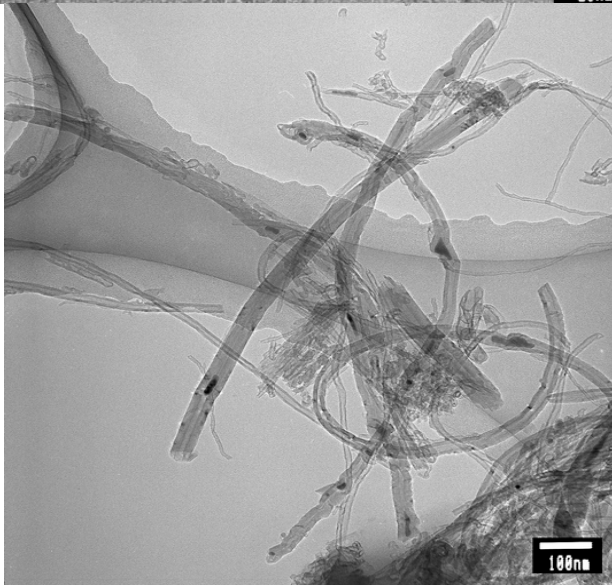
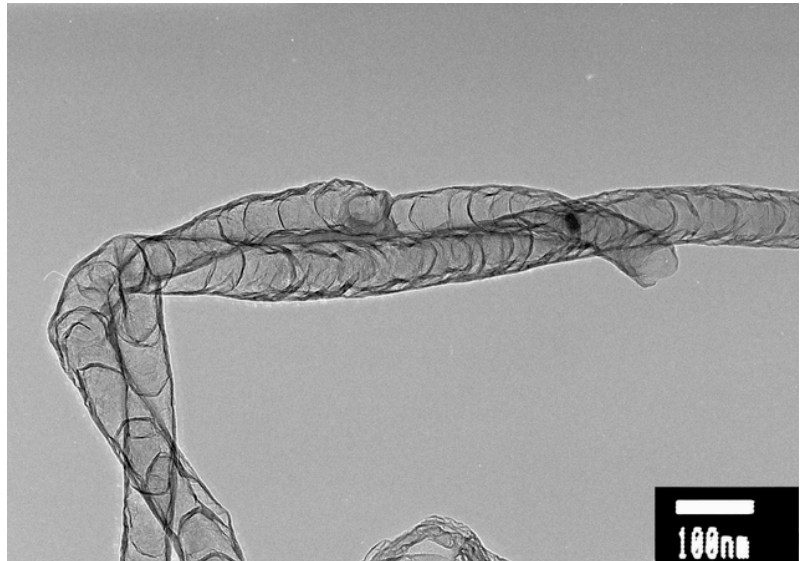
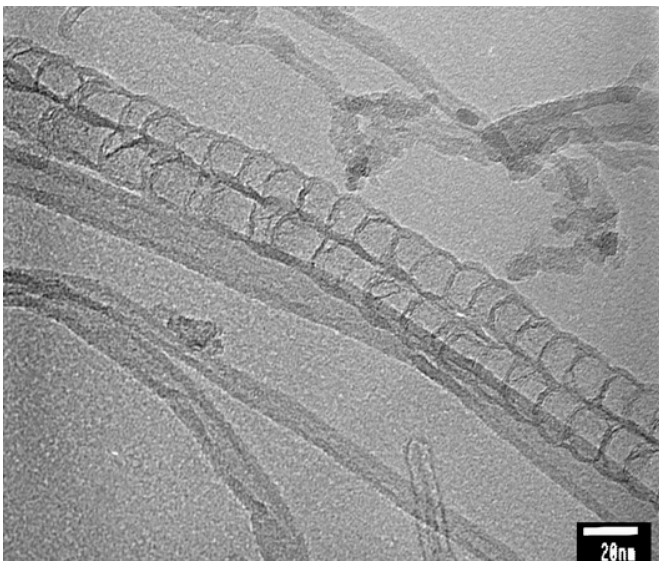


Nitrogen-Dope CNTs/Short CNTs

When adding liquid Nitrogen, CNT's crystal structure changes sharply. That is to say the structure is changed from hollow micro-pipe to thin shell. Besides, crystal status on CNTs surface also changes and crystallizability of hexagon is weakened. Bad effect can be immediately realized. However if processing the surface by having it react with Pt and other materials, an excellent effect can be gained. For example, when full cell, platinum catalyst carrier, is adopted, comparing liquid nitrogen CNTs carrier with common carbon-black carrier, durability of platinum is greatly improved. Nitrogen-Dope CNTs, due to a modified crystal structure, can easily get short CNTs. It is a very good way to cut CNTs or improve dispersion.

Nitrogen-Dope CNTs



TEM of Cut Nitrogen-Dope CNTs after grinding

TEM Diagram of Hollow Tube-Shaped CNTs without N-Dope Treatment and Bamboo-Shaped CNTs after N-Dope Treatment