

Computation Of The Energy Density Of The Adsorption Sites By Inverse Gas Chromatography

BOUHANK Antar, BENCHEIKH Lahcene

Abstract : Inverse Gas Chromatography (I.G.C) technique can be used to determine the adsorption properties of the stationary phase of various materials. The problem is formulated in terms of an integral equation where the unknown is the energy density. The integral equation is a Fredholm integral equation of the first kind. Generally, integral equations cannot be solved analytically. Resort is often made to numerical methods of solutions. The kernel of the integral equation is the adsorption model. For some special models, a solution in a closed form was obtained. Some results are presented.

Keywords : Inverse gas chromatography, adsorption energy, adsorption models, integral equation