

各种CNT的观察与测定 IV

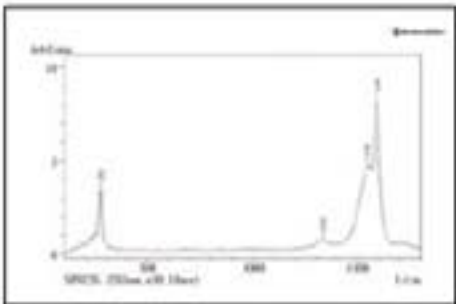
Various Types of CNT Observations and measurements:#4

样品： 双层碳纳米管

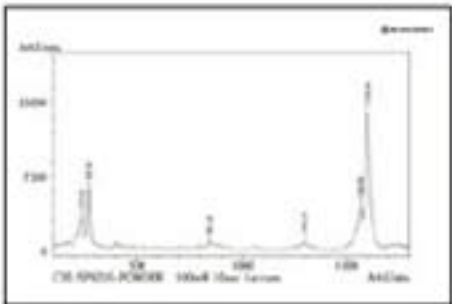
Sample: Double-walled carbon nanotubes

Carbon Nanotechnologies Inc生产的DWNT的观察与测定实例。
This is an example of observation and measurement of DWNT, produced by Carbon Nanotechnologies Inc.

拉曼分光 (HoloProbe 监控系统) /Raman Scattering

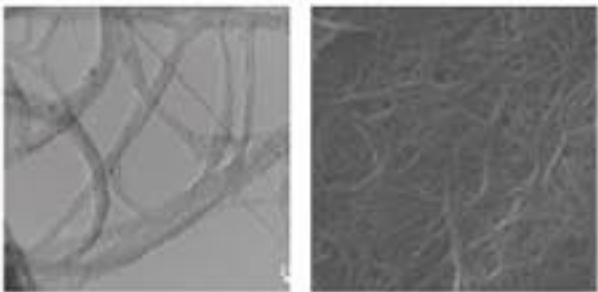


532nm激发的拉曼光谱
Raman spectrum at 532 nm excitation



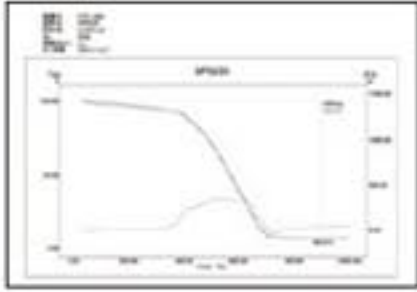
785nm激发的拉曼光谱
Raman spectrum at 785 nm excitation

TEM•SEM



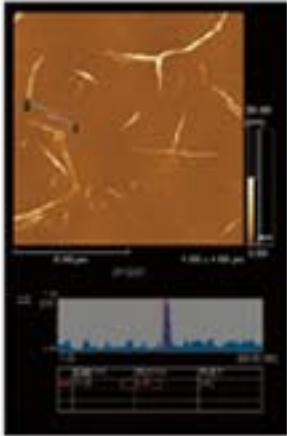
TEM/SEM对DWNT的观察
SWNT observation by TEM and SEM

热重分析 (DTG-60A) /Thermogravimetry



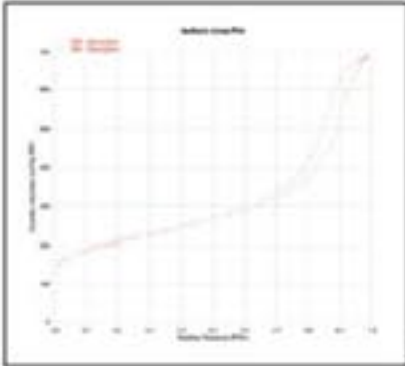
DTG的热重分析
Thermogravimetric measurement by DTG

SPM (SPM-9600)



SPM对DWNT的观察及直径的估算
SWNT observation and estimate of diameter by SPM

比表面积/细孔分布 (TriStar3000型)



前处理装置：真空预处理061型
前处理条件：300摄氏度、5小时、抽真空
吸附气体：氮气（液氮温度）

样品名	BET比表面积 (平方米/克)	细孔容积 (平方厘米/克)
DWNT	761	1.124500

定容法 (气体吸附法) 测定比表面积/细孔分布

Specific surface area/porous distribution measurement via constant volume (gas absorption) method