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Application of the new numerical method to an analysis of nitrogen and carbon dioxide adsorption on NaY

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The paper presents the results of the research on the application of the LBET numerical method with the fast multivariant identification procedure as a tool for analysing the adsorption in NaY zeolites structures on the basis of the nitrogen and carbon dioxide isotherms. The obtained results show that the LBET method give good

insight into the adsorption mechanisms as well as the LBET models may be well fitted to data in a wide pressure range, providing accurate evaluation of the monolayer adsorption capacity. The models give also information on adsorbate clusterisation mechanisms, and surface energy distribution.

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