

What's New

Every description of the items on the following three pages was condensed from information supplied by its manufacturer. The reviews are published as a service to the professionals working in the field of nuclear medicine and their inclusion herein does not in any way imply an endorsement by the Editorial Board of the JNMT or by the Society of Nuclear Medicine.

Three New Cardiac Stress Tables

Atomic Products Corp. cardiac stress table provides safe, comfortable patient immobilization and a stable environment for performance of nuclear cardiology rest and exercise studies. Welded steel construction eliminates any motion that would interfere with dependable, clear cardiac images when the ergometer is in use. A 24-in. table width permits close camera work from either side of, or above, the patient. The table accommodates both the Collins and the Tunturi ergometers. —Atomic Products Corp., PO Box 657, Center Moriches, NY 11934.

Circle Reader Service No. 51

Nuclear Associates' cardiac stress table and ergometer system is a versatile unit that utilizes a Collins ergometer mounted on a fully adjustable frame to accommodate patients of all sizes. The entire ergometer swings down under the table for the patient's easy access. The table is fully mobile and heavy-duty locking casters assure vibration-free rigidity. Bicycle seat and adjustable shoulder harness and hand grips assist in maintaining patient position—Nuclear Associates, 100 Voice Rd., Carle Place, NY 11514.

Circle Reader Service No. 52

The "Connect-Able" from Engineering Dynamics attaches to any imaging, examination, or catheterization table. In addition to this cost-effective versatility, the system features a pedal ergometer that can be raised or lowered to any height above or below the table. The system can be used for stress imaging with LFOV cameras, as well as standard-view and mobile models. Its electronic control unit displays digital readouts of actual workload, pedal speed, and elapsed time. A glance shows the attending medical personnel whether the patient is within the appropriate speed range. Casters and locks provide quick, easy mobility and full locking power for both the stress unit and the table. —Engineering Dynamics Corp., 120 Stedman St., Lowell, MA 01851.

Circle Reader Service No. 53

New Generation Survey Meter

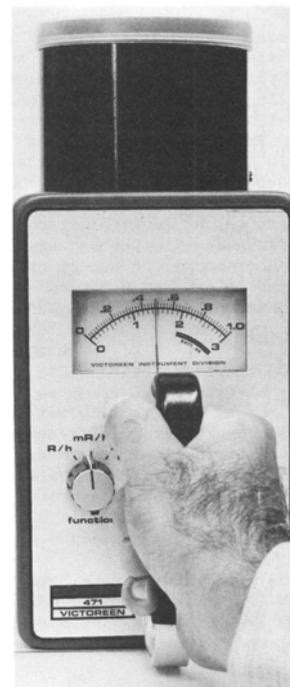
A versatile new generation survey meter with a 1 mR/hr full scale sensitivity range is available.

Designed for detection of alpha rays above 3.5 MeV, beta rays above 70 keV, and gamma and x-rays above 6 keV, the model 471 survey meter is a more sensitive version of Victoreen's popular Model 470A survey meter.

An unsealed air ionization chamber with a 1.1 mg/cm² mylar end window forms the radiation detector. The detector provides broad energy response, with 12 overlapping ranges to 300 R/hr on rate, and six integrate ranges. Because of the excellent energy response and a wide dynamic range, the model has appeal for a number of health physics applications.

All controls and an easy-to-read meter are located on top of the unit's metal case for operator convenience. —Victoreen, Inc., 10101 Woodland Ave., Cleveland, OH 44104.

Circle Reader Service No. 54



Camera Back

A new camera back—the CB-70—is designed to use SX-70 film, including the new time-zero supercolor SX-70 material and original equipment manufacturers (OEM) can adapt the CB-70 to a variety of scientific instruments and camera equipment.

The CB-70 houses an automatic, fully motorized transport which can eject an SX-70 photograph as often as every 1½ seconds. The film self-develops in day or lab light as the technologist watches. Pictures emerge hard and dry and require no after-treatment.

The CB-70 positions film in the focal plane, thus eliminating the need to re-focus after each exposure.

The lightweight camera back is the most recent addition to Polaroid's OEM line. —OEM Products, Industrial Marketing Dept., Polaroid Corp., 575 Technology Square, Cambridge, MA 02139.

Circle Reader Service No. 55

PHA/MCS Analyzer

The TN-1750 is Tracor Northern's smallest processor-based multichannel analyzer offering performance features that are optional on larger, more expensive systems. A 200 MHz Wilkinson-type ADC is standard, along with built-in pre-amp and display calibration. Multiple regions of interest read out gross/net counts or ratio for comparing peak intensities.

Data processing capabilities include smoothing, stripping, multiply/divide/add/subtract constants, and normalization. A special buffer memory allows the results of processor functions to be viewed before actually changing the data. It is also used during data acquisition to provide flicker-free viewing regardless of ADC deadtime.

Display features include digital expansion, overlap, and manual/auto/logarithmic vertical scale.

The comprehensive control layout and

continued on page 132

What's New

continued from page 130

pressure-sensitive touch panel make it easy to use.—*Tracor Northern, Inc., 2551 West Bellline Highway, Middleton, WI 53562.*

Circle Reader Service No. 56

Silver Recovery Seminar Film

Silver recovery is the subject of a 14-minute videotape from DuPont. In this presentation, Dr. Ken Smith of DuPont's technical service staff explains ways to compute the amount of silver available for recovery from medical operations and briefly describes the three methods for recovery: chemical precipitation, metallic replacement, and electrolytic plating. Dr. Smith gives guidelines for choosing the proper method and advice on how to maximize value of the final product—recovered silver.—*Marketing Communications, DuPont Co., Wilmington, DE 19898.*

Circle Reader Service No. 57

Video/Computer Interface

A video/computer interface system takes any video output, converts it to x,y signals, and then recreates a video display in a flat faced oscilloscope. Resolution is thus significantly improved because the oscilloscope is flat faced, which eliminates bowing and intensity drift, characteristics inherent in a video monitor. Additionally, this system can image from any existing source—gamma cameras, computed tomography systems, and computers. The unit is compact: 12 in. width, 17 in. deep, and 46 in. high and is said to be cost saving.—*Illinois Imaging Electronics, Inc., 208 Fay Ave., Addison, IL 60101.*

Circle Reader Service No. 58

Video Hard Copy Unit

Components Corporation introduces a video hard copy system Model 947S, which provides the means for producing hard copies of video images with most 35-mm SLR cameras.

947S is lightweight, portable, and moderately priced.

The system consists of a 5-in., high resolution (600 line) monochrome TV monitor, along with monitor hood and secure mounting for the user's 35-mm SLR camera.

Contrast and brightness controls are

located on top of the monitor to facilitate adjustment of the video image for best gray scale. Pointer dials are provided for easy marking of frequently used settings. By varying the intensity of the contrast and brightness controls on the monitor, specific details of video images may be highlighted.

The video loop through feature enables the system to be used with other video monitors in the TV chain or with a video cassette recorder.

—*Components Corp., 6 Kinsey Pl., Denville, NJ 07834.*

Circle Reader Service No. 59

Fully Integrated Gamma Camera

Elscont introduces the Apex line, a full family of fully integrated digital gamma cameras, where digitally controlled detectors communicate directly with various data acquisition and processing modules. This direct communication allows for extremely high counting rates and achieves a degree of uniformity and linearity never before possible. The Apex line comprises large field stationary, large field mobile, lightweight mobile, and stand-alone processor systems.

The Apex 215M lightweight mobile gamma camera is a self-contained digital camera in a mini-mobile form. Its high degree of flexibility and excellent maneuverability make it perfect for the ICU, CCU, emergency room, etc. The electronic console detaches for ease of positioning. For transportation it slips back in place, making it only one complete unit to move.—*Elscont Inc., 138-160 Johnson Ave., Hackensack, NJ 07602.*

Circle Reader Service No. 63

Ga-67

New England Nuclear has received notification from the FDA that it may begin marketing Ga-67. The isotope, previously used by physicians for the evaluation of patients with certain malignancies, has long been known to accumulate in sites of infection as well. Investigational work at hospitals and medical schools has demonstrated that this localization in sites of infection can prove useful in detecting such inflammatory conditions as postoperative abscess, infected wounds, and pyelonephritis, and in evaluating patients with fever of unknown origin.—*New England Nuclear, 601 Treble Cove Road, N. Billerica, MA 01862.*

Circle Reader Service No. 60

What's New in RIA Products

Automated Pipetting Station

This automated pipetting station was designed to simplify RIA tube processing for labs doing a multiplicity of assays daily. The station requires no pump priming. Reagents are dispensed from a cartridge or reservoir that is easily removed and replaced for rapid assay changeover. The APS2 pipet samples either with or without dilution, and dispenses reagents in either solution or suspension form. It pipets sample volumes as small as 2 μ l with an accuracy of $\pm 2\%$ and a representative CV of 0.5%. The station adapts to virtually any manufacturer's test protocols, requiring no modification of procedure.

The APS2 comes with 20-place sample and assay racks. The desired assay racks may be loaded directly into any Micromedic gamma counter.—*Micromedic Systems Div., Rohm and Haas Co., Horsham, PA 19044.*

Circle Reader Service No. 61

Rapid I-125 Steroid Assay

RSL Laboratories has introduced a new series of quick steroid hormone assays at a fraction of their previous cost. In the past, steroid hormone measurements have required difficult and time-consuming extraction and chromatography steps. With these steroid assays using I-125 labeled hormones, such steroids as cortisol, testosterone, estradiol, progesterone and DHEA-sulfate (plasma 17-ketosteroids) can be measured in less time with reductions in cost. Evaluation of adrenal function, gonadal function and high risk pregnancies can be performed conveniently, economically and rapidly.—*Radioassay Systems Laboratories, Inc., 20770 Leabwood Ave., Carson, CA 90746.*

Circle Reader Service No. 62

Tri-Cy Test Set

Wien Laboratories, Inc. has developed a new RIA test set for determining blood levels of the tricyclic antidepressant drugs: doxepin, desipramine, protriptyline, imipramine, amitriptyline, and nortriptyline. The Tri-Cy test set

What's New in RIA

permits determination of serum levels of tricyclic drugs with a simplified procedure, smaller sample size, and greater accuracy than the GLC methods currently in use.

The Tri-Cy method uses a direct 10- μ l serum sample that does not require separation or dilution. A 1-hr incubation allows the entire assay to be completed in less than two hours.

Wien's new method has been extensively researched, and correlates favorably with GLC mass spectrometry results. The CV for the test is $\pm 5\%$; the sensitivity is 8 ng.—*Wien Laboratories, Inc., PO Box 227, Succasunna, NJ 07876.*

Circle Reader Service No. 64

Modern Drug Research

Advances in modern drug research, its challenges, methods, and achievements, are vividly described in "The Quest," a 27-minute film sponsored by Hoffman-LaRoche Inc. Featuring Roche scientists, the film illustrates the complicated steps involved in the search for new and better means to fight pain and disease. The film takes the viewer on a guided tour of a modern pharmaceutical research laboratory which, operating on frontiers of the life sciences, delves into the activities of individual cells and body systems and their response to new pharmaceutical agents.—*Hoffman-LaRoche Inc., Nutley, NJ 07110.*

Circle Reader Service No. 65

Thyroglobulin RIA Test

Thyroglobulin (Tg) levels in blood can now be measured with an RIA test. Serum Tg levels are significantly elevated in patients with untreated differentiated thyroid carcinomas but decrease to within normal levels following successful therapy. Using this NMS assay, the first on the market, serum samples are first screened for antithyroglobulin auto-antibodies that would interfere with the radioimmunoassay for Tg. Serum and standards are then incubated with I-125 Tg and Tg-specific antibody—*Nuclear Medical Systems, Inc., 1533 Monrovia Ave., Newport Beach, CA 92663.*

Circle Reader Service No. 66

PAP RIA Kit

The GammaDab I-125 PAP RIA kit is a

sensitive and specific assay for determining elevated levels of prostatic acid phosphatase in serum. PAP used as an antigen and in human serum-based standards is affinity purified, an improved technique that results in greater homogeneity and higher specificity. The antibody does not cross-react with major acid phosphatases in whole blood. Calculated sensitivity of the assay is 0.4 ng/ml, with greatest sensitivity at borderline normal values. High maximum binding assures increased reliability. The kit offers the flexibility of either a same-day or a high sensitivity overnight procedure.

Other features include two controls, blue tinted PAP tracer, and ready-to-use liquid reagents. Room temperature incubations and minimal pipetting make the test easy to run. Two kit sizes are available: CA-597 for assaying 125 tubes, and CA-598 for assaying 60 tubes.—*Clinical Assays, 620 Memorial Drive, Cambridge, MA 02139.*

Circle Reader Service No. 67

Microprocessor-Based Gamma Counter

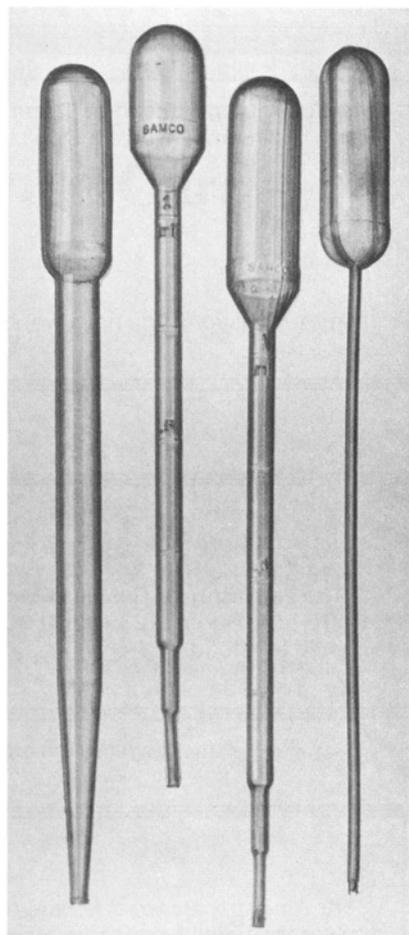
Computational capability and enhanced simplicity of operation are major features of the new NE 1612 microprocessor-based gamma counter for RIA introduced by Nuclear Enterprises. The 12-detector counter provides a sensitive means of measuring I-125 and Co-57 samples. By simultaneous counting, a throughput more than ten times faster than that of orthodox instruments is achieved. A typical assay of five duplicated standards and 50 duplicated patient samples can be completed in less than 30 minutes. This includes counting, computation of standard curves, graph plotting, and computation of patient concentration estimates.

The repertoire of RIA curve-fitting requirements covered by the NE 1612 contains a highly versatile four parameter nonlinear method, a log-logit method of linear regression, and a special calculation program for hepatitis screening.—*Nuclear Enterprises Ltd., Sighthill, Edinburgh, EH11 4EY Scotland.*

Circle Reader Service No. 68

Unbreakable Transfer Pipets

Disposable pipets that are completely unbreakable and safe even when handling blood are available. From Bio-Rad Laboratories, the pipets combine barrel and bulb to end the cross-contamination, leaks, and delays associated with



changing rubber bulbs. Made of low-density polyethylene, they are inert, nontoxic, and won't scratch cuvettes.

The versatile pipets can be heat-sealed for airtight sample storage or transport, frozen for cryogenic storage, modified to decrease drop size, and sterilized by gas or radiation. Originally designed to eliminate the risks inherent in using glass Pasteur pipets when working with blood, the disposable plastic transfer pipets are useful in any lab where small amounts of liquid are transferred without precise measurement.—*Bio-Rad Laboratories, 2200 Wright Ave., Richmond, CA 94804.*

Circle Reader Service No. 69