



## This sponge

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  $I^{131}$  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.**

901202



\*McAdams, G. B. and Reinfrank, R. F., *Jrnl. Nuclear Med.*, 5:112, Feb., 1964.

**TRIOSORB<sup>®</sup>**  
**T-3 DIAGNOSTIC KIT**  
ABBOTT LABORATORIES NORTH CHICAGO, ILL.



**It takes a pretty special instrument package to give you simple, high-performance liquid scintillation counting.**

**Only the Mark I Liquid Scintillation Computer has what it takes.**



Model 6860 (Ba<sup>133</sup> external standard)  
Model 6863 (Ra<sup>226</sup> external standard)

Everything about our Mark I™ Liquid Scintillation Computer is there to help you cut down on your work load. To let you handle all sample types and energies, quickly and easily. To give you unmatched counting accuracy and system reliability.

Here are just some of the reasons why the Mark I has what it takes for your kind of work:

1. Exclusive, all-electronic data computer with integrated microcircuits.
2. Three separate, identical counting channels.
3. 150-sample capacity with temperature control.
4. All operating controls located on front panel within easy reach.
5. Automatic external standardization with choice of Ra<sup>226</sup> or Ba<sup>133</sup> standard.
6. Three scalars with 0.2  $\mu$ sec resolution. Crystal-controlled timer.
7. Preset time, preset count, and preset time/preset count control on all three scalars.
8. No high-voltage adjustments necessary.
9. Reproducible, positive-step discriminators and amplifier attenuators with dynamic ranges to cover any beta spectrum.
10. Individual background subtractors on each counting channel.
11. Low-count reject on each counting channel.
12. Foolproof sample-changing and index numbering.
13. Automatic counting of preselected sample groups.
14. Repeat counting for best statistical accuracy and reproducibility comparison.
15. Built-in data conversion for card punch, tape punch, electric typewriter, and Teletypewriter.
16. Wide selection of data listing sequences.
17. Continuous presentation of number of sample being counted.
18. Calibration and operating logic designed for the individual convenience of multiple users.
19. Set-up for single-, dual-, or triple-labelled samples.
20. Guaranteed performance specifications.

Call your Nuclear-Chicago sales engineer or write to us for the complete details on the Mark I.

NUC-8-5-058

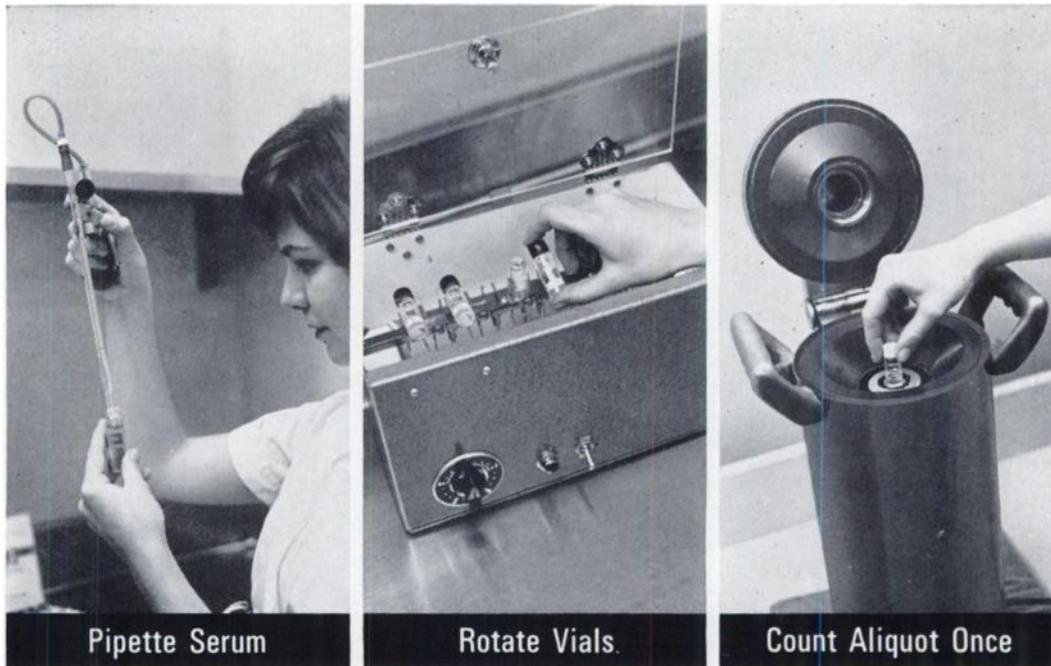


**NUCLEAR-CHICAGO CORPORATION**

# LESS TECHNICIAN TIME

*Than Any Other T-3 Test*

## TBI KIT 265T



- Easiest, most reliable\* *in vitro* thyroid function test. New buffer produces exceptional stability and reproducibility.
- Unmatched accuracy for hypo-, eu-, or hyperthyroid evaluation. Eliminates variables due to problems of serum handling.
- Takes less technician time than any other T-3 test . . . almost half.
- Time and temperature are not critical.
- Count patient serum only once in well counter.
- TBI test kits cost less, too. Permits use as a screening test.

\*In tests performed on over 2200 patients, the TBI test was reported in agreement with final clinical diagnosis in over 90% of the cases. Ref: Scholer, J.F., J. of Nuclear Med., May '63, p. 192.

Write today for further information.

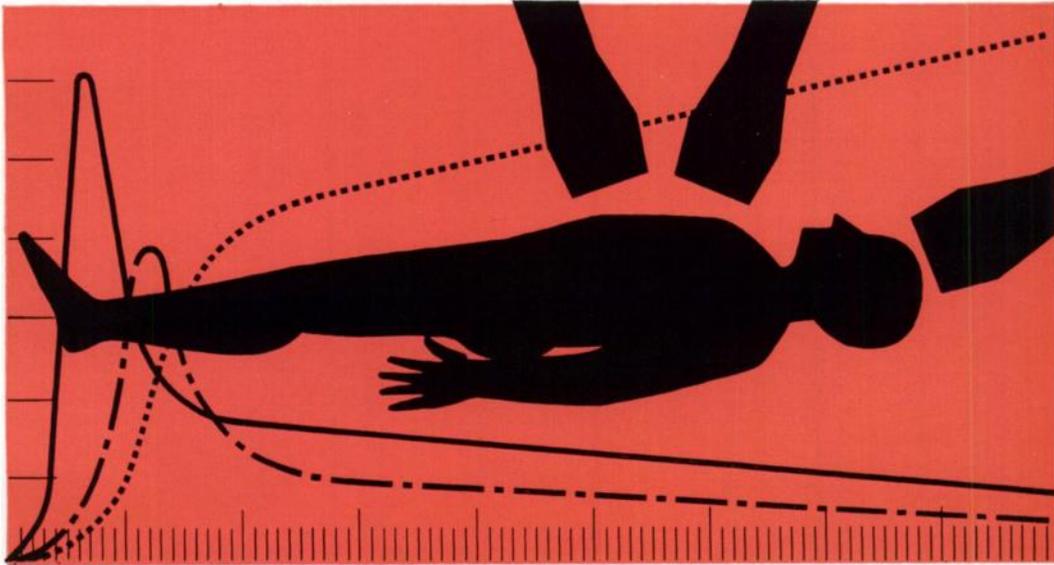


**NUCLEAR CONSULTANTS**  
DIVISION OF MALLINCKRODT CHEMICAL WORKS  
Box 6172 Lambert Field, St. Louis, Missouri 63145



CHICAGO      CLEVELAND      HOUSTON      LOS ANGELES  
MIAMI      NEW YORK      SAN FRANCISCO      WASHINGTON, D. C.

## Dynamic clinical studies using radioisotopes:



### Are you interested but don't know quite where to start?

#### Then start here.

First let us admit that the dynamic clinical techniques which use radioisotopes for studying various bodily functions are more complicated than well counting or even scanning procedures. Undeniable.

But these methods are valuable, providing either confirmatory clinical data or, in some instances, information which just cannot be obtained *by any other means*. Long-established applications of these techniques include, for example, renal function studies, cardiac output determinations and hepatic function assessment. Or perhaps the newer techniques such as cerebral blood flow or pulmonary function would be of interest.

Whatever your interest, we *can* minimize the technical difficulties of getting into this field.

Our offer: to work with you in any and every way to make your entry into this area as painless as possible. Specifically, we would be

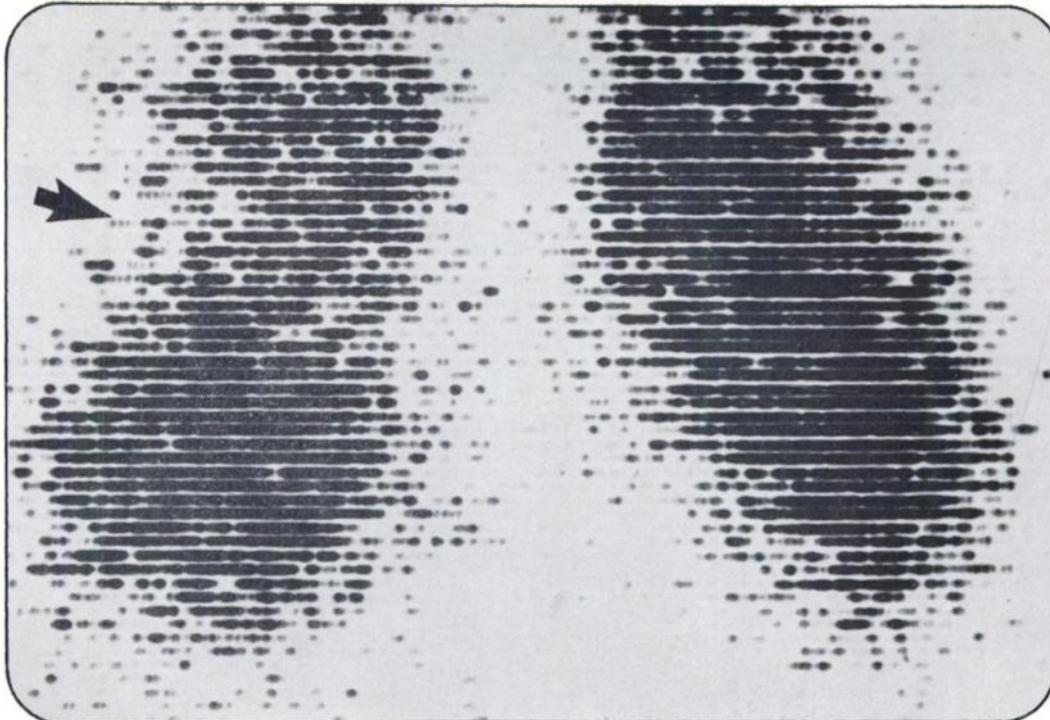
happy to talk with you about these methods, to provide the necessary information on existing procedures, to help you plan your radio-tracer studies, to assist in interpreting results, and to aid in the training of your staff in all phases of radioisotope dynamic function methodology. Or, to work with you in any other way that you may wish. With no obligation.

Then it will come as no surprise that we can also help you select the equipment that makes sense for your needs. And to begin with, this can be a relatively simple outfit; your first commitment can be limited to the basic equipment since refinements can be added easily as needed. You should also know that our line of instruments for dynamic function work of every kind is *unmatched in diversity or quality*.

So, an invitation: call your Picker Nuclear representative, or drop us a line. Start a dialogue.

Picker Nuclear: 1275 Mamaroneck Avenue, White Plains, New York 10605





Photostatic of lungs of female patient, aged 50, showing pulmonary emboli.

# ALBUMOTOPE<sup>®</sup>-LS

Squibb Aggregated Radio-Iodinated (<sup>131</sup>I) Albumin (Human)

## FOR EARLIEST EVIDENCE OF PULMONARY EMBOLISM...

A unique diagnostic feature of the lung scan technique that employs Albumotope-LS as the tracer is its capacity to display ischemic areas produced by small pulmonary emboli before evidence of infarction or ischemia is demonstrated in standard chest x-rays.

This method has been found to be a valuable adjunct to selective pulmonary arteriography with the advantages of being readily available, reliable, simple, direct and free from morbidity.

Albumotope-LS meets all the requirements for the ideal radiopharmaceutical for the scanning of pulmonary infarcts as described by Quinn et al.\*

- Exhibits a marked difference in concentration between the infarcted and the uninvolved lung tissue.
- Because concentration in the lungs is so selective, it presents a low radiation background when other organs are compared to the lungs.
- Clears rapidly from the blood stream if the infarct concentration of radioactivity is lower than that in the blood.
- Has a suitable gamma energy for scanning and delivers a low radiation dosage to the patient.
- It is non-toxic.

**SQUIBB**



Squibb Quality—the Priceless Ingredient

**Dosage and Scanning Procedure:** Recommended scan doses of 150 to 300 microcuries of aggregated radioalbumin depending on the instrumentation available and the technics employed. Scanning immediately follows administration of intravenous injection. Patient may be placed in a prone or supine position.

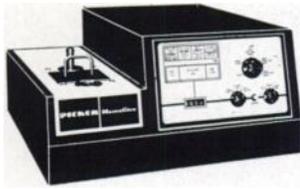
**Side effects and Precautions:** There have been no reported cardiovascular or other untoward effects attributable to Albumotope-LS. The product appears to possess no antigenic properties. One patient with a known history of angioneurotic edema, who had been given Lugol's solution in conjunction with aggregated radioalbumin similar to Albumotope-LS, developed urticaria. Extensive clinical use of Albumotope-LS has not borne out the hypothetical

possibility that particles of large size might induce deleterious cardiovascular or cerebrovascular effects.

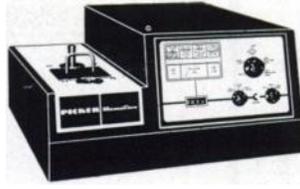
Radioisotopes should not be used in pregnant women, nursing mothers, or in patients under 18 years of age unless indications are very exceptional.

**Available:** As a sterile, pyrogen-free, aqueous suspension. Each cc. contains approximately 1 mg. aggregated human serum albumin labeled with 800-1500 microcuries of Iodine-131 at time of manufacture. Also contains 0.9% benzyl alcohol as a preservative.

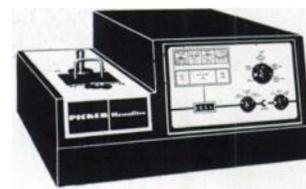
\*Quinn, J. L., III, Whitley, J. E., Hudspeth, A. S. and Watts F. C.: An approach to the scanning of pulmonary infarcts, *J. Nuclear Med.* 5:1, 1964.



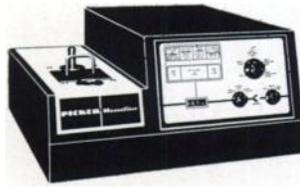
**BODY WATER**



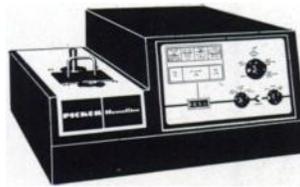
**Thyroid Uptake\***



**Urinary Rose Bengal Excretion**



**Schilling Test**



**BLOOD VOLUME**



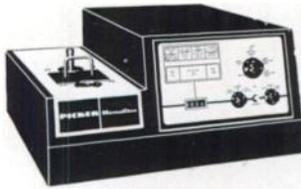
**Plasma Disappearance**

***Now then, isn't it funny  
that we named it Hemolitre®  
if the measurement of blood volume  
is but one of its many talents?***

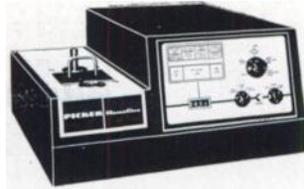
Yes. Except that it now leaves us with this not-so-funny problem: to explain, credibly and compellingly, that this instrument's capabilities extend far beyond the measurement of blood volume. Read on if you'd like to hear about this truly versatile instrument useful for essentially all static nuclear medicine techniques.

Basically, the Hemolitre is a complete, self-contained instrument for precise measurement of gamma radioactivity. As such, any of the clinical procedures using gamma-emitting

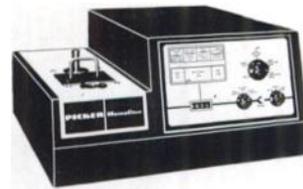
radioisotopes can be performed easily with the Hemolitre. More specifically, the Hemolitre's usefulness extends to the measurement of small samples with low radioactivity (T-3 and PBI tests, red cell survival, plasma disappearance, fat absorption, iron binding, body-water measurement, etc.). Or tests involving bulk samples (Schilling test, urinary rose bengal excretion, counting of feces, etc.). Or tests using an external scintillation probe (thyroid uptake, placenta localization, regional perfu-



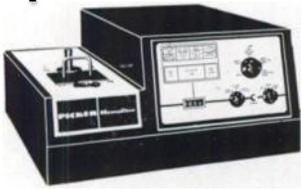
**RED CELL SURVIVAL**



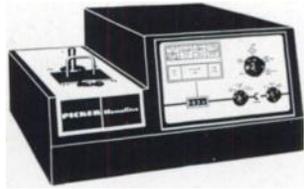
*Placenta Localization\**



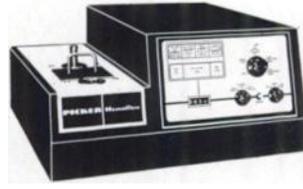
**PBI**



**Fat Absorption**



**T-3**



*Iron Binding*

sion, etc.). Or even blood volume measurement. Versatile instrument.

Also worthy of emphasis: the Hemolitre is fully transistorized, gives direct reading in per cent, and has automatic background correction. And Picker service everywhere.

So, if you are interested in a seasoned, dependable instrument for blood volume measurement and/or other static nuclear medicine procedures, think Hemolitre. The name may be limiting, the instrument certainly isn't.

(Finally, *why* did we name it Hemolitre if its versatility extends so far beyond the measurement of blood volume? Simple. It was born, baptized, and known to so many people as the Hemolitre *before* the full development of its capabilities. It just seemed much too complicated—and, hopefully, unnecessary—to start changing its name at this late date. And the same reasoning applies to the price: it, too, remains the same.)

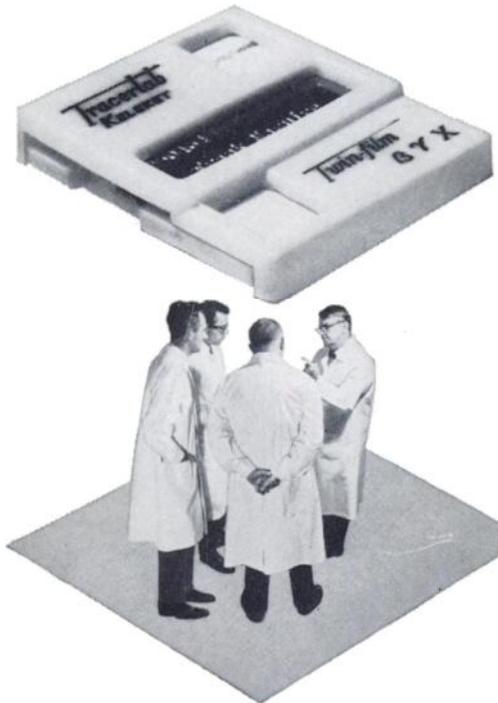
Write for the Hemolitre brochure HNM4.

\*With external detector.

PICKER NUCLEAR: 1275 Mamaroneck Avenue, White Plains, New York 10605



# Tracerlab Film Badge Service



**where people count!**

A dosimetry badge is a personal thing; the health, the very life of the wearer may depend on it. That's why Tracerlab people give so much personal care and attention to each and every film badge that passes through their hands, before and after computer processing and quick return to you. And more dosimetry badges pass through their skilled hands than any other monitoring service. Yours should be among them.

You can also count on Tracerlab people for the safest, most reliable radioactive sources in the world — a wide selection of stock or custom types for standardization and analysis. For dependable products and services in the life sciences and health physics, including a broad range of radioanalytical services, come to Tracerlab — where people count!



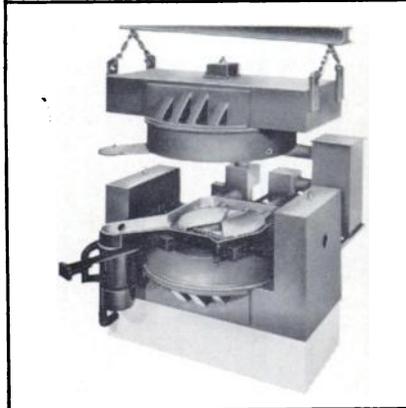
**TRACERLAB**

A Division of Laboratory For Electronics, Inc.  
WALTHAM, MASSACHUSETTS 02154

Film Badge Service • Health Physics • Bioassays • Sources • Nuclear  
Instrumentation • Radiochemicals • Radioactive Waste Disposal  
• Radiation Monitoring Instrumentation • Isotope Applications

FOR ONLY \$200,000

## A modern Cyclotron for diagnosis, therapy & research



Offers you all these advantages

1. Best source of short-lived isotopes and positron emitters for use in diagnostic measurements and with scanning instruments.
2. Produces collimated beams of fast neutrons for radiation therapy and radiation effects measurements.
3. Produces charged particle fluxes for research in space medicine.
4. Simple operation with guaranteed performance.

THIS 30-INCH AVF CYCLOTRON weighs just 30,000 pounds and requires only 175 kilowatts of power. Measures only 7' x 7' x 7' to fit in a 15' x 15' shielded room. Produces external beams of protons with an energy of 15 Mev, deuterons of 7.5 Mev and helium-3 ions of 20 Mev, and neutrons with energy up to 25 Mev.



For more information and facts on medical applications, please write or call:

**THE CYCLOTRON CORPORATION**  
Dept. SNM, 950 Gilman Street, Berkeley,  
California 94710, 415/524-8670

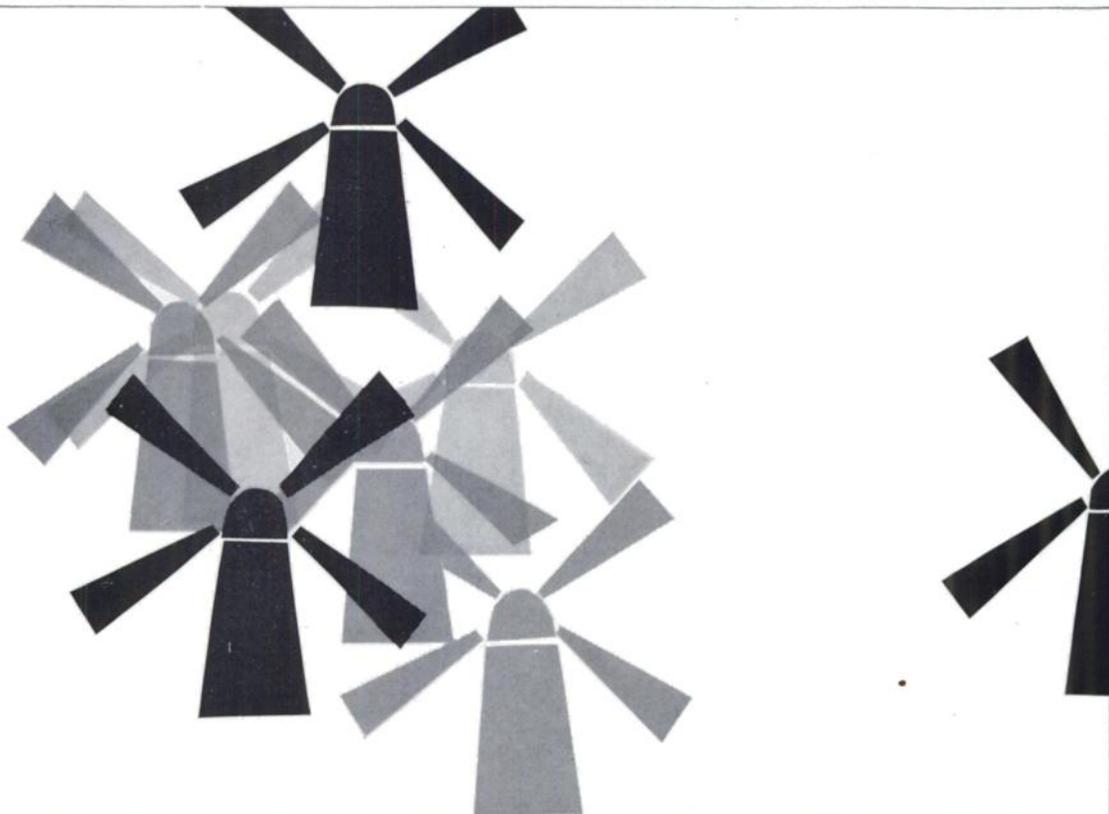
# duphar nuclear pharmaceuticals

## Why Holland?

Why should you look for isotopes in Holland? Well, because in Holland you will find a company, specialized in isotope production.

The name is Philips-Duphar. Twelve years of isotope production guarantee the kind of experience you can rely on: Nuclear Pharmaceuticals for medicine... C14/H3 compounds and radiochemicals for research... radiographic sources for industry... Representatives in 70 countries and airway despatch make Philips-Duphar your next-door supplier. Write for complete documentation and price lists.

**N.V. PHILIPS-DUPHAR  
AMSTERDAM HOLLAND**  
Apollolaan 151  
Telegrams:  
Vitamine-Amsterdam  
Telex: 14232





30 YEARS OF SCIENTIFIC ACHIEVEMENT



**MODEL 708**  
\$8960. LESS DETECTOR  
F.O.B. Cambridge

# ISO/MATIC TEST TUBE CHANGER SYSTEMS

**AUTOMATICALLY MEASURES AND  
RECORDS GAMMA RADIATION IN CLINICAL  
OR LABORATORY APPLICATIONS**

Model 708 ISO/MATIC Test Tube Changer System automatically measures the radioactivity in up to 100 samples of gamma or hard beta emitters in either liquid or solid form. Throughout the complete counting cycle, all the required data are printed on paper tape: *sample number, count, and time.*

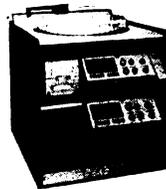
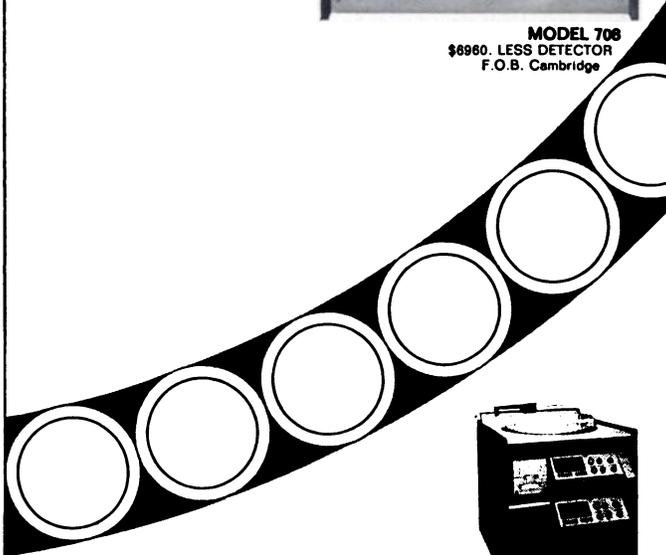
The detector's location in the circular sample storage rack ensures a constant background count. The practical flexibility of the Iso/Matic Model 708 meets the most demanding counting requirements.

#### MODEL 708/FEATURES

- 100-SAMPLE CAPACITY
- PRESET COUNT
- PRESET TIME
- DIRECT PERCENT-RATIO READING
- POWER-FAILURE ALARM
- AUTOMATIC BACKGROUND SUBTRACT
- NEVER-FAIL SAMPLE ADVANCE
- AUTOMATIC PRINTOUT
- SIMPLIFIED, FLEXIBLE CONTROLS
- EASY LOADING
- BETA CRYSTAL ASSEMBLIES AVAILABLE
- DUAL-CHANNEL ANALYSES (MODEL 710)

Service is available in all the Baird-Atomic sales offices listed below. For further details ask for *Brochure 708.*

**SCIENTISTS:** Investigate challenging opportunities with Baird-Atomic — an equal opportunity employer.



**MODEL 710**  
Simultaneous  
Dual Channel  
System  
\$9960. LESS DETECTOR  
F.O.B. Cambridge



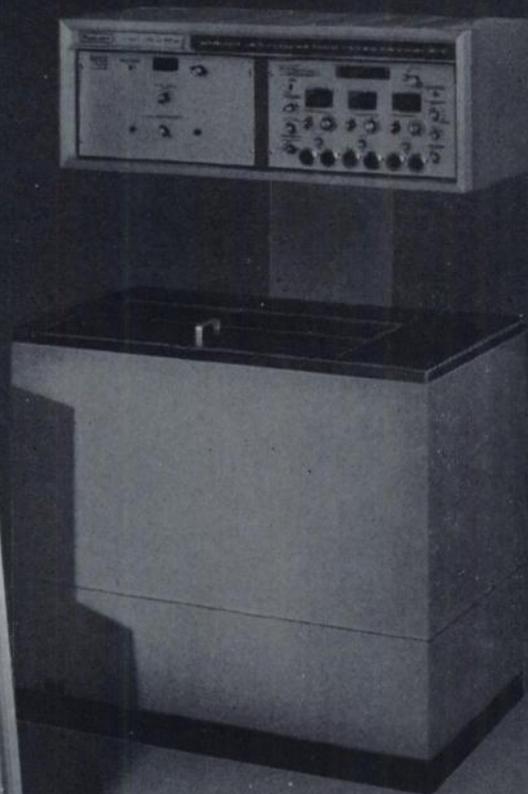
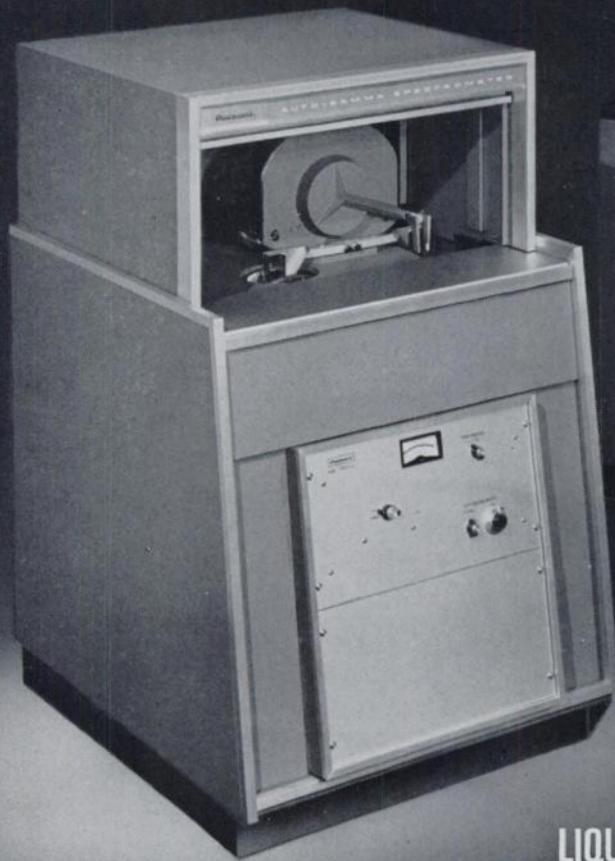
## BAIRD-ATOMIC

ATOMIC AND LABORATORY INSTRUMENTS DIVISION

33 UNIVERSITY ROAD, CAMBRIDGE, MASSACHUSETTS 02138, Telephone: 617 864-7420

OFFICES: ATLANTA BOSTON CHICAGO DALLAS DETROIT LOS ANGELES NEW YORK PHILADELPHIA PITTSBURGH SAN FRANCISCO WASHINGTON, D.C.  
EUROPE: BAIRD-ATOMIC (EUROPE) N.V., 28-27 VEENHARD, THE HAGUE, HOLLAND

• See "Model 708" at the Nuclear Medicine Show



## 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.

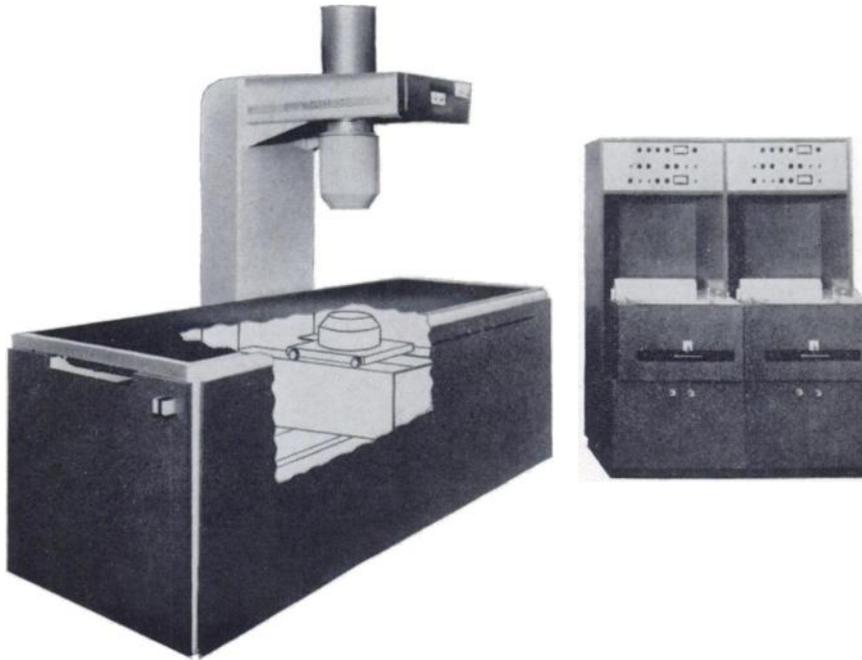
How do you count gammas without a Tri-Carb Spectrometer? Select one of the 24 complete Auto-Gamma Spectrometer Systems offering manual or automatic operation; one, two or three channels of analysis; three readout options and a choice of 2 in. or 3 in. crystals. Call your Packard Sales Engineer for details, or write for Bulletin 1064 from Packard Instrument Company, Inc., 2200 Warrenville Road, Downers Grove, Illinois.

**Packard**

# RADIOISOTOPE SCANNER

## MODEL 54-FD

### DUAL, OPPOSED, 5-INCH CRYSTALS



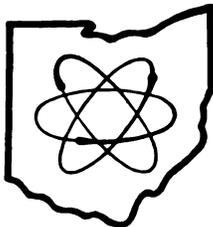
The demonstrable advantages of a dual 5-inch crystal scanner should be investigated by all those with a high clinical load who desire high resolution, rapid scans of both large and small organs or of the whole body.

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.



## **OHIO-NUCLEAR, INC.**

1725 FALL AVENUE

CLEVELAND, OHIO

216 - 621-8477

# **McGraw-Hill books tune you in on newest events in nuclear medicine**

## **CLINICAL NEURORADIOLOGY**

Edited by Dr. Kurt Decker

American Edition translated and edited by William H. Shehadi, M.D.

Neuroradiology has come into its own. Neurology has split into several subspecialties, and neuroradiology is one which has made great strides in recent years. The advent of cineradiology and advances made in neurophysiology have opened new areas of knowledge which this book carefully explores in an original and authoritative way.

The authors draw on their vast experience and wealth of material at their command. They discuss the techniques and applications of cerebral angiography, pneumoencephalography, myelography, and other special procedures with a new approach to the investigation of the common as well as the rare, the benign as well as the malignant, neurologic and neuropsychiatric conditions. This edition is the first to give the contribution of radioactive isotopes to neuroradiology the importance it deserves, modernizing the work by including the most recent modalities in diagnosis.

Much has been streamlined in the American Edition. New Material is introduced, and redundancies are eliminated.

525 pp., 9¼ x 11½, 1428 illus. on 560 figs., \$45.00

## **NUCLEAR MEDICINE**

Edited by William H. Blahd, M.D.

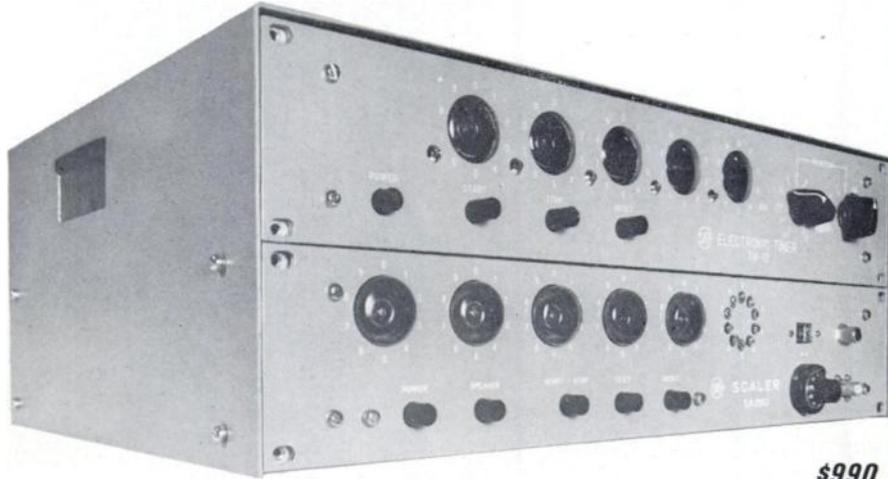
Dr. Blahd's description of the fundamentals and newest developments in nuclear medicine features a discussion of thyroid physiology and radioisotope tests of thyroid function. The book includes the most important forms of radioisotope therapy in the treatment of hyperthyroidism, thyroid cancer, and blood diseases. Distinguished national and international experts have contributed to this work, and although the approach is primarily clinical, subjects are presented in sufficient depth to interest the medical investigator. Complete bibliographics at the end of each chapter make the book an invaluable reference.

830 pp., 6 x 9, 334 illus. on 272 figs., \$17.95

**The Blakiston Division  
McGraw-Hill Book Company  
330 West 42nd Street, New York, N. Y. 10036**



## TRANSISTORIZED SCALER/TIMER



**\$990**

No other company can offer this quality and accuracy for such a low price. NUCLEAR SUPPLIES Scaler/Timer can be used with GM, Scintillation, Gas flow, Proportional, Bf, and solid state detectors. It is used in hospitals, medical centers, for experimentation, classroom demonstration and industrial quality control. Reliable and rugged plug-in transistorized circuit boards are used throughout. Compare the quality, serviceability, versatility and price, and you too will join the hundreds already using this scaler.

### SCALER

MODEL SA-250

300-3000 volts, adjustable high voltage  
 1  $\mu$ second resolving time  
 5  $\mu$ A pulses can be scaled  
 Push button aural speaker  
 999,999 total counts  
 Transistorized printed circuit boards  
 19" w. | 3½" h. | 14" d.  
 Price \$495

### TIMER

MODEL TM-12

9999.9 switch selected mins. or secs.  
 Preset time dual selection  
 Push button start/stop/reset control  
 Time base 60 c/s line frequency  
 Ambient temperature, -25C to +55C  
 Transistorized printed circuit boards  
 19" w. | 3½" h. | 14" d.  
 Price \$495



Manufactured exclusively for NUCLEAR SUPPLIES by the world's first company to successfully build transistorized nuclear equipment. Kobe Industries Corp. of Japan. Complete line of instruments, modules, automatic systems and accessories listed in new catalog. Write to: NUCLEAR SUPPLIES Incorporated, P.O. Box 312, Encino, California. Phone Area Code 213, 787-1722.



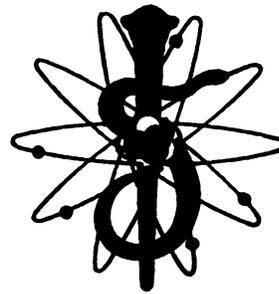
# A Valuable Addition To Your Professional Library

*Journal of*

**NUCLEAR**



*Official Publication  
Society of Nuclear Medicine*



## **AN IMPORTANT NEW JOURNAL**

*featuring*

Original articles in clinical medicine, basic and clinical medical research, physics and chemistry dealing with the use of isotopes in humans, and articles on related subjects. The latter includes dosimetry, instrumentation, protection, techniques, biologic effects contributing to the use or effects of isotopes in clinical medicine or the clinical effects of ionizing radiation.

George E. Thoma, M.D., St. Louis—*Editor*

G. O. Broun, Jr., M.D., St. Louis, Titus C. Evans, Ph.D., Iowa City,

Niel Wald, M.D., Pittsburgh, Eugene L. Saenger, M.D., Cincinnati—*Associate Editors*

**The Journal of NUCLEAR MEDICINE**  
333 North Michigan Avenue, Chicago, Illinois 60601  
\$20.00 per year, U.S.    \$21.00 Foreign

Name.....  
Address.....  
City..... State..... Zip Code.....

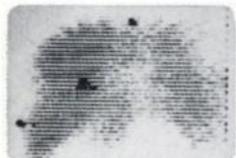
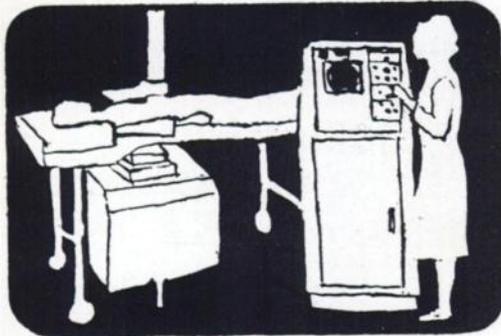
*Please remit by check or money order.*

**Published  
Monthly**



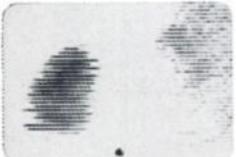


30 YEARS OF SCIENTIFIC ACHIEVEMENT



Conventional Scan Time: 35 min.      Autofluorogram Time: 3.2 min.

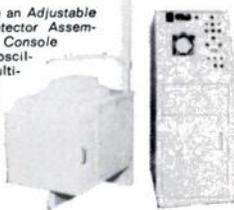
At left is a conventional anterior scan compared with a Model 5000 autofluorogram of an abnormal liver showing a hepatomegaly and an abnormal zone of decreased uptake in the lateral margin of the right lobe, which represents a liver metastasis.



Conventional Scan Time: 20 min.      Autofluorogram Time: 4 min.

At left is a conventional posterior renal scan compared with a Model 5000 autofluorogram showing a reduced uptake in the inferior 2/3rds of the right kidney due to the presence of a large hypernephroma in this area.

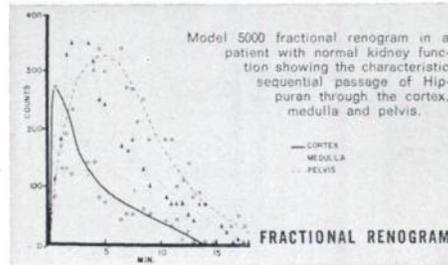
Supplied with each Model 5000 are an Adjustable Hospital Bed, Motor-Driven Detector Assembly, Recording and Control Console which includes cathode ray oscilloscope visual display, multi-channel analyzer circuitry with memory, computer-formatted magnetic tape system, and camera mount.



SCIENTISTS: Investigate challenging opportunities at Baird-Atomic — an equal opportunity employer.

# MODEL 5000 DIGITAL AUTOFLUOROSCOPE

FOR RAPID DIAGNOSTIC LOCALIZATION AND  
VISUALIZATION OF GAMMA-EMITTING  
RADIOISOTOPES WITHIN THE HUMAN BODY!!



The Digital Autofluoroscope MODEL 5000 is a fixed (non-scanning) device with memory storage which provides a picture of the distribution of radioisotopes within any organ of the human body. Compared to conventional moving scanners, the versatile new MODEL 5000 will localize tumors faster. Visualization is accomplished by the use of a multi-crystal matrix which permits the simultaneous detection of radiation from all parts of the organ or area of interest without scanning. Disease processes in the brain, heart, lung, kidneys, liver, spleen, and pancreas are routinely detected in only a fraction of the time required with conventional mechanical scanning techniques!

Moreover, the MODEL 5000 will also measure rapid changes in the concentration of a radioactive material in compartments within the organ. Of special importance, the instrument allows effective utilization of the full range of isotopes — high energy isotopes can now be used and data can be immediately viewed! Further, the Autofluoroscope periodically displays accumulated data allowing observation of buildup. For continuing historical advantage, the patient's records can be permanently stored on magnetic tape for future reference!

#### MODEL 5000 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
- PATIENT'S RECORDS CAN BE PERMANENTLY STORED ON COMPUTER-FORMATTED MAGNETIC TAPE
- CRYSTAL MATRIX AND MULTI-CHANNEL STORAGE OF ACCUMULATED DATA
- PERIODIC DISPLAY OF DATA DURING BUILDUP PROCESS
- AUTOMATICALLY PROVIDES QUANTIFICATION OF DATA

Call or write today for free descriptive literature!



## BAIRD-ATOMIC

ATOMIC AND LABORATORY INSTRUMENTS DIVISION

33 UNIVERSITY ROAD, CAMBRIDGE, MASSACHUSETTS 02138, Telephone: 617 864-7420

OFFICES: ATLANTA BOSTON CHICAGO DALLAS DETROIT LOS ANGELES NEW YORK PHILADELPHIA PITTSBURGH SAN FRANCISCO WASHINGTON, D.C.  
EUROPE: BAIRD-ATOMIC (EUROPE) N.V. 26-27 VEENKADE, THE HAGUE, HOLLAND

See "Model 5000" at the Nuclear Medicine Show

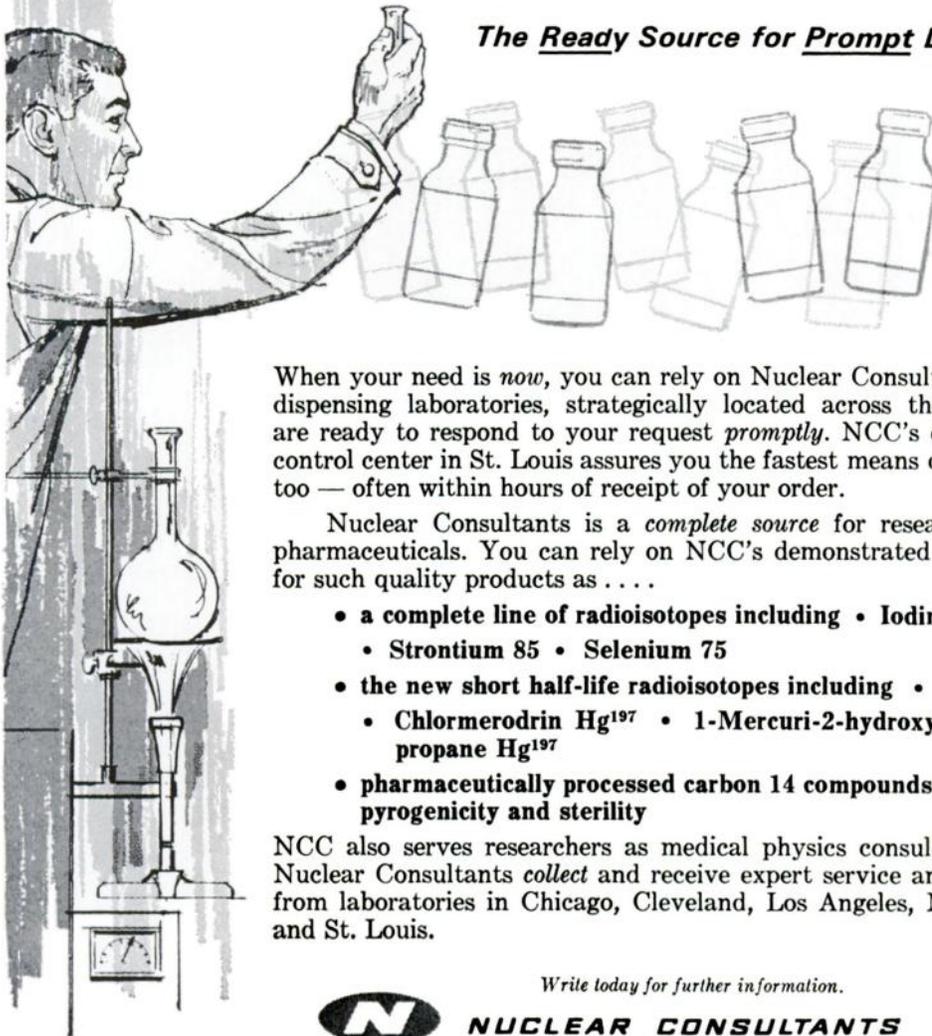


LOOK TO



**RADIOPHARMACEUTICAL  
PRODUCTS FOR  
CLINICAL  
RESEARCH**

*The Ready Source for Prompt Delivery*



When your need is *now*, you can rely on Nuclear Consultants. Five dispensing laboratories, strategically located across the country, are ready to respond to your request *promptly*. NCC's own traffic control center in St. Louis assures you the fastest means of delivery, too — often within hours of receipt of your order.

Nuclear Consultants is a *complete source* for research radiopharmaceuticals. You can rely on NCC's demonstrated leadership for such quality products as . . . .

- a complete line of radioisotopes including • Iodine 125  
• Strontium 85 • Selenium 75
- the new short half-life radioisotopes including • Tc<sup>99m</sup>  
• Chlormerodrin Hg<sup>197</sup> • 1-Mercuri-2-hydroxy-  
propane Hg<sup>197</sup>
- pharmaceutically processed carbon 14 compounds, tested for  
pyrogenicity and sterility

NCC also serves researchers as medical physics consultants. Call Nuclear Consultants *collect* and receive expert service and delivery from laboratories in Chicago, Cleveland, Los Angeles, New York, and St. Louis.

*Write today for further information.*



**NUCLEAR CONSULTANTS**  
DIVISION OF MALLINCKRODT CHEMICAL WORKS

Box 6172 Lambert Field, St. Louis, Missouri 63145

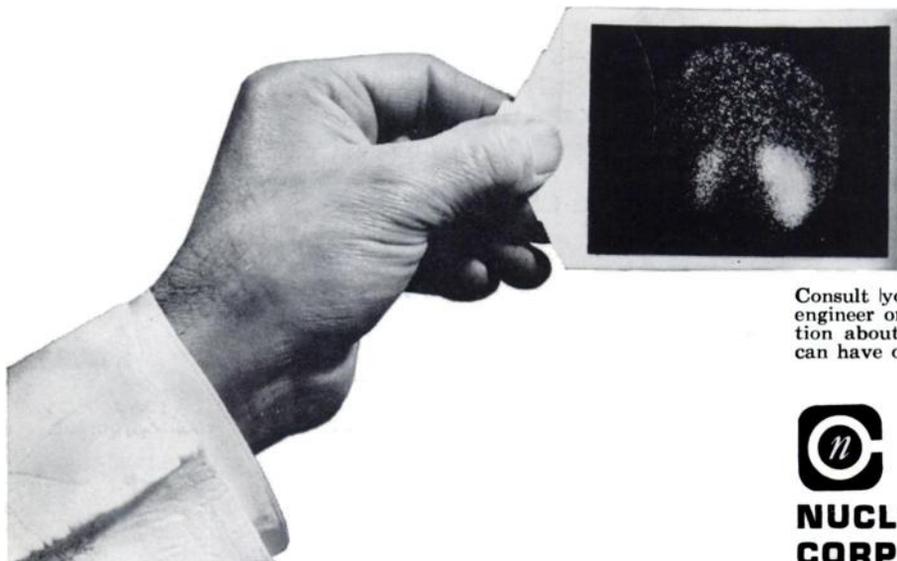
CHICAGO CLEVELAND HOUSTON LOS ANGELES  
MIAMI NEW YORK SAN FRANCISCO WASHINGTON, D. C.



**There's no  
clinical advantage to  
a 3 $\frac{1}{4}$ " x 4 $\frac{1}{4}$ " photo of  
radioisotope distribution.**

**Unless you like  
speed, sensitivity,  
and  
statistical accuracy.**

**That's why the Pho/Gamma<sup>®</sup>  
Scintillation Camera is making  
all rectilinear scanners  
obsolete (even our own).**



Consult your Nuclear-Chicago sales engineer or write to us for information about the impact Pho/Gamma can have on your work.

NUC-D-9-221



**NUCLEAR-CHICAGO  
CORPORATION**