

## ABSTRACT

The present invention relates to a method for producing a carbon fiber that can be suitably used as a transparent conductive material for forming transparent flexible conductive films and the like, more particularly, to a method for producing a carbon fiber having an outermost surface composed of edges of graphenes, and to a carbon fiber produced by the production method. The production method comprises a step of pre-baking a fiber of an organic compound so as to contain remaining hydrogen, and a step of putting the pre-baked fiber of the organic compound in a closed vessel made of a heat resistant material and subjecting the pre-baked fiber together with the vessel to hot isostatic pressing treatment using a compressed gas atmosphere, wherein a maximum ultimate temperature in the hot isostatic pressing treatment is 1000 to 2000°C.