

## Synthesis of Highly Ordered Fluorinated Mesoporous Carbon

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Recently, numerous researches related to highly ordered mesoporous carbon using the way to add various kinds of heteroatoms (ex. O, S, N, F) to the mesoporous carbon are on a progress, because of the dopant atoms can enhance the mechanical, semiconducting, electrical, and surface properties.

Therefore, we fabricate the highly ordered fluorinated mesoporous carbon by the hard template method. Various ordered mesoporous silica such as SBA-15, KIT-6 and MCM-48 was used as templates and p-fluorophenol was used as a carbon precursor. Synthesized carbon materials were characterized by XRD, SEM and N<sub>2</sub> adsorption measurement. Existence of fluorine in products were analyzed by Thermo-gravimetric analysis (TGA) and Fourier transform infrared (FT-IR). In results, each mesoporous carbon frameworks show different morphology via using diverse templates and indicates the physico-chemical properties.