

RESOURCES

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

Analysis Software for NaI Detectors:

ScintiVision™ from EG&G ORTEC® is 32-bit quantitative analysis software for gamma-ray spectra from sodium iodide detectors. Year-2000 compliant, it provides preemptive multitasking under Windows® 95 or NT. The software includes a nuclide-identification technique that can identify and quantify known and unexpected isotopes. Features include automatic calibration, interactive reanalysis mode, graphic display of analysis results, and resistance to false positives. Website: www.egginc.com/ortec. Circle No. 60 on Reader Service Card.

Bipolar HTS Current Lead System:

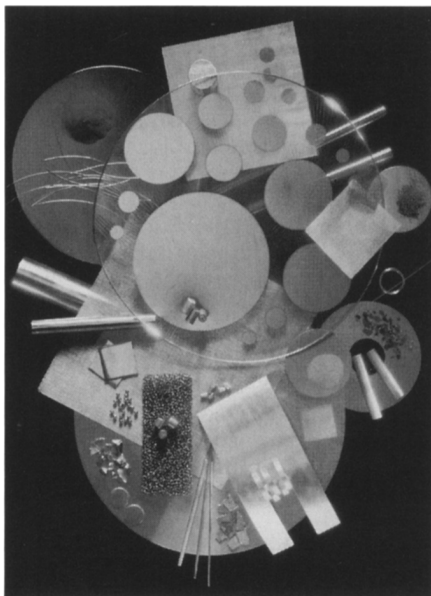
The EURUS SX Series™ Bipolar Current Lead from EURUS Technologies® is configurable from 600 to 100,000 amps and allows for simultaneous processing of both supply and return. Each bipolar lead contains all components to integrate the power lead into the client's specific cryogenic requirements. A resistive section is included for efficient connection and uniform cooling to room temperature. The design geometry minimizes the self field, which can be substantial in high-current lead designs. Website: www.TeamEURUS.com. Circle No. 61 on Reader Service Card.

Machine Vision Software:

Free Sherlock³² software from Imaging Technology is available via the Internet or on CD-ROM. This machine vision software allows configuration of most on-line gauging, inspection, assembly verification, and machine guidance tasks with no programming required. Included are camera calibration, I/O control, custom report generation, and statistical process control capabilities, as well as an array of image enhancement, filtering, and analysis routines. The software may be downloaded at <http://www.imaging.com/producttour/sherlock/sherlock.html>. Circle No. 63 on Reader Service Card.

Digital Oscilloscopes:

The single-channel PCI-441 and dual-channel PCI-442 from PC Instruments provide a wide bandwidth measurement in a PC-based digital oscilloscope. Features include 10-bit resolution at 50 MSPS, 64 K samples per channel, 15 MHz bandwidth, seven vertical voltage ranges from 20 mV/div to 2 V/div, burst mode, and 50–80 MHz base-band sampling. For fast pulse measurements, three ranges can be utilized with a bandwidth of 30 MHz. Video trigger (line counter) and differential inputs are optional. Website: www.pcinstruments.com. Circle No. 69 on Reader Service Card.



Ultra-Thin Foils: Goodfellow's Microfoils range in thinness from 0.0001 to 0.000001 mm and are mounted on a permanent polyester support because of their fragile nature. Microleaf foils are the same thinness as Microfoils but are mounted on a specially treated support that allows for separation. The company can supply small quantities of metals and materials, ranging from a few grams to a few kilos, or large quantities. Website: www.goodfellow.com. Circle No. 62 on Reader Service Card.

Vacuum Pumps Rebuilt: Mass-Vac uses an eight-step program to rebuild vacuum pumps. The pumps are disassembled, inspected for wear and damage, and cleaned and decontaminated. Defective parts are replaced as necessary. The pumps then are rebuilt to OEM specifications, tested, repainted, and fitted with new belts. Then the ports are sealed. The company also offers vacuum pump protection products such as vacuum inlet traps, oil filtration systems, and oil mist eliminators. Circle No. 65 on Reader Service Card.

Automated Depth Profiler: Physical Electronics' ADEPT-200™ incorporates dynamic SIMS with new technology to reproducibly measure dopant depth distribution for shallow (100 eV), medium (keV), and deep (MeV) implants. The wafer stage offers full XY travel for access to all points on a 200-mm wafer. Combined with the ESCOSY Plus™ wafer navigation software, the tool can be used with other FAB metrology tools. Circle No. 68 on Reader Service Card.

IR Imaging Spectrometers:

McPherson's integrated spectrometers with InGaAs linear array detectors (700–1700 nm) provide spatial and spectral information simultaneously. Silicon-based sensors are available for operation from 200–1100 nm. Internal corrective optics also are offered for 0.35–1.33-m focal length units manufactured by McPherson. Corrective, first surface optics can be inserted or removed from the light path, ensuring that both features of high resolution and astigmatic, 1:1 imaging can be obtained over a large wavelength range. Website: www.mcphersoninc.com. Circle No. 66 on Reader Service Card.

Desktop X-Ray Tomography:

MicroPhotonics' Skyscan Microtomograph is a desktop x-ray tomography system for nondestructive reconstruction of 3-D object microstructures. It allows obtaining the transmission shadow images (normal radiography) and the reconstruction of any cross-section or complete 3-D internal microstructure. The 3-D spatial resolution is 8 μm, and features as small as 3 μm can be visualized. The technique has been applied to samples producing detailed structural images of composite fibers, electronic components, diamonds, and bone structure. Website: www.microphotonics.com. Circle No. 67 on Reader Service Card.

Fasteners and Machined Parts:

Free 104-page catalog from Richard Manno & Company features thousands of stock machined products ranging from aerospace fasteners to basic washers. Products are listed alphabetically with schematic illustrations. A choice of sizes, materials, and finishes are shown. Part numbers also are cross-referenced to those of other leading manufacturers. The company also offers custom machining capabilities. Website: www.richardmanno.com. Circle No. 64 on Reader Service Card.

Low-Signal Measurements:

The ProbeShield™ from Karl Suss provides ideal conditions for low-signal probing in frost-free low-temperature surroundings. The device under test is protected from electromagnetic interference, light, and ambient air over a temperature range of -65°C to 300°C without compromising mechanical performance. Its contribution to the noise floor cannot be detected by the instrument's resolution of 1 fA ranging from -100 to +100 V. Circle No. 70 on Reader Service Card.