

Support informations:

Table 1 The detailed data of Raman spectra about Figure 3.

	PSWNT	PSWNT+Phe 0.15 M	OSWNT	OSWNT+Phe 0.15 M	
Ig/Id	10.08	8.55	9.53	8.91	
Position of Raman mode (cm ⁻¹)	①	142.1	158.6	159.8	152.7
	②	214.7	214.7	216.4	218.2
	③	251.6	251.6	251.6	251.6
	④	1325.2	1325.2	1326.2	1327.7
	⑤	1580.7	1580.1	1581.3	1585.7
	⑥	1910.9	1912.4	1910.9	1915.1
	⑦	2618.6	2611.8	2631.4	2631.4
	⑧	3165.1	3163.4	3167.4	3170.8

Table 2 The assignment of FT-IR bands of L-Phenylalanine used in this work.

Bands (cm ⁻¹)	Assigned to groups as following
700 cm ⁻¹ , 1074 cm ⁻¹ , 1560 cm ⁻¹ , 1625 cm ⁻¹	Benzene ring
682 cm ⁻¹ , 3031 cm ⁻¹	-CH- in the benzene ring
747 cm ⁻¹ , 2963 cm ⁻¹	-CH ₂ -
849 cm ⁻¹ , 3066 cm ⁻¹	-NH ₃ ⁺
947 cm ⁻¹ , 1307 cm ⁻¹ , 1410 cm ⁻¹ , 1458 cm ⁻¹	-COO ⁻
1449 cm ⁻¹ , 1596 cm ⁻¹	-C=O

Figure 1 The flowchart for the purification procedure of SWNTs.

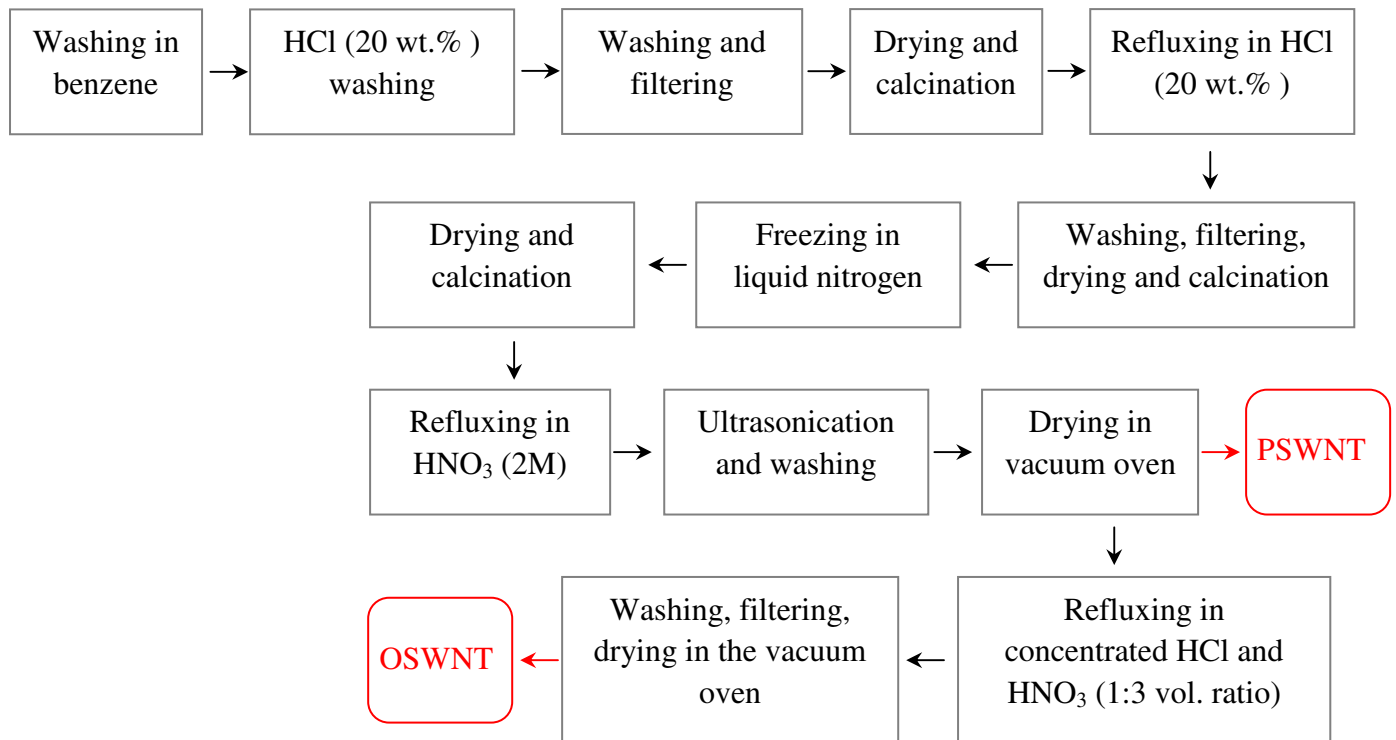


Figure 2 EDX spectrum and data for OSWNT-Phe0.15M sample.

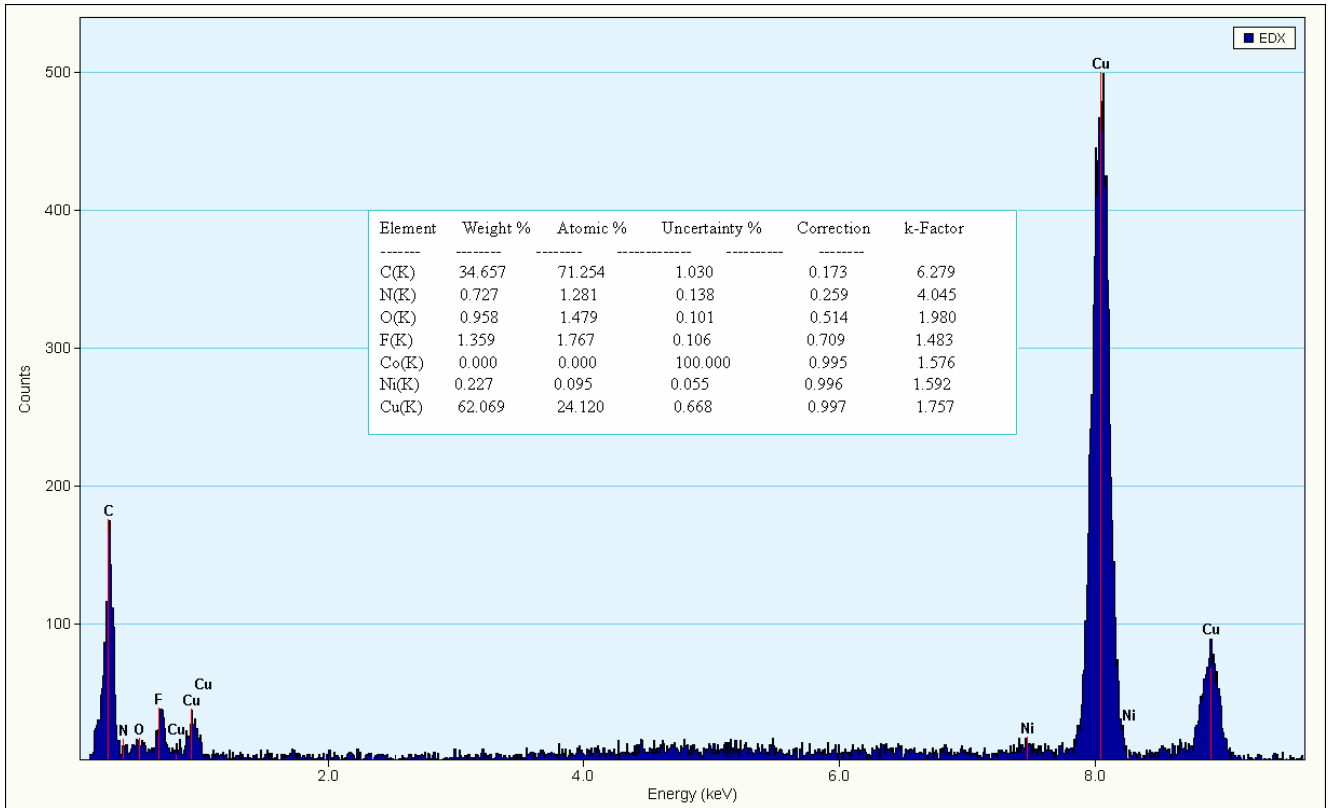


Figure 3 EDX spectrum and data for OSWNT sample.

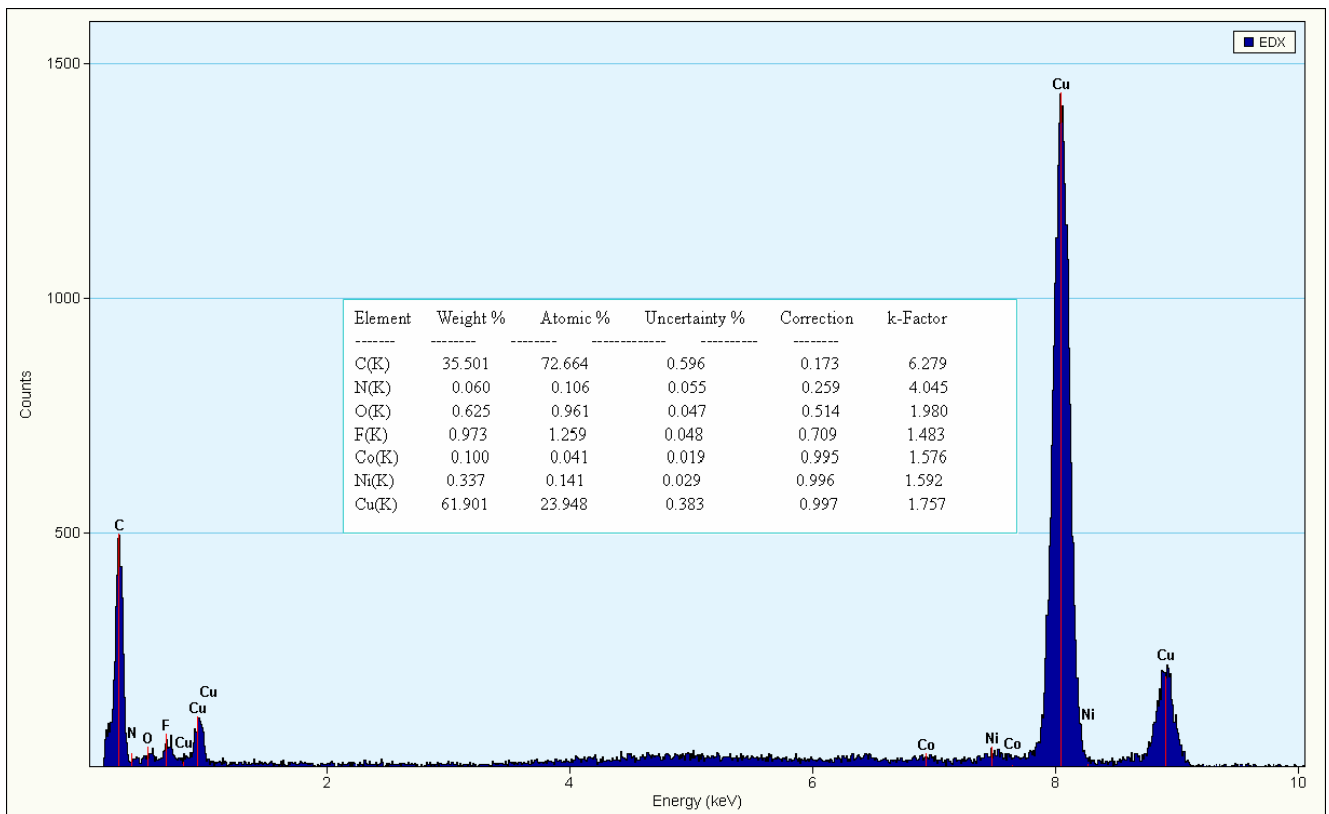


Figure4. The HPLC results of PSWNT and OSWNT before and after adsorption.

