Preparation and characterization of activated carbons derived from bio-solid: a review

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ABSTRACT
Preparation of activated carbons from bio-solid is a promising way to dispose bio-solid as well as to produce a low-cost adsorbent for pollutant removal. Various physical and chemical processes are in use for the activation of the activated carbon derived from bio-solid (ACBS). Both physical and chemical characterizations provide fundamental knowledge for its potential application for pollutants removal. The literature illustrates that KOH, the chemical activation procedure is found to be the most effective technique for producing high BET surface area ACBS, with areas in excess of 1,882 m²/g being reported. In this review, the results reveal that the ACBS is comparable with commercially activated carbons.

Keywords: Bio-solid; Activated carbon; Production; Characterization; Application

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