

Scanning electron microscopy of activated carbons prepared from commercial acrylic textile fibres

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Abstract

Scanning electron microscopy has been used to study the variation in surface texture and dimension during carbonisation and activation of three acrylic textile fibres. The results show that both ordered and disorganised forms of carbon exert a direct influence on the macroscopic structure of the carbon materials. In addition, the results also show that the presence of small amounts of an inorganic additive, namely titanium dioxide, can disrupt the graphene structure and lead to modification of the surface texture and reactivity of the carbon materials. © 2002 Elsevier Science B.V. All rights reserved.

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