American Assoc. of Clinical Chemists (R. L. Dryer, State Univ. of Iowa, Dept. of Biochemistry, Iowa City). 26–27 Dec.

American Astronautical Soc. (J. Campbell III, R.C.A., Front and Cooper Sts., Bldg. 10-7, Camden, N.J.). 26–30 Dec.

American Astronomical Soc. (H. J. Smith, Yale Observatory, 135 Prospect St., New Haven, Conn.). 27–30 Dec.

American Economic Assoc. (J. W. Bell, Northwestern Univ., Evanston, Ill.). 26 Dec.

American Educational Research Assoc. (G. T. Buswell, 1201 16 St., NW, Washington 6). 30 Dec.

American Meteorological Soc. (J. M. Austin, Dept. of Meteorology, Massachusetts Inst. of Technology, Cambridge 39). 26–31 Dec.

American Nature Study Soc. (B. Schultz, Dept. of Biology, Western Michigan Univ., Kalamazoo). 26–30 Dec.

American Physiological Soc. (R. G. Daggs, APS, 9650 Wisconsin Ave., Washington 14). 28 Dec.

American Political Science Assoc., (E. M. Kirkpatrick, 1726 Massachusetts Ave., NW, Washington 6). 27 Dec.

American Psychiatric Assoc. (M. Ross, APA, 1700 18 St., NW, Washington 9). 27 Dec.

American Soc. of Criminology (J. Chwast, New York Inst. of Criminology, 115–117 W. 42 St., New York 36). 29–30 Dec.

American Soc. of Naturalists (E. L. Green, Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Maine). 27 Dec.

American Soc. of Zoologists (C. B. Metz, Dept. of Oceanography, Florida State Univ., Tallahassee). 28–30 Dec.

American Sociological Assoc. (T. Parsons, Emerson Hall, Cambridge 38, Mass.). 28–29 Dec.

American Statistical Assoc. (D. C. Riley, ASA, 1757 K St., NW, Washington 6). 29–30 Dec.

Association of American Geographers, Great Plains–Rocky Mountain Div., (M. F. Burrill, AAG, 1785 Massachusetts Ave., NW, Washington, D.C.). 29–30 Dec.

Beta Beta Beta Biological Soc. (F. G. Brooks, Box 515, Ansonia Station, New York 23). 27 Dec.

Colorado-Wyoming Acad. of Science (R. G. Beidleman, Zoology Dept., Colorado College, Colorado Springs).

Ecological Soc. of America (J. E. Cantlon, Dept. of Botany and Applied Pathology, Michigan State Univ., E. Lansing). 26–30 Dec.

Institute of Management Sciences (W. Smith, Inst. of Science and Technology, Univ. of Michigan, Ann Arbor). 29 Dec.

Mathematical Assoc. of America, Committee on Undergraduate Program in Mathematics (H. L. Alder, MAA, Univ. of California, Davis). 30 Dec.

National Assoc. of Biology Teachers (H. C. Kranzer, Temple Univ., Philadelphia 22, Pa.). 26–30 Dec.

National Assoc. for Research in Science Teaching (H. A. Branson, Dept. of Physics, Howard Univ., Washington 1). 26–30 Dec.

National Assoc. of Science Writers (D. J. Dunham, Cleveland Press, Cleveland 14, Ohio).

National Science Teachers Assoc. (M. T. Ballou, Ball State Teachers College, Muncie, Ind.). 26–30 Dec.

National Speleological Soc. (D. N. Cournoyer, 2318 N. Kenmore St., Arlington 1, Va.). 29 Dec.

Scientific Research Soc. of America (D. B. Prentice, 51 Prospect St., New Haven, Conn.). 29 Dec.

Sigma Delta Epsilon (B. L. McLaughlin, 702 Butternut St., NW, Washington 12). 26–30 Dec.

Society of Protozoologists (N. D. Levine, College of Veterinary Medicine, Univ. of Illinois, Urbana). 27–30 Dec.

Society of the Sigma Xi (T. T. Holme, 51 Prospect St., Yale Univ., New Haven, Conn.). 29 Dec.

Society of Systematic Zoology (R. T. Abbott, Acad. of Natural Sciences, Philadelphia 3, Pa.). 27–30 Dec.

Tau Beta Pi Assoc. (R. H. Nagel, Univ. of Tennessee, Knoxville). 29 Dec.

United Chapters of Phi Beta Kappa (C. Billman, 1811 Q St., NW, Washington 9). 29 Dec.

27–29. American Folklore Soc., Cincinnati, Ohio. (T. P. Coffin, 110 Bennett Hall, Univ. of Pennsylvania, Philadelphia 4)

27–29. American Geophysical Union, 1st Western natl., Los Angeles, Calif. (A. N. Sayre, U.S. Geological Survey, Washington 25)

(See issue of 20 October for comprehensive list)

Abstracts on four Laboratory investigations:

OPTICAL COMMUNICATIONS Gordon Jacobs, an Electronics Laboratory communications engineer, recently reported that a ruby laser burst system using 350 watts of primary power can provide a range of 10,000 nautical miles at 400 bits per second. In an experimental system development at the Laboratory a KDP crystal was used to modulate the light source frequencies up to 200 mc. The optical receiver utilized a multiplier phototube. Mr. Jacobs stated that future improvements in light sources offer an enormous potential for optical communications. A considerable technical effort is required in many areas: e.g. atmospheric propagation, wide-band modulation and wide-band detection.

ADAPTIVE NEURON COMPONENT Thomas Bray, of the Electronics Devices & Networks group, presented a paper a short time ago describing "An Electro-Optical Shift Register" which employs an adaptive neuron component. This artificial neuron utilizes optoelectronic elements as analog multipliers. (Extremely low volume is an advantage of this Shift Register: a 20-input component consisting of more than 40 analog multipliers and 20 analog memory elements occupies about 2.5 cubic inches.) This work of Mr. Bray's is part of the Laboratory's endeavor in the field of new logic and memory techniques development.

A SCHEME TO CREATE A "RADIOWAVE ATMOSPHERE" NEAR THE MOON ...has been proposed by Dr. Frank Dickey, radar consultant with the Laboratory. He suggested "a powerful earth-based transmitter be employed to beam microwave energy at the moon. The interaction of incident and reflected energy near the lunar surface would create a stationary radiowave pattern...which would be sensed by an incoming spacecraft. This new technique can provide a simple, lightweight device capable of performing all sensory functions needed to achieve soft lunar landings." (First reported at IRE Convention in March 1961, theoretical work is continuing on this concept.)

THE CARDIAC PACEMAKER Electronics Laboratory engineers, headed by Jerome J. Suran, Manager of the Electronic Applications Laboratory, developed this device to control the beat of the human heart. It is the first surgically implantable unit whose rate can be adjusted by the patient to accommodate strenuous activities, such as stair-climbing. Its successful use was described in the May '61 issue of LIFE MAGAZINE. A continuing program of cooperation with medical researchers is now part of the Laboratory effort. It includes work on mechanisms that will stimulate other muscles which have suffered deterioration (from paralytic disease or injury) and the development of new diagnostic techniques.

PERSONNEL PLACEMENT

CLASSIFIED: Positions Wanted 25¢ per word, minimum charge $4. Use of Box Number counts as 10 additional words. Payment in advance is required.

COPY for ads must reach SCIENCE 2 weeks before issue date (Friday of every week).

DISPLAY: Positions Open. Rates listed below—no charge for Box Number. Rates net. No agency commission allowed for ads under 4 inches. No cash discount. **Minimum ad:** 1 inch. Ads over 1 inch will be billed to the nearest quarter inch. Frequency rate will apply to only repeat of same ad. No copy changes. Payment in advance is required except where satisfactory credit has been established.

Single insertion	**$40.00 per inch**
4 times in 1 year	**38.00 per inch**

For PROOFS on display ads, copy must reach SCIENCE 4 weeks before date of issue (Friday of every week).

Replies to blind ads should be addressed as follows:
Box (give number)
Science
1515 Massachusetts Ave., NW
Washington 5, D.C.

FELLOWSHIPS

Predoctoral and Postdoctoral Fellowships in Medical Physics. Opportunities are available to do graduate work in the basic medical sciences. Emphasis is on the fields of radiation biology, radiation physics, and the clinical use of radioisotopes. Fellowship support is offered for study programs leading to the M.S. and Ph.D. degrees in medical physics and also for postdoctoral research. Stipends vary with training and dependents. Write to Chairman, Department of Radiology, Medical Center, University of California, Los Angeles 24, California.

FELLOWSHIPS

Applications now being accepted for graduate study in **Biochemical Pharmacology** leading to Ph.D degree. Prerequisites are a B.S. degree in chemistry or biology with a strong chemistry background. Research programs in progress on amino acid and nucleic acid metabolism, biochemical genetics, smooth muscle physiology, mechanism of enzyme action, and mechanism of drug action. Fellowships available with an initial stipend of $3000 per annum. Personal interviews arranged for promising applicants. Write to Chairman, Department of Pharmacology, St. Louis University School of Medicine, St. Louis 4, Missouri. 11/24

SCHOLARSHIPS

The **INSTITUTE FOR NORTHERN STUDIES** is offering for the 1962–63 academic session, four scholarships, and possibly more, for students of marked ability interested in research problems to do with Northern Canada. This work may be in any field of the biological, physical, or social sciences or the humanities and will be carried out under the supervision of a department of the University of Saskatchewan.

Applicants who have no postgraduate experience are eligible to apply for scholarships of the value of $1800 for 12 months, and those with at least 1 year of postgraduate research training are eligible to apply for scholarships of the value of $2200 for 12 months. Essential equipment and traveling expenses incurred while carrying out a research project will be looked after by the Institute.

The Institute will also consider meeting essential equipment and traveling expenses incurred by a graduate student who holds a scholarship from some other source.

Further information and application forms may be obtained from the Secretary, Institute for Northern Studies, University of Saskatchewan, Saskatoon. The application forms and supporting documents must be received not later than **1 February 1962.**

POSITIONS WANTED

Coordinator of Research. Ph.D. chemistry, 1941. Outstanding record in industrial, university, and government research. Box 217, SCIENCE. 11/24; 12/1

German Pharmacologist, M.D. and **Chemist.** Academic and 6 years' industrial experience. General pharmacology, CNS pharmacology, especially EEG, desires appointment as senior pharmacologist. Box 216, SCIENCE X

(a) **Ph.D. Agronomist;** trained in radioisotopes, nuclear physics; research and university teaching experience. (b) **Ph.D. Zoologist** (Parasitology, Entomology) experienced in research and teaching at university level. (Please write for information regarding these and other scientists in all fields; nationwide and very active service.) Science Division, **The Medical Bureau, Inc.,** Burneice Larson, *Chairman,* **900 North Michigan Avenue, Chicago 11, Illinois.**

POSITIONS OPEN

BIOLOGY—A mature man capable of managing, directing, and developing a division of a growing and expanding midwestern scientific supply company in the preparation of microscopic slides for biology, botany, and zoology for classes in secondary and advanced educational institutions. He must have vast background experience in this field. This is a permanent and key position which includes a stock option plan, a reasonable salary, and an opportunity to participate in ownership without capital investment; opportunities are unlimited for research in new techniques and developments. An M.D., Ph.D., or the equivalent. In reply give age, educational background, availability, starting salary expected, willingness to relocate, and an experience résumé with references. Replies will be held in strict confidence and no interviews will be granted without the above information. Reply to Box 214, SCIENCE. X

POSITIONS OPEN

ADMINISTRATOR FOR MICROBIOLOGICAL RESEARCH DEPARTMENT OF LEADING PHARMACEUTICAL COMPANY

Ph.D. Outstanding ability in virology, bacteriology, or a related field, with special interest or experience in chemotherapy. Considerable postdoctoral experience in industry desirable. Facility in oral and written communications. Demonstrated supervisory ability. Organization of over 500 with very active program. Academic atmosphere. Plateau overlooking Hudson River Valley in heart of New York State vacation area. Excellent company benefits. Salary open.

Please send résumé to Mr. C. E. Alford, Director of Personnel.

Sterling-Winthrop Research Institute
Rensselaer (Albany), New York

CLINICAL CHEMIST

Man with B.S. in chemistry or medical technology and 2 to 5 years' clinical laboratory experience needed to handle analysis of blood, serum, and so forth, deriving from clinical research program. Some travel involved. Write, sending complete résumé, to Technical Personnel Manager, **Parke, Davis & Company**, Ann Arbor, Michigan.

ELECTRON MICROSCOPY TRAINEE

Pre- or postdoctoral. Research institute, New York. Must have good foundation in cytology.

Box 208, SCIENCE

Need **MEDICAL RESEARCH ASSISTANT** with master's degree in a biological science and experience or training in virology, serology, and tissue culture for respiratory virus disease project. Tuition-free courses after 1 year. Write Personnel,

University of Vermont
Burlington, Vermont

PHYSICS—A mature man with teaching experience on the secondary and collegiate levels in physics and mathematics to take management responsibility with a growing and expanding midwestern scientific supply company. He must know the needs of modern educational curricula in these subjects and have the initiative to plan and develop new teaching equipment and supplies. This is a permanent and key position which includes a stock option plan, a reasonable salary, and an opportunity to participate in ownership without capital investment. Opportunities are unlimited for research, M.S., Ph.D., or the equivalent are preferred. In reply, give age, educational background, availability, starting salary expected, willingness to relocate, and an experience résumé with references. Replies will be held in strict confidence and no interviews will be granted without the above information. Reply to Box 215, SCIENCE. X

SENIOR RESEARCH PHARMACOLOGIST

Ph.D. (pharmacology or physiology) to be responsible for pharmacologic research program involving biologic evaluation of novel enzymes for possible medical use. Principal duties would include development and implementation of a comprehensive enzyme screening and evaluation program. Will report directly to the Director of Pharmacologic Research. Midwestern metropolitan location. Excellent community and research facilities. Reply to R. M. Gesler,

Baxter Laboratories, Inc.
Morton Grove, Ill.

POSITIONS OPEN

Effective 1 January 1962

The rates for advertising in the Positions Open section of **Science** will be increased to $50 per inch.

POSITIONS OPEN

HEALTH PHYSICIST

Organize and direct radiological health activities for Oregon State Board of Health. Regulations enforcement, source inspection, shielding and waste disposal review, laboratory, training program, public information. One year graduate health physics training, two years responsible experience. Salary $655-810. Applications: Oregon State Civil Service Commission, 100 Public Service Building, Salem, Oregon.

BECOME A PHYSICAL THERAPIST WHILE RECEIVING FULL SALARY

Enjoy a career as a graduate physical therapist. A year's course is open to qualified, single, female college graduates, age 21-29, with satisfactory background in psychology and the physical and biological sciences. Sponsored by the Army Medical Service, this course is approved by the American Medical Association's Council on Medical Education and Hospitals and qualifies the graduate for membership in the American Physical Therapy Association.

Selected candidates receive full salary (starting at $270 per month) following commissioning as 2nd Lieutenants in the Army Medical Specialist Corps Reserve. Additional benefits include travel expenses, free medical and dental care and 30 days leave time per year.

For full details, write: The Surgeon General, Dept. of the Army, Washington 25, D.C.

TOXICOLOGIST OR BIOCHEMIST

With suitable background to organize and head toxicology section of active Medical Examiner's office. Research opportunity and possible medical school affiliation available. Salary $9000–$10,000 plus Civil Service benefits. Contact Robert M. Greendyke, M.D., Medical Examiner, County of Monroe, 70 Clarissa St., Rochester 14, N.Y.

The Market Place

BOOKS • SERVICES • SUPPLIES • EQUIPMENT

DISPLAY: Insertions must be at least 1 inch in depth. Weekly invoices will be sent on a charge account basis—provided that satisfactory credit is established.

Single insertion	$48.00 per inch
4 times in 1 year	44.00 per inch
13 times in 1 year	42.00 per inch
26 times in 1 year	40.00 per inch

PROOFS: If copy is to be set, and proofs submitted for approval, complete copy and cuts must be received 4 weeks in advance of issue date (Friday of each week); complete plates no later than 3 weeks in advance of issue date.

SUPPLIES AND EQUIPMENT

"From the hand of the veterinarian to research"®

albino rats

CHARLES RIVER *CD
(Caesarean derived)
CHARLES RIVER SD
(Sprague-Dawley descendants)
CHARLES RIVER W
(Wistar descendants)

HYPOPHYSECTOMIZED RATS

- Only Charles River CD animals used
- Rigidly controlled environment (same bldg.) birth to surgery.
- High speed surgery by graduate biologists.
- 10 years experience animal surgery.
- Overnight air service from Boston

* Trade Mark Reg. U. S. Patent Office

THE CHARLES RIVER BREEDING LABS
1018 Beacon St., Brookline 46, Mass. RE. 4-2000
Henry L. Foster, D.V.M., President

SUPPLIES AND EQUIPMENT

YOU NEED THIS FREE CATALOG FOR YOUR FILES

Serums, antiserums and bloods of all kinds for technicians and tissue culture laboratories. No salesman will call.

COLORADO SERUM CO.
4950 York St. • MAin 3-5373 • Denver 16, Colo.

LIVE SALAMANDERS
Direct shipment collector to purchaser insures largest, freshest, most disease-free materials. SPECIALS SHIPPED ALL YEAR: Triturus $7.50 12, Desmognathus $7.50 12, Ambystoma adults $9.00 6, Ambystoma larvae $7.50 12, $25.00 50; Live bats $10.00 10. Ambystoma hatching eggs Sept.-April $5.00 50; Early eggs Nov.-April $10.00 100.
Customer pays transportation; no other charge
J. C. NICHOLLS, JR. MURPHY, N.C.

PROFESSIONAL SERVICES

CONSULTATION AND RESEARCH SINCE 1922

Food and Drug Research Laboratories INCORPORATED
TWining 4-0800

Toxicology • Pharmacology
Nutrition • Biochemistry • Bacteriology

BERNARD L. OSER, Ph.D., Director
Maurice Avenue at 58th Street
Maspeth 78, New York City

WHERE EXPERIENCE COUNTS

BOOKS AND MAGAZINES

Your sets and files of scientific journals

are needed by our library and institutional customers. Please send us lists and description of periodical files you are willing to sell at high market prices. Write Dept. A3S, CANNER'S, Inc. Boston 20, Massachusetts

SCIENTIFIC JOURNALS WANTED

Sets, Runs and Volumes bought at top prices. Your wants supplied from our Back Files of over 3,000,000 periodicals. **Abrahams Magazine Service N. Y. 3, N. Y.**

AAAS SYMPOSIUM VOLUMES

CALCIFICATION IN BIOLOGICAL SYSTEMS

Edited by R. F. Sognnaes,
526 pages with 283 illustrations, references, and index; **$9.75**
$8.50 cash orders from AAAS members

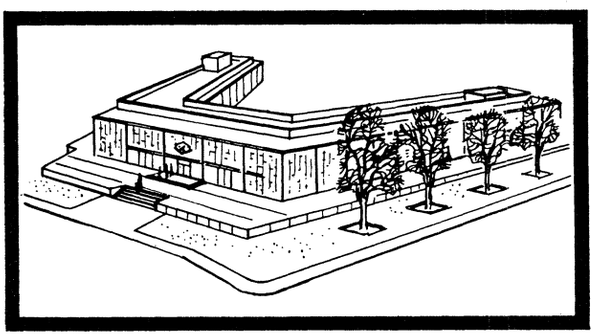
CONGENITAL HEART DISEASE

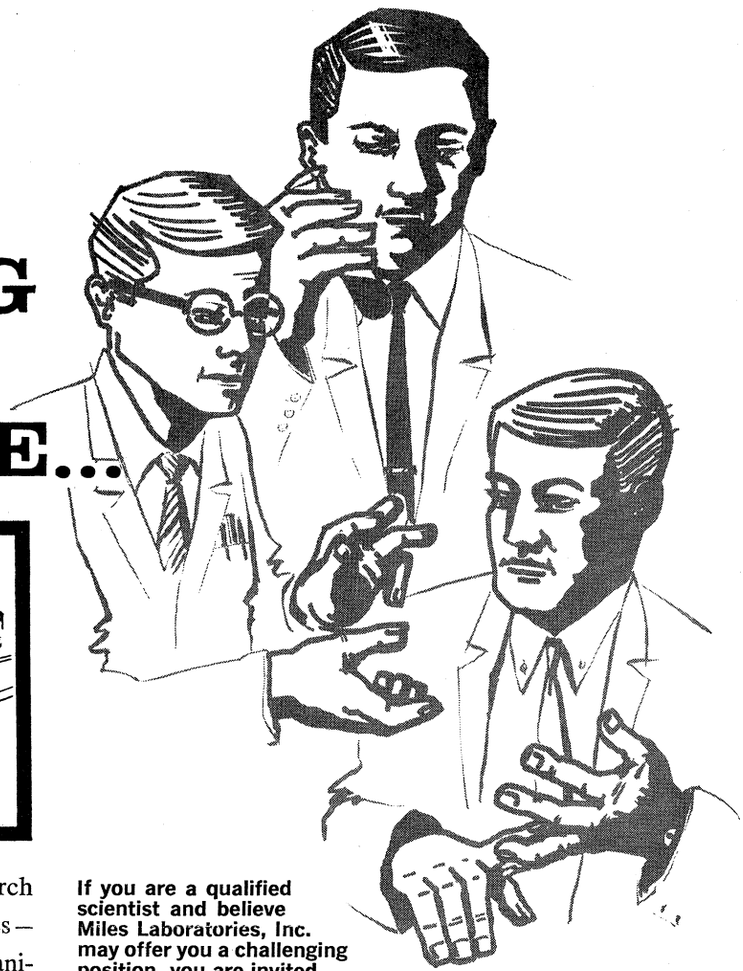
Edited by Allan D. Bass & Gordon K. Moe,
372 pages with 147 illustrations, references, and index; **$7.50**
$6.50 cash orders from AAAS members

Order today from

AAAS
1515 Massachusetts Ave., NW
Washington 5, D.C.

ADVANCING MAN'S KNOWLEDGE...





Miles Laboratories' recently-completed research center—an extension of present research facilities—will become the headquarters for our growing organization's expanding pharmaceutical research activities. Equipped with modern laboratory tools and designed to encourage interdisciplinary exchange of information and ideas, this new facility will provide an unusually fine research environment. Our competent professional staff is encouraged to apply creative research approaches in advancing man's knowledge in Biology, Biochemistry, Chemistry, Enzymology, Microbiology, Immunology, Pharmacology and Physiology. The company's continuing goal will be the development of pharmaceutical products by advancing the state of the art through creative research.

Inquiries may be directed in complete confidence to:
Dr. R. F. McCracken
Coordinator of Management Recruitment
(Personal discussions can be arranged at your convenience, including Saturdays, in Elkhart, Indiana)

MILES LABORATORIES, INC. and AMES COMPANY, INC.*

1127 Myrtle Street, Elkhart, Indiana

If you are a qualified scientist and believe Miles Laboratories, Inc. may offer you a challenging position, you are invited to investigate these openings:

STAFF RESEARCH IMMUNOLOGIST
Will be responsible for staffing and leading a group of immunologists in a research program leading towards applications in the diagnosis and treatment of diseases. Must have a Ph.D. and/or M.D. degree plus several years' experience.

RESEARCH BIOCHEMIST
Principal responsibilities will involve conducting independent research programs for new enzyme products, to improve existing enzyme products and investigation of enzyme components, separation, purification, optimum performance, specificity studies and assay procedures. Must possess a Ph.D. in chemistry or biochemistry plus several years' experience in enzymological research.

RESEARCH CHEMIST
To define research objectives and programs and engage in basic and applied research. Should hold a Ph.D. in chemistry and several years' experience in organic synthesis, polymers, resins, and/or plasticizers.

RESEARCH INFORMATION SCIENTIST
Will work closely with laboratory chemists in collecting, evaluating, organizing and presenting scientific information pertinent to a current or proposed program having potential diagnostic or therapeutic interest. Must have Ph.D. in organic or medicinal chemistry or in a biological science. While previous science information experience is desirable, it is not a prerequisite.

ASSISTANT RESEARCH CHEMIST
Will perform various functions under guidance of research biochemist in enzyme analysis, isolation and screening. Must have a minimum of B.S. in chemistry and interest in biochemical, pharmaceutical or medical research.

ASSISTANT RESEARCH BIOCHEMIST
Will be responsible for carrying out clinical chemical investigations in connection with laboratory evaluations of new drugs. Should possess a B.S. in chemistry or biology plus experience as a medical technologist.

An Equal Opportunity Employer

**Ames Company, Inc. is an ethical pharmaceutical division of Miles Laboratories, Inc.*

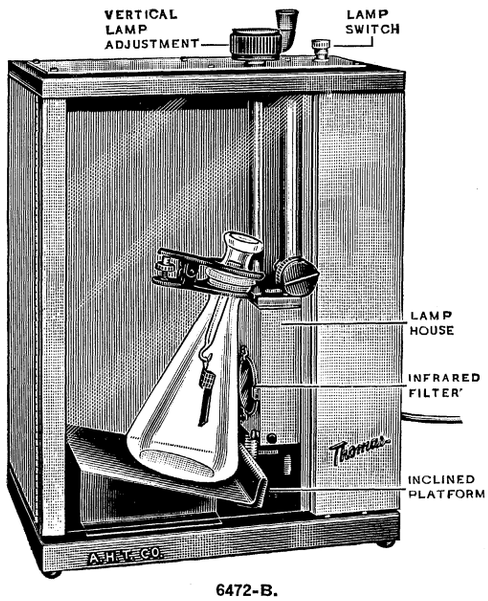
Our new Research Center is located in Elkhart, Indiana, a clean, progressive city of 40,000 people. In Elkhart, schools are among the best in the middle west and year 'round cultural and recreational activities for the whole family are only minutes from your door.

New . . .

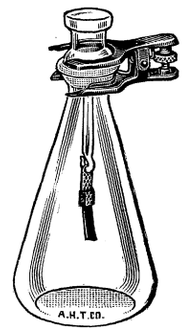
Thomas-OGG INFRARED SAFETY IGNITER

for oxygen flask combustions

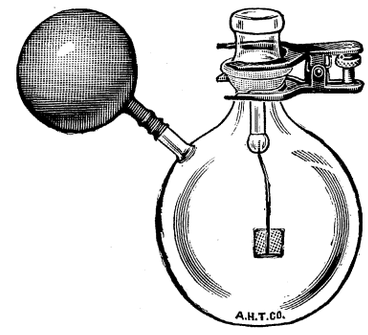
- ***Utilizes focused infrared beam for ignition***
- ***Flask shielded completely during ignition and combustion***
- ***Takes flasks 500 to 2000 ml capacity***



6472-B.
Showing 6471-P10 Ogg Flask in position *(Flask not included)*.



6471-P10.



6474-G10.

OXYGEN FLASK SAFETY IGNITER,* Thomas-Ogg. For combustion of organic materials in a closed oxygen flask completely shielded within a safety cabinet. Utilizes a focused infrared beam from a built-in 150-watt lamp and special black paper sample wrappers for rapid ignition in an oxygen-charged clamp-closed flask. Vertical alignment of the sample in the beam, and push-button firing are done from outside the cabinet after door is fastened.

Cabinet is of metal, 12¼ × 8 × 16 inches high overall, with transparent acrylic plastic door with full-length hinge, baffled vents and spring-loaded latch. Lamp is mounted in housing with screw crank elevating device; fixed focusing reflector is sealed within lamp envelope. Inclined platform tilts flask to bring sample close to lamp. Flask can be adjusted from front to rear from outside cabinet.

Designed for use with Thomas-Ogg combustion Flask, but accommodates any flask up to 2000 ml, such as Thomas-Lisk, in which stopper can be clamped securely.

6472-B. Safety Igniter, Thomas-Ogg, as described, with flask platform, infrared filter, 100 black paper sample wrappers, extra lamp bulb, 3-wire cord, 3-prong plug with adapter and directions for use, but without combustion flask. For 115 volts **165.00**

OXYGEN COMBUSTION FLASKS,* Thomas-Ogg, of borosilicate glass, conical, designed especially for use in Ogg Safety Igniter but can also be used separately. Mouth is formed by socket of spherical joint 35/25, and stopper fabricated from matching ball member. Stopper has extension with hook for suspending the detachable sample carrier. Carrier is of perforated platinum sheet 1¾ inches long × ⅜-inch wide. Stopper is held securely during combustion by Thomas Pinch Clamp and can be tilted to permit easy release of vacuum following combustion.

6471-P10. Oxygen Flask, Thomas-Ogg, as described, 500 ml capacity, complete with stopper, clamp and platinum sample carrier, but without sample wrappers **41.70**
Each, in lots of 12 or more **39.65**
6471-P15. Ditto, but 1000 ml capacity **42.50**
Each, in lots of 12 or more **40.40**

OXYGEN COMBUSTION FLASKS, Thomas-Lisk, of borosilicate glass, with side arm to take rubber balloon for safe expansion of gases. Designed for determination of pesticide residues in 50 to 100 mg plant extracts but suitable for general samples requiring 1000 or 2000 ml of oxygen. See Donald J. Lisk, *Agricultural and Food Chemistry, Vol. 8, No. 2 (1960), p. 119.* With mouth formed by socket of spherical joint 35/25 and stopper fabricated from matching ball member. Stopper has extension into which is sealed the stem of a platinum sample carrier, U-shape, 18 × 20 mm. Can be used with Infrared Igniter or separately.

6474-G10. Oxygen Flask, Thomas-Lisk, as described, round bottom, 1000 ml capacity, complete with stopper, clamp and 144 rubber balloons, but without sample wrappers .. **54.20**
6474-G20. Ditto, round bottom, 2000 ml capacity **55.45**
6474-G30. Ditto, conical, 1000 ml capacity **54.45**

6471-Q25. Sample Wrappers, Black Paper. Quickly absorb heat for prompt infrared ignition. Die-cut from unsized paper, with integral fuse. Sample area 32 × 30 mm, with fuse 8 × 38 mm. Per box of 100 ..... **.50**
10% discount in lots of 12 — 15% discount in lots of 72

*Patent applied for. Based on developments by Clyde L. Ogg and associates, Eastern Utilization Research and Development Division, A.R.S., U.S.D.A., Philadelphia, Pa. Described at the International Symposium on Microchemical Techniques, August, 1961.

QUALITY AND SERVICE
A.H.T.CO.
PHILA., U.S.A.
LABORATORY APPARATUS

ARTHUR H. THOMAS COMPANY

More and more laboratories rely on Thomas / *Laboratory Apparatus and Reagents*

VINE ST. AT 3RD • PHILADELPHIA 5, PA.