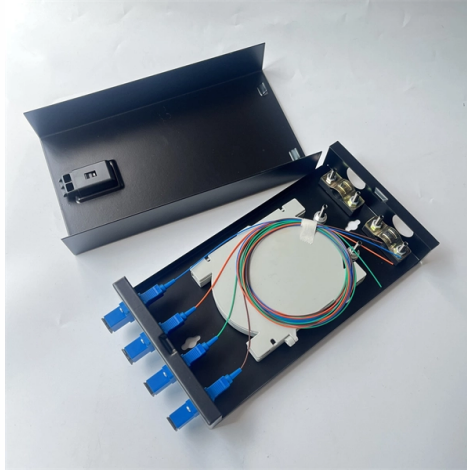


Catalyst spectrometer



Overview

These instruments are used in the following areas: characterization of catalysts using TPD, determination of acidity / basicity of the solid catalyst, pulse injection for the metal dispersion rate of noble metal supported catalysts, evaluation of the catalytic reaction. These instruments are used in the following areas: characterization of catalysts using TPD, determination of acidity / basicity of the solid catalyst, pulse injection for the metal dispersion rate of noble metal supported catalysts, evaluation of the catalytic reaction. Hiden Analytical is an industry-leading supplier of microreactors and mass spectrometer systems for complex areas of research, including catalyst characterization, screening, and reaction studies. With rapid responses for kinetic and thermodynamic measurements at temperatures of up to 1000°C. The performance of solid catalysts is shaped by specific surface properties, with factors like nature and distribution of active sites, acidity, basicity, redox behavior, electronic structure, and surface morphology all playing critical roles in determining catalytic activity, selectivity, and. Whereas with diffraction, scattering and microscopy, decisive insights into the structure and morphology of the catalysts can be obtained, spectroscopy produces new knowledge about the chemical nature of the catalyst, e., its bonding and valence states. X-ray diffraction is well suited to ascertaining the bulk structure and composition of heterogeneous catalysts that have crystalline structures.



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Website: <https://www.thebucketlistbook.co.za>

Email: sales@thebucketlistbook.co.za

Phone: +33 1 42 78 39 16

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