



Technical Data Sheet

ACS Material Purified Single-Walled Carbon Nanotubes

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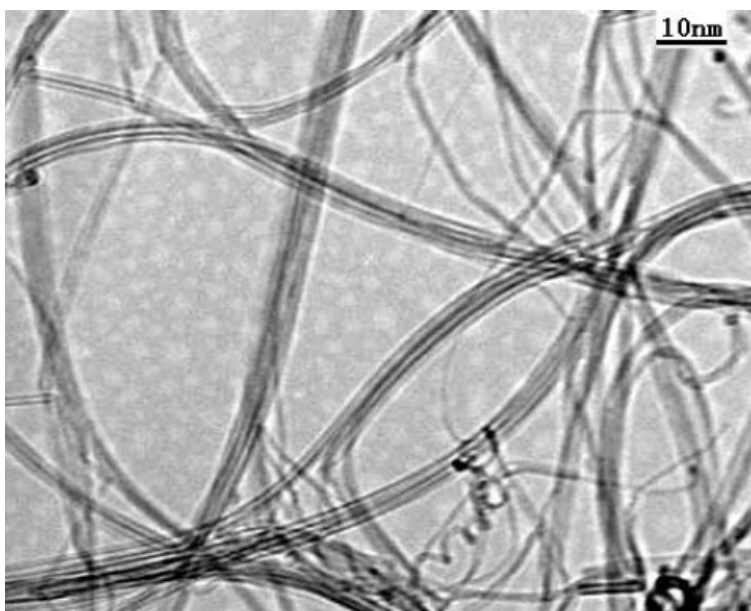
Revision: 092617

1. Preparation Method

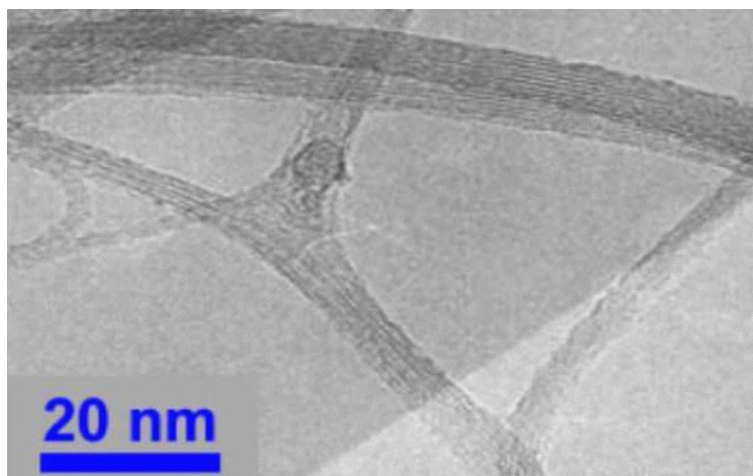
Chemical Vapor Deposition (CVD) Method

2. Characterizations

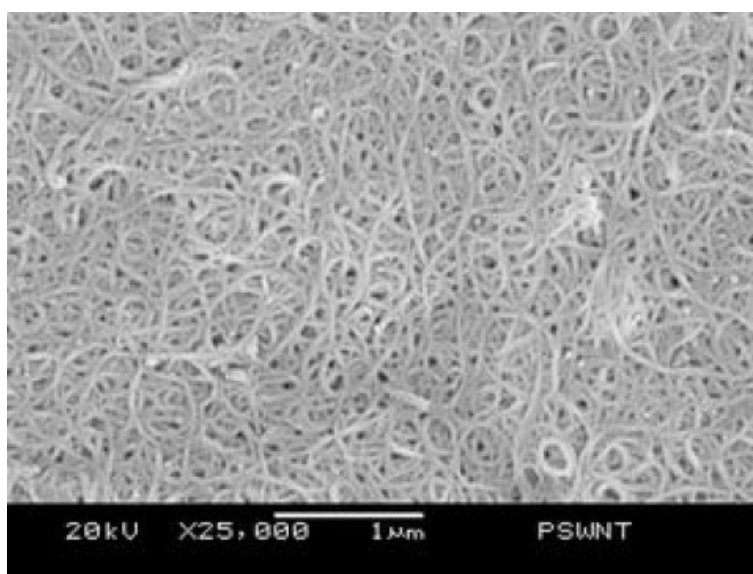
Purity:	>90%
Color:	Black
Outer Diameter:	1-2 nm
Inner Diameter:	0.8-1.6 nm
Length:	1-3 μm 5-30 μm
SSA:	>380m ² /g
Tap density:	0.14g/cm ³
Apparent density:	~2.1g/cm ³
EC:	>100 S/cm



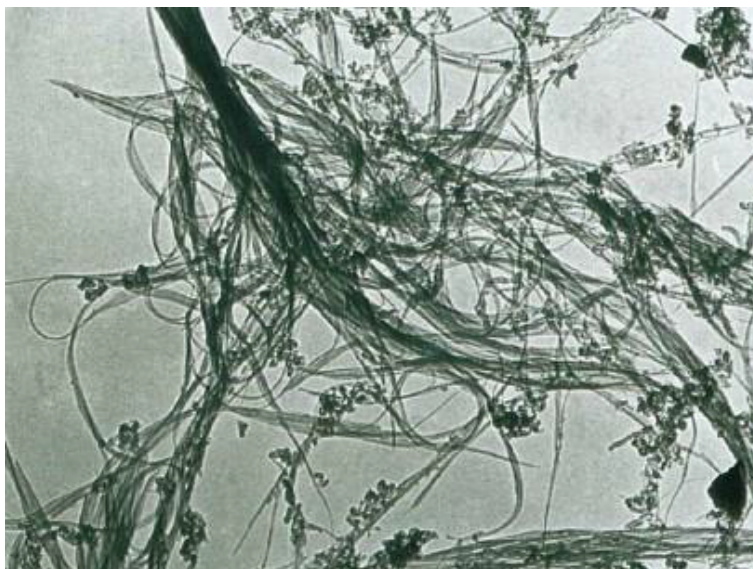
TEM Image of ACS Material Purified SWCNTs (Length = 1-3 μm)



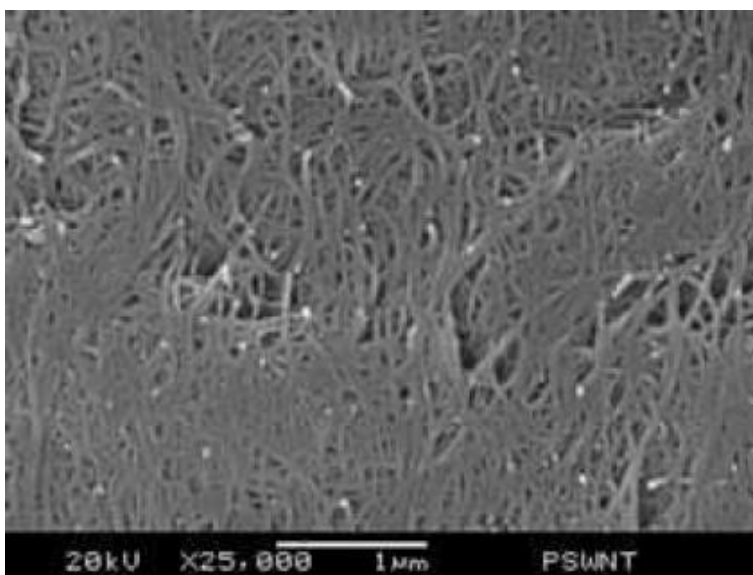
HRTEM Image of ACS Material Purified SWCNTs (Length = 1-3 μm)



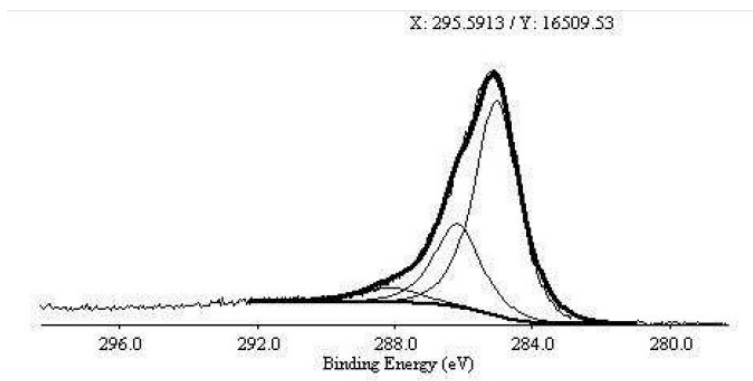
SEM Image of ACS Material Purified SWCNTs (Length = 1-3 μm)



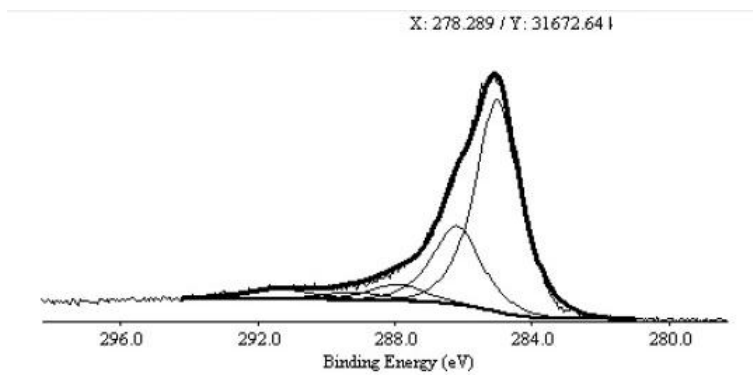
TEM Image of ACS Material Purified SWCNTs (Length = 5-30 μm)



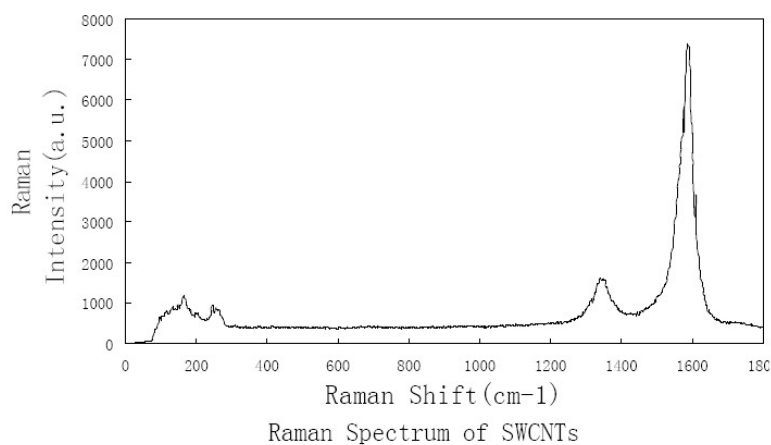
SEM Image of ACS Material Purified SWCNTs (Length = 5-30 μm)



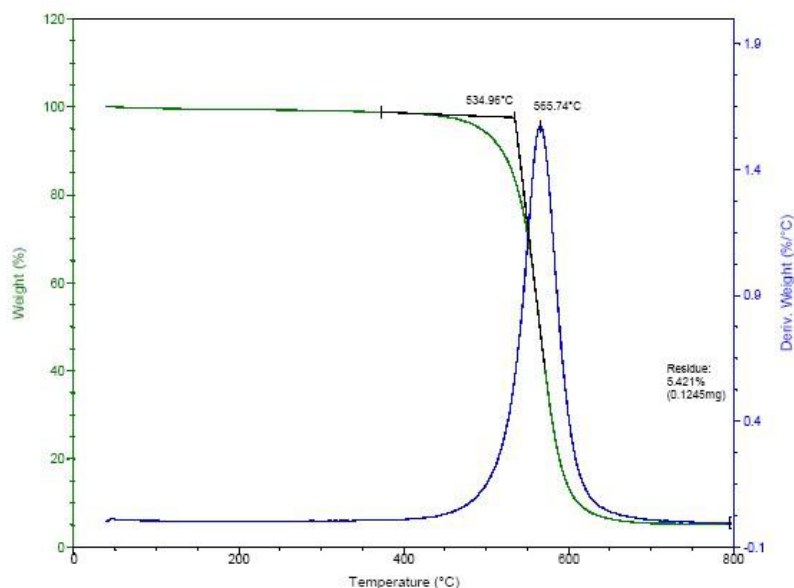
XPS Spectrum of ACS Material Purified SWCNTs (Length = 1-3 μm)



XPS Spectrum of ACS Material Purified SWCNTs (Length = 5-30 μm)



Raman Spectrum of ACS Material Purified SWCNTs (Length = 5-30 μm)



TG Analysis of ACS Material Purified SWCNTs (Length = 1-3 μm)

3. Application Fields

Catalysts, additives in polymers, nanoelectrodes, drug delivery, sensors, electromagnetic-wave absorption and shielding, electron field emitters for cathode ray lighting elements, flat panel display, gas-discharge tubes in telecom networks, energy conversion, lithium-battery anodes, hydrogen storage, supercapacitors, nanotube composites (by filling or coating), nanoprobe for STM, AFM, and EFM tips, nanolithography, reinforcements in composites, *etc.*

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