

## Welch High Form TRIPLE-BEAM BALANCE



- **ONE-PIECE BEAM (PATENTED)**      4030. TRIPLE BEAM BALANCE, High Form.      Each, \$27.50
- **ELECTROPOLISHED SURFACES**      4031. AUXILIARY WEIGHT. For increasing the capacity of No. 4030 Balance to 201 grams.      Each, \$1.50
- **REVERSE ETCHED SCALES**      4030C. PLASTIC COVER, For No. 4030.      Each, \$1.60
- **POSITIVE-SETTING SLIDING WEIGHTS**

### THE WELCH SCIENTIFIC COMPANY

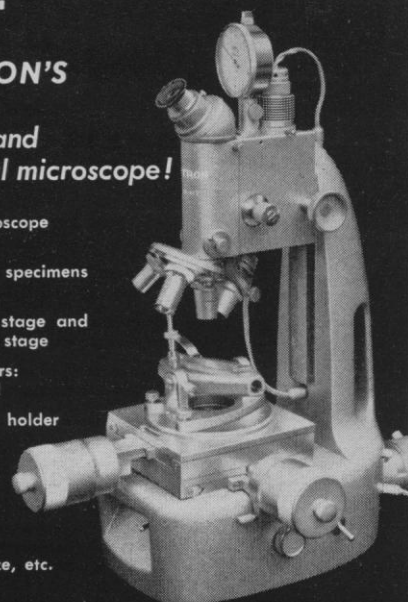
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1515 Sedgwick Street, Dept. E      Chicago 10, Illinois, U.S.A.  
Manufacturers of Scientific Instruments and Laboratory Apparatus

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Metallurgical microscope!

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- Ball bearing rectangular stage and calibrated circular rotary stage
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- Inclined work and tool holder
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Even the smallest shop can rapidly pay for this versatile instrument in time and materials saved. UNITRON Model TM, with all its features, costs about the same as the lowest priced, simple shop microscope. . . . . fob Boston only **\$1050**

Write for Bulletin TM41-1

**UNITRON** INSTRUMENT COMPANY • MICROSCOPE SALES DIV.  
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# 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 only to repeat of same ad. No copy changes. Payment in advance is required except where satisfactory credit has been established. Send copy for display advertising to SCIENCE, Room 1740, 11 West 42 St., New York 36.

Single insertion      \$65.00 per inch  
4 times in 1 year      60.00 per inch

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Replies to blind ads should be addressed as follows:

Box (give number)  
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1515 Massachusetts Ave., NW  
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### POSITIONS WANTED

**Botanist**, Ph.D., biochemical orientation, experienced, publications. Prefers Southeast or Gulf. Box 26, SCIENCE. X

**Chemical Engineer** 1945 with honors; M.D. 1953 U.S. Public Health Service Internship; American Board Certified Specialist 1959; hospital department head, 6 years; age 37, married. Seeks opportunity for further professional experience and responsibility. Stateside or overseas. Box 28, SCIENCE. X

### POSITIONS WANTED

**Academic Organic Chemist** seeks university staff position with research facilities in United States or Commonwealth. Available summer or fall 1963. Currently postdoctoral fellow. Medical and industrial research experience. Ph.D. Stanford 1958. Age 32. Family. Six publications. Box 21, SCIENCE. X

**Histologist, Embryologist**, 14 years' experience in medical school teaching, research and administration. Desires a challenging relocation. Box 27, SCIENCE. 2/8

**Microbiologist-Algal Physiologist** Ph.D. Basic research, photobiology. Desires research position. Box 25, SCIENCE. X

**Ph.D. Zoology**. Teaching experience: genetics, cytology, histology, physiology, anatomy. Research: cytochemistry, electron microscopy. Box 6, SCIENCE. 1/25; 2/1

(a) **Ph.D. Biochemist**, strong nutrition background; wants teaching. (b) **M.S. Biologist** prefers full-time teaching, opportunity to continue toward doctorate. (Please write for information regarding these and other scientists, senior and junior, in all fields.) Science Division, The Medical Bureau, Inc., Burneice Larson, Chairman, 900 N. Michigan Avenue, Chicago 11, Illinois. X

**Ph.D. Biologist**, many publications, experienced in research and teaching is looking for permanent university or research institute position in zoology and experimental biology. Box 29, SCIENCE. X

**Physiologist-Biologist**; Ph.D.; age 41. Teaching and research experience, cardiovascular, neurophysiology. Seeks teaching position. Box 24, SCIENCE. X

**Zoologist**, Ph.D., experienced, publications, desires teaching-research position, preferably Northeast or Midwest. Box 23, SCIENCE. 2/15

**Virologist**, Ph.D. Tissue culture, virology. Infectious nucleic acids, tumor study. Box 14, SCIENCE. 2/1, 8

### POSITIONS OPEN

#### ACADEMIC APPOINTMENTS in BIOCHEMISTRY

Assistant Professor and Instructor levels. Teaching and research in expanding department; full time. **Dr. Lynn D. Abbott, Jr., Chairman, Department of Biochemistry, Medical College of Virginia, Richmond 19, Virginia.**

**BIOASTRONAUTICS**—Senior analysts for Space Associated Sciences to cover Bioastronautics. Ph.D., or M.D., equivalent. Training in medicine, physiology or experimental psychology. Primary interest in evaluating research. Must be U.S. citizen, good health, willing to relocate to Washington, D.C.; salary to \$15,045 per annum, numerous other benefits, active training program. Send résumé to **Box #107, Suite 1200, 230 West 41st Street, New York 36, N.Y.**

**Medical Officers** (2 vacancies): (i) **Supervisory Medical Officer** (pathology). Incumbent will serve as chief of a division, directing research program conducted by employees in such scientific disciplines as medicine and pathology, bacteriology, virology, chemistry, biology, and veterinary sciences. Salary \$15,045 per annum. (ii) **Medical Officer** (general medicine and surgery). Incumbent will participate in a program of preventive and clinical medicine. Clinical experience and familiarity with research techniques are desirable. Salary \$12,245 per annum. Individuals selected for these positions will be reimbursed for travel and transportation expenses from the place of actual residence at time of selection to Fort Detrick. Vacancies will be filled in accordance with Federal Government competitive appointment procedures. Send résumé to: **Civilian Personnel Officer, U.S. Army Biological Laboratories, Fort Detrick, Frederick, Maryland.** X

# MELPAR'S EXPANDING RESEARCH DIVISION

has immediate need  
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Applicants with ex-  
perience desired, but  
new graduates will  
be considered.

For further details, write to:

**John A. Haverfield**

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## POSITIONS OPEN

### BIOCHEMIST

recent Ph.D., research concerning thermo-  
dynamic properties of macromolecular  
transitions. Send résumé to:

**M. Downing, Chem. Dept.  
Univ. of Colorado  
Boulder, Colorado**

### ELECTRON MICROSCOPIST

Ph.D. or equivalent to supervise unit  
hospital-affiliated research institute. Sal-  
ary up to \$1200. Pending qualifications.  
New York City.

Box 7, SCIENCE

**LIFE SCIENCES**—Senior analysts in Life Sci-  
ences. Ph.D., equivalent in such fields as physi-  
ology, neurophysiology, biophysics, medical  
electronics, clinical medicine, experimental psycho-  
physiology. Must be a U.S. citizen, willing to  
relocate to Washington, D.C., good health, sal-  
ary to \$15,045 per annum, opportunity for ad-  
vancement, training program, many other bene-  
fits. Send résumé to **Box #108, Suite 1200, 230  
West 41st Street, New York 36, N.Y.**

### Ph.D. Clinical Chemists

Large midwestern pharmaceutical company needs  
man with doctorate in analytical or biochemistry  
to head growing clinical pathology laboratory  
associated with clinical investigation group. Ex-  
perience in clinical laboratory procedure is neces-  
sary. Write, sending summary of experience  
and training, to Manager of Salaried Employ-  
ment, **Parke, Davis & Company, Detroit 32,  
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lege professors or high school teachers of  
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at summer science camp. Small selected  
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interest in science. Modern facilities and  
equipment. Salary open. Director,

**Adirondack Science Camp  
State University College  
Plattsburgh, New York**

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nol; new vaccine devel, improve estab vaccines,  
related areas; also (b) **Microbial Geneticist**; Ph.D.  
to do antibiotic rsrch new strains, improved  
strains, related, other areas; also (c) 2 **Virologists**;  
Ph.D.'s; 1 int in immunol phases virol, other do  
resrch new virus growth, adaptation w/ eventual  
vaccine develop; all with outstand'd MW pharm  
co. (d) **Chemist**; Ph.D. to supv, develop new  
chem techs; lovely rsrch ctr; to \$10,000; ideal  
warm climate loca. (e) **Bacteriologist**; pref expd  
hsp bact to hd dept, 200-bed gen hsp now ex-  
pand'g; resid suburb NYC; excel benefits. (f)  
**Biochemist**; Ph.D. to wk on develop new biochem  
prod; also (g) **Organic Chemist**; Ph.D.; respon  
in scale-up new organic compounds for pre-  
human, trial; new methods compound synthesis;  
econ factors, related areas; noted pharm co; MW.  
Science Division, **Woodward Medical Personnel  
Bureau, Ann Woodward, Director, 185 North  
Wabash, Chicago 1, Illinois.** X

(a) **Ph.D. Physical Chemist**, biochemical R&D,  
Midwest pharmaceutical house. (b) **Ph.D./M.S.**  
**Physicist**, electrostatic, chemical imaging sys-  
tems; East, to \$14,700. (c) **B.S. Bacteriologist**,  
head biological control laboratory, Midwest. (d)  
**Chemical Engineer**, experienced in chemical/pro-  
cess engineering; East, to \$11,500. (e) **Biologist**,  
sell radiation measuring systems; \$8000 plus; East.  
**Faculty Appointments:** (f) **Microbiology**, Midwest  
college; (g) **Physiologist**, undergraduate teaching,  
research; Southeast. (h) **Biology**, animal physiol-  
ogy, radiobiology preferred; research; Southeast.  
Please write Science Division, **The Medical  
Bureau, Inc., Burnelle Larson, Chairman, 900  
North Michigan Avenue, Chicago 11, Illinois.** X

**PREDOCTORAL ASSISTANTSHIPS AND FEL-  
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ing and research in biophysics, membrane and  
subcellular physiology, endocrinology, muscle,  
water metabolism, cardiovascular, gastrointesti-  
nal, and environmental physiology. Write for de-  
tails to Head, Department of Physiology, Uni-  
versity of Illinois at the Medical Center, Chicago  
12, Illinois. 1/18, 25; 2/1

## FELLOWSHIPS

Applications are being accepted for **Graduate  
Study in Microbiology** leading to Ph.D. Research  
and training programs in progress on biochemi-  
cal and biological aspects of normal and virus-  
infected tissue culture systems and other aspects  
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genetics, and biochemistry, immunology, and  
nucleic acid and protein synthesis. Adequate  
fellowship stipends available. Training grant  
regulations require that preference be given  
to U.S. citizens. Write to Chairman, Depart-  
ment of Microbiology, **Saint Louis University  
School of Medicine, St. Louis 4, Missouri.** 2/1

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### BOOKS AND MAGAZINES

**SCIENTIFIC BOOKS** for sale. Chemistry,  
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technical books.

Box 30, SCIENCE


### Your sets and files of scientific journals

are needed by our library and institutional cus-  
tomers. Please send us lists and description of  
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**ROSELAWN LABS, Inc.**  
P.O. 38-130 Miami, Fla.

# Now!

## Double-element laboratory type Glas-Col heating tapes

This heating tape is especially designed for laboratory use . . . where the tape must be applied and removed frequently. BOTH of the parallel leads of heating elements terminate at the SAME end of the tape so that a heater cord can be attached easily.

The heating elements in these tapes consist of two Nichrome ribbons running parallel to each other with an insulated space between them . . . each ribbon is covered with glass braid and then with a tough, pliable silicone rubber. The tape can be attached to steel pipe by small magnets, or tied to glass tubes.

**Waterproof:** If water is spilled on Glas-Col heating tapes, the possibility of shorts and electrical shock to laboratory personnel is eliminated.

**Flexible:** Glas-Col heating tapes are extremely flexible. They're only 1/16" thick, yet are very tough and durable.

**Uniform heating:** Glas-Col laboratory type double-element heating tapes\* produce a uniform heating pattern.

**No burnouts:** Nichrome heating elements will not burn out even when used far beyond assigned wattages. Glas-Col tapes are tested at 1000 volts for electrical breakthrough. They'll give years of service when used below 480° F which is the temperature limit of the tape's silicone rubber covering.

Available in 1/2" and 1" widths, in standard lengths from 4 to 40 ft with plug and cord, or in any special length.

### Single-element tapes for production applications.

Single-element tapes are ideal for installations requiring extremely long lengths . . . 300 feet or more. Example: for heating pipe lines, or large production, or pilot plant receptacles.

\*Patents Pending

Send for Bulletin 4-B-1

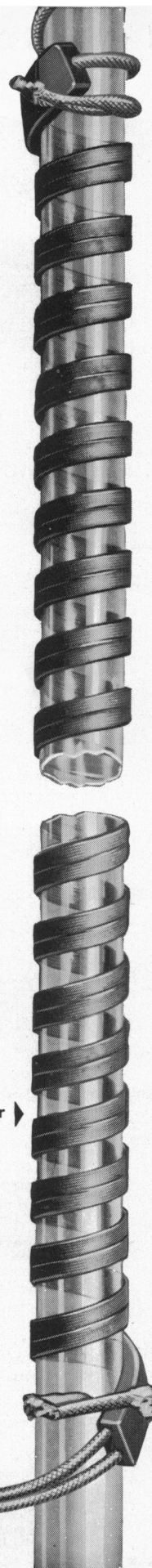
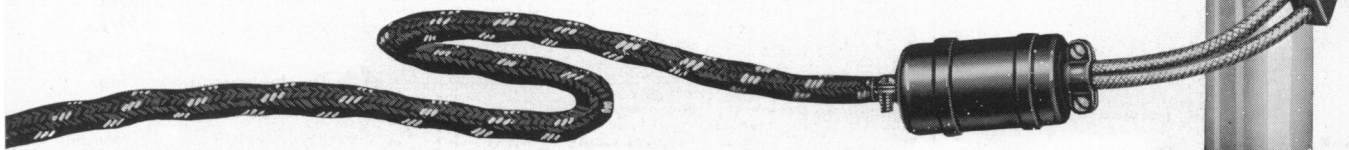
**GLAS-COL**

**Heating Tapes**



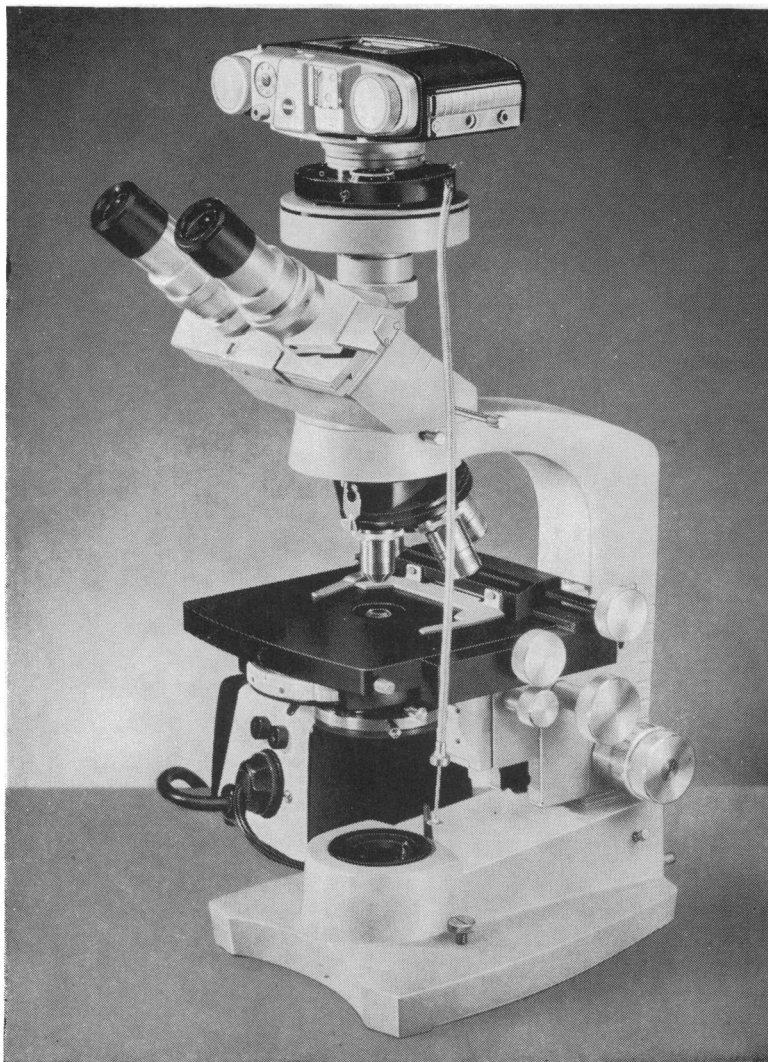
Glas-Col Apparatus Company, Dept. SC  
711 Hulman Street, Terre Haute, Indiana

Glas-Col is the world's largest manufacturer of heating mantles . . . and produces a complete line for laboratory, pilot plant, and chemical process heating applications.

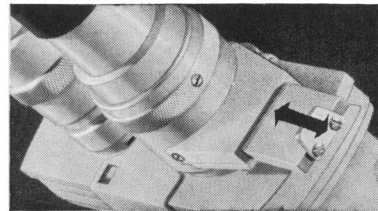




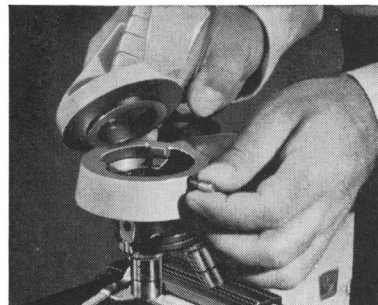
# Here's why AO Phasestar offers you more!



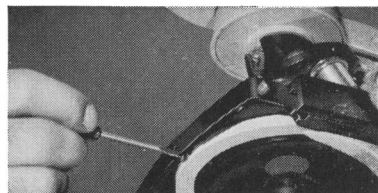
IN CANADA write—P.O. Box 130, Postal Station R, Toronto 17, Ontario



**New Bertrand Lens** Built-in Bertrand lens is now supplied as standard on all binocular and trinocular Phasestars to provide new convenience. You slide lens into position in eyepiece tube and raise or lower to focus quickly on diffraction plate at back aperture of objective.



**Interchangeable, Rotatable Bodies** Your choice of interchangeable, rotatable, monocular, binocular or trinocular bodies. Simply loosen thumb screw to rotate (full 360°) or interchange. Special inclined monocular body with vertical photographic tube also available.



**Interchangeable Stages** You loosen single set screw to remove and interchange stages... your choice of graduated or ungraduated mechanical or MICRO-GLIDE stages.

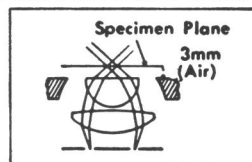
The AO Spencer Phasestar is the most versatile phase microscope ever developed. Beginning with a basic Phasestar stand, you can select from a wide choice of interchangeable bodies, stages, optics and phase accessories to make up the specific model that meets your exact needs...all in all, more than 50 possible combinations or models to choose from. And whatever the model you choose, you're assured of superior AO Spencer quality *plus* matchless convenience, comfort and versatility.

Often particular phase applications require specific equipment and phase contrast objectives. Before you select your phase microscope and accessories consult your AO Sales Representative. He's qualified to help

you select the microscope and equipment you need to do the job. There's no obligation, of course.

## AO SPENCER PHASE ACCESSORIES FOR PLATELET COUNTS

The use of phase contrast for blood platelet counts is increasing in acceptance and application. The longer working distance required with the phase hemacytometer can be obtained with special AO Spencer long working distance accessories that provide up to 7mm working distance in air or 10½mm in glass.



**American Optical**  
COMPANY

INSTRUMENT DIVISION, BUFFALO 15, NEW YORK

Dept. N1

- ☐ I would like to review a specific phase microscopy problem. Please have AO Sales Representative call.
- ☐ Please send copy of Phasestar Brochure.

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