

Characteristics of Fluorinated Ni-doped Activated Carbon Fibers

김주완, 김신동, 임지선, 이영석*

충남대학교

(youngslee@cnu.ac.kr*)

In order to examine the relation between surface property and metal doping, the surfaces of activated carbon fibers (ACFs) were modified by fluorination and/or metal doping. The fluorinated ACFs were impregnated with $\text{Ni}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$ dissolved with acetone. The properties of fluorinated Ni-dispersed ACFs were investigated by BET surface area analysis, scanning electron microscopy (SEM), energy dispersive spectroscopy (EDS) and X-ray diffraction (XRD). X-ray photoelectron spectroscopy (XPS). Also, BET surface area of fluorinated ACFs with/without nickel was decreased as the partial pressure of fluorine.