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New: IGA-003-MC Binary Gas Sorption Analyzer

Hidden Isochema announces the release of a new product for the fast and accurate determination of binary gas sorption isotherms: the IGA-003-MC. The IGA-003-MC is a turnkey system for binary gas sorption, featuring a gravimetric analyzer, coupled mass spectrometer, and an optimized gas delivery and sampling system.



Binary Gas Sorption

Measuring multicomponent gas sorption equilibria is essential to characterize and assess adsorbents for applications such as nitrogen and oxygen production from air, natural gas upgrading, and hydrogen purification. Both the partial adsorbed gas quantities, and the gas adsorption selectivities at a range of gas compositions, are required to accurately model these separation and purification processes. Traditional multicomponent sorption methods are often time consuming and require large samples, but fast and accurate measurements, using only a few grams of material, are now possible using Hidden Isochema's IGA-003-MC binary gas sorption analyzer.

The IMB Method

The IGA-003-MC uses the recently developed Integral Mass Balance (IMB) method, which represents a major advance in sorption analysis techniques. In the IMB method, a controlled gas mixture flows over a sample suspended from the IGA microbalance and the gas composition at the outlet is determined using a mass spectrometer. Inlet flow rates and outlet gas composition are then combined with in-situ gravimetric data to calculate the partial uptake of each gas, as well as the total mass uptake, as a function of gas composition. The IMB method is unique to Hidden Isochema's IGA-003-MC binary gas sorption analyzer.

IGA Series Sorption Analyzers

The IGA-003-MC is the latest addition to the IGA series of Instruments, a range of high accuracy gravimetric gas and vapor sorption analyzers, for precise characterization of sorption equilibria and kinetics in academic and industrial research applications.

About Hidden Isochema

Hidden Isochema is recognized as an established leader in sorption instrumentation with over 20 years' experience in sorption analyzer design and development. For further information on this or any other Hidden Isochema product contact Hidden Isochema at info@hiddenisochema.com or visit www.hiddenisochema.com