By eliminating the disadvantages of earlier methods, the Triosorb Sponge has achieved a real breakthrough in thyroid testing. It is an in vitro test unmatched in accuracy, speed and convenience.

Accuracy: Because factors such as red blood cells and exogenous iodine have been eliminated from consideration in the Triosorb Test, it is unmatched in accuracy.

Speed: With only 3 washes and no need for double pipettings, shakers, or incubators, the Triosorb Test can be
revolutionized thyroid testing!

more rapidly performed than any other T-3 test.

**Convenience:** Triosorb is in a disposable kit ready for immediate use at room temperature, making it the simplest and most convenient thyroid function test to perform.

McAdams* reported that “The resin sponge (Triosorb) technique is superior to the erythrocyte method for performing the $^{131}$T3 test in terms of simplicity, convenience and elimination of errors characteristic of the erythrocyte procedure.”

Triosorb is available to all doctors, hospitals and clinical laboratories—AEC licensing is not required. Because Triosorb will enable far more screenings to be performed, this procedure may soon become as standard as today’s blood counts and urinalyses.


**TRIOSORB**

T-3 DIAGNOSTIC KIT

ABBOTT LABORATORIES NORTH CHICAGO, ILL.
HOW TO COUNT GAMMAS WITH A TRI-CARB® LIQUID SCINTILLATION SPECTROMETER

Take an Automatic Tri-Carb Liquid Scintillation Spectrometer. Add the low-cost Model 5022 Auto-Gamma Console. Now you're ready to do fully automatic gamma counting of up to 100 samples. Model 5022 incorporates a sample changer, a well-type crystal detector, a beta-gamma switch and its own high voltage supply. It uses the Tri-Carb Spectrometer and Control Unit for sample analysis and changer actuation. Because each system has its own power supply, you can switch from beta to gamma counting as often as you like with no adverse effects on counting stability.

How do you count gammas without a Tri-Carb Spectrometer? Select one of the 24 complete Auto-Gamma Spectrometer Systems offering manual or automatic operation; one, two or three channels of analysis; three readout options and a choice of 2 in. or 3 in. crystals. Call your Packard Sales Engineer for details, or write for Bulletin 106L from Packard Instrument Company, Inc., 2200 Warrenville Road, Downers Grove, Illinois.

Packard
Completely lead shielded, the new E-1810 Dispenser provides a semi-automatic system for producing a sterile solution of sodium pertechnetate with minimum radiation exposure. It eliminates the need for awkward shielding and handling devices, and enables the smaller laboratory to use technetium on a daily basis.

Insert generator into shielded upper chamber of Dispenser, where it may be stored for daily use. Each day the internal disposable processing parts are replaced with a fresh sterile set.

1. Pour eluting solution into generator and replace shielded cap.

2. When solution has passed through the Technekow, open dispenser door, reach in and lift up processing unit to activate operation. The solution automatically passes through a sterilizing filter and is injected into a sterile, pyrogen-free bottle.

3. Remove bottle with its shielded jacket. Solution is ready for calibration.

The NCC Technekow Shielded Dispenser is of heavy welded construction with polished chrome plating. A two-inch thick lead shield surrounds the Technekow source generator. Lead shielding on the walls and door of the lower processing chamber keeps radiation at a minimum. Disposable processing parts are available in kit form.

Write today for further information.

Demonstrated Leadership from the specialist

The TECHNEKOW® Shielded Dispenser

A NEW COMPACT “HOT LAB” by NCC

A Shielded Self-Contained System for Producing Sterile Technetium from the Technekow Source Generator

NUCLEAR CONSULTANTS DIVISION OF MALLINCKRODT CHEMICAL WORKS

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directly from our nuclear reactor to your radioisotope laboratory

Neisler Laboratories now offers the first of its line of nuclear reactor products for medicine—the NEIMOTEC T.M. (⁹⁹Mo/⁹⁹ᵐTc) Generator—for the convenient production of short-lived technetium-99m, one of the most useful radioisotopes available for clinical investigation. Write for details.

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The two scanning heads, exactly opposite each other, have separate, and complete electronics and print-out so that the data collected by each crystal may be used separately, in coincidence, or additively.

Mechanical and electronic specifications are the same as for our other large-crystal radioisotope scanners Models 54F and 54H: Scanning speeds continuously variable to 200 inches per minute (500 cm/min.); adequate shielding even for high energy gamma emitters (up to 3 inches lead and 1 inch steel); high resolution crystals (9 per cent or better); accurate, reproducible scanning speeds and line spacing; no scalloping at any speeds; low background crystals (2 inch thick pure NaI light pipe); Gamma-graphic (patent pending) or slit mask photoscans; unequivocal one year warranty anywhere in USA or Canada.

This unparalleled radioisotope scanner is priced at $28,750 with delivery in 90 days guaranteed.
Well suited to Multipoint Data Acquisition and Processing for Localization of Activity in the Body as reported in ANL 6839

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Good Resolution
when investing in a scintillation scanner

what should you look for?

among other things...

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Only the Picker Magnascanner® is so designed that its standard three-inch diameter crystal Ultraprobe can be replaced at any time by the five-inch diameter crystal Pentaprobe without any modification to the scanning mechanism.

The larger crystal of the Pentaprobe results in greater efficiency and/or longer focal distance on the collimator.

Picker Nuclear

Magna Scanner®

the versatile scanner / the proven scanner

Picker Nuclear Division / Picker X-Ray Corporation

White Plains, New York
Another major achievement in the field of nuclear medicine, Baird-Atomic's MODEL 5000 DIGITAL AUTOFLUOROSCOPE now makes it possible to study organs of the human body in action without resorting to surgery! The AUTOFLUOROSCOPE is a fully-equipped, fixed (non-scanning) device with dual-memory storage which provides either a dynamic or static picture of the distribution of radioisotopes within any area of interest in the body — localization of tumors is much faster, and disease processes in the brain, heart, lung, kidneys, liver, spleen, and pancreas are routinely detected in only a fraction of the time required using conventional mechanical scanning techniques!

AUTOFLUOROSCOPE FEATURES:
- CONTRAST ENHANCEMENT OF PICTURE WITHOUT AFFECTING RAW DATA
- DYNAMIC AND STATIC VISUALIZATION OF THE ISOTOPE WITHIN THE BODY
- FULL RANGE OF (INCLUDING HIGH ENERGY) ISOTOPES CAN BE USED AND ACCUMULATED DATA CAN BE IMMEDIATELY VIEWED
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- PERIODIC DISPLAY OF DATA DURING BUILD-UP PROCESS
- PERMITS STUDY OF ORGANS SCREENED BY OTHER ORGANS AND SELECTION OF SPECIFIC SECTIONS FOR QUANTIFICATION OF DATA

Call or write today for free descriptive literature!
A New Radioisotope Generator

INDIUM-113m

- for rapid, low-dose scanning
- short-lived daughter — 1.7 hours
- long-lived parent — 118 day half-life
- individually leak-tested

APPLICATION: Recent publications (available on request) indicate that indium-113m may be extremely useful for the preparation of radiopharmaceuticals for liver, lung, and blood pool scanning. Its only significant emission is a 390 kev gamma photon and its 1.7 hour half-life minimizes patient exposure. In addition, its emissions are compatible with I131 scanning equipment and the parent, tin-113, has a long (118 day) half-life.

RATIONALE: Indium-113m is continually produced in NEN’s generator by the decay of its radioactive parent, tin-113. The tin is adsorbed on an inorganic chromatographic column. Indium-113m is removed by eluting with 10 to 15ml of dilute HCl.

OUTPUT: The amount of indium-113m which can be eluted at one time is determined by the total amount of tin-113 on the column and by the elapsed time since the previous elution. A column containing 25mc of Sn113 will yield about 10mc of In113m 2 hours after a previous elution and about 20mc after 8 hours.

ECONOMICS: A generator initially charged with 25mc of tin-113 will yield about 2500mc of indium-113m over a six-month period when milked twice a day, 5 days a week. Thus the average cost of In113m is ~ $0.30 per mc. By comparison, a Tc99m generator initially charged with 100mc Mo99 yields product at a cost of $0.60-0.90 per mc Tc99m

LEAKAGE: Typically less than 0.002% of tin on the column per elution. Each column is tested prior to shipment and does not leak more than 0.02%. Leakage of other metal ions is also monitored by NEN and is less than 1μg/ml of eluant with NEN eluting reagent.

LICENSE REQUIREMENTS: Researchers intending to prepare and use radiopharmaceuticals from In113m must hold an "AEC-313a License for Non-Routine Medical Uses of By Product Material" or an AEC Broad License (medical uses).

SIZE AND SHIELDING: The packed glass column is fitted into a break resistant impact case 7" high by 1.5" in diameter. A 3.5" diameter lead shield (1" walls) with bottom exit port is supplied at no additional charge for in-laboratory shielding.

ELUTING REAGENT: Five 5ml ampoules of carefully standardized eluting reagent concentrate are provided at no charge with each column. Each ampoule contains sufficient concentrate to prepare 250ml of eluting reagent.

PRICE SCHEDULE:

Generators:

<table>
<thead>
<tr>
<th>Code</th>
<th>Amount</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>IG1-001</td>
<td>1mc Sn113</td>
<td>$285</td>
</tr>
<tr>
<td>IG1-005</td>
<td>5mc Sn113</td>
<td>375</td>
</tr>
<tr>
<td>IG1-010</td>
<td>10mc Sn113</td>
<td>500</td>
</tr>
<tr>
<td>IG1-025</td>
<td>25mc Sn113</td>
<td>750</td>
</tr>
</tbody>
</table>

Larger generators quoted on request.

Eluting Reagent:

<table>
<thead>
<tr>
<th>Amount</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 ampoules</td>
<td>$25</td>
</tr>
<tr>
<td>30 ampoules</td>
<td>100</td>
</tr>
<tr>
<td>100 ampoules</td>
<td>175</td>
</tr>
</tbody>
</table>

Shipping and Delivery: Shipped within 2 days of receipt of order via air express, FOB Boston. Shipping weight ~ 40 lbs.

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Prices ex works Amsterdam for nominal Mo99 activities:

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- 25 mC: Dfl. 180,—
- 50 mC: Dfl. 230,—
- 100 mC: Dfl. 350,—
- 150 mC: Dfl. 450,—
- 200 mC: Dfl. 525,—
- 250 mC: Dfl. 600,—
- 300 mC: Dfl. 650,—*
- 350 mC: Dfl. 700,—*

* only available in Belgium, W.-Germany and Holland due to maximal possible loading of Mo99 on the generator.

Delivery: first possible shipment after Mondays at 18.00 hours M.E.T.

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