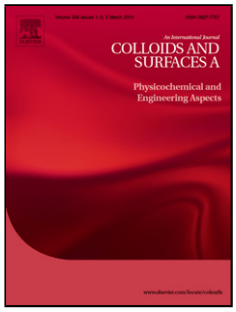

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AN ANALYSIS OF THE POROUS STRUCTURE OF ACTIVATED CARBONS OBTAINED FROM HAZELNUT SHELLS BY VARIOUS PHYSICAL AND CHEMICAL METHODS OF ACTIVATION

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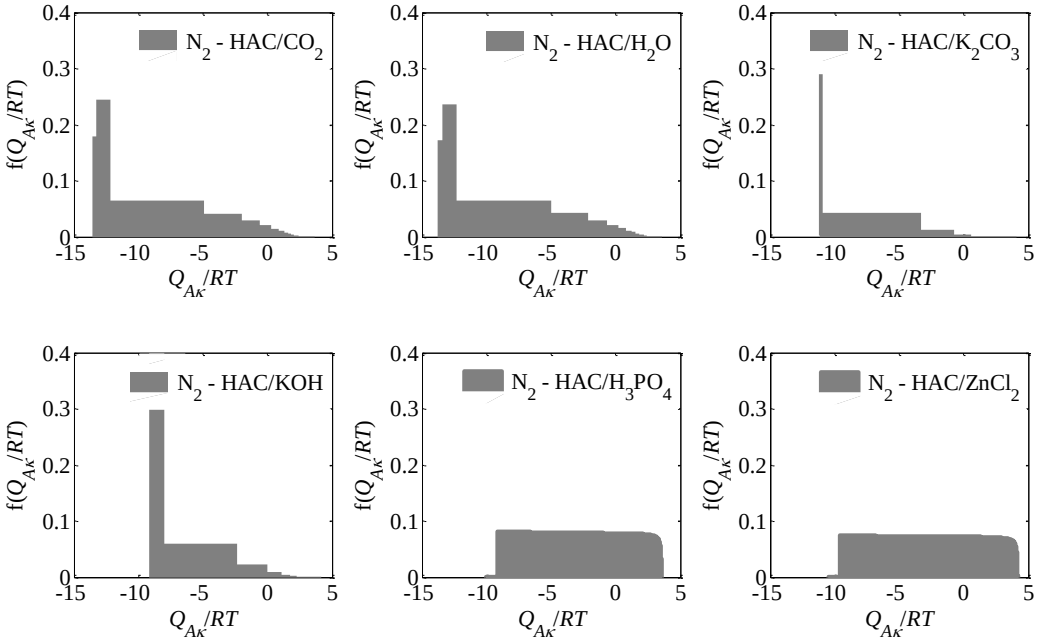
Graphical Abstract



The nitrogen adsorption energy distributions determined for all analysed activated carbons, obtained with the use of various methods of physical and chemical activation.

Abstract

This paper presents the results of the research analysing the microporous structure of carbonaceous adsorbents obtained from hazelnut shells by various physical and chemical methods of activation. The calculations were carried out with the use of the procedure of fast multivariate identification of adsorption systems with implemented LBET class adsorption models, which is generally referred to as the LBET method, as well as by DR and BET methods on the basis of adsorption isotherms of benzene and nitrogen. Porosimetry measurements, as well as imaging with the use of scanning electron microscopy and an EDX elemental analysis were also conducted.

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