Electron Microscopy Study for Pt Nanoparticles Deposited on Different Carbon Supports

Pt nanoparticles were deposited on different type of carbon supports by chemical vapor deposition (CVD) technique for use as catalysts for fuel cell electrode, and studied by scanning electron microscopy (SEM) and transmission electron microscopy (TEM). CVD has been recently reported to be effective for the deposition of highly dispersed metal nanoparticles. We used carbon black (Vulcan XC-72), carbon nanotubes (multi-walled nanotubes, CM-95, Iljin nanotech), and activated carbon as carbonaceous supports.