

Reagent-free Microwave-assisted Purification of Carbon Nanotubes

Khalil Chajara,^a Claes-Henrik Andersson,^a Jun Lu,^b Erika Widenkvist,^c Helena Grennberg^{a*}

^aDepartment of Biochemistry and Organic chemistry, PO Box 576, SE 751 23 Uppsala, Sweden

^bThe UU Microstructure Laboratory, Box 534, SE 751 21 Uppsala, Sweden

^cDepartment of Materials Chemistry, PO Box 538, SE-751 21 Uppsala, Sweden

Supplementary material

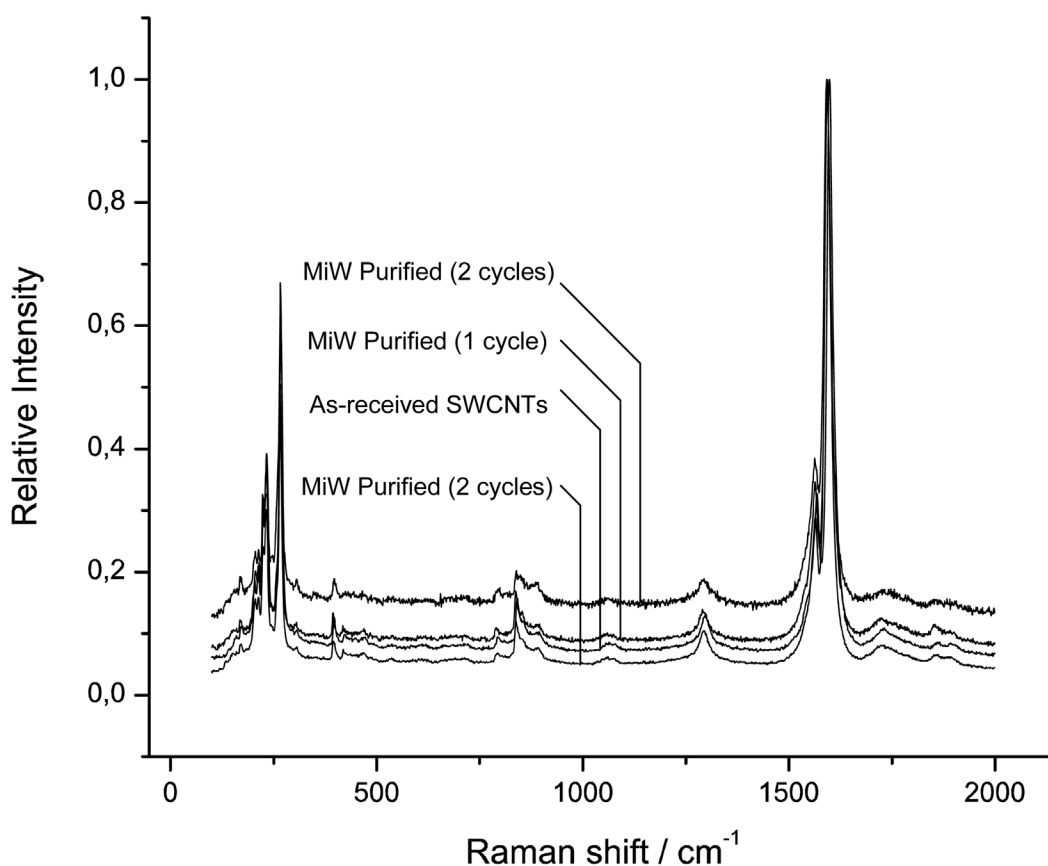


Figure S1. Raman spectra (783 nm excitation) of MiW-assisted cleaning of commercial post-synthesis treated HiPco SWCNT material using CH₂Cl₂, normalized to the G-band.

* Corresponding author. FAX: +46 18 4713818. E-mail address:

Helena.Grennberg@biorg.uu.se (H. Grennberg)

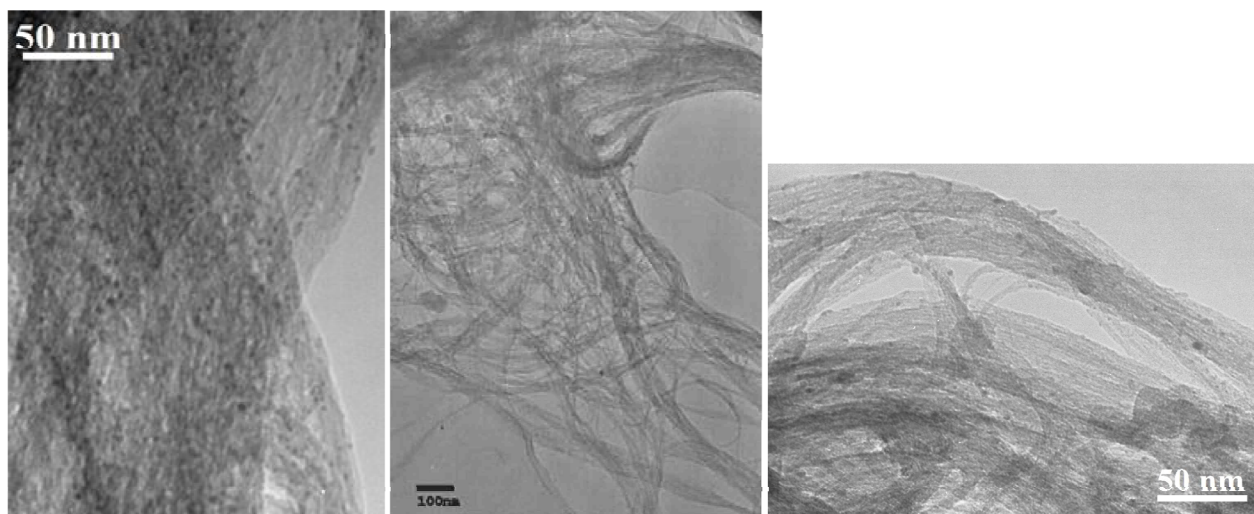


Figure S2. TEM analysis monitoring MiW-assisted cleaning of commercial post-synthesis treated HiPCO SWCNT material (Carbon Nanotechnologies, “<15wt% ash content”) using CH_2Cl_2 . Left: As-received material, middle: after 1 cycle, right: after 3 cycles.

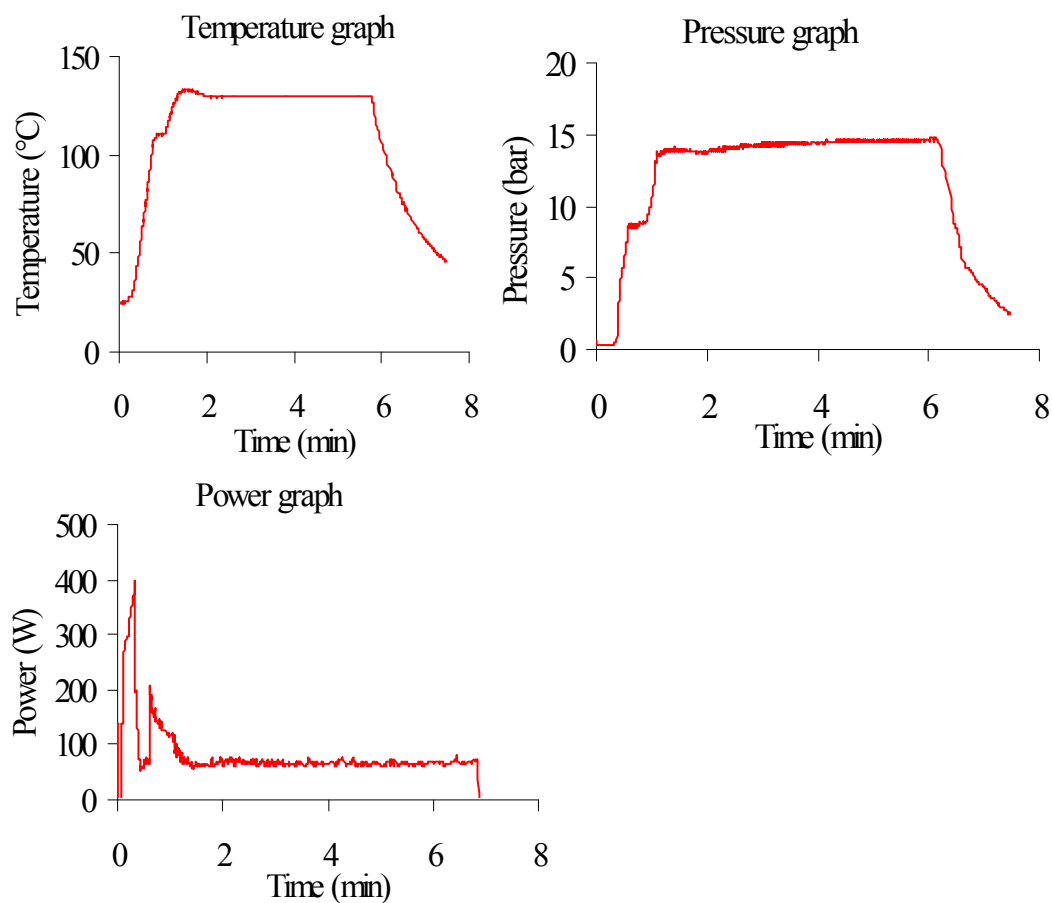


Figure S3. Temperature, pressure and power graphs from a typical run using a Biotage Initiator 2.0 microwave for the MiW assisted purification of CNTs.

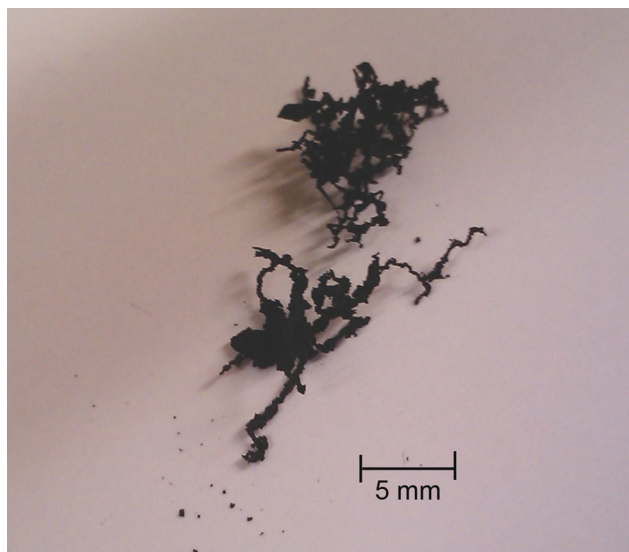


Figure S4. Some metal-containing structures collected from the MiW-treated MWCNT material.