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## Numerical evaluation of the effect of the activation method and the used activator on the formation of the micro porous structure of the carbonaceous materials

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The work presents numerical evaluation of the effect of the used activator on the formation of the micro porous structure of the carbonaceous materials. The computer calculations were carried out based on the adsorption of isotherms of nitrogen. On the basis of the research and analysis, a significant effect of the type of the activating agent used on the formation of the micro porous structure and consequently on the adsorptive properties of the produced adsorbate was observed. The right choice of the raw material and the conditions for the production of carbonaceous adsorbents can result in obtaining materials with a complex micro porous structure suitable for a particular technological process provided that the optimal activating agent is applied and the preparation conditions are suitable for the raw material in question. The new adsorption models with the unique numerical procedure of the fast multivariate fitting of theoretical models to adsorption isotherms applied in this work proved highly advantageous when compared with popular methods of micro porous structure description by providing a wider range of information on the analyzed micro porous structure and offering unique possibilities of evaluating reliability of the obtained information on the analyzed structure.

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