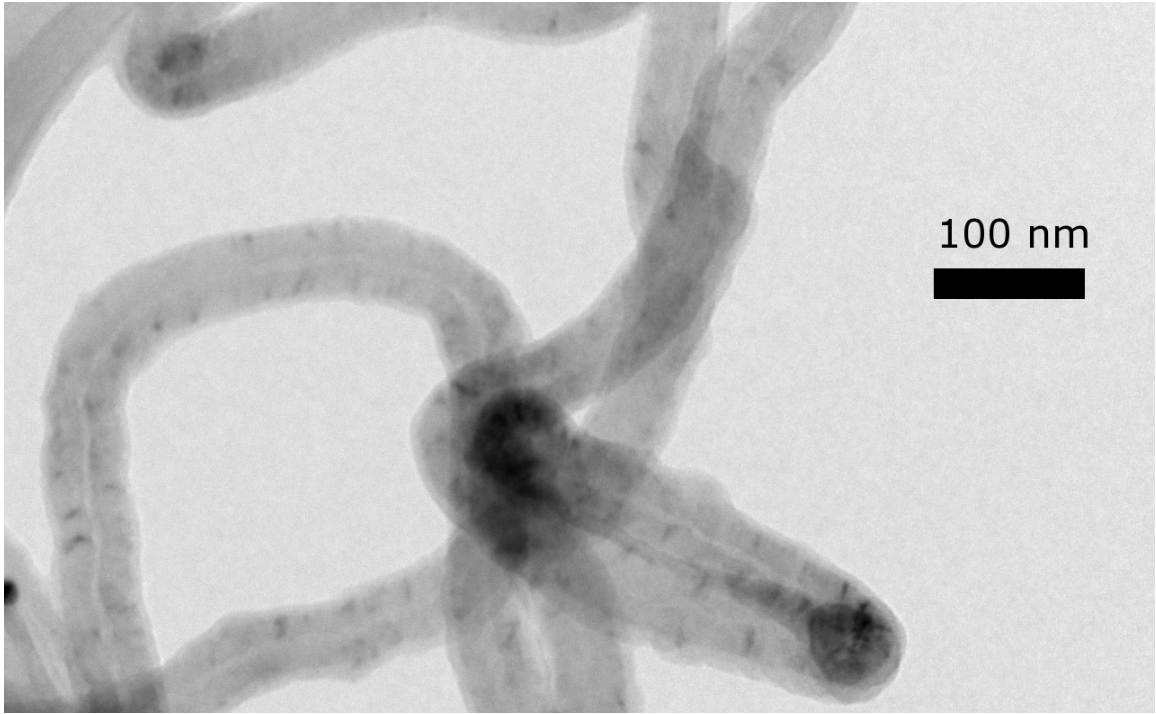


Figure 1a

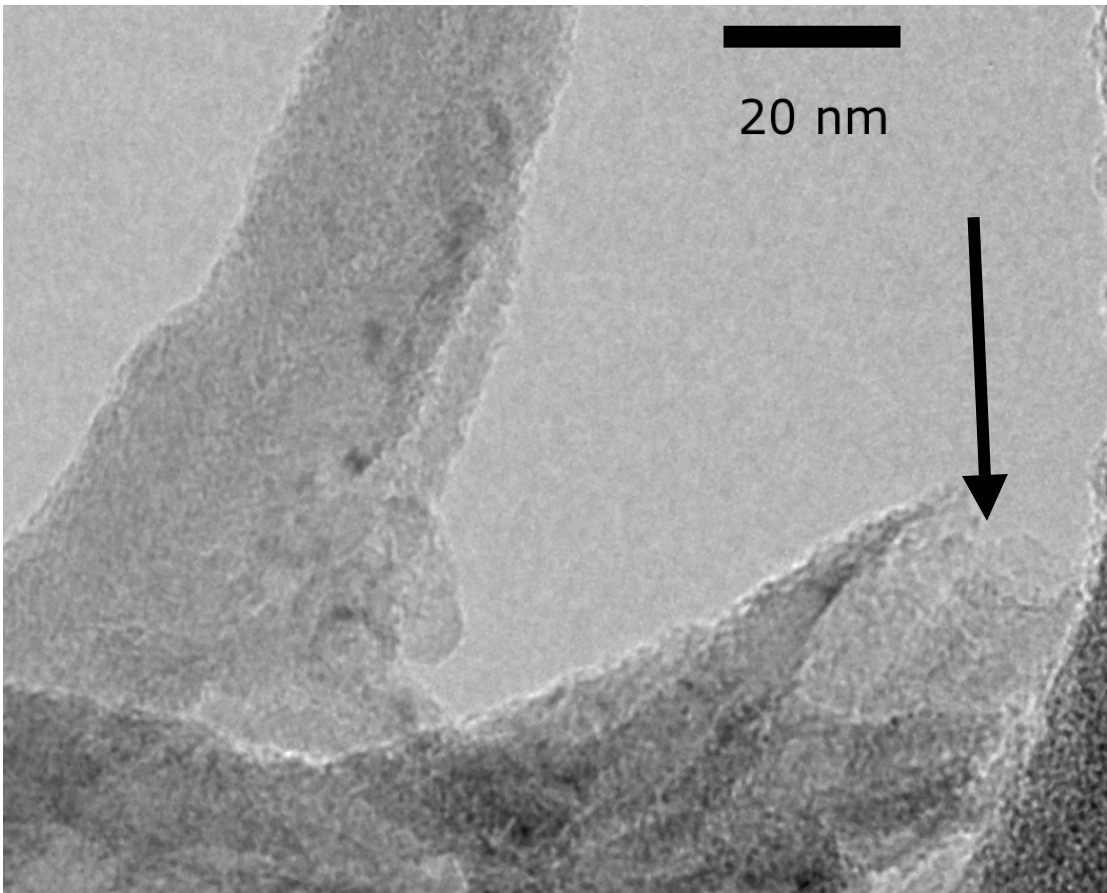


Figure 1b

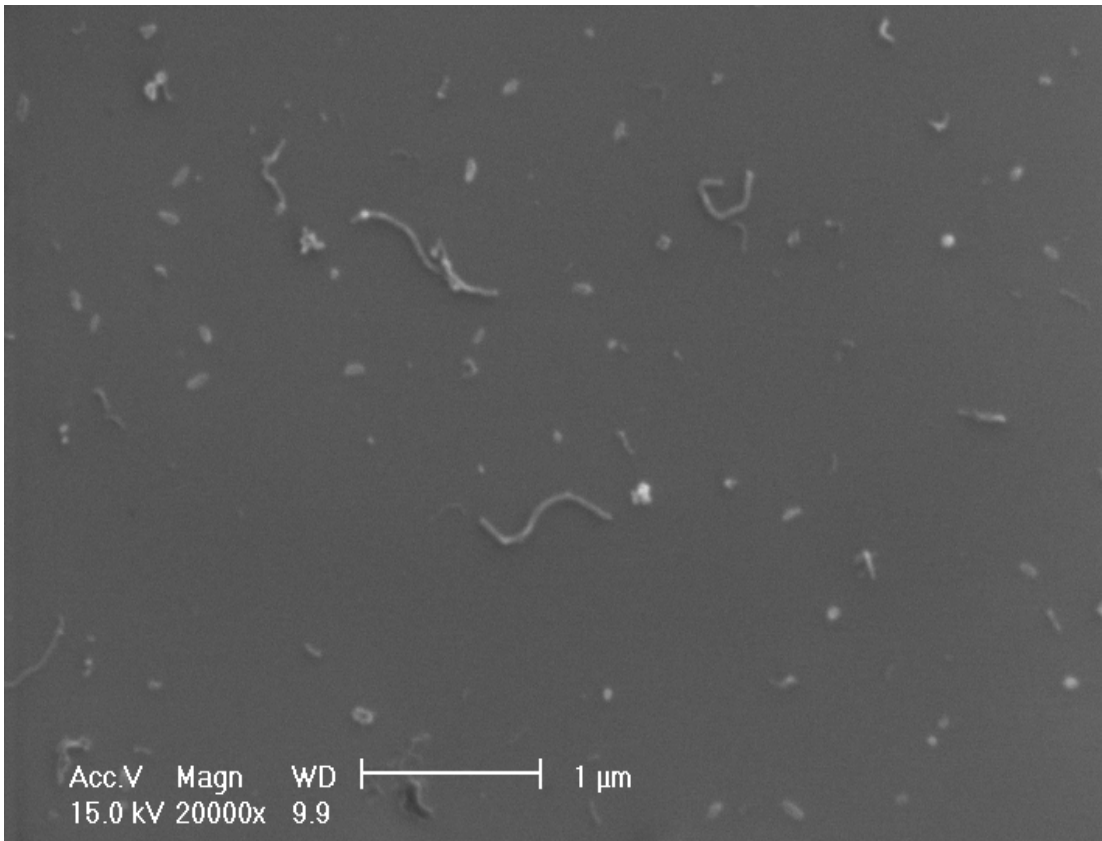


Figure 1c

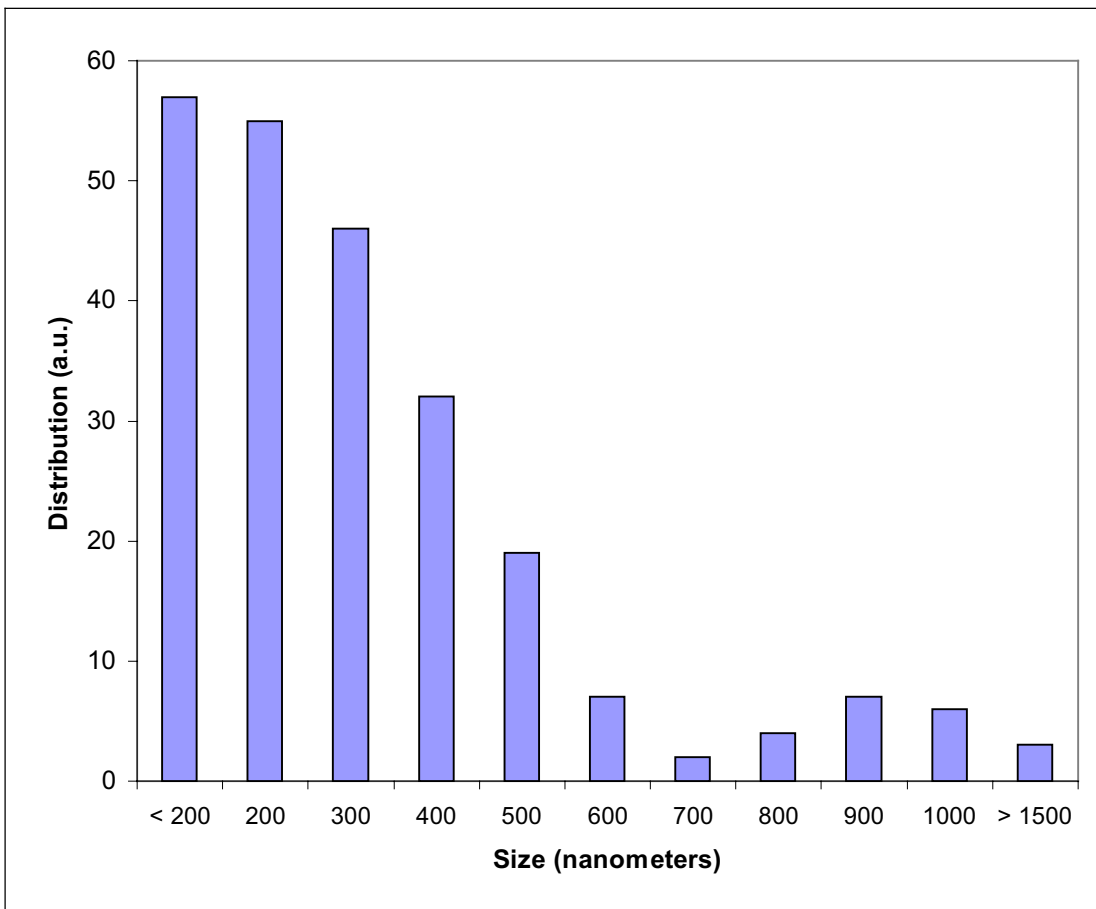


Figure 1d

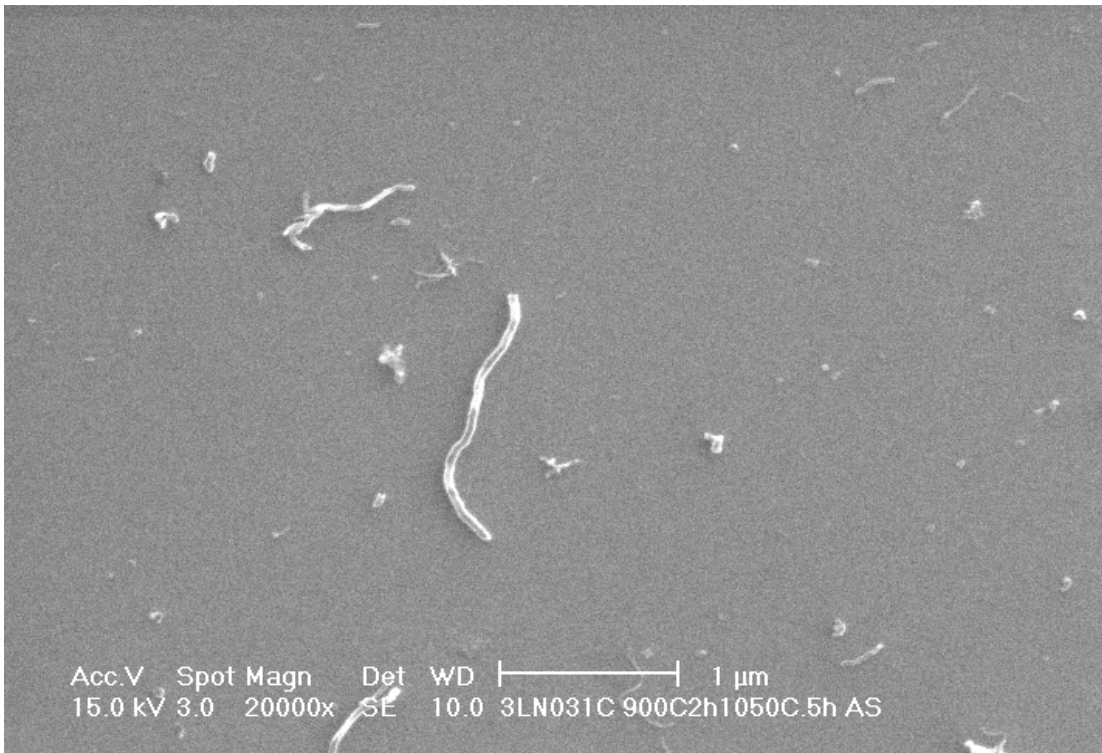


Figure 1e

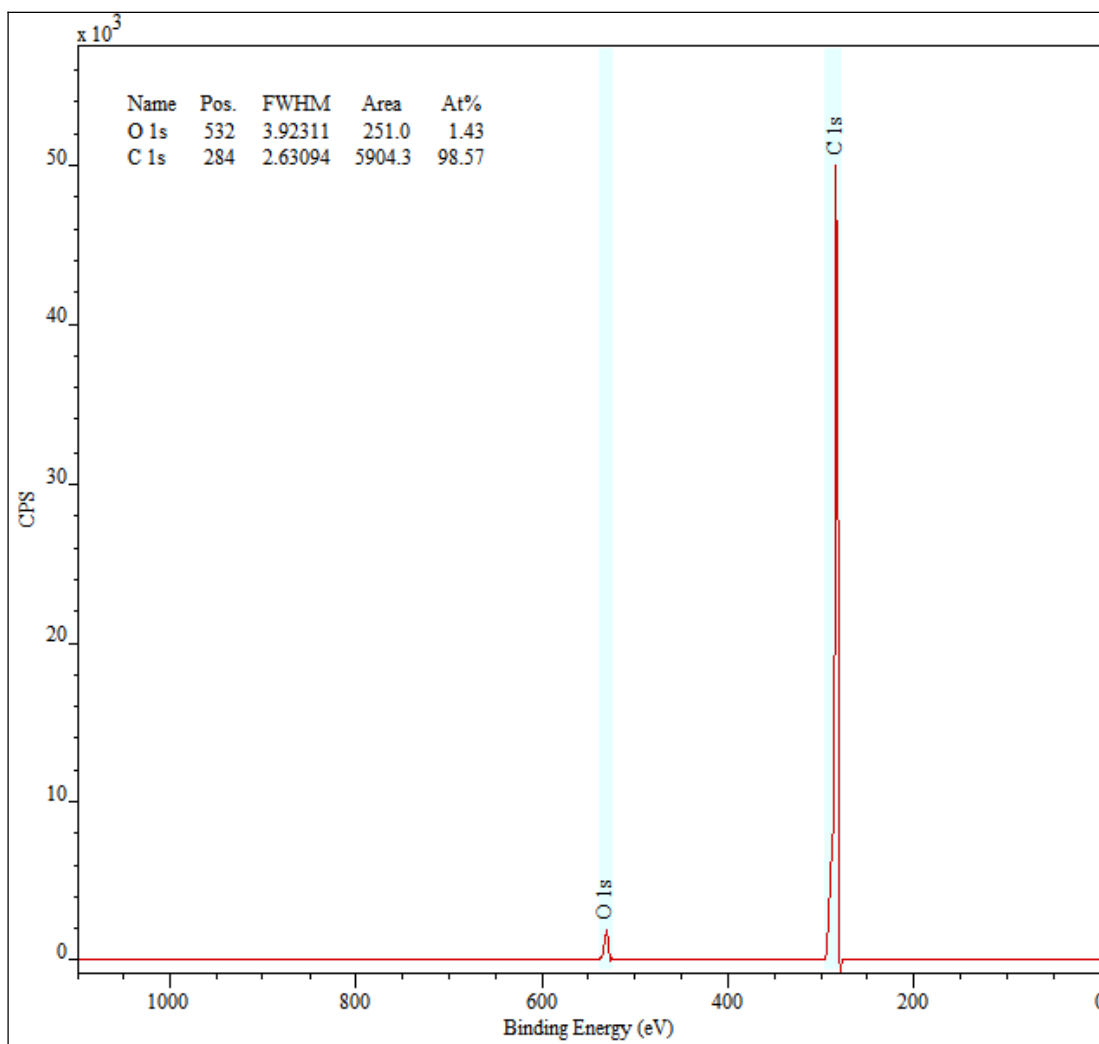


Figure 1f

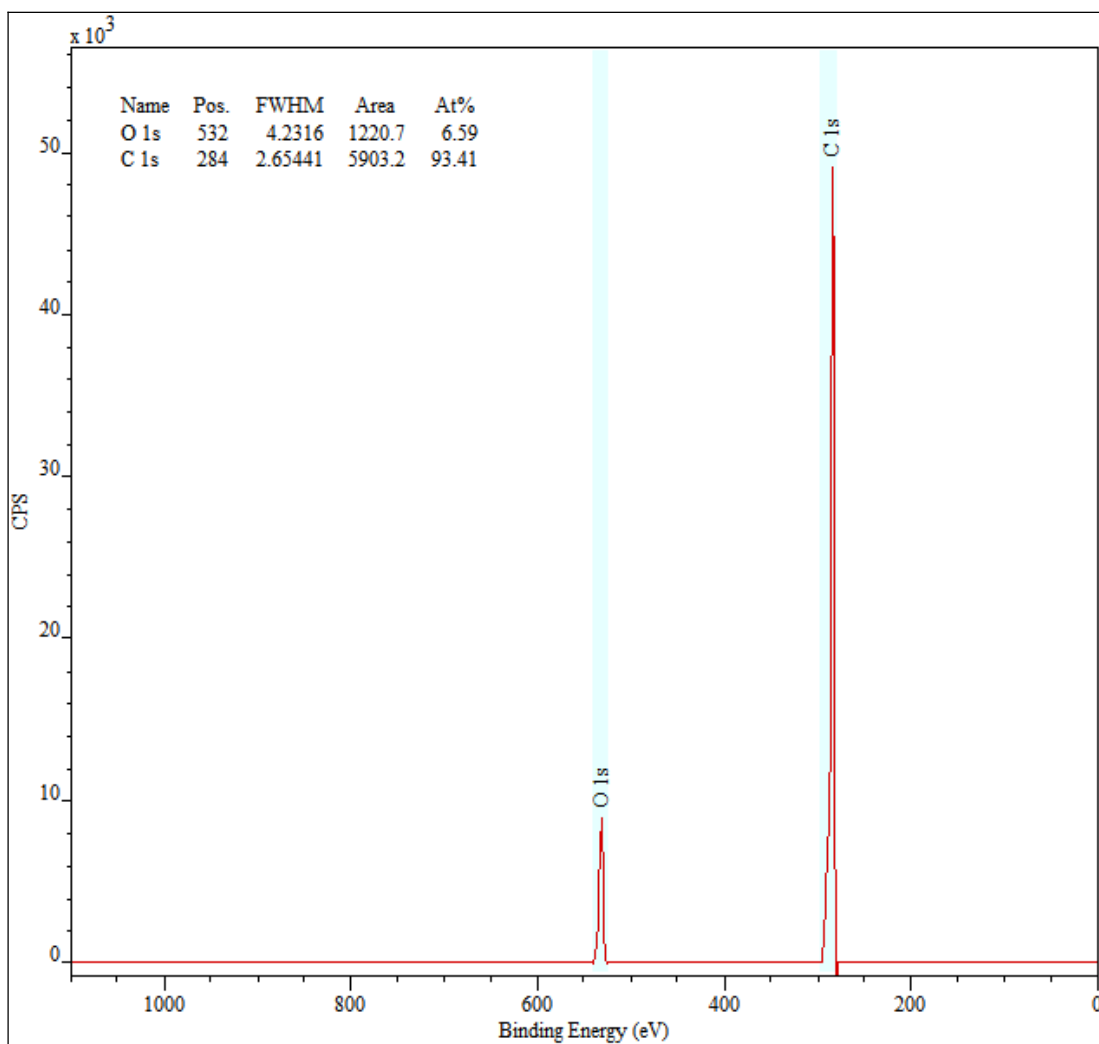


Figure 1g