1. **EDX spectra of Fe-filled SWNTs and pristine SWNTs.**

![EDX spectra](image)

Fig. 1 EDX spectra of Fe-filled SWNTs and pristine SWNTs

Compared with the EDX data of pristine SWNTs, one distinct peak of Fe at 6.4 keV is seen for the sample of Fe-filled SWNTs, although it exhibits a relatively weak intensity.

2. **Magnetic properties of ferrocene and ferrocene-filled SWNTs**

![Magnetization curve](image)

Fig. 2 Magnetization curve of ferrocene measured at 5 K
The above results indicate that ferrocene molecules show diamagnetic behavior, as shown in Fig. 2. Also, the magnetization data in Fig. 3 reveals that magnetic characterization of ferrocene-filled SWNTs is similar to that observed for pristine SWNTs, which demonstrates that the magnetization of ferrocene-filled SWNTs comes from the magnetic particles in the sample of pristine SWNTs.