Length Control of Single Walled Carbon Nanotubes

Hui Hu[1], Heather Rhoads[1], Michael Harrington[1], Leandro Balzano[1],

Daniel Resasco[2*]

[1] SouthWest NanoTechnologies, Norman, OK, 73069-8518

[2] School of Chemical, Biological, and Materials Engineering

University of Oklahoma, Norman OK 73019

Abstract

We report a convenient centrifugation method to separate single-walled carbon nanotubes (SWNTs) with narrow length distribution. The SWNTs were first stirred in 10% HF for 5 minutes. After centrifugation at varied speed and time, different fractions was collected. AFM images show about 80% of SWNTs contain in the sediment have a length varied from 800 nm to 1200nm.

* To whom correspondence should be addressed: resasco@ou.edu