

A nanotubular polyaniline was prepared by emulsion polymerization in the presence of n-dodecylbenzenesulfonic acid (DBSA) · Camphorsulfonic acid (CSA) and Hydrochloric acid (HCl). Since the helical pattern of nanotubes, it can increase the conjugation of molecular chain, leading to achieve electronic, solubility enhancement for a wider application.

The polyaniline nanotubes were confirmed by micrographs of Transmission Electron Microscope (TEM) and Scanning Electron Microscope (SEM). In the polymerization process with the addition of Camphorsulfonic acid (CSA), micelles were formed, the associating with inter-molecular H-bonding, which was characterized in the Infrared-ray spectrum (FT-IR), in the vicinity of wave number for 1750 cm^{-1} of the carbonyl group with shoulder. It was sure that the micelles were combined with each other through the H-bonding. When dedoping the polyaniline nanotubes, the structure of the H-bondings, resulted on the carbonization crosslinking found at higher temperature, its resistance value was too high to be measured, the resistance will decrease with the temperature increased to higher value when graphification occurs.