-76°C Ultra-Cold. -96°C Ultra-Colder.

Both from Kelvinator Commercial. Upright drops to -76°C. Ultra-cold. Chest model dips to -96°C. Ultra-colder. Upright's six French doors open individually. And you can label each door to know what's inside. Easy labeling for what's under the chest's stainless steel sliding lids, too. Want more? Automatic alarm systems? 2" portholes for recorders? The Kelvinator Commercial name? You got them. Don't be caught in the cold without ultra-cold. Contact J. E. Hirssig at Kelvinator

Commercial, the company that knows how to give you 12 cubic feet of the best cold you ever had. Upright UC-105 (-76°C/-105°F) Chest UC-520 (-85°C/-120°F) Chest UC-540 (-96°C/-140°F)

Kelvinator

621 Quay Street • Manitowoc, Wisc. 54220 • (414) 682-0156 One of the White Consolidated Industries WGI Circle No. 104 on Readers' Service Card



<section-header><section-header><section-header><section-header><text><text><text>

KLETT-SUMMERSON TEST KIT

Circle No. 112 on Readers' Service Card

179 EAST 87TH STREET, NEW YORK, N. Y.

The CHIAMIP'S profile

Bausch & Lomb's StereoZoom 7 Microscope

- Greatest range of 100% USABLE magnification, from 2.5× through 280×.
- Infinitely variable zoom and accessory lenses let you select the power best for you and your work.
- Large field of view, optimum for visual scanning.
- All the working distance you need for widely diversified applications.
- Convenient photomicrography with integral and interchangeable cameras.

Manufacturing Co., Inc.

- Highest eyepoint eyepieces, comfortable for eyeglass wearers.
- Power pods interchangeable with any models from 1959, and 180° reversible.
- Bausch & Lomb's StereoZoom 7 Microscope. The world's Champ. StereoZoom, Reg. T.M. Bausch & Lomb.

There's a new catalog that tells all about The Champ. Write today for No. 31-15 and our free demonstration plan.



Soletime institument Division

26439 Bausch Street, Rochester, New York 14602 Circle No. 55 on Readers' Service Card

12 MARCH 1971



THERMOLYNE Multi-Stir Plates



Thermolyne's new two and four place Multi-Stir Plates are designed for greater laboratory efficiency ... no more reaching over hot surfaces ... no more downtime because of belt problems ... no more worry about heat control accuracy.

Wide Variety of Applications Ideally suited for industrial, educational and medical lab procedures such as culture media preparations, stirring and heating for extractions, preparation of reagents, gas chromatography analysis of amino acids and esters, dissolving quantitative samples, testing chemical synthesis and stirring tissue culture flasks.

Synchronous Stirring Positive-drive system with solid state speed control compensates for any change in stirring effort caused by viscosity of fluid. Precise synchronism of stirring action is assured throughout a wide range of stirring speeds. Stirring action can be varied depending on size of stirring bar, type of container and fluid being used.

Selective Temperature Control Each plate has its own separate control. You can vary the temperature of each plate or set them all at one identical temperature. Heat-up time from ambient to 371° C., without any load, is 5 to 6 minutes. Temperature accuracy is $\pm 3^{\circ}$ C. Individual safety lights alert operator when plate surface heat is 65°C. or above.

Improved Visibility The white Nucerite[®] coated plates provide improved visibility of the fluid being stirred. Plates are spill resistant and easy to clean.

MULTI-STIR PLATE (4), Model SP-13025, Series 13000 120V, 1700W, 50/60 Hz. Complete with four 3/8" x 2" long Teflon stir bars and easyreading tachometer. Price......\$490.00



MULTI-STIR PLATE (2), Model SP- 13125, Series 13100 120V, 1250W, 50/60 Hz. Complete with two 3/8" x 2" long Teflon stir bars. Price. \$285.00 Insist on Thermolyne Multi-Stir Plates . . . to be sure.



Index of Advertisers

12 March 1971

Air Products and Chemicals Inc.	
American Optical Corp	1068
Bausch & Lomb, Scientific	
Instruments Div	1075
Bel-Art Products Buchler Instruments, Div. of Nuclear	1050
Chicago Corp.	1072
Cary Instruments, a Varian sub-	
sidiary Charles River Breeding Laboratories,	944
Inc	946
Chemical Rubber Co.	1068 1007
Corning Glass Works 1006, Extracorporeal Medical Specialties,	1007
Inc.	1064
Gilford Instrument Laboratories,	
Inc	947
Harris Mfg. Co., Inc. Harvard University Press	1071 1073
Heath Co. Hellma Cells, Inc.	1069
Hellma Cells, Inc. Holt, Rinehart and Winston, Inc.	1066 1067
Hotpack Corp.	1067
Hyland	1071
ISCO	958
Kelvinator Klett Manufacturing Co., Inc.	1075 1075
Kontes	952
Labindustries	953
Lab Products Inc	956 1063
Labtron Scientific Corp.	1003
McGraw-Hill Book Co.	1063
Mettler Instrument Corp.	1079
Milo Components, Inc.	1063
Nalgene Labware Div., Nalge Co., Div. of Sybron Corp.	960
Neslab Instruments, Inc.	1062
New Brunswick Scientific Co., Inc. New England Nuclear Corp.	1059 942
Norton Plastics & Synthetics Div.	957
Nuclear-Chicago Corp.	1080
Olympus Corporation of America Oriel Optics Corp.	945 1059
Paillard, Inc.	948
Panasonic	934
Parr Instrument Co.	1062 951
Photovolt Corp.	940
Polaroid Corp. Precision Scientific Co.	950 1059
Professional Tape Co., Inc.	1039
Revco, Inc.	1073
Sargent-Welch Scientific Co	949
Schultz Development Shandon Scientific Co., Inc.	1074 1072
Sigma Chemical Co.	1067
Technicon Corp.	943
Tenney Engineering, Inc.	1066 1076
Thermolyne 3M Co., Medical Products Div.	935
Union Carbide Corp., Linde Div.	941
University of Calgary	1077
Varian Aerograph Varian Anaspect	1065 1073
Wang Laboratories, Inc.	
Wild Heerbrugg Instruments, Inc	1061
Zeiss, Carl, Inc. 938,	
SCIENCE VO	

AAAS Symposia as Textbooks

Man, Culture, and Animals

Man, Culture, and Animals is now in its third printing. First published in 1965, it is being used increasingly as a college textbook in anthropology. It grew out of a AAAS symposium, "The Role of Animals in Human Ecological Adjustments."

Edited by Anthony Leeds and Andrew P. Vayda. 304 pages. Bibliography. Retail price: \$8. AAAS member price when payment is sent with order: \$7.

Air Conservation

Recent emphasis on the environment has put this 5-yearold AAAS volume into the textbook category. *Air Conservation* is the Report of the Air Conservation Commission of the AAAS, James P. Dixon, Chairman. The volume has suddenly found wide use by environment-conscious students and teachers.

2nd printing, 1968. 348 pages. Illustrated. Bibliography. Index. Retail price: \$8. AAAS member price when payment is sent with order: \$7.

Send your order today to

AAAS Publications Suite 100, 1515 Massachusetts Ave., NW Washington, D.C. 20005

the University of Calgary

Demonstrator in Plant Biology

Applications are invited for a full-time faculty teaching position in the area of Plant Biology, beginning on August 1, 1971. The duties include supervision and organization of large first- and secondyear laboratory classes. The salary offered will be commensurate with qualification and experience, with the current minimum being \$7,500.00. Candidates should send their curriculum vitae and the names of three referees to Dr. D. Parkinson, Department of Biology, The University of Calgary, Calgary 44, Alberta, Canada by April 30, 1971.



Personnel Placement

RATE CHANGE Effective 1 January 1971

- POSITION WANTED: 40¢ per word, minimum charge \$10. Use of Box Number counts as 10 additional words. Payment in advance is required. These rates apply to individuals only. Personnel agencies and companies take display rate for all advertising.
- POSITIONS OPEN: \$110 per inch. No charge for Box Number. Rates net. No agency commission allowed for ads under 4 inches. No cash discount. Ads over 1 inch will be billed to the nearest half inch. Payment in advance is required except where satisfactory credit has been established.

COPY for ads must reach SCIENCE 4 weeks before issue date (Friday of every week). Send copy for Personnel Placement advertising to:

SCIENCE, Room 211 1515 Massachusetts Ave., NW Washington, D.C. 20005

Replies to blind ads should be addressed as follows: Box (rive number)

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

POSITIONS WANTED

Anatomist-Physiologist. Ph.D. 1966. Postdoctoral, research, teaching experience. Publications in reproductive biology. Areas taught: history, neuroanatomy, vertebrate anatomy, general physiology, endocrinology. Desires research/teaching position. Box 98, SCIENCE. X

12 MARCH 1971

POSITIONS WANTED

Biochemist, Ph.D. 1971. M.S. physical chemistry, desires teaching or teaching/research position at college or junior college level. Available September 1971. Desires small classes. Research experience in infrared spectroscopy and enzyme kinetics. Box 114, SCIENCE. X

Botanist-Ecologist-Palynologist. Woman Ph.D. 1971. Teaching experience. Desires teaching position with time available for research, any location. Box 101, SCIENCE. X

Consulting Biostatistician, Ph.D. Interest: quantitative genetics, physiology, statistics, design analysis of biological experiments. Publications. Midwest. Box 115, SCIENCE. X

Executive Editor of Journal. Ph.D., extensive research experience (protozoology, general biology) plus thorough training editorial policy, manuscript editing, journal production and management, information science. Available June 1971. Full-time, or combination with research or teaching. Box 105, SCIENCE. 3/12

Geneticist, Ph.D., 35, 9 years of university experience, seeks position in small private college. Box 95, SCIENCE. 3/12, 19

German into English. Technical, scientific, medical. Fast, exact. Standard rates. Lee Stavenhagen, Ph.D., Box 1141, Galveston, Texas 77550. X

Immunologist: Specialty, Immunochemistry: published studies in microbial ecology, parasitism, molecular biology. Ph.D. State, provincial, or federal government laboratory or industry. Box 116, SCIENCE. X

Immunochemist-Microbiologist, Ph.D., 30, 3 years of postdoctoral experience, publications, seeks a teaching, research position in immunology, microbiology, in industry, university, or college, Box 117, SCIENCE. X

POSITIONS WANTED

Microbiologist, Ph.D., MT (ASCP). Seeks position in clinical laboratory environment. Experience in medical bacteriology, immunology, immunohematology and diagnostic cytology. Also research and teaching experience. Box 118, SCIENCE. 3/19

Pharmacologist, Ph.D., seeks position in biomedical information, writing, editing, or combination of these. Salary requirement: middle \$20's. Box 119, SCIENCE. X

Soil Microbiologist, Ph.D., 29, postdoctoral experience and publications; seeks academic, government, or industrial position in soil microbiology and/or fungal physiology. Research experience in the area of degradation and effects of pesticides on microorganisms. Box 120, SCIENCE. X

Vertebrate Ecologist-Systematist. 30, Ph.D. 1971. Desires college position in northern United States. Ten publications. Box 121, SCIENCE. X

POSITIONS OPEN

UNIVERSIDAD DE LOS ANDES Merida—Venezuela

This University is very interested in Teachers for the next signatures:

Human Anatomy

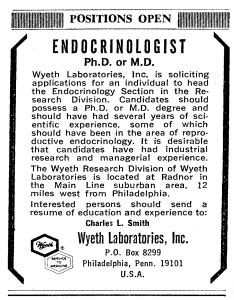
Histology

Embryology Human Physiology

Mathematics

- Drawing and Descriptive Geometry
- Statistics and Computation

The applications should be sent to the University Secretary, with the respective curriculum vitae.



MEDICAL LABORATORY SCIENCES

Assistant Professor, Ph.D., assume responsibility for courses in clinical microbiology and related clinical laboratory areas, Professional and aca-demic experience. Excellent salary and fringe benefits, Equal opportunity employer. Curriculum vitae to Dean, Hunter College Institute of Health Sciences, 695 Park Avenue, New York, New York 10021.

NUTRITIONAL SCIENTIST-ADMINISTRATIVE ASSISTANT

M. S. degree in Nutritional Science with experience in research related to human nutrition to serve as Administrative Assistant to V. P., Nutritional Sciences. Duties also include preparation of reports and responsibility for nutritional research and product information. Send resume in strictest confidence to:

Manager, College Relations

Mead

Evansville, Indiana 47721

An Equal Opportunity Employer

MICROBIOLOGIST

MICROBIOLOGIST A broad Microbiology base with experience in im-munology and virology may qualify you as head of quality control with up and coming young animal vaccine manufacturer. You will also serve as assistant to research director. B.S. minimum requirement, advanced degree preferred, experi-ence and own future desires most important. Send résumé and salary requirement to: Amerlab, Inc., Tapawingo Drive, Gainesville, Ga. 30501, in full confidence or phone 404-534-4585.

UNIVERSITY OF AKRON

Applications are invited for the following position

tions: **VIROLOGIST.** Candidates should have an es-tablished research program and experience in supervising Ph.D. level students. Appointment will be at the Professor or Associate Professor level

GENERAL BIOLOGIST, to offer introductory **GENERAL BIOLOGIST**, to offer introductory course to biology majors and on occasion partici-pate in a CCTV course for non-majors. There will be opportunity to participate in their aspects of the department's programs. This appointment will be at the Assistant or Associate Professor level, **GENERAL BIOLOGIST**, with duties as above, but primarily responsible for the introductory course for non-majors. This is a temporary ap-pointment, for one year only and will be at the Assistant Professor level. Please send résumé and names of three refer-ces to: Dr. Dale Jackson, Chairman, Department of Biology, The University of Akron, Akron, Ohio 443404.

POSITIONS OPEN

OCEANOGRAPHER with specialty in physical as-spects of Marine Science needed. Leading coastal and estuarine research Institution seeks an ex-perienced Ph.D. with competence and interest-in administration to fill newly-established, permanent position as Assistant Director for chemical, geological and physical oceanography involving research, planning and direction, ad-ministration, and graduate teaching. Will head major programmatic division in environmentally oriented, public-supported research institute. Position supported by local funds. If interested, please reply with appropriate résumés to Bay 125 SCIENCE

Box 125, SCIENCE

INTERNATIONAL **DOCTORS IN**

ALCOHOLICS ANONYMOUS (M.D.-Ph.D.-DDS-DVM)

Research Section: Organization Meeting: 13 April 1971, Chicago

For information write to: Acting Secretary, IDAA, The New Life Foundation, 2900 - 72nd Street, N., St. Petersburg, Florida. 33710. Telephone: 813/345-9371.

GRADUATE STUDY

GRADUATE TRAINING IN ANATOMY

Graduate program leading to Ph.D. Research emphasis on aging, biochemical-morphological in-terrelations, cytological ultrastructure, hematology, immunology, neurochamistry and reproductive physiology, Stip-ends and free tuition available to U.S. citizens. Address inquiries to: Chairman, Department of Anatomy, State University of New York, Down-state Medical Center, 450 Clarkson Avenue, Brooklyn, N.Y. 11203.

CONTRACT

CONTRACT-NATIONAL CANCER INSTITUTE

INSTITUTE The National Cancer Institute, as part of a comprehensive study of the etiology of human bowel tumors, is interested in developing con-tracts for work designed to identify the basic genetic lesion of familial polyposis. Formal Re-quests for Proposals will be sent to those ex-pressing interest who have access to an adequate study group and have proven capabilities in the line of investigation they propose to follow. Inquiries should be sent to Mr. Fred Shaw, NIH, Federal Building, Room 514, Bethesda, Maryland 20014. Capability statements such as these will be distributed in the future through an NIH Grants and Contracts Guide.

COURSES

BIOLOGICAL ELECTRON MICROSCOPY FOR TECHNICIANS

FOR TECHNICIANS Northeastern University, 5-10 July 1971 An intensive residential program primarily for technicians with some experience in electron microscopy who wish to expand and secure their knowledge of biological specimen preparation. Students and others who feel this program will fill their needs also will be considered for admission. For more information, write or call Dr. Morton Maser, Northeastern University, 369 Huntington Avenue, Boston, Massachusetts 02115; 617-427-0679.

COURSES SANTA CATALINA MARINE

BIOLOGICAL LABORATORY

The Santa Catalina Marine Biological Laboratory is pleased to anounce its 1971 Summer Program. Biology of Mollusca (Dr. Vera Fretter) Program. Biology of Mollusca (Dr. Vera Fretter) and Pathology and Disease in Marine Animals (Drs. Albert Smith and Ronald Taylor) will be offered 16 June-20 July and Pollution and En-vironment (Dr. Dale Straughan), 22 July-25 August. Each of these graduate level classes carries five semester units credits; registration is through the University of Southern California.

There are still some vacancies for graduate and advanced undergraduate students for graduate spring courses, Marine Invertebrate Zoology (March 25-April 28) and Developmental Biology of Marine Organisms (May 3-June 5).

Supplementing our formal coursework, independent or directed research may be pursued at any time during the year.

For additional information, write to Dr. Russell L. Zimmer, Santa Catalina Marine Biological Laboratory, Box 398, Avalon, California 90704 or Telephone area code 213, Avalon 811 (operator's assistance is required).

INTERFACE PHENOMENA— CATALYSIS, CORROSION, ADSORPTION, ELECTROCHEMISTRY—AS RELATED TO BIOLOGICAL SYSTEMS

Professors in charge: Harry C. Gatos and August F. Witt

This special summer-program at M.I.T. from August 16 to August 27, 1971 will attempt to bridge the gap between surface phenomena in nonbiological and biological systems. Experts in both fields will discuss surface characterization methods and the important parameters affecting surface and interface reactions. Emphasis will be placed on extending present knowledge in the various fields of surface science and engineering to biomedical systems.

For further information, please write to: Director of the Summer Session Room E19-356 M.I.T.

Cambridge, Massachusetts 02139

The Market Place

PROFESSIONAL SERVICES

ECONOMIDES & GOLDBERG Consulting Engineers Drawings & Specifications Mechanical and Electrical Systems & Services for Laboratories, Test, Research & Process Facilities Air Conditioning, Refrigeration, Laboratory Exhaust, Laboratory Services, Lighting, Power Distribution, Power Generation, Incineration & Environmental Control 10 East 30th Street New York 10016 212-683-6889

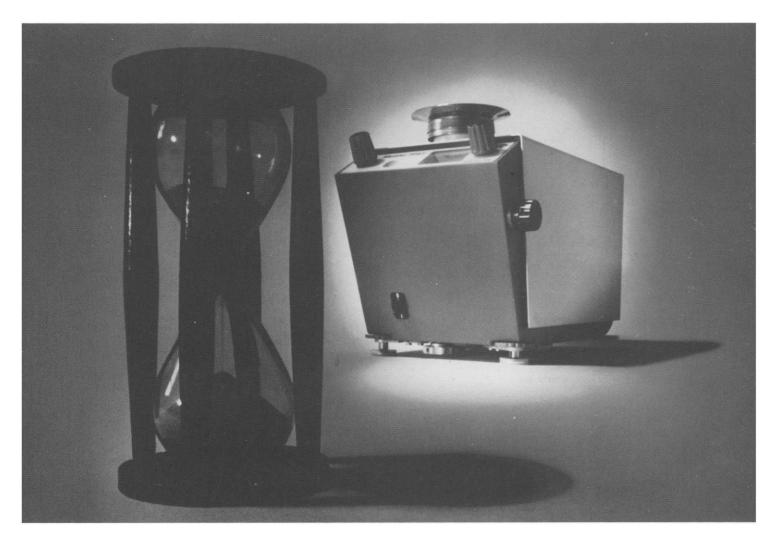
& European 110 East 30th Street 212-683-6889

SUPPLIES AND EQUIPMENT



SCIENCE, VOL. 171

When time is in the balance... A Mettler top loader will weigh in seconds to ± 0.001 g



But there is more in the balance than time. If you need accuracy, reproducibility, and application flexibility, no other balance, at any price, gives you as much.

In the R & D lab, quality control lab, or classroom, weigh unknowns, checkweigh, weigh-in, batch weigh, weigh below the balance. All high speed. And make other physical measurements by gravimetry thickness, volume, area, surface tension.



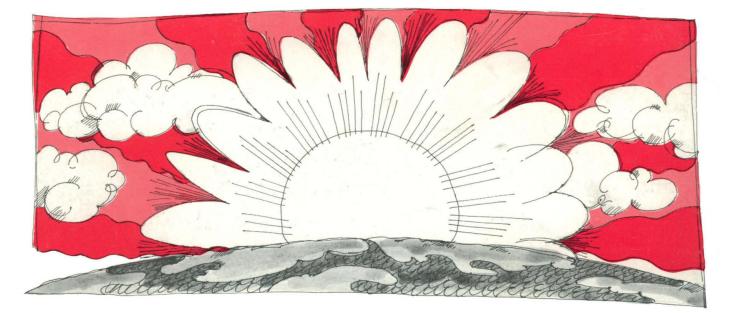
And accurately. Throughout the Mettler line of 18 models, you'll find a high load-to-precision ratio. From the 11,000-g capacity instrument with ± 0.05 g precision to the 170-g balance with ± 0.001 g precision. Precision to one part in several hundred thousand. Big, bright, highly visible readouts...depending on model, your choice of digital or analog. Available in metric or other calibrations.

The Mettler top loader is as pre-

cise and rugged as it is for very good reasons. Extremely lowfriction beam suspension system assures reproducibility throughout the life of the balance. Friction clutches help prevent damage due to forcing. Dust trap keeps foreign matter out. Automatic self-leveling. Rugged construction throughout.

For a catalog, write Mettler Instrument Corporation, Box 100, Princeton, New Jersey 08540, or call 609-448-3000.

Circle No. 31 on Readers' Service Card



Sure as sunrise. TWO TRUTHS ABOUT OUR LIQUID SCINTILLATION SYSTEMS: THEY'RE ULTRA-RELIABLE BY DESIGN. AND WE SEE TO IT THAT THEY STAY THAT WAY.

To illustrate, consider our multi-user-oriented Mark IITM for high-performance, cooled, 300-sample counting. And our all-new Unilux[®] IIA—the ultimate 100-sample bench-top system with higher E^2/B than ever.

Reliability for both begins with integrated circuits which eliminate the trouble spots inherent in wired-andsoldered circuits.

Next, the sample-changing mechanism—all too often the culprit in breakdowns. Not so in our systems, with foolproof sample conveyor and anti-jam sample elevator that automatically rejects oversize samples.

Further, cooled counting—to be fully appreciated depends on a stable counting environment. Created, in the Mark II and Unilux IIA, by a chamber held precisely at the optimum temperature that you select and isolated from all heat sources.

Unilux IIA

Mark II

From such built-in reliability comes full utilization of system performance. Such as the Mark II's figure of merit that permits counting at activities lower than any other system (plus accommodation for 12 separate counting programs—and more). And such as the Mark II's improved efficiency (60% for ³H and E²/B of better than 175 in the same channel).

This sort of reliable performance is our standard. The rare service problem is promptly brought under control by our nationwide network of service personnel. Trained to know the system. To get to the heart of any problem. To realize that every minute of down-time is, for you, one minute too many.

Reliability. Built-in. Watched-over. The reasons to learn more about the Mark II and the Unilux IIA. Call your Nuclear-Chicago sales engineer. Or write to us. 0-220

Circle No. 4 on Readers' Service Card



2000 Nuclear Drive, Des Plaines, Illinois 60018, U.S.A. Donker Curtiusstraat 7, Amsterdam W. The Netherlands

ALS-273