

# What's New

Every description of the items on the following two 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.

## Xenon Delivery/Trap System

The "XDS II" xenon delivery/trap system features a newly designed manual valve to select all phases of xenon ventilation studies and an integral xenon gas trap. Fully shielded for either Xe-133 or Xe-127, the XDS II also contains a dual blower system for resistance-free "pick-off" patient breathing. A timer allows the operator to accurately time the equilibrium and both washout cycles. A water vapor trap prolongs cartridge life by greatly reducing the amount of vapor entering the gas trap cartridge. A lead-glass window on the top panel allows direct observation of the breathing bag, and a full-length door permits easy changing of the breathing bags and the CO<sub>2</sub> or water vapor absorber material.

The XDS II is extremely compact, measuring 15 in. wide × 16 in. deep × 40 in. high with a 5 in. diameter × 10 in. long extension arm. Complete mobility is provided by four easy-rolling casters. The system may be ordered without the integral gas trap, according to the user's need.—*Nuclear Associates, 100 Voice Rd., Carle Place, NY 11514.*

Circle Reader Service No. 55

## Shielding Eyeglasses

Nuclear Pacific's wrap-around shielding eyeglasses provide excellent eye protection against radiation. Current FDA standards require that every lens survive a steel ball drop test after tempering. Because of the high lead crystalline content of the glass, lens breakage during testing could prove to be very costly. For this reason, most manufacturers will not attempt to meet industrial impact standards; however, every lens produced by Nuclear Pacific exceeds all federal eyeglass specifications.

Nuclear Pacific has set the standard for radiation shielding glass for over 30 years. The optics and prescription you receive in their lenses are guaranteed for accuracy and quality. Exclusive OP-TITE™ adjustable rotors are installed in the frames for a personalized and comfortable fit. Clip-on and

contour format eyeglasses are available in addition to the wrap-around and standard format eyeglasses.—*Nuclear Pacific, Inc., 6701 Sixth Ave. South, Seattle, WA 98108.*

Circle Reader Service No. 58

## Collimator Inserts

Septa Collimators introduces a new system of nuclear camera collimator inserts that should save time, money, effort, storage space, and the need for collimator carts while, at the same time, increase the utility value of each insert.

Septa now manufactures almost all of its collimators as separable units: a mounting ring to fit a specific camera, and an insert that will fit into any Septa-made mounting ring of the appropriate size, no matter what make of camera it is used with. Thus a large field camera that is fitted with a Septa mounting ring can take almost any large field Septa insert, regardless of type; if a department has more than one camera of the same size (even though they are from different manufacturers) the Septa inserts can be used interchangeably.

The inserts are quite lightweight, and in most cases do not require the use of a collimator cart; insert changes can be made in a matter of seconds, and, of course, an insert is a lot less costly than a complete collimator. For those older standard field and portable cameras that require heavy collimators, Septa offers the same advantages as for large field cameras.—*Septa Collimators, 124 Stedman St., Lowell, MA 01851.*

Circle Reader Service No. 60

## Portable Imaging Cameras

The uniqueness of all imaging cameras from IIE is the fixed multi-lens system of each. The only moving part is an electromagnetically-operated shutter. Each lens assembly is fixed into position and individually focused for that position on the film. For a nine-mode

system, for example, there are nine separate fixed lens assemblies. The advantage to a system with no moving lenses is consistent resolution and system reliability.

In quality testing the electromagnetically-operated shutter life cycle exceeded 200,000 cycles or 20 years of use. What this means is that if by some small chance a shutter fails, the system is still operational. IIE now offers one of the most complete lines of portable imaging cameras. The lowest priced attach-on portable is a nine-mode, 12-lb camera scope that attaches to any CRT. A separate control panel can be placed anywhere near the system for easy operation. The attach-on portable is available for either video or nuclear applications.

The latest portable imager from IIE is a six-mode, fixed lens compact camera. This is a completely self-contained unit with its own video monitor. It features six fixed lenses—one for each image position and is designed for either rack mounting or table top use. It is the smallest compact imager on the market measuring 9½ in. height × 16 in. width × 23 in. diameter.—*Illinois Imaging Electronics, Inc. 901 S. Kay, Addison, IL 60101.*

Circle Reader Service No. 56

## Dose Calibrator Activity Linearity Test

The Calicheck™ test kit from Calcorp Inc. is designed to attenuate radiation from Tc-99m by known values. Use of this procedure to check linearity on dose calibrators will eliminate the need to fractionate eluants or decay the elution for several days while periodically collecting data. Calicheck offers a faster, cheaper, and better means of conforming with NRC's Regularity Guide 10.8, Appendix D, Section 2E, or state regulations pertaining to activity linearity verification. Use of this procedure may, however, require approval of the agency issuing the radioactive materials license.

With Calicheck, testing time is

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reduced from days to approximately 4 min. The original test source can then be used for patient administration or kit preparation.

The test kit comes complete in its own storage container and includes a set of calibrated color-coded measuring tubes, work/record keeping sheets, complete use instructions, and a license amendment form to be used if needed.

The testing procedure consists of removing the dose calibrator's well liner and inserting the Calicheck central tube. The Tc-99m source is then placed in this central tube and an initial reading is taken. The other color-coded tubes are then placed sequentially over the central tube and readings are taken for each. These readings are then converted with a normalizing factor and recorded on a date sheet. Degrees of linearity can virtually be seen at a glance. This procedure is designed to simulate the decay of Tc-99m at approximately 0, 6, 12, 21, 31, 41, and 51 hr from the initial assay. Linearity can be measured whether using a high yield generator eluant or a unit dose.  
—*Calcorp Inc., PO Box 25589, Cleveland, OH 44125.*

Circle Reader Service No. 59

### Coded Vial Shields

New England Nuclear is now marketing coded vial shields designed for greater protection and dose control. The vial shields are both color- and name-coded to match NEN's radiopharmaceutical kits: Glucoscan, Osteolite, Pulmolite, and Pyrolite.

The color- and name-coded shields offer convenient top or bottom vial insertion. A unique swivel top permits easy vial septum penetration and quick shield reclosure. Also available is a "lazy susan" storage tray that securely positions the vial shields and NEN's Tc-99m fission generator elution shield.  
—*New England Nuclear, 549 Albany St., Boston, MA 02118.*

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*New product releases must be received by January 4, 1982, to be considered for review in the March issue of the JNMT. Send them to the Coordinating Editor, Journal of Nuclear Medicine Technology, 475 Park Ave. S., New York, NY 10016.*

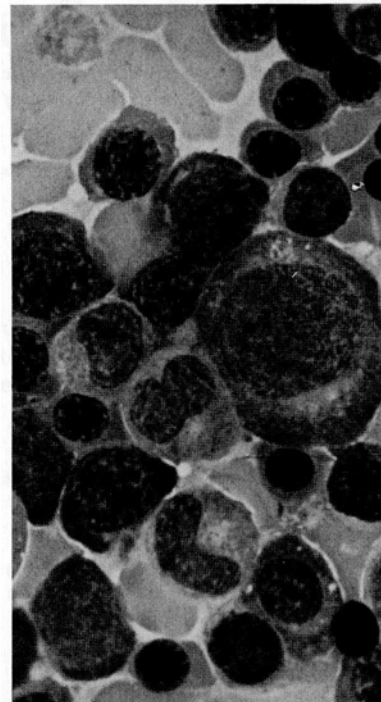
## What's New in Radioimmunoassay

### Simultaneous B<sub>12</sub> and Folate Kit

This is the only solid phase, no-boil kit for simultaneous assay of vitamin B<sub>12</sub> and folic acid. The No-Boil Combo-Stat II™ Kit offers markedly improved convenience and ease of use since it eliminates both the messy charcoal separation and difficult boil steps. Pure intrinsic factor and B-lactoglobulin are covalently bonded to microcrystalline particles. One pipetting step delivers both the solid phase separation medium and specific binders. The resulting tight, visible pellet enables laboratories to easily utilize the preferred procedure of counting the bound fraction rather than the free.

The kit is in compliance with the National Committee for Clinical Laboratory Standards (NCCLS) and FDA guidelines. The kit's vitamin B<sub>12</sub> and folate values exhibit excellent correlation with other conventional radioassay methodologies. Clinical and performance data have been generated with confirmed B<sub>12</sub> deficient sera, pernicious anemia sera, B<sub>12</sub> and folate normal sera, chronic myelogenous leukemia sera, microbiological assays, and red blood cell normal sera.

Accurate vitamin B<sub>12</sub> and folate values are critical parameters for differentiation of anemias. Hemato-



logical manifestations as depicted in this megaloblastic photograph are similar for both deficiencies.—*RIA Products Inc., 411 Waverly Oaks Rd., Waltham, MA 02154.*

Circle Reader Service No. 63

### Improved Prolactin Assay

An improved RIA for the quantitative determination of prolactin levels in small volumes of serum or plasma is available from Damon Diagnostics.

This sensitive and specific assay aids in the diagnosis of mammary gland disorders, prolactin-secreting pituitary adenomas, functional and organic disorders where hypothalamic control is reduced, functional amenorrhea in women, and available pituitary prolactin reserve.

The assay is performed directly on 100 µl of serum or plasma with a choice of 4-hr or overnight incubation at room temperature.—*Damon Diagnostics, 115 Fourth Ave., Needham Heights, MA 02194.*

Circle Reader Service No. 62

### Gastrin RIA Kit

Clinical Assays has introduced the GAMMADAB® Gastrin RIA kit, which offers the reproducibility, speed,

and specificity of double antibody separation.

The assay features a convenient procedure requiring minimal hands-on time and only 40 min of incubation at room temperature. Unlike resin uptake assays, the precipitate rather than the supernatant is counted, eliminating the need for an extra set of tubes. All reagents except the tracer come ready-to-use. The assay is simplified by using convenient pipetting volumes.

A wide assay range, from 50 pg/ml to 1000 pg/ml, and a high count rate allow for easy discrimination between values in the area of most clinical interest. The kit, which is used for the quantitative determination of gastrin levels in serum, can aid in the diagnosis of various diseases, including peptic ulcer, pernicious anemia, and Zollinger-Ellison syndrome.—*Marketing Communications, Clinical Assays, 620 Memorial Drive, Cambridge, MA 02139.*

Circle Reader Service No. 61