

ions $C_6H_6^+$ and $C_7H_7^+$ (tropyllium), respectively. Other recognizable peaks due to the molecular structure of polystyrene are $M Z^{-1} = 103$ (M-H) and to a lesser extent $M Z^{-1} = 105$ (M+H), where M refers to the molecular ion in the equivalent monomer.

These are only two applications of laser microprobe mass spectrometry. Other work using this technique includes the observation of beryllium in lung tissue, analysis of explosives, contamination microanalysis of integrated circuits, and the investigation of polymers. □

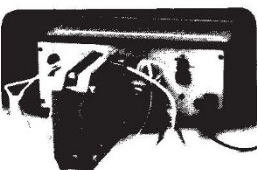
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Outfitting for analysis

From an accessory for differential weighing to an inductively coupled plasma mass spectrometer, this week's feature offers solutions to analytical problems, large and small.

A JOINT venture between Perkin-Elmer and the SCIEX Division of MDS Health Group Ltd was the genesis of the ELAN inductively-coupled plasma mass spectrometer (Reader Service No. 101). The £178,800 (UK) ELAN is designed for multielement determination of elemental species at low concentrations, and is complementary to both ICP emission spectroscopy and graphite furnace AA. The ELAN consists of a plasma source, spectrometer, detection system and computer/controller. Rather than the optical dispersion used in an ion emission instrument, the ELAN uses a spectrometer that disperses ions according to their mass. Special features include multielement isotope dilution analysis, isotope ratio determination and negative ion capability.

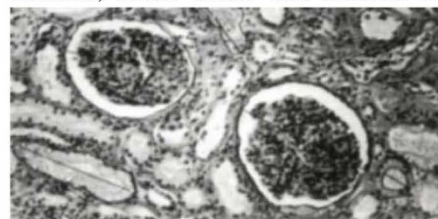
The Evapo-Mix multiple sample concentrator from Haake Buchler concentrates ten samples simultaneously from a variety of test tube or centrifuge tube types (Reader Service No. 102). Variable speed mixing with a 750 W immersion heater-thermoregulator assures that the bath has uniform temperature. Bumping is minimized by exposing a large solvent surface area in the sample tubes to heat and vacuum to increase the evaporation rate. The vacuum manifold is available in glass or stainless steel, and has a central water-cooled tube to condense solvent vapours. The temperature in the \$1,995 (US) instrument's bath is maintained to be constant to within $\pm 0.2^\circ\text{C}$.

For the price of a simple integrator — about \$1,995 (US) — the Baseline chromatography workstation from Dynamic Solutions, a division of Millipore, can be added to an IBM microcomputer or compatible (Reader Service No. 103). Standard features include the automation of up to 100 sample analyses, batch reanalysis of chromatograms from disk, visual display of linear and nonlinear calibration curves, baseline adjustments and a graphics interface. Options for the basic system include user-customizable plots and reports, a built-in results data base manager, HPLC pump control, valve switching, and advanced analysis routines.

From Dynatech Laboratories comes a computer-controlled sample preparation system, the SPD 3000 liquid handling system (Reader Service No. 104). The \$27,000 (US) SPD 3000 uses a tracker ball, similar to that found in a video game,

to set up the instrument and allow fast definition of working areas. A variable speed probe control allows fast movement between samples, and slow entry and exit into test chambers for accuracy. A liquid level sensor determines reagent or sample volume automatically. The system takes bottles, beakers, test tubes, cuvettes, microplates, or a combination of all.

Analytical Measuring Systems has announced an addition to its line of video interactive display systems (VIDS) — the VIDS IV (Reader Service No. 105). The £7,000 (UK) VIDS IV is a semi-interactive image analyser designed for IBM AT and compatible computers. Inputs can be taken from colour or monochrome cameras, frame stores and electron or



A sharper image from the VIDS IV. optical microscopes. The VIDS IV has a new statistics program which enables tests to be carried out during and after measurements have been made. Data can be channelled directly into the VIDS statistics program without the need to exit or load data into other programs, enabling users to run VIDS IV continuously without switching disks. Optional software packages include programs for 3-dimensional reconstruction and stereology, and spreadsheets for data manipulation.

Mettler's LabPac-M is an accessory for differential weighing (Reader Service No. 106). It can be used in conjunction with a Mettler analytical or precision balance for moisture determination in samples and filter analysis, among other applications. Mettler says the LabPac-M can store the weights of up to 20 tare containers and their respective initial weights. After drying, samples can be weighed again to obtain the weight difference in grams or as a per cent of total weight. The LabPac-M comes with a printer and can be interfaced with a microcomputer. □

These notes are compiled by Carol Ezzell from information provided by the manufacturers. To obtain further information, use the reader service card bound inside the journal. Prices quoted are sometimes nominal, and apply only within the country indicated.