

Supplementary Information

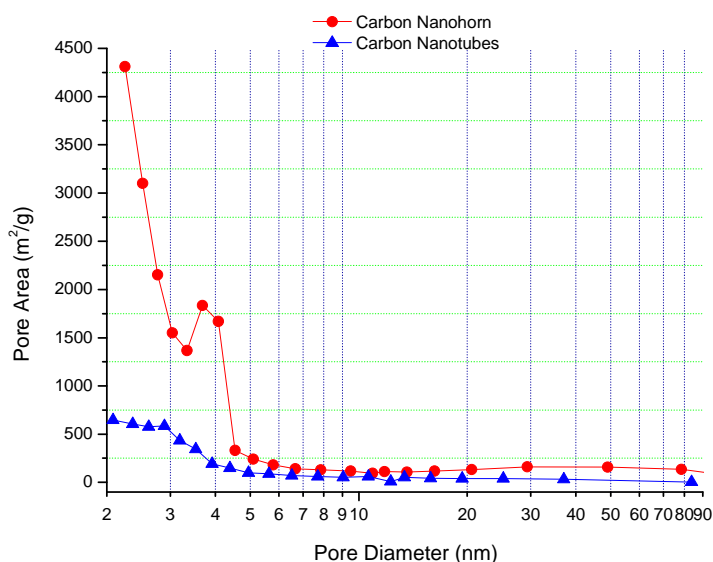


Figure 1: Barret-Joyner-Halenda (BJH) analysis of the CNTs and the CNH. It can be seen that a large part of the surface area enhancement comes from micropores (<2nm).

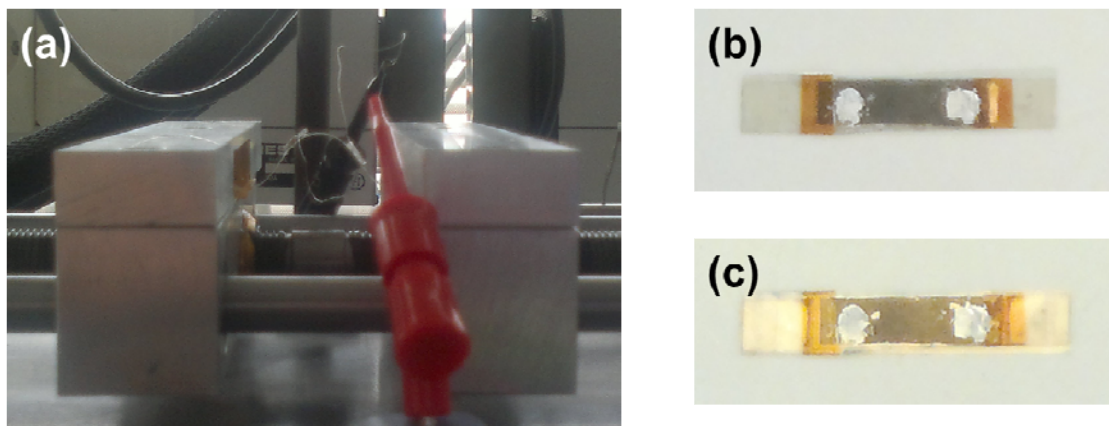


Figure 2: Physical stability of the SWNT/CNH composite. A strip of composite film was bent for 1000 cycles as shown in (a) while the conductivity was measured. (b) and (c) show photographs of the films before and after, no visible deterioration, in the structure of the film or the conductivity was observed.