The Fisher Sub-Sieve Sizer provides the means of making particle size determinations of materials such as cement, pigments, pulverized coal, carbon black, cosmetics, powdered metals, insecticides, etc. Such determinations of weighed samples can be made in a minute.

The Fisher Sub-Sieve Sizer (Trade Name) has standardized parts and a unique design based upon original work by Ernest L. Gooden and Charles M. Smith. It employs the air permeability method of particle size measurement. When a sample is placed in the instrument and the air pressure is applied, the average particle size in micron units is read directly from the chart.

The Fisher Sub-Sieve Sizer, with copyrighted calculator chart and directions — $225.00

The particle size is read directly in microns from computation chart.
DISSECTING KITS

- Wide assortment of stock kits
- Kits made up to order...at no extra charge

How To Choose Your Kit

- Select a stock kit from our Catalog No. 103, pages 40 to 45. Catalogs available on request.

- Make up a kit to your own specifications by selecting instruments from pages 46 to 60 and the case from pages 40 to 45. We will make up a sample and submit it to you with a quotation.

- Send us a sample of the Kit you are now using. We will submit a counter sample and quotation.

Arrangements can be made with recognized, established local supply stores to sell dissecting kits and science supplies to students.

Clay-Adams Company, Inc.
141 East 25th Street • New York 10
Showrooms also at 308 West Washington Street, Chicago 6, Ill.
CONTENTS

Science in the Universities:
William H. Taliaferro ........................................ 145

Royal Society Scientific Information
Conference: Ralph R. Shaw .................................. 148

Association Affairs ........................................... 152

News and Notes ............................................... 153

Comments and Communications
Important Advances in Zoological Nomenclature
Achieved at 13th International Congress
of Zoology; Water at −72° C; Low-Temperature Spectroscopy of Biological Compounds; On the Purification of Rabies Vaccine ........................................ 156

Technical Papers
Color Adaptation to Stimuli of Different Spectral Composition But Equal Tristimulus Values: Jozef Cohen ........................................ 159


Effect of Cations Upon Recovery of the Guinea Pig Gut From Inhibition by Antihistaminics:
M. Rocha e Silva and Wilson T. Beraldo ........ 162

Stubble Mulch Studies: Effect of Sweetclover Extract on Corn Germination:
T. M. McCalla and F. L. Duley ............................. 163

In the Laboratory
Dialysis of Protein Solutions for Electrophoresis:
Miriam Reiner and Richard L. Fenichel ................. 164

A Simple Aid for the Cannulation of Small Blood Vessels:
Erwin Haas and Harry Goldblatt ......................... 166

Science, a weekly journal, is published each Friday by the American Association for the Advancement of Science at The Business Press, Incorporated, N. Queen St. and McCovern Ave., Lancaster, Pa. Founded in 1880, it has been since 1900 the official publication of the AAAS. Editorial and Advertising Offices, 1515 Massachusetts Avenue, N.W., Washington 5, D. C. Telephone, Executive 6060 or 9061. Cable address, SCIMAG, Washington, D. C. Entered as second-class matter at the Post Office at Lancaster, Pa., January 15, 1948, under the Act of March 3, 1879. Acceptance for mailing at the special rate postage provided for in the Act of February 28, 1925, embodied in paragraph 4, Sec. 538, P. L. and R., authorized January 13, 1948.

Articles offered for publication should be sent to the Editor. The AAAS assumes no responsibility for the opinions expressed by contributors. Membership correspondence for the AAAS should be sent to the Administrative Secretary.

Annual subscription, $7.00; single copies, $25. Foreign postage (outside the Pan-American Union), $1.00 extra.

Canadian postage, $5.00 extra. Remittances and orders for subscription and single copies should be sent to the Circulation Department, AAAS, North Queen Street and McCovern Avenue, Lancaster, Pennsylvania, and 1515 Massachusetts Avenue, N.W., Washington 5, D. C. Claims for missing numbers will not be allowed if received more than 60 days from date of issue. No claims allowed from subscribers in Central Europe, Asia, or the Pacific Islands other than Hawaii or because of failure to notify the Circulation Department of a change of address or because copy is missing from the files.

Change of address: Four weeks notice is required for change of address. This should be sent to Science, 1515 Massachusetts Avenue, N.W., Washington 5, D. C. When ordering a change, please furnish an address stub step label from a recent issue. Address changes can be made only if the old as well as the new address is supplied.

The American Association for the Advancement of Science also publishes The Scientific Monthly. Subscription rates on request.

Vol. 108 No. 2798 Friday, August 13, 1948
INSIDE INFORMATION ON INLAND WATERS:

To those whose interest in ponds, lakes and streams is more than scenic, this new book by Dr. Welch will be bountifully rewarding. It renders valuable and pioneering service in the study of the biologic, chemical and physical conditions of inland waters.

Profusely illustrated, the book not only serves as (1) a reference work on limnological methods, but is (2) an authoritative guide for field and laboratory work, (3) a textbook for a one-semester course, (4) basic foundation for research.

97 Illus., 381 Pages. $7.00.

A NEW PHYSICS TEXT...
STUDENT-TESTED FOR HOLDING INTEREST AND IMPLANTING INFORMATION

DRS. LEIN AND SCOUTEN of the University of Buffalo have collaborated with Dr. Hector of the Sonotone Corporation of America to write a beginners' text in physics that has the pedagogs agog. Its greatest virtue, probably, is in offering students the opportunity to think through a problem by concrete reasoning rather than by an abstract mathematical approach. Note a few of its features, below; a book, you may conclude, that you ought to check.

Some Features: Terse, lucid style; problems presented in graded groups; principal ideas summarized at each chapter's end; suggestions given for experimental work in home or laboratory; many color illustrations, sharply high-lighted key points in experiments and apparatus.

Ready for Fall Classes. Tentative Price $4.50
Special Diet Materials
FOR BIOLOGICAL PROCEDURES

Long-continued experimentation with animals in our own laboratories has led to the development of many special diet materials which we have found valuable in nutritional research. While the preparation of these materials in small quantities in the individual laboratory would be troublesome and costly, our production facilities enable us to offer them—conveniently packaged and economically priced—as a service to investigators engaged in biological assay and research.

VITAMIN TEST CASEIN GBI. Uniformly free of vitamins A and D, as well as the known factors of the vitamin B complex and vitamin K.

VITAMIN A TEST DIET, U. S. P. XII, GBI. For depletion of animals within allotted time-weight limits specified for Vitamin A assays.

RACHITOGENIC DIET NO. 2, U. S. P. XII, GBI. For depletion of animals within allotted time-weight limits specified for vitamin D assays.

VITAMIN B COMPLEX TEST DIET GBI. For use with suitable animals and experiments, to produce deficiencies of thiamine chloride, riboflavin, niacin, pyridoxine and pantothenic acid.

SALT MIXTURE NO. 2, U. S. P. XII, GBI. For preparing vitamin A test diet and also as a mineral source in the preparation of most laboratory diets.

WRITE for complete list and prices of these and other diet materials, including crystalline vitamins, amino acids, casein hydrolysate, biotin and other chemicals of biological significance.

GENERAL BIOCHEMICALS, INC.
60 LABORATORY PARK  CHAGRIN FALLS, OHIO

SCIENCE, August 13, 1948, Vol. 108
Through tonight's small hours, today's quota of tissues will be automatically processed ready for diagnosis tomorrow.

AUTOTECHNICON saves everybody's time... the pathologist, the technician, the surgeon, the patient. Completely automatic overnight service is routine... finished tissues are available within short hours of surgery... diagnosis is prompt. Brochure is available on request (on your letterhead, please).

THE TECHNICON COMPANY
215 East 149 St., New York 51, N. Y.

every phase of tissue processing automatically... fixation, dehydration, washing, infiltration, staining
WHO IS THE SMILING MAN?

CLUES:
1. His children’s education is as good as paid for.
2. He’s moving into his dream house in 1958.
3. He’s going to get $4 back for every $3 he invests today, after 10 years.
4. He’s helping his country and himself, at one and the same time.

ANSWER: The Smiling Man is the man who invests regularly in U.S. Savings Bonds. What he has done—actually—is to guarantee his own future, to insure the security and happiness of his family.

Every Savings Bond you buy will stretch your smile a little further. They’re the wisest investment you can make, today—they pay you back $4 for $3 after ten years, and that’s a promise by Uncle Sam!

What’s more, every dollar you invest in Savings Bonds is helping to fight inflation over here, helping to maintain democracy over there.

If you draw a salary, enroll in the easy, painless, automatic Payroll Savings Plan. Or, if you aren’t on a payroll but have a checking account, use the equally convenient Bond-A-Month Plan.

Inquire today about these sure, profitable savings plans. And watch your smile grow along with your savings!

AUTOMATIC SAVING IS SURE SAVING—U.S. SAVINGS BONDS

Contributed by this magazine in co-operation with the Magazine Publishers of America as a public service.
A Dial System Speaks for Itself

As dial systems have been improved, so also have the means of keeping them at top efficiency. Even before trouble appears, test frames, developed in Bell Telephone Laboratories, are constantly at work sending trial calls along the telephone highways. Flashing lamps report anything that has gone wrong, and the fault is quickly located and cleared.

If trouble prevents one of the highways from completing your call, another is selected at once so that your call can go through without delay. Then on the test frames lights flash up telling which highway was defective and on what section of that highway the trouble occurred.

Whenever Bell Laboratories designs a new telephone system, plans are made for its maintenance, test equipment is designed, and key personnel trained. Thus foresight keeps your Bell telephone system in apple-pie order.
Here's why...

1. Correct phase difference of 1/4 wavelength uniformly maintained. Top image contrast with any thin transparent specimen is obtained by means of the ¼ wavelength annulus. Findings of recognized authorities, plus the theory of diffraction gratings, plus actual interferometer tests verify this conclusively. Maintaining this critically precise coating is a production feat made possible only by B&L high mechanical and optical precision.

2. Positive contrast image. The natural, easier way, is to see denser substances as darker tones. This eliminates any transition between ordinary bright field observation and the positive contrast provided by B&L phase contrast accessories.

3. Balanced intensity of direct and diffracted light beams. An extremely important factor in obtaining maximum image contrast and tonal range, balanced transmission is another result of B&L accurately controlled coating processes.

4. Speed, simplicity and ease of operation. A feature attested to by leading microscopists. Just four objectives, a condenser assembly, auxiliary telescope, and filter, comprise the full equipment. Takes only a few minutes to attach accessories and put into operation on any standard B&L Laboratory Microscope equipped with a substage rack and pinion.

5. Available on normal delivery. Properly planned B&L production makes it possible for you to obtain “Phase Contrast Microscopy at its Best” without a long wait.

BAUSCH & LOMB Simplified PHASE CONTRAST ACCESSORIES

SCIENCE, August 13, 1948, Vol. 108