

What's New?

With this issue of *JNMT* We start a new editorial section devoted to descriptions of new products. Each of the items on these two pages was condensed from information supplied by manufacturers. They are published as a service to professionals working in the field of nuclear medicine. Their inclusion here does not in any way imply an endorsement by the Editorial Board of the *JNMT* or by the Society of Nuclear Medicine.

^{99m}Tc Generator/Dispenser

A new ^{99m}Tc generator and dispenser, the CintiChem system, is designed to reduce potential radiation exposure and the time-consuming tests and computations that technologists face when manual handling is used in multidose procedures. With the dispenser, the isotope measurement, transfer of reagents, and dose calibration are fully automatic, with the end result of delivering the desired quantity of ^{99m}Tc in a constant volume to a serum vial. According to the manufacturer, the generator features safer, lower radiation dose exposure and a better than 88% yield of high-purity ^{99m}Tc. The CintiChem also features fully shielded disposable syringes for injection of a patient which are connected with a unit-dose vial from the dispenser, further reducing radiation exposure.—*Union Carbide Corp., 401 Theodore Fremd Ave., Rye, NY 10580.*

Scintillation Camera

The Raytheon Company has introduced a new 37-tube scintillation camera, the Cameray II. The manufacturer claims a maximum counting rate in excess of 100,000 cps, an intrinsic resolution of 1/10 in., energy resolution of 18%, uniformity of $\pm 10\%$, and linearity of 3%. This system simultaneously gathers counts from any two areas within the camera's field of view. The unit accepts a wide variety of film sizes and has the convenience of printing all pertinent patient data directly on the film. A whole-body system and an anatomical marker are available as optional equip-

ment.—*Raytheon Co., Box 397, Fourth Ave., Burlington, MA 01803.*

Positron Camera

The Cyclotron Corporation announces the production of its camera for imaging radiation from short-lived, cyclotron-produced, positron-emitting radionuclides. To date, the Cyclotron Positron Camera, developed at the Massachusetts General Hospital, has been applied experimentally in heart, brain, and lung imaging, and is particularly useful in producing transverse section images of these and other organs in the body. The instrument consists of a stand with the camera and a separate console with a built-in computer.—*Cyclotron Corp., 950 Gilman St., Berkeley, CA 94710.*

B₁₂ Assay

A new in vitro Vitamin B₁₂ assay kit, the COAT⁵⁷, has been introduced by RIA Products. The assay is based on the competitive binding of radioactive or nonradioactive B₁₂ to the intrinsic factor (IF). The kit includes standards and has but one buffer system with ⁵⁷Co.—*RIA Products Inc., P.O. Box 914, Waltham, MA 02154.*

T-3 RIA Kit

A new Amersham/Searle T-3 RIA kit has a high sensitivity (requiring only a 50-ml sample) and a cross reactivity with T-4 of less than 0.2%. The kit includes freeze-dried human serum standards, high-specific-activity ¹²⁵I-lyothyronine,

and all reagents, tubes, racks, and data sheets necessary. Upon request, the manufacturer will provide an informative package insert for the T-3 RIA kit, as well as an illustrated test sequence for the laboratory assay of serum T-3.—*Amersham/Searle, 2636 S. Clearbrook Dr., Arlington Hts., IL 60005.*

^{99m}Tc Chromatography

MAC-1 is a new double binary, miniaturized radiochromatographic system for determining the chemical state of ^{99m}Tc in DTPA, pyrophosphate, polyphosphate, and diphosphonate. The system consists of two color-coded chromatography procedures which separate the chemical states of ^{99m}Tc to determine the percents of activity existing as unbound technetium (green chromatogram) and free technetium (black chromatogram). The manufacturer claims that the analysis can be generally completed in 10 min or less.—*General Radioisotope Products, 3120 Crow Canyon Road, San Ramon, CA 94583.*

X-Y Scanner

The Model 940 Two Dimensional Radiochromatogram Scanner is a new Vanguard Systems scanner for analyzing 20 × 20-cm TLC plates. The system includes a gas-flow G-M detector and a dot printer displaying a two-dimensional fingerprint. Single-directional scans can be made in 10 adjustable Y positions and two-directional scans with 5 fixed Y increments.—*Vanguard Systems, Inc., Ten Price St., Dobbs Ferry, NY 10522.*

Ultrasonic Scanning

A new ultrasonic real-time imaging system, the Echostat, features a hand-held stationary phased array of crystal elements which scans up to a 90-deg angle of the body. It thus provides live, continuous moving echo images with the ability to vary the field size scanned from 150 in.² to a single beam line, with an electronic zoom keeping the echoes in continuous focus. The manufacturer states that imaging of both static and moving structures can be performed with a resolution limit of ± 1.5 mm and improved dynamic range. An oscilloscopic display is provided.—*Diagnostic Electronics Corp., Box 580, Lexington, Ma. 02173.*

Another new ultrasonic scanner, the Multi-Scan, consists of an instrument console (Echo-Trace X1) and a compound contact scanner (CCS-4). The instrument console incorporates a digital computer module, the Computa-Scan, for the determination of transducer position, eliminating drift problems and increasing position accuracy. Also featured are a lithicon storage tube with a 32-level gray scale; A-scope presentation; B-mode imaging; CRT display; a cardiac module with M-mode echoes, ECG, and PGC signals; a recorder; a Doppler ultrasound unit; and a module for accurate alignment of transducers in head studies. The contact scanner is designed for easy change from transverse to longitudinal scans, and for parallel scans, without moving the transducer, patient, or scanner.—*Metrix, Inc., 876 Ventura, Denver, CO 80011.*

Programmable Calculator

Hewlett-Packard claims that a complete data-reduction of a 100-tube RIA takes less than 5 min on their new 9815 Calculator. For each assay the 9815 system gives an accurate standard curve and interpolation of patient unknowns with correction for nonspecific binding, aliquot factors, percent recovery due to extractions, and quench correction from CPM to DPM. This is then followed by an error analysis of the standard curve and patient unknowns. Storage of quality control data for each assay is also included. The HP 9815 is especially useful for "persons with limited computer knowledge." — *Hewlett - Packard, Loveland, CO 80537.*

MAA Agent

New England Nuclear has introduced a stannous macroaggregated human serum albumin (MAA) agent, Pulmolite, in kits to be reconstituted with ^{99m}Tc-sodium pertechnetate. The ^{99m}Tc-MAA is to be used for lung imaging as an adjunct in the evaluation of pulmonary perfusion, indicative of such conditions as pulmonary embolus and abscess—*New England Nuclear, Atomlight Place, North Billerica, MA 01862.*

Isotope Fume Hood

An isotope fume hood, designed especially for work with radioactive materials, consists of a stainless steel, all-welded hood with a washdown system for ease of decontamination. Its major feature is an induction-type blower which prevents fumes from passing through the fan, motor, or bearings,

thus reducing the amount of radioactive deposits that have to be cleaned off. These hoods are available in a variety of sizes and can be custom fabricated.—*Lab Fabricators Co., 1803 E. 47th St., Cleveland, OH 44103.*

Xenon Trap

The RADX Xenon Trap absorbs radioactive xenon gas from patient washout in lung ventilation studies. Absorption efficiency by a disposable cartridge of activated charcoal is claimed to be better than 98%. A G-M detector is available which monitors the xenon trap exhaust port to warn when the cartridge pack has reached capacity.—*RADX, Box 19164, Houston, TX 77024.*

Coaterless Land Pack Film

Type 107-667 Coaterless Land film is a new Polaroid black and white instant film that does not require use of a print coater. The film has a development time of 30 sec. In all other respects, including price and speed (3000 ASA), this film is very similar to its coated predecessor, Type 107-084. Type 107-667 is available in case quantities only.—*Polaroid Corp., Cambridge, MA 02139.*