sorption techniques

in trace analysis

Techniques based on the distribution of components being separated between two phases, one of which is stationary and the other mobile. The advantage of some chromatographic methods is the possibility of combining the preconcentration and determination steps, as well as improving the speed of determination, and the possibility of separation of components with similar properties, and of achieving high values of the preconcentration coefficient. The methods enable analyses of microamounts of substances. Ion-exchange chromatography is not widely used owing to the great volumes of solutions being treated and, consequently, to a great degree to the variation in the blank, and to some diffusional limitations. Static ion-exchange, which is much simpler and more readily carried out, is practised quite widely.

Source:

PAC, 1979, 51, 1195 (Separation and preconcentration of trace substances. I - Preconcentration for inorganic trace analysis) on page 1199