"OPTO-VARIMEX"
Ultimate Animal Activity Meter

DIGITALLY MEASURES TRAVELED DISTANCE, PLOTS PATTERN OF MOVEMENTS.

Measures Animal Respiration and Tremors

* Measures horizontal activity by interruption of invisible infrared beams criss-crossing animal cage 1" above the bottom.
* Measures rearing and jumping activity by means of two adjustable light curtains.
* Plots pattern of animal movements on X-Y chart recorder by decoding position of animal from interrupted IR beams.
* Completely insensitive to urine bedding or feces as IR beams cross the cage 1" above bottom.
* Large 15" x 15" transparent plastic cage—not attached to the instrument.
* Measures tremors and respiration by proximity sensor.

For more information call or write:

COLUMBUS INSTRUMENTS
950 NORTH HAGUE AVENUE
COLUMBUS, OHIO 43204, U.S.A.
PHONE (614) 488-6176

Circle No. 13 on Readers’ Service Card
Personnel Placement

Personnel advertising is accepted only with the understanding that the advertiser does not discriminate in employment on the basis of race, sex, religion, age, or national origin.

Positions Wanted: 40¢ per word, $4 extra for use of box number, $10 minimum charge per insertion. Prepayment required. Rate available only to individuals; personnel agencies, corporations, and universities take display rate for all advertising.

Display (Positions Open, Market Place, and so forth): $5.80 per line (25 millimeters equals 10 lines of 50 characters) with a minimum charge of $43 per insertion. No charge for use of box number. Rates net. No agency commission for ads under 4 inches. No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information required for all other ads.

Science is published weekly, on Friday. Copy must be received in writing by Wednesday, 3½ weeks before Friday issue date required. Send copy for all positions wanted ads and classifieds in 10-point type (kerned) as follows:

**SCIENCE, Room 207**
1515 Massachusetts Ave., NW
Washington, D.C. 20005
Telephone: 202-467-4456

Send copy for display ads, 1/2 page and larger, to:
Schragos Associates, Inc.
New York, N.Y. 10036
Telephone: 1-212-260-1050

Blind Ad replies should be addressed as follows:

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

**POSITIONS WANTED**

**Mathematical Ecologist. Ph.D. Seven years as systems ecologist, Canadian IBP forest and lake ecosystem studies, experience in fisheries problems. Two years in Latin America, land-use problems. Extensive publications. University teaching experience. Currently seeking position for fall 1978 at large or small university which values teaching environmental studies and would encourage continued interest in developing countries. Box 49, SCIENCE.**

**POSITIONS OPEN**

**ADMINISTRATIVE/Academic Position—Toxicology**
A major college specializing in health, life, and physical sciences is instituting an undergraduate degree program in toxicology to govern and industry needs. Has immediate need for full-time di-rector with doctorate and experience in toxicology or a related discipline.

Successful candidate will be responsible for curricu-lum implementation, budget planning, faculty develop-ment, industry and government liaison, student placement for traineeships, graduate placement for employment, and personal research. Salary commensurate with qualifications. Send résumé by 15 March 1978 to:

**Dr. G. Victor Rosol, Director**
Department of Chemistry
Philadelphia College of Pharmacy and Science
43 Street and Kingsessing Mall
Philadelphia, Pennsylvania 19104

The Philadelphia College of Pharmacy and Science is an Equal Opportunity/Affirmative Action Employer. All interested persons are encouraged to apply.

**ANATOMY**

**WASHINGTON UNIVERSITY**

Applications are invited for a tenure-track faculty position in the Department of Biomedical Science, School of Medicine. The individual must be qualified to teach gross anatomy and have demonstrated a strong research capability. Preference giv-en to someone with interests in craniofacial embry-ology, biomechanics, or bone and mineral metabolism. Rank and salary are negotiable.

Please forward résumé, the name of three refer-encees, and a list of publications and plans to: Dr. A. J. Kell, Department of Anatomy, 4559 Scott Hall, University of St. Louis, Missouri 63110. An Equal Opportunity/Affirmative Action Employer.

**DEPARTMENT OF ANATOMY is seeking Ph.D. or M.D. biomedical scientist with expertise in immunocytochemistry as applied to problems in mo-lecular, developmental, reproductive, or neurobiol-ogy. Candidate must have a laboratory program of sufficient depth and extent to be competitive for extru-financing within 1 to 2 years. Primary teaching respon-sibility in neuroanatomy and histology. Send curriculum vitae, bibliography, three refer-ences, and statement of career goals to: Dr. A. J. Kellman, Department of Anatomy, University of New Mexico, Albuquerque, N.M. 87131. An Equal Opportunity/Affirmative Action Employer.**

The AQUATIC ECLOGIST position with the Zoolo-gy Department, University of Wisconsin, Madison, advertised in Science [198 (No. 4315), 430 (1977)], is expanded to consider candidates at the assistant or associate professor level. Submit curriculum vitae, four letters of recommendation, and reprints to: James F. Kitchell, Laboratory of Limnology, University of Wisconsin, Madison, Wisconsin 53706. Applications and all materials are due 24 February 1978. The University of Wisconsin is an Equal Opportunity Employer.

**VISITING ASSISTANT PROFESSOR OF BIOLOG-ICAL ANATOMY. Appointment for 1 year but will likely be for 2 years, or possibly 3 years (not a tenure-track posi-tion). Ph.D. in biostatistics, biometry, or craniofacial biology, and ichthyology. Excellent teaching experience.** Send curriculum vitae, bibliography, references, and a copy of teaching evaluations to: Box 48, SCIENCE.


**Technical Manager. M.S., Ch.E., P.E. Present posi-tion as technical director lacks energy/resource content. Broad national and international management background includes R & D, quality control, manu-facturing. Superior problem solving, oral and written communication skills. I have much to offer. Box 50, SCIENCE.**

**SCIENCE, VOL. 199**

**APPLICATIONS WANTED**

Applications are invited for the position of ASSIST-ANT PROFESSOR to begin September 1978. Can-didates must have a Ph.D. in physiology and preferably some postdoctoral training. The posi-tion involves teaching anatomy and physiology to first-year medical students. Applicants are expected to develop graduate and undergraduate courses in physiology for biology majors and must be capable of establishing an independent research program. Send curriculum vitae, including concise description of research and teaching background, current inter-ests, and three letters of reference by 15 February 1978 to: Dr. Robert Jones, Chairman, Department of Biological Sciences, Herbert L. Lehman College—City University of New York, Bronx, N.Y. 10468. The City University of New York is an Equal Opportunity/Affirmative Action Employer.

**ASSISTANT PROFESSOR—tenure-appointment for fall 1978 in chemistry department. Field open (except not physical) with preference for bio-organic chemistry or bioinorganic chemistry. Applications in organic reaction mechanisms; at least 2 years of postdoctoral experience in biochemistry; teaching and publications in drug metabolism and hydroxylation mechanisms. Teaching experience essential. Send credentials to: Box 42, SCIENCE. Code 100. An Equal Opportunity/Affirmative Action Employer.**

**ASSISTANT PROFESSOR—BIOLOGY**

Primary competence in histology and microtechnique; teaching responsibilities in histology. Must have Ph.D. required. Effective 1 September 1978. Send résumé to: Dr. R. Virkor, Biology Department, KEY COLLEGE. INC., NEW JERSEY, Morris Avenue, Union, N.J. 07083. An Equal Opportunity/Affirmative Action Employer.

**UNIVERSITY OF ILLINOIS AT URBANA–CHAMPAIGN**

**INSTITUTE FOR ENVIRONMENTAL STUDIES**

Applications are invited for a tenure-track position as ASSISTANT PROFESSOR ENVIRONMENTAL GENETICS beginning 21 August 1978. Individual will provide leadership for an interdisciplinary team engaged in expansion of a strong research pro-gram in comprehensive environmental man-agement which focuses on environmental mutagens and carcinogens. Applicant will be expected to de-velop and teach courses in research methodology and especially in environmental mutagenesis and carcinogenesis. A Ph.D. in a discipline related to plant, animal, or microbial genetics is required. Applic-ant must have training or experience in environ-mental toxico-logy and research experience beyond the doctoral level with a suitable publication record. In addition, demonstrated commitment to inter-disciplinary research, record of successful acquisition of research support, and well defined research objec-tives related to mutagenic and carcinogenic envi-ronmental contaminants are desired. Applicant will report to a research professor, who is Director, Institute for Environmental Studies, University of Illinois at Urbana-Champaign, 406 South Goodwin Avenue, Urbana, Illinois 61801. Applications should be received by 15 March 1978 to ensure equal con-sideration. The University of Illinois is an Affirmative Action/Equal Opportunity Employer.

**ASSISTANT RESEARCH BIOCHEMIST I, Section**

Department of Pathology, University of Cali-fornia, University of California, Davis, Sacramento Medical Center. Requires Ph.D. with a background in biochemistry and experience with the methodology relating to and a conceptual understanding of the human phosphorylation and experimental work in unique combination of an Affirmative Action Employer. Send bibliography to: Neville R. Pinnock, M.D., Chief, Section of Gastro-intestinal Surgery, 4301 X Street, Sacramento, California 95817. Received through 30 April 1978.