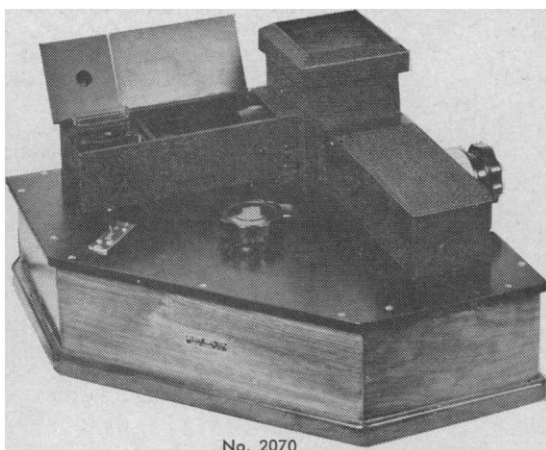


## THE KLETT FLUORIMETER

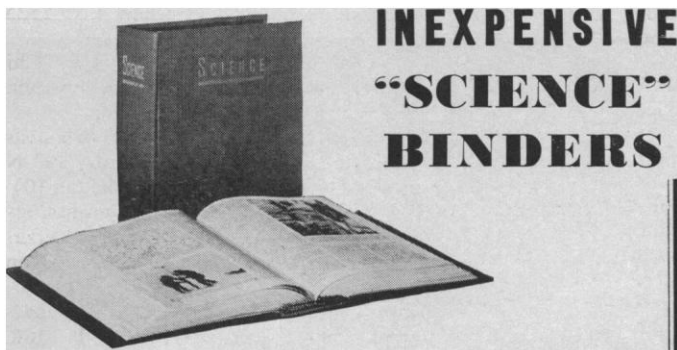


Designed for the rapid and accurate determination of thiamin, riboflavin, and other substances which fluoresce in solution. The sensitivity and stability are such that it has been found particularly useful in determining very small amounts of these substances.

### KLETT SCIENTIFIC PRODUCTS

PHOTOELECTRIC COLORIMETERS • BIO-COLORIMETERS  
GLASS ABSORPTION CELLS • COLORIMETER NEPHELOMETERS • KLETT REAGENTS • COLONY MARKER AND TALLY

**Klett** Manufacturing Co., Inc.  
179 EAST 87TH STREET, NEW YORK, N. Y.



Keep your copies of **SCIENCE** always available for quick, easy reference in this attractive, practical binder. Simply snap the magazine in or out in a few seconds—no punching or mutilating. It opens **FLAT**—for easy reference and readability. Sturdily constructed, this maroon buckram binder stamped in gold leaf will make a fine addition to your library.

Starting with January 1962, **SCIENCE** Binders hold one three-month volume of **SCIENCE**. They now have a 3-inch back and 13 flat fasteners. \$3.25 each. Four binders, \$12.00.

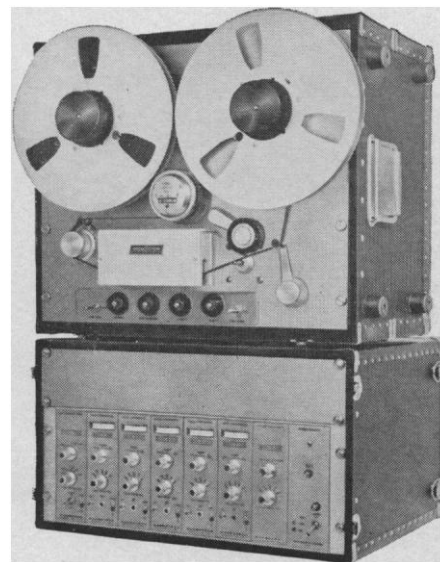
For six-month volumes, through December 1961, **SCIENCE** binders with 4-inch back and 26 flat fasteners are available. \$3.25 each.

Add 50¢ for orders outside the U.S. Name of owner, 75¢ extra; year of issues, 50¢ extra.

**SCIENCE** • 1515 Massachusetts Ave., NW,  
Washington, D.C. 20005

2 OCTOBER 1964

## Low Cost 2- to 14-channel Tape Recording Systems



These tape recording systems represent today's best value in data storage equipment. They offer 99.8% DC linearity, expandability and significant operating specifications, along with low cost. Complete 7-channel system is \$7,795 including auto tape lift, built-in footage counter and four standard tape speeds.

### Check these features:

- front panel tape speed selection
- rack or portable case mounting
- modular construction — all record/reproduce electronics in one plug-in for each channel and all speeds
- built-in calibration signal and panel meters
- isolated inputs accept data from unbalanced, differential, push-pull, and single-ended sources
- front panel test points for monitoring input levels (record), output voltages (reproduce)
- IRIG 7-channel, or 14-channel formats available on ½" tape
- accessories for voice, fast pulse, slow pulse recording
- world-wide field service available



**TECHNICAL MEASUREMENT CORPORATION**  
441 WASHINGTON AVE., NORTH HAVEN, CONN.

Send 700/1400 Tape System information to

Name..... Title.....  
Company .....  
Address .....  
City ..... State..... Zip.....

# **MELPAR'S** *Research Division has* **IMMEDIATE OPENINGS FOR . . .**

- **BIOCHEMISTS**      ■ **BIOPHYSICISTS**
- **VIROLOGISTS**     ■ **MICROBIOLOGISTS**
- **IMMUNOLOGIST-IMMUNOCHEMISTS**

Melpar, an expanding and progressive industrial research organization in the Washington, D.C. area, has a fast moving program of research in a wide range of scientific disciplines. There is an immediate need for scientists and instrumentation engineers who have an active interest and experience or training in:

- Antigen-Antibody Reactions
- Bacterial Physiology
- Enzymatic Mechanisms & Kinetics
- Enzyme Active Site Studies
- Microbial Genetics
- Nucleic Acid Studies
- Virus Physical Properties
- Viral Host Parasite Interaction
- Biochemical Processors
- Electrochemical Monitors
- Fluorescence Instrumentation
- Optical Design
- Collection & Fractionation Systems

## **BIOPHYSICAL MEASUREMENTS**

## **BIOCHEMICAL MEASUREMENTS**

## **ELECTRO-OPTICS**

Qualified persons who are interested in participating in challenging projects ranging from basic research to the exploration of life detection techniques are invited to submit resumes to:

**Clarence Endsley—Professional Placement**

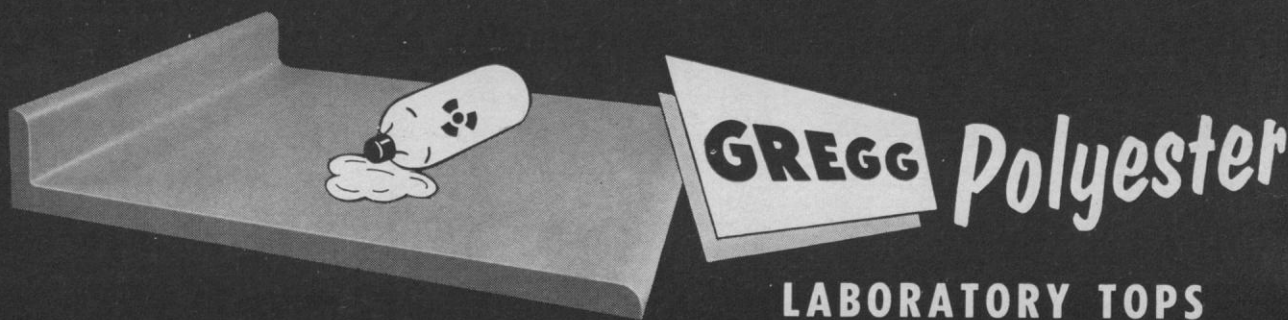
**MELPAR**  **INC**

A SUBSIDIARY OF WESTINGHOUSE AIR BRAKE COMPANY

**3463 Arlington Blvd. Falls Church, Va.**  
***an equal opportunity employer***

WORKING WITH **RADIOACTIVE** CHEMICALS?

WANT SAFETY FOR YOUR **"HOT"** LAB?



- ★ Homogeneous chemically resistant surface material, with porosity of less than one half of one percent.
- ★ Continuous, smooth, seamless surface from top of backsplash to rounded front edge, allowing no chance for build up.

- ★ Resilient, durable, pleasant working surface; no maintenance or surface treatment required, easy to decontaminate.
- ★ Plus, exceptional resistance to radio chemicals and all other acids, bases and solvents used in laboratories.

**THIS NEW CONCEPT OF TOP SURFACING NOW INSTALLED AT  
LEADING EDUCATIONAL, RESEARCH & INDUSTRIAL INSTITUTIONS**

For Installation References & Test Reports Write:

**GREGG LABORATORY TOPS**  
Nashua, New Hampshire

## LAND AND WATER USE

Special Reference to Mountain & Plains Regions  
Wynne Thorne, Editor

AAAS Symposium Volume No. 73. May 1963  
6" by 9", 364 pages, references, index, \$8.00  
(AAAS members' cash order price \$7.00)

Arranged by the AAAS Section on Agriculture

This symposium volume reports papers by leaders in research, and policy discussions relating to the nation's land and water resources, presented at the AAAS meeting in Denver, Colorado, in December 1961.

The volume centers on problems associated with the increasing competitive demands for use of publicly owned lands. The historic uses by livestock and timber processors are being challenged by groups concerned with recreation, wildlife, and water production. Adjustments in public land use in relation to uses of adjacent or intermingled privately owned lands need further consideration if the total benefits from these resources are to be maximized. These and other problems of land and water are explored by recognized leaders in the field.

### AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

1515 Massachusetts Avenue NW,  
Washington, D.C. 20005

## PHYSIOLOGIST— PHARMACOLOGIST

**ASSIGNMENT:** To conduct and design original experiments in life science research and investigate the correlation between animal and clinical findings.

**LOCATION:** New Brunswick, New Jersey.

**BACKGROUND:** Academic achievements should include a Ph.D. degree. From two to four years' experience in research as a Physiologist-Pharmacologist is needed; familiarity with instrumentation is very useful.

The extensive research activities carried on at Colgate-Palmolive's laboratories, the proximity of Rutgers, the State University, and the availability of an extensive research library will contribute to your professional career satisfaction.

Interviews with members of our research staff may be arranged by writing to:



Mr. Carl Strub, Manager-Administrative Services  
Research and Development Center  
**COLGATE-PALMOLIVE COMPANY**  
909 River Road, New Brunswick, N. J.  
An Equal Opportunity Employer

## Personnel Placement

Replies to blind ads should be addressed as follows:

Box (give number)  
SCIENCE  
1515 Massachusetts Ave., NW  
Washington, D.C. 20005

### POSITIONS WANTED

**Chief Chemist, Ph.D.** Seeks research position in academic or hospital setting. Oriented towards life sciences, with experience in kinetics and methods of enzymes. TLC, GLC, drugs, hormones. Numerous publications. Demonstrated ability to maintain collateral staff via grants. Box 510, SCIENCE. 10/9

Forty-year-old **Ph.D.**, experienced teacher of **medical histology and embryology**, own electron microscope laboratory, publications, grants, seeks senior position in university or research laboratory. Box 515, SCIENCE. 10/9

**Organic (Medicinal) Chemist, Ph.D.** 1952; 10 years' experience in planning and synthesis of new pharmacological agents with productive records. Original thinker and initiative. Many publications and patents. Box 506, SCIENCE. X

**Ph.D. Biochemist**, 4 years of postdoctoral experience, 3 years at leading U.S. institution, 4th year overseas. Academic position preferred. Available after January. Box 503, SCIENCE. X

**Ph.D. Pharmacologist**, physiology, bacteriology minors, medical teaching, research experience, academic position preferred. Box 508, SCIENCE. 10/9

**Russian/English** scientific and technical translations by professional engineer. Box 512, SCIENCE. X

### POSITIONS WANTED

**Abstracts** expertly done from Russian, Polish, German, and French. Literature searches. Nominal charge. Box 513, SCIENCE. X

**Lawyer**, information retrieval and geological experience. Presently employed in information retrieval. Box 504, SCIENCE. X

**Microbiologist-Immunologist, Ph.D.**, 35, broad training, interests. Desires challenging position, western United States. Box 511, SCIENCE. X

**Neurophysiologist, Ph.D.** Industrial/academic research position. Box 505, SCIENCE. X

**Pathologist-Biochemist, M.D., Ph.D.** Age 40, married, three children. Desires basic research and teaching position in experimental pathology at medical school, research institute, or industry. Available 1 July 1965. Box 514, SCIENCE. X

**Research Director, Ph.D.** Seeks dynamic opportunity with/without teaching. Background in enzymes, analytical methodology, drug metabolism disease processes. Box 509, SCIENCE. 10/9, 16

**Translator.** German/English, experienced in medical literature, accepts free-lance assignments. Reasonable fees. Please write Box 4K, 67-25 Dartmouth Street, Forest Hills, 75, N.Y. 10/2

**Virology D.Sc., Microbiology, M.S.;** extensive background in tissue culture; virus-host relationship; virus-cancer research; desires research or teaching position. Box 507, SCIENCE. X

### POSITIONS OPEN

#### Ph.D. CLINICAL BIOCHEMIST

Four hundred fifty-bed acute general hospital medical center. Supervision of clinical chemistry department, research and development, and teaching medical technologists. Salary open. Will pay enough to attract a top notch clinical biochemist. **Sharp Hospital, 7901 Frost Street, San Diego, California 92123.**

### POSITIONS OPEN

**BOTANICAL LIBRARIAN.** Competent and energetic man or woman with a good general knowledge of botany and horticulture, and preferably with experience in a large university library. Duties include running an outstanding research library as well as information work. An exceptionally interesting and attractive post for a progressive and imaginative librarian. Address correspondence to: **Dr. W. C. Steere, Director, The New York Botanical Garden, Bronx, New York 10458.**

#### Ph.D. BIOCHEMIST

For bone research. General background in analytical and physical chemical methodology. Salary commensurate with experience. Send resumé to:

**M. R. Urist, M.D.**  
UCLA Dept. of Surgery  
1019 Gayley Avenue  
Los Angeles, California 90024

#### FISHERIES RESEARCH BOARD OF CANADA Ottawa, Canada

Applications are invited for position of **Associate Editor and Special Assistant to the Chairman**. Duties include evaluating, with assistance of referees, scientific manuscripts for publication by the Fisheries Research Board of Canada and assisting in developing publication policies and standards. In addition to editorial responsibilities, duties involve maintaining broad knowledge of board's scientific programs as background for undertaking special assignments.

**Qualifications:** Ph.D. in a branch of biological science with at least 5 years of research experience. Appointment will be made on or about 1 November 1964.

Salary on appointment will be commensurate with qualifications in range of \$9500 to \$15,000 per year. Canadian Government pension plan, medical services, and hospitalization plan, and other benefits apply.

Applications, including personal data and details of training and experience should be addressed to **Chairman, Fisheries Research Board of Canada, Ottawa 8, Ontario.** 10/9

## SENIOR VETERINARY TOXICOLOGIST (DVM)

Required by

### SQUIBB INSTITUTE FOR MEDICAL RESEARCH

Position available in our Department of Toxicology. Candidate should have experience in animal medicine. Training in laboratory techniques is desirable but not essential. Duties include:

1. Care of animal colony used in toxicological studies.
2. Evaluation of the effects of new drugs in animals.
3. Research in mechanisms of toxicity.

Send complete résumé and salary requirements, in confidence to:

BUSINESS MANAGER

### SQUIBB INSTITUTE FOR MEDICAL RESEARCH

New Brunswick, New Jersey

An equal opportunity employer

## TOXICOLOGIST

Required By

### SQUIBB INSTITUTE FOR MEDICAL RESEARCH

Ph.D. in Biological Sciences, for a senior position in our Department of Toxicology. Experience in toxicology preferred but will consider candidate with training in other areas of biological research. Duties include:

1. Evaluation of toxicological effects of new drugs in experimental animals.
2. Development of new techniques in toxicology.
3. Research in mechanisms of toxicity.

UNUSUAL OPPORTUNITY  
IN RAPIDLY EXPANDING UNIT

Send complete résumé and salary requirements, in confidence to:

BUSINESS MANAGER

### SQUIBB INSTITUTE FOR MEDICAL RESEARCH

New Brunswick, New Jersey

An equal opportunity employer

## POSITIONS OPEN

### TECHNICAL TRANSLATOR

Position open for scientifically trained translator. Sound training in chemistry essential. Competence required in French, German, and one other language used in scientific fields. Position entails some editing work. Send complete résumé to: **Wendell Powers, Kresge-Hooker Science Library Associates, Wayne State University, Detroit, Michigan 48202.** X

## UNIVERSITY OF SASKATCHEWAN

Department of Anatomy  
Saskatoon, Sask., Canada

Applications are invited for two positions in the Department of Anatomy: one to teach gross anatomy and the other to teach electron microscopy and ultrastructure. Ample opportunities for research in various fields. Good research facilities. The appointments will be made at rank and salary according to qualifications and will become effective 1 July 1965. Salary ranges: Lecturer \$6000-8000; Assistant Professor \$7500-9800; Associate Professor \$10,000-12,800. Apply to **Head of Department of Anatomy** at the above address.

## ALCOHOLISM PROGRAM . . .

Alcoholic Program Director, Mental Hygiene Division, Wisconsin Public Welfare Department, Madison. Will plan, organize and lead a comprehensive study of state-wide problem scope, treatment and facilities for development of a co-ordinated total alcoholism program for the State. Position presents unusual opportunity for exercise of individual approach and initiative. Ph.D. in sociology, psychology, public health or M.D. degree, and 3 years of postdoctoral research experience. First annual salary: \$12,018 with annual increments to \$15,168. Physicians salary under separate salary schedule with salary based on training and experience. Applicants write to: **L. J. Ganser, M.D., Director, Division of Mental Hygiene, Room 325, State Office Building, Madison, Wisconsin.**

## MINISTRY OF DEFENCE

(ARMY DEPARTMENT)

### MICROBIOLOGICAL RESEARCH ESTABLISHMENT

Porton, Nr. Salisbury

#### Two SENIOR RESEARCH FELLOWS required:

(i) for research in Chemical Pathology section into role of erythritol in metabolism of Brucellae. Relevant experience essential. (ii) for Immunochimistry section studying surface constitution of tissue cells with special reference to virus absorption. Experience of fractionation of cell components and/or handling of lipoproteins essential. Organic chemist with appropriate research experience considered.

**QUALIFICATIONS:** 1st or 2nd class honours degree (or equivalent) in Chemistry or Biochemistry for (i), Biochemistry for (ii), and at least 3 years' postgraduate research experience.

**SALARY** within fixed range £1,420-£1,755. Appointments tenable for 1 to 3 years.

**APPLY TO:** Ministry of Defence, CE2(e)(AD), Northumberland House, Northumberland Avenue, London, W.C.2.

## PHYSIOLOGIST PHARMACOLOGIST

**HAZLETON LABORATORIES**, a leading independent company specializing in the Life Sciences, needs a Ph.D. with 0 to 3 years' experience or an experienced M.S. physiologist or pharmacologist to conduct, design, coordinate, and evaluate research programs in the fields of respiratory physiology and inhalation toxicology. Opportunity for scientific meeting attendance and publications. Liberal employee benefit program including profit sharing. Salary commensurate with experience and education.

Please send résumé to: **K. T. Paynter, Personnel Manager**



**HAZLETON  
LABORATORIES,  
INC.**

P.O. Box 30  
Falls Church,  
Virginia  
(Suburban  
Washington, D.C.)

An Equal Opportunity Employer

## POSITIONS OPEN

### RESEARCH ORGANIC CHEMIST

Unusual opportunity for an imaginative scientist with experience in the application of analytical instrumentation to biochemical investigations. Offered by a rapidly growing, medically oriented, commercial organization in Florida. Salary commensurate with qualifications.

BOX 502, SCIENCE

## FELLOWSHIPS

### Biophysics Training Program Fellowships

Applications are invited from candidates with M.S. or Ph.D. degrees in either physical or biological sciences. A major aspect of the program is the conduct of a specific research project and current studies include problems in radiobiology, neutron activation and neutron dosimetry, processing of biological data and medical engineering. Training stipends in the range of \$5000-6500. Further information from **Dr. G. L. Brownell, Head, Physics Research Laboratory, Massachusetts General Hospital, Boston 14, Massachusetts.**

### POSTDOCTORAL RESEARCH FELLOWSHIPS AT THE WEIZMANN INSTITUTE

OF SCIENCE  
REHOVETH, ISRAEL  
ACADEMIC YEAR 1965-66

A number of postdoctoral fellowships (junior and senior level) are available to candidates from all countries for research in the natural sciences at the Weizmann Institute of Science. They are normally of 12 months' duration.

Facilities are available for research in:  
Applied Mathematics    Infrared Spectroscopy  
Biochemistry    Isotope Research  
Biodynamics    Nuclear Physics  
Biological Ultrastructure    Organic Chemistry  
Biophysics    Photochemistry and  
Cell Biology    Spectroscopy  
Chemical Immunology    Plant Genetics  
Electronics    Polymer Research  
Experimental Biology    Theoretical Chemical  
Genetics    Physics

X-Ray Crystallography

Information on stipends, family and travel allowances, etc., and application forms, may be obtained from the **Academic Secretary, Weizmann Institute of Science, Rehoveth, Israel.**

Applications should be received not later than 1 December 1964. Announcement of awards will be made in February 1965.

## The Market Place

BOOKS • SERVICES • SUPPLIES • EQUIPMENT

## PROFESSIONAL SERVICES

**Austin**  
TEXAS

Scientifically Oriented for Expanding Industry

**FREE** { SEND FOR AUSTIN'S 100 PAGE  
"INVITATION TO INDUSTRY"

Simply attach  
your letterhead  
to the coupon.

Austin Economic Development Council  
P.O. Box 998S • Austin, Texas

## SUPPLIES AND EQUIPMENT

### AVAILABLE

Primate research support facilities suitable for bio-medical testing or investigations. Any species of primates maintained in closed colonies under professional veterinary supervision.

#### INQUIRIES INVITED:

Research Primate Division  
Asiatic Animal Imports, Inc.  
P.O. Box 8125 Intl. Airport  
San Francisco, California

415-697-3747

415-982-6866

### SPRAGUE-DAWLEY, INC.

Pioneers in the development of the  
STANDARD LABORATORY RAT.

P.O. Box 4220

Madison, Wisconsin

CE 3-5318

## Kodak reports on:

flash photolysis as convenience, not curse . . . **R**apid **A**ccess **R**ecording

### Tinctorial properties

Candor is the best policy in the long run. Know then that KODAK WRATTEN Light Filters can betray a scientific photographer under certain circumstances.

He has planned out a tricky piece of high-speed photography. He carefully selects the transmittance characteristics from the catalog. After the filter comes in, he measures the transmittance in his own laboratory. It checks out exactly as advertised. The great flash of light occurs. The photographer goes home to bed and cannot sleep. Did the flash bleach out the filter before the event was over? It is only dyed gelatin, after all. He slips on his trousers, jauntily greets the night men at the gatehouse, and rechecks the filters. Transmittance still exactly as advertised. He leaves a note that he will not be in until after lunch, bids a jaunty good morning to the fresh crew at the gatehouse, and this time is able to make happy noises with his uvula 30 seconds after hitting the pillow.

Poor fellow! His daddy had never explained to him that in many organic dyes the descent from the excited singlet state can proceed by way of an intermediate triplet trap where molecules can linger practically forever—1/100 second or more. Because of this depopulation of ground state with high light intensity, the window shade was up some and he may never suspect. Perhaps worse, the populated triplet state may have manifested itself in temporary absorption bands not shown in the book.

Now the laser men are turning the curse of flash photolysis into a convenience. In giant-pulse outfits they are having good luck replacing costly Kerr cells with cyanine dye solutions that require no unsightly wires. Some seem to do an acceptable job of blocking off the end-mirror until high inversion is attained, and then they open up. Quick-eared laser men have developed a sudden passion for dye lore.

It is an old art closely bound to mature trades like textiles. There are Easter-egg dyes. There are dyes for changing organdy curtains from coral to aqua. There are biological stains. Beyond lies mumbo jumbo. Unless your brother-in-law is a great scout and an officer of the textile color chemists, you find yourself knee-deep in the patent literature. Again and again you fish out our name. You decide to sit down and write us a letter, to which we answer as follows:

*We hope you will appreciate why we are unable to supply samples or enter into further technical discussion of the large number of dyes that our chemists have developed in the course of photographic research. We believe that for your purpose, however, you may find it useful to consider the following selection, all of which have been reported in the literature to show spectral sensitizing properties and all of which are sold as EASTMAN Organic Chemicals by our division, Distillation Products Industries, Rochester, N. Y. 14603. Implicit in any spectral sensitizer, photographic or otherwise, is a high degree of absorbance at the wavelength for which the molecule has been designed.*

*The list includes:*

1757 Acridine Orange	1842 2-(p-Dimethylaminostyryl)-
1021 Benzopurpurin 4B	1-ethylpyridinium iodide
C 770 Congo Red	C 1746 Eosin Y
1334 Cryptocyanine	C 110 Erythrosin B
373 2',7'-Dichlorofluorescein	2155 Ethyl Red
1532 Dicyanine A	2067 Neocyanine
2748 5-(p-Dimethylamino- benzylidene)rhodanine	623 Orthochrome T
	622 Pinacyanole (Chloride)

*Please do not hesitate to call on us if we can be of any further service. Inquiries are always welcomed for custom synthesis in quantity of specifically designated compounds regardless of tinctorial properties.*

**The time has come this autumn to quit kidding ourselves.** Beautiful photography is a great art that has virtually nothing to do with the purposes for which physical scientists and engineers justify their heavy consumption of 16mm, 35mm, 70mm, and larger widths of film during working hours. We had better see things their way. We now know they are seldom in a mood to treat film as an object of veneration, a subject for mystic rites that can be short-cut only at grave peril to conscience.

All they seem to want are the data—the quicker the better.

The exact nature of these data is really none of our cotton-pickin' business, except insofar as the users care to talk or honor us with reprints some fine day. The best we can contribute to their spark-chamber or bubble-chamber physics, their radar recordings, their studies of bioluminescence or of the stratigraphy of Antarctica, their improvement of sugar-beet pulping machinery or of ignition systems for vernier rockets, their logging of oil wells, their probing of the Saturnine atmosphere, their counting of taxis on the Golden Gate Bridge, and all the other vaguely imagined tasks they perform with film—the best we can contribute is a fierce determination to make them demonstrably better film for their multifarious purposes than anybody else can make.

To this end we are placing upon the market a new line of films. We don't want them confused with films designed for beautiful movies either by us or by our competitors. You will get to know them by a trademark that hardly suggests softness and beauty. It happens to consist of the initials for "Rapid Access Recording."

The five films which will first carry this mark are *primarily* designed for processing at temperatures up to 130°F. Four of the five are on ESTAR Base, tops for dimensional stability in film with strength and thinness. A sixth new one, KODAK 2475 Recording Film, likewise on ESTAR Base, has extended red sensitivity to make it the fastest film you can buy, but it is not yet suitable for hot processing.

*Hardly less important than the characteristics of the new films is ready information about said characteristics so that user and maker can sit down together and make the best choice for the work at hand. Get in touch with Eastman Kodak Company, Photorecording Methods Division, Rochester, N. Y. 14650, phone 716 - 562 - 6000, Ext. 3257. See what happens. The new trademark, by the way, is:*



**This is another advertisement where Eastman Kodak Company probes at random for mutual interests and occasionally a little revenue from those whose work has something to do with science**



# Announcing a new and complete system for the retrieval and analysis of bioelectric signals

The investigator of life-science phenomena attempting the recovery of meaningful data from repetitive, noisy signals or the analysis of bioelectric potentials now has at his disposal a powerful new tool—Nuclear-Chicago's Data Retrieval Computer System.

This advanced instrument system derives from our close association with the research worker and our 18 years of demonstrated ability to furnish reliable, time-saving instruments that give him accurate experimental information.

To meet his increasing interest in the isolation and study of bioelectric signals, we offer a complete system, including the Model 7100 Data Retrieval Computer and a selection of input and readout instruments: a transistorized, current-regulated stimulator; differential preamplifier; FM tape recorder; strip-chart recorder; X-Y plotter; electric typewriter; and paper-tape punch.

The heart of this system is the Model 7100, a 400-data-point computer that operates in the transient-averaging, time-histogram, and interval-histogram modes—all without extra-cost options. It is compact and functional in design and offers significant features and benefits, principal among which are those listed in the adjoining column.

May we tell you more about the advanced data retrieval system based on the Model 7100? Please consult your Nuclear-Chicago sales engineer or write us for further information.

---

## THE MODEL 7100 DATA RETRIEVAL COMPUTER

---

### VERSATILE:

Requires no costly optional equipment.

Operates in three modes: transient averaging, time histogram, and interval histogram.

Has four balanced differential inputs.

Has four amplitude discriminators (sensitive to signals as small as 10 millivolts), baseline stabilizers, and quadrant memory erases—all with front-panel control.

Buffer memory storages at each input virtually eliminate input deadtime during time-histogram operation.

Five-inch oscilloscope with camera bezel monitors input signal or memory contents.

---

### SENSITIVE:

Only one preamplifier needed for lowest input signal amplitudes.

Input signal requirement is nominally 100 millivolts; operates with signals from 10 millivolts to 6 volts.

---

### AUTOMATIC:

Data collection requires minimum attention.

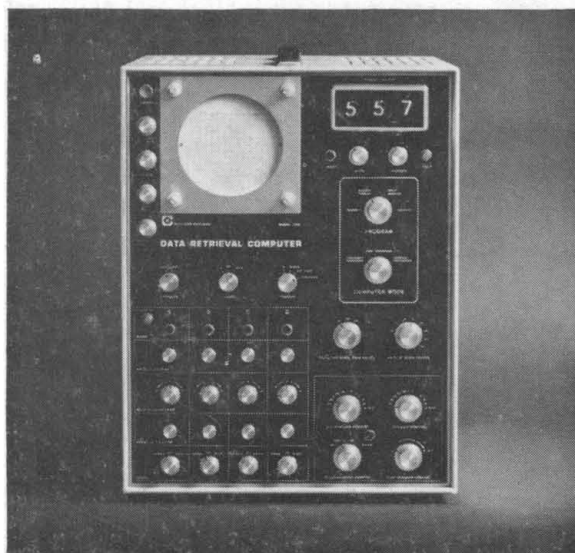
Preset electronic counter settings variable from 1 to 900 analysis intervals.

Front-panel selection of a wide range of pre-analysis and post-analysis intervals.

400-data-point analysis interval selectable from 15.625 milliseconds to 64 seconds.

---

NUC:Q-4-241



Nuclear-Chicago covers all system components with a comprehensive, one-year guarantee that includes parts, labor, shipping costs, and travel time. The Model 7100 is further protected by a free, one-year service contract that includes two preventive maintenance calls.

34 sales offices and 17 service offices in U. S. A. and Canada, 65 sales and service representatives throughout the world.



**NUCLEAR-CHICAGO**

A DIVISION OF NUCLEAR-CHICAGO CORPORATION

349 Howard, Des Plaines, Illinois 60018 U.S.A.

In Europe: Donker Curtiusstraat 7, Amsterdam W