

Chemisorption analyzer

Description/Parameters

The AutoChem II 2920 is a highly automated catalyst characterization system. It can perform the following experiments individually or in various sequences:

- Temperature-Programmed Desorption (TPD)
- Temperature-Programmed Reduction (TPR)
- Temperature-Programmed Oxidation (TPO)
- Temperature-Programmed Reaction
- Pulse Chemisorption
- BET Surface Area

The AutoChem II 2920 analyzer is designed to offer maximum control, flexibility, and automation. All parts of equipment (e.g. mass flow controllers, valves, gas ports) allow setting specific conditions for desired reaction and using.

Utilization/Services

Characterization of catalysts and adsorbents by temperature programmed techniques (-100 °C - 1000 °C). It is possible to determine the amount of reducible and oxidizable species, metal surface area and dispersion of supported metal/oxide catalysts, the amount and strength of acidic and basic sites and to provide temperature programmed desorption of selected compounds (e.g. O₂, NO, NO₂, N₂O) applicable especially for studying of mechanisms of catalytic reactions.

