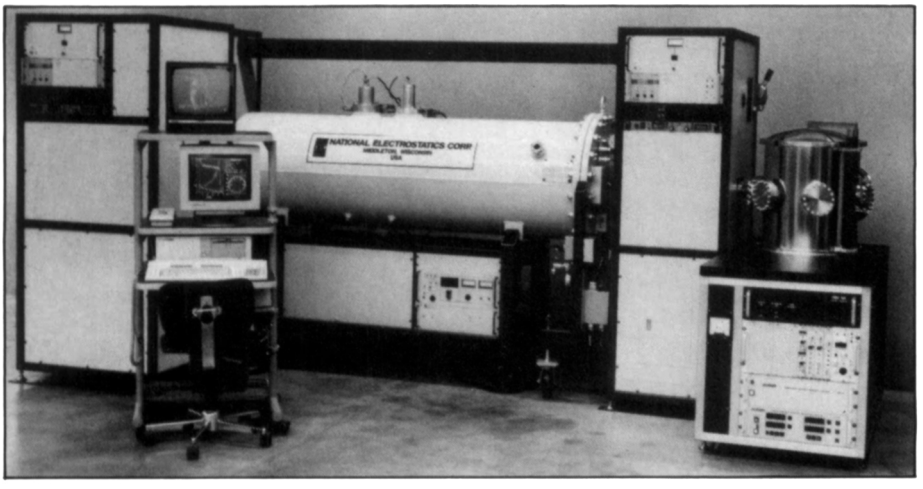
A summary of new products and services for materials research...

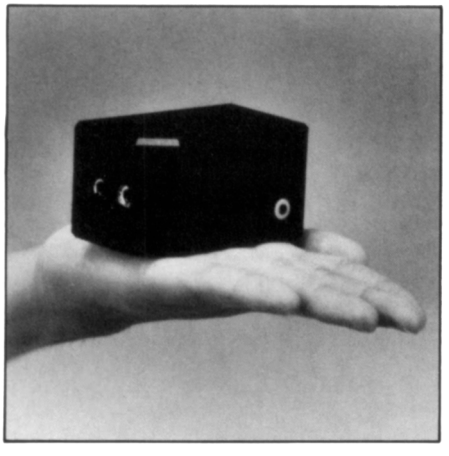


MeV Ion Beam Surface Analyzer

MeV Ion Beam Surface Analyzer: National Electrostatics' MAS1000 MeV materials analyzer provides nondestructive elemental analysis of surfaces to depths in excess of 5,000 Å. Versatile, compact system (4.2 m × 1.5 m) can perform a wide range of MeV ion-beam-based analysis techniques including RBS, PIXE, channeling, target recoil analysis, and resonant and reaction techniques with energy variable helium ion and proton beams to above 3 MeV. The instrument is fully computer interfaced for unattended data collection.
Circle No. 68 on Reader Service Card.

Temperature Chambers: Instron's eight-page brochure details a line of high and low temperature testing chambers for advanced materials, including metals, plastics, elastomers, papers, textiles, and composites. Four models in the 3119 series cover individual temperature ranges within -150 to 600°C. Additional features are handset control, automatic self-tuning temperature control, and special window design. There are also sections on cryogenics applications, communications links, and accessories for the temperature chamber as well as operational, temperature, accuracy, and dimension specifications.
Circle No. 69 on Reader Service Card.

Data System for Surface Analysis: Advanced, comprehensive data system for surface analysis from Perkin-Elmer features a menu-driven software package which works with the 32-bit HP-Apollo® UNIX® workstation. Windowing aids tasks such as data massage, automated analysis, data reduction, and word processing.
Circle No. 67 on Reader Service Card.



Compact Picosecond Photodetector

Compact Picosecond Photodetector: The C4258 picosecond photodetector from Hamamatsu Photonic Systems is an integrated subsystem designed to replace the cumbersome head, power supply, and cables used as an oscilloscope accessory. It measures 77 × 43 × 47 mm including a built-in power source and battery tester. The C4258's GaAs photodiode provides a sensitive area of 0.2 mm^2 with a rise time of 40 picoseconds. It operates from 450 to 870 nm and can be combined with a short-pulse light source to determine the bandwidth of plastic and quartz fibers used for optical data transmission.
Circle No. 62 on Reader Service Card.

Microscope Revisit Station: Inspex's EX 200L microscope revisit station provides on-line production defect review in support of the company's EX 3500 patterned wafer inspection system. New features on the fully automated station include a unique second darkfield, enabling the viewer to see all wafer surface defects. Also, new software enhances production control by distinguishing various kinds of defects. The self-contained station with an integral microscope allows viewing and classifying defects such as CVD residual, photoresist flakes, and etch defects. An operator can examine all the defects or select them by size and location.
Circle No. 60 on Reader Service Card.

Ultrahigh Performance WDS Spectrometer: Electronically controlled wavelength dispersive vertical spectrometer is available as an accessory to Tracor Northern's automatic digital electron microscope (ADEM). Featuring software control over both the x-ray diffracting crystal and the x-ray detector positioning during scan, this spectrometer can shift its wavelength setting from one element to another in 10 seconds or less, and is extremely precise. Integrated with the ADEM, it offers the highest speed and accuracy for the acquisition of wavelength dispersed x-ray spectra acquisition capability.
Circle No. 63 on Reader Service Card.

Real Time Confocal Microscope Conversion: ODYSSEY, from Noran Instruments, economically converts a standard research microscope into a laser-scanning real-time confocal light microscope. The system employs state-of-the-art acousto-optical laser scanning to produce extremely thin optical section images at video rates. Fast scanning and high quality dual-fluorescence imaging dramatically reduce photo-bleaching and phototoxicity effects. Designed primarily for biological and morphological studies, the ODYSSEY includes software for through-focus images, isometric mapping, 3-D reconstruction, stereo pairs, and more.
Circle No. 64 on Reader Service Card.

Multifunctional Raman System: Multifunctional Raman system from Instruments SA can be configured as a triple spectrograph with the foremonochromator in subtractive or additive mode, as a double (0.64 m) additive or subtractive monochromator, as a single spectrometer (0.64 m) with a dual grating turret, or even as a fluorescence system with a double excitation monochromator and a single detection monochromator. Unique features include translating mirrors and a patented grating technology.
Circle No. 66 on Reader Service Card.

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