A PRECISION INSTRUMENT
Of The Finest
Quality for only
$368.50

GB-BINOCULAR
OLYMPUS
MICROSCOPE
BUILT to
LAST A
LIFETIME
Service Guaranteed
OPTICS are
EXCELLENT
A Model
For Every Purpose
Write for
Our Catalogue

OLYMPUS OPTICAL INSTRUMENT CO.

PHYSICIST
Ph.D.—several years experience
LONG RANGE RESEARCH
IN ASTROPHYSICS

As a part of its work on advanced missile weapon systems, the Special Defense Projects Department of General Electric has set up a long range research program in both the experimental and theoretical aspects of astrophysics.

We have an opening for an astrophysicist able to contribute to this program in such fields as electromagnetic radiation of gases, upper atmospheres, spectroscopy and radiative transfer.

If you are interested in work in these areas, General Electric can make available to you the most advanced laboratory facilities plus a strong group of supporting services.

Attributes of the position include liberal salary and benefits, pleasant and convenient suburban living conditions, a strictly professional environment and the opportunity to make a significant personal contribution to an extremely important research program.

Write in confidence (not necessary to name present employer) to:
Mr. W. Billingsley
SPECIAL DEFENSE PROJECTS DEPT.
GENERAL ELECTRIC
3198 Chestnut Street, Rm. 100-B
Philadelphia, Pennsylvania

PERSONNEL PLACEMENT

CLASSIFIED: 18¢ per word, minimum charge $3.60. Use of Box Number counts as 10 additional words.
COPY for classified ads must reach SCIENCE 2 weeks before date of issue (Friday of every week).
DISPLAY: Rates listed below — no charge for Box Number. Monthly invoices will be sent on a charge account basis—provided that satisfactory credit is established.

Single Insertion $22.00 per inch
13 times in 1 year 21.00 per inch
26 times in 1 year 20.00 per inch
52 times in 1 year 19.00 per inch

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

POSITIONS OPEN


Chemists. Several current vacancies for both experienced and inexperienced chemists. Attractive salaries with regular pay increments depending upon qualifications. Requires degree with minimum of minor in chemistry; M.A. or Ph.D. desirable for higher levels. Paid vacation, sick leave benefits, social security and state pension plan. Write to Michigan Civil Service, Lansing 13, Michigan.

Science Writer for new 516-bed research hospital and basic science research institute. Basic policy, clinical and basic science research into the problem of cancer and allied diseases. Salary open. Qualifications: bachelor's degree and 2 years of writing experience. Box 221, SCIENCE.

INFRARED SPECTROSCOPIST
Opening for a responsible individual with several years' industrial experience in Infrared spectroscopy to help set up an infrared group. Infrared activities are being carried out in a well-equipped, newly established laboratory as part of a cooperative effort to solve a wide variety of physical, chemical and metallurgical problems. Submit résumé and salary requirements to:
EMPLOYMENT DEPARTMENT
GOODYEAR ATOMIC CORPORATION
PORTSMOUTH, OHIO

X-RAY DIFFRACTION AND FLUORESCENCE
Opening for responsible individual to take charge of new, well equipped X-ray laboratory in Midwest. Experience and interest required in metallurgical, corrosion, general diffraction problems and fluorescent applications.
Submit replies to Dept. O, Box 220, SCIENCE.

MEDICAL EDITOR ASSISTANT
Male or female with bachelor's degree with science major, preferably premedical training, for position in Advertising Department as Assistant to Medical Editor. Experience in medical and scientific writing and editing necessary.

Above position immediately available with expanding drug company located in central New York State. Send résumés to Personnel Director, Eaton Laboratories Division, Norwich Pharmacal Company, Norwich, N.Y.

(a) Physician experienced in pharmaceutical field or with definite interest and training in pharmacology or biochemistry; serve as director of research and medical relations, pharmaceutical company; $17,500. (b) Director, Medical Literature Department, pharmaceutical company; physician with supervising experience in writing and editing; East; $14,000. (c) Assistant Director, excellently equipped laboratories for scientific criminal investigation; Ph.D., training in physiology, pharmacology, human anatomy, pathology.

Research Laboratory Technician with background in biochemistry. Write Midwest Medical Research Foundation, 3241 Victor Place, Wichita 8, Kansas.

Scientific Writer. Young M.D. or person with equivalent training in medical science with literary interest and talent to write technical material for the medical profession. Work involves interpretation of laboratory and clinical data on new drugs explaining composition, application, use, therapeutic action of new drug discoveries for scientific publications, and preparing physician. Large midwestern clinical pharmaceutical research and manufacturing organization. Please and complete resume to Box 315, SCIENCE.

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SCIENCE, VOL. 124

9/7, 14, 21
Your sets and files of scientific journals are needed by our laboratory and institutional customers. Please send us lists and description of periodical files you are willing to sell at high market prices. Write Dept. A33, J. S. CANNON, Inc., Boston 19, Massachusetts

**JOURNALS**

Journal of Animal Ecology for sale. Complete set from Volume 1 up to present. Box 214, SCIENCE. X

**JOURNALS**

**POSSESSIONS OPEN**

**BOOKS AND MAGAZINES**

Sets and runs, foreign and domestic, entire libraries and smaller collections wanted.

WALTER J. JOHNSON, INC.
125 E. 23rd St., New York 10, N. Y.

**SUPPLIES AND EQUIPMENT**

**POSITIONS WANTED**


Microbiologist, Ph.D.; 17 years' university experience in bacteriology, biochemistry, and phycology. Desires challenging opportunity. Box 196, SCIENCE. 8/24, 9/7

Pharmaceutical Chemist, Ph.D.; 8 years' research director, one of leading pharmaceutical companies. Medical Bureau, Palmolive Building, Chicago. X

Veterinary Pathologist, Bacteriologist, D.V.M., Ph.D.; teaching research experience, comparative pathology, infectious diseases. Desires primarily research position. Box 218, SCIENCE. 9/14

Virologist, Ph.D.; 3 years' industrial experience, veterinary vaccine research and development, including tissue culture. Publications. Desires research position in East. Box 216, SCIENCE. X

**BOOKS AND MAGAZINES**

Sets and runs, foreign and domestic, entire libraries and smaller collections wanted.

WALTER J. JOHNSON, INC.
125 E. 23rd St., New York 10, N. Y.

**SUPPLIES AND EQUIPMENT**

**POSITIONS WANTED**

Biochemist, outstanding opportunity for Ph.D. to direct clinical laboratories, 350-bed general facility affiliated important midwestern university medical school; exclusive research opportunity: supervisor, clinical responsibilities, $7000-$10,000. (b) Bacteriologist, B.S. or M.S. for well-established department in major medical center;v large hospital; Midwest. (c) Microbiology Technician, assist in allergy research program, university medical school; principal duties: culture and identification of bacteria, preparation of bacterial cultures, extracts, assays, and lower animal experimentation; Midwest. (d) Biochemist; M.S. or better to head department, 150-bed general hospital; $6000 up; lovely southern city. (e) Instructor or Assistant Professor; to teach comparative anatomy and embryology; exceptional research opportunity with advancement dependent upon research output; $7000-$8000; important midwestern university. Woodward Medical Personnel Bureau, 185 North Wabash, Chicago. X

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Sets and runs, foreign and domestic, entire libraries and smaller collections wanted.

WALTER J. JOHNSON, INC.
125 E. 23rd St., New York 10, N. Y.
APPLICATION FOR HOTEL RESERVATIONS
123rd AAAS MEETING
New York City, December 26-31, 1956

The list of hotels and their rates and the reservation coupon below are for your convenience in making your hotel room reservation in New York. Please send your application, not to any hotel directly, but to the AAAS Housing Bureau in New York and thereby avoid delay and confusion. (Members of the American Astronomical Society who wish reservations at uptown hotels should correspond directly with the Hayden Planetarium.) The experienced Housing Bureau will make assignments promptly; a confirmation will be sent you in two weeks or less. As in any city, single-bedded rooms may become scarce; double rooms for single occupancy cost more; for a lower rate, share a twin-bedded room with a colleague. Most hotels will place comfortable rollaway beds in rooms or suites at 2.50 or 3.00 per night. Mail your application now to secure your first choice of desired accommodations. All requests for reservations must give a definite date and estimated hour of arrival, and also probable date of departure.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE
Rates for Rooms with Bath*
All hotels have sessions in their public rooms. For a list of headquarters of each participating society and section, please see Science, July 20, or The Scientific Monthly for August.

<table>
<thead>
<tr>
<th>Hotel</th>
<th>Single</th>
<th>Double Bed</th>
<th>Twin Bed</th>
<th>Suite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governor Clinton</td>
<td>$7.00-11.00</td>
<td>$10.00-13.00</td>
<td>$11.00-17.00</td>
<td>$20.00-35.00</td>
</tr>
<tr>
<td>Martinique</td>
<td>5.00-9.00</td>
<td>8.00-14.00</td>
<td>8.00-14.00</td>
<td>16.00-38.00</td>
</tr>
<tr>
<td>New Yorker</td>
<td>7.00-10.00</td>
<td>10.00-14.00</td>
<td>11.50-17.00</td>
<td>25.00 and up</td>
</tr>
<tr>
<td>Sheraton-McAlpin</td>
<td>6.75-9.75</td>
<td>9.75-12.75</td>
<td>10.75-13.75</td>
<td>20.00 and up</td>
</tr>
<tr>
<td>Statler</td>
<td>8.00-12.00</td>
<td>11.00-15.00</td>
<td>11.50-18.00</td>
<td>31.00-33.00</td>
</tr>
</tbody>
</table>

* Subject to 5% New York City tax on hotel rooms.

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THIS IS YOUR HOUSING RESERVATION COUPON

AAAS Housing Bureau
90 East 42nd Street
New York 17, N. Y.

Please reserve the following accommodations for the 123rd Meeting of the AAAS in New York City, Dec. 26-31, 1956:

TYPE OF ACCOMMODATION DESIRED

<table>
<thead>
<tr>
<th>Single Room</th>
<th>Desired Rate</th>
<th>Maximum Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Double-Bedded Room</td>
<td>Desired Rate</td>
<td>Maximum Rate</td>
</tr>
<tr>
<td>Twin-Bedded Room</td>
<td>Desired Rate</td>
<td>Maximum Rate</td>
</tr>
<tr>
<td>Suite</td>
<td>Desired Rate</td>
<td>Maximum Rate</td>
</tr>
</tbody>
</table>

(Attach list if this space is insufficient. The name and address of each person, including yourself, must be listed.)

First Choice Hotel .................................. Second Choice Hotel .................. Third Choice Hotel ..................

DATE OF ARRIVAL .................................. DEPARTURE DATE ..........................
(These must be indicated—add approximate hour, a.m. or p.m.)

NAME .................................................1
(Individual requesting reservation)

ADDRESS ...............................................
(City and Zone)
(State)

Mail this now to the Housing Bureau. Rooms will be assigned and confirmed in order of receipt of reservation.
GET YOUR ADVANCE COPY
of the General Program-Directory
of the AAAS New York Meeting
by first class mail – early in December

The General Program-Directory of the 123rd Meeting of the AAAS in New York City, Dec. 26–31, 1956, will be available to anyone, at cost, within the first week in December—whether he can attend the Meeting or not. You will want the General Program-Directory for your reference shelf.

### Program content
1. The two-session general symposium, “Moving Frontiers of Science,” arranged by the Committee on AAAS Meetings.
2. The six sessions of the Conference on Scientific and Technical Editorial Problems.
3. Details of the anniversary celebrations of the AAAS-Gordon Research Conferences, Botanical Society of America, Freud et al.
4. Programs of the 18 AAAS sections (symposia and contributed papers).
5. Programs of the more than 80 participating societies.
6. The Special Sessions: AAAS, Academy Conference, Conference on Scientific Manpower, National Geographic Society, Phi Beta Kappa, RESA, Sigma Xi.
7. Details of the Hotel Statler—center of the Meeting—and other hotels and session sites.
8. Titles of the latest foreign and domestic scientific films to be shown in the AAAS Science Theatre.

### Directory content
1. AAAS officers, staff, committees for 1956.
2. Complete roll of AAAS presidents and their fields.
3. The more than 265 affiliated organizations.
4. Historical sketch and organization of the Association; the 1955 revised Constitution and Bylaws.
6. AAAS Awards and Grants—including all past winners.
7. Membership figures by sections.
8. Section committees (Council members) in detail.
9. Local committees.
10. Future Meetings of the AAAS through 1962.
11. New and current activities of the AAAS.

### Advance Registration
Advance registration has these decided advantages: 1) You avoid delay at the Registration Center upon arrival; 2) You receive the General Program-Directory in ample time to decide, unhurriedly, which events and sessions you particularly wish to attend; 3) Your name is posted in the Visible Directory as the Meeting opens.

The following coupon may be used both by advance registrants and by those who wish only the advance copy of the General Program-Directory.

---

**THIS IS YOUR COUPON FOR AN ADVANCE COPY OF THE GENERAL PROGRAM-DIRECTORY**

1a. ☐ Enclosed is $3.00 for my advance Registration Fee which brings me the Program-Directory, Convention Badge, and all privileges of the Meeting.

1b. ☐ Enclosed is $2.00 for only the Program-Directory. (It is understood that, if I should attend the Meeting later, the Badge—which is necessary for all privileges of the Meeting—will be secured for $1.00 more.)

(Choose one)

2. FULL NAME (Dr., Miss, etc.) .................................................................
   (Please print or typewrite) .................................................................
   (Last)  (First)  (Initial)

3. ACADEMIC, PROFESSIONAL, OR BUSINESS CONNECTION .................................................................

4. OFFICE OR HOME ADDRESS .................................................................
   (For receipt of Program-Directory)

5. YOUR FIELD OF INTEREST .................................................................

6. CONVENTION ADDRESS .................................................................
   (May be added later, after arrival)

Please mail this Coupon and your check or money order for $3.00 or $2.00 to the

**AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE**

1515 Massachusetts Avenue, N.W., Washington 5, D.C.
RESEARCH AND DEVELOPMENT PERSONNEL The above curve shows the growth in Ramo-Wooldridge personnel which has taken place since our Progress Report one year ago. A significant aspect of this growth is the increase in our professional staff which today is made up of 135 Ph.D's, 200 M.S's and 265 B.S's or B.A's. Members of the staff average approximately ten years' experience.

FACILITIES Within the past few months, construction has been completed at our Arbor Vitae complex, which now consists of eight modern buildings of 350,000 square feet, four of which are illustrated at the bottom of the page. Nearby is the R-W flight test facility, including hangar, shop, and laboratories, located on a 7-acre plot at International Airport.

To provide additional space for our continuing growth, construction has been started on an entirely new 40-acre Research and Development Center, located three miles from the Arbor Vitae buildings. The photograph above is of a model of the Center, which we believe will be one of the finest research and development facilities in the country. The first three buildings, now under construction, will total 250,000 square feet.

A second major construction program is underway on a manufacturing plant for quantity production of electronic systems. The initial unit of the plant, located on a 640-acre site in suburban Denver, Colorado, will be completed next spring and will contain approximately 150,000 square feet.

PROJECTS Our current military contracts support a broad range of advanced work in the fields of modern communications, digital computing and data-processing, fire control systems, instrumentation and test equipment. In the guided missile field, Ramo-Wooldridge has technical direction and systems engineering responsibility for the Air Force Intercontinental and Intermediate Range Ballistic Missiles. Our commercial contracts are in the fields of operations research, automation, and data processing. All this development work is strengthened by a supporting program of basic electronic and aeronautical research.

THE FUTURE As we look back on our first three years of corporate history, we find much to be grateful for. A wide variety of technically challenging contracts have come to us from the military services and from business and industry. We have been fortunate in the men and women who have chosen to join us in the adventure of building a company. We are especially happy about the six hundred scientists and engineers who have associated themselves with R-W. Their talents constitute the really essential ingredient of our operations. We plan to keep firmly in mind the fact that the continued success of The Ramo-Wooldridge Corporation depends on our maintaining an organizational pattern, a professional environment, and methods of operating the company that are unusually well suited to the special needs of the professional scientist and engineer.