Academic Press, New York, 1975. x, 920 pp., illus. \$49. Subnuclear Series, vol. 11.

Lepton and Hadron Structure. Proceedings of a school, Erice, Italy, July 1974. A. Zichichi, Ed. Academic Press, New York, 1975. x, 952 pp., illus. \$49. Subnuclear Series, vol. 12.

Light Scattering by Phonon-Polaritons. R. Claus, L. Merten, and J. Brandmüller. Springer-Verlag, New York, 1975. viii, 238 pp., illus. \$29.70. Springer Tracts in Modern Physics 75.

Low Maintenance Perennials. Robert S. Hebb. Quadrangle (New York Times), New York, 1975. iv, 220 pp., illus. Paper, \$4.95. A Demeter Press Book.

Mathematical Foundations of Computer Science 1975. Papers from a symposium, Mariánské Lázně, Czechoslovakia, Sept. 1975. J. Bečvář, Ed. Springer-Verlag, New York, 1975. x, 476 pp. Paper, \$16.80. Lecture Notes in Computer Science, vol. 32.

The Mechanics of Frozen Ground. N. A. Tsytovich. Translated from the Russian edition (Moscow, 1973). George K. Swinzow and Gregory P. Tschebotarioff, Eds. Scripta, Washington, D.C., and McGraw-Hill, New York, 1975. xx, 426 pp., illus. \$34.50. McGraw-Hill Series in Modern Structures.

Methods in Narcotics Research. Seymour Ehrenpreis and Amos Neidle, Eds. Dekker, New York, 1975. xiv, 408 pp., illus. \$29.75. Modern Pharmacology-Toxicology, vol. 5.

Modern Aspects of Electrochemistry. No. 11. B. E. Conway and J. O'M. Bockris, Eds. Plenum, New York, 1975. xii, 320 pp., illus. \$32.50.

Molecular Mechanisms for Repair of DNA. Proceedings of a conference, Squaw Valley, Calif., Feb. 1974. Philip C. Hanawalt and Richard B. Setlow, Eds. Plenum, New York, 1975. Two volumes. illus. Part A. xxiv, 418 pp. + index. \$32.50. Part B. xvi + pp. 419–844. \$32.80. Basic Life Sciences, vols. 5A and 5B.

Mössbauer Spectroscopy. U. Gonser, Ed. Springer-Verlag, New York, 1975. xviii, 242 pp., illus. \$30.10. Topics in Applied Physics, vol. 5.

Motivation. Theories and Issues. Fred P. Valle. Brooks/Cole, Monterey, Calif., 1975. viii, 328 pp. \$10.95. Core Books in Psychology Series.

The Mountainway of the Navajo. Leland C. Wyman. University of Arizona Press, Tucson, 1975. xvi, 272 pp., illus. \$14.50.

Nearshore Sediment Dynamics and Sedimentation. An Interdisciplinary Review. Papers from a symposium, Southampton, England, Oct. 1973. J. Hails and A. Carr, Eds. Wiley-Interscience, New York, 1975. xiv, 316 pp., illus. \$31.

Numerical and Asymptotic Techniques in Electromagnetics. R. Mittra, Ed. Springer-Verlag, New York, 1975. xii, 260 pp., illus. \$31. Topics in Applied Physics, vol. 3.

Optimal Control of Discrete Time Stochastic Systems. Charlotte Striebel. Springer-Verlag, New York, 1975. iv, 208 pp. Paper, \$9.90. Lecture Notes in Economics and Mathematical Systems, vol. 110.

Other Homes and Garbage. Designs for Self-Sufficient Living. Jim Leckie, Gil Masters, Harry Whitehouse, and Lily Young. Sierra Club Books, San Francisco, 1975. x, 302 pp., illus. Paper, \$9.95.

Pathology of Rheumatic Diseases. H. G. Fassbender. Translated from the German edition by G. Loewi, Springer-Verlag, New York, 1975. xii, 356 pp., illus. \$44.80.

Photoprocesses, Photoreceptors, and Evolution. Jerome J. Wolken. Academic Press, New York, 1975. xiv, 318 pp., illus. \$19.50.

Plant Anatomy. Forrest F. Stevenson and Thomas R. Mertens. Wiley, New York, 1976.

xx, 188 pp., illus. Paper, \$4.95. Wiley Self-Teaching Guides.

Play Fighting. Owen Aldis. Academic Press, New York, 1975. xxii, 320 pp., illus. \$17.50.

The Politics of Drugs. Marijuana to Mainlining. Richard G. Schroeder. Congressional Quarterly, Washington, D.C., 1975. x, 216 pp. Paper, \$5.95.

Porphyrins and Metalloporphyrins. Kevin M. Smith, Ed. Elsevier, New York, ed. 2, 1975. xxiv, 910 pp., illus. \$114.50.

Potential Theory on Locally Compact Abelian Groups. Christian Berg and Gunnar Forst. Springer-Verlag, New York, 1975. viii, 200 pp. \$25.40. Ergebnisse der Mathematik und ihrer Grenzgebiete. Band 87.

Problem Book in Relativity and Gravitation. Alan P. Lightman, William H. Press, Richard H. Price, and Saul A. Teukolsky. Princeton University Press, Princeton, N.J., 1975. xiv, 602 pp., illus. Cloth, \$20; paper, \$7.50.

A Programmed Text in Statistics. J. Hine and G. B. Wetherill. Chapman and Hall, London, and Halsted (Wiley), New York, 1975. Book 1, Summarizing Data. viii, 96 pp., illus. Paper, \$5.50. Book 2, Basic Theory. x, 110 pp., illus. Paper, \$6.50. Book 3, The *t*-test and χ^2 Goodness of Fit. viii, 54 pp., illus. Paper, \$4.50. Book 4, Tests on Variance and Regression. viii, 70 pp., illus. Paper, \$5.

Progress in Polymer Science, Japan. Vol. 8. K. Imahori and T. Higashimura, Eds. Kodansha, Tokyo, and Halsted (Wiley), New York, 1975. x, 244 pp., illus. \$26.50.

Rapid Practical Designs of Active Filters. David E. Johnson and John L. Hilburn. Wiley-Interscience, New York, 1975. xii, 264 pp., illus. \$16.95.

Removal of Trace Contaminants from the Air. Papers from a symposium, Atlantic City, N.J., Sept. 1974. Victor R. Deitz, Ed. American Chemical Society, Washington, D.C., 1975. viii, 208 pp., illus. \$17.25.

Responses of Plants to Air Pollution. J. Brian Mudd and T. T. Kozlowski, Eds. Academic Press, New York, 1975. xiv, 384 pp., illus. \$29.50. Physiological Ecology.

Rings of Quotients. An Introduction to Methods of Ring Theory. Bo Stenström. Springer-Verlag, New York, 1975. viii, 312 pp. \$39.60. Die Grundlehren der mathematischen Wissenschaften, Band 217.

The Rotation of the Earth. A Geophysical Discussion. Walter H. Munk and Gordon J. F. Macdonald. Cambridge University Press, New York, 1975. xx, 324 pp., illus. \$19.95. Cambridge Monographs on Mechanics and Applied Mathematics. Reprint of the 1960 edition.

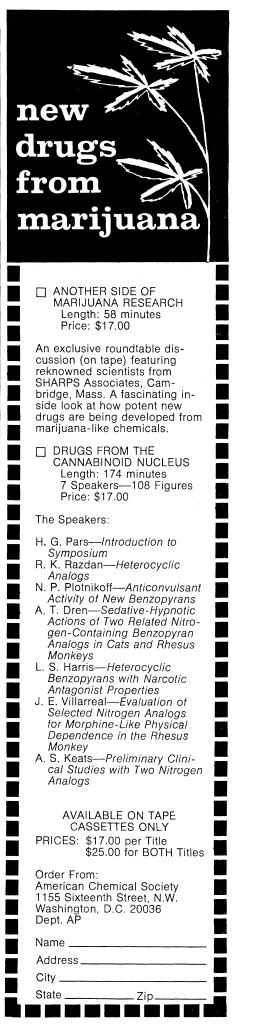
Small Mammals. Their Productivity and Population Dynamics. F. B. Golley, K. Petrusewicz, and L. Ryszkowski, Eds. Cambridge University Press, New York, 1975. xxvi, 452 pp., illus. \$32.50. International Biological Programme 5.

Software Engineering. An Advanced Course. F. L. Bauer, Ed. Springer-Verlag, New York, 1975. xii, 546 pp., illus. Paper, \$18.10. Lecture Notes in Computer Science, vol. 30. Reprint of the 1973 edition.

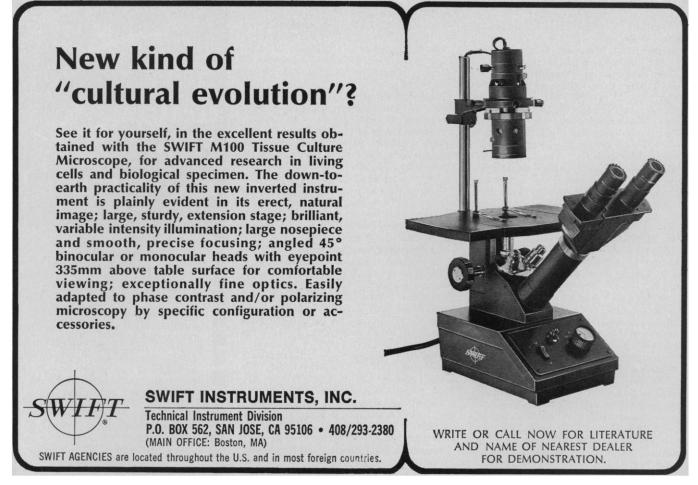
Stadler Genetics Symposia. Vol. 7. Columbia, Mo., Apr. 1975. G. P. Rédei, Ed. University of Missouri Agricultural Experiment Station, Columbia, 1975. 168 pp., illus. Paper, \$4.50.

Stochastic Convergence. Eugene Lukas. Academic Press, New York, ed. 2, 1975. xii, 202 pp. \$14. Probability and Mathematical Statistics, vol. 30.

Ultrastructure of Lymphoid Organs. An Electron-Microscopic Atlas. I. Oláh, P. Röhlich, and I. Törő. Lippincott, Philadelphia, 1975. 318 pp. \$30.



19 MARCH 1976



Circle No. 301 on Readers' Service Card

For AA & IR you think of us. Here's something more to think about ...

This Incubator-Shaker is GUARANTEED for **400,000 MILES**

A 400,000-mile Guarantee for a shaker is really not much of a bargain. In the life-span of an automobile, 100,000 miles of use may be a major achievement. But a shaking machine, used continuously, 24 hours a day, day-in day-out, runs the equivalent of 100,000 miles in just 83.3 days.* And even then, NBS shakers are just getting started. Although this Model G25 Incubator-Shaker is guaranteed for 365 days (over 400,000 miles), it has a lifeexpectancy of more than 10 years. Many are still in operation after 20 vears.

*(Based on an average auto speed of 50 mph 24 hours a day.)

ADVANCED FEATURES

Longevity is only one of the attributes of the G25. This model provides electronic speed control from 40 to 400 rpm (indicated on a direct-reading tachometer). Temperatures from near-ambient to 60°C are regulated within ±0.5°C. A main thermostat and a safety thermostat are employed. Tension lock-knobs prevent accidental



change of settings. When opened, a safety switch automatically shuts off the shaker.

Write for catalog No. G25S/376



NEW BRUNSWICK SCIENTIFIC CO., INC. 1130 Somerset Street, New Brunswick, N. J. 08903 • 201/846-4600 With NBS, Advanced Technology is a Way of Life.

Circle No. 258 on Readers' Service Card

Quantitative accuracy: The optimum digital approach

- models 575, 572 and 571 feature dark cycle stepping-measures the ratio of sample and reference beam energy at an identical wavelength
- built-in format recording for perfect superimposition of repetitive scans, digital setting of range and zero suppression for precise ordinate presentations
- both beams brought to an intense slit image at the cell for unrestricted microsampling
- step-variable bandpass optimizes reproducibility

PLUS applications back-up, prompt service, one-year warranty, product specialists to assist in instrument operation

If you're thinking of new UV instrumentation, why not think Perkin-Elmer? Write today for the whole story. Instrument Marketing Division, Mail Station 222, The Perkin-Elmer Corporation, Main Avenue, Norwalk, CT 06856

PERKIN-ELMER







19 MARCH 1976

Personnel Placement

Only those employers and individuals who do not dis-criminate on the basis of race, sex, religion, age, color, or national origin should submit Personnel Placement advertising advertising.

POSITIONS WANTED: 40¢ per word; use of Box Number counts as 10 additional words. Minimum charge \$10. Prepayment required. This rate applies to individ uals only; personnel agencies, companies, colleges, and universities take display rate for all advertising.

DISPLAY (POSITIONS OPEN, MARKET PLACE, AND SO FORTH): \$130 per inch, minimum, per insertion (1 inch is equivalent to 11 lines of 52 spaces each). Ads over 1 inch billed to nearest quarter inch. No charge for Box Number. Rates net. No agency commission allowed for ads under 4 inches. No cash discount. Prepayment required for foreign advertising. Purchase orders and billing information must accompany all other advertis-ing.

COPY for ads must reach SCIENCE by Wednesday, 3-½ weeks before issue date (Friday of each week) re-quested. Send copy for all positions wanted ads and dis-play ads under 5 inches to:

SCIENCE, Room 207 1515 Massachusetts Ave., N Washington, D.C. 20005 NW

Send copy for display ads, 1/6 page and larger, to:

Scherago Associates, Inc. 11 West 42nd Street New York, N.Y. 10036

BLIND AD replies should be addressed as follows: Box (give number) SCIENCE 1515 Massachusetts Ave., NW Washington, D.C. 20005

POSITIONS WANTED

Developmental Biologist, Ph.D. Broad experience. Project director. Cancer research. International fel-lowships. Seeking research/teaching cum research position. Box 130, SCIENCE. X

Electron Microscopist-Toxicologist-Morphologist (Ph.D.): interested in toxicity and safety studies on therapeutic and industrial products. Experience, publications, Box 99, SCIENCE. X

Environmental Health Toxicologist, M.P.H., 1 year Environmental Health Toxicologist, M.P.H., 1 year of occupational toxicology experience, 2 years as part-time health inspector, publications in press. De-sires challenging position in industrial/environmen-tal health administration, research, or teaching, in Colorado (preferably Denver area). Box 131, SCI-ENCE. X ENCE.

Gross Anatomist. Experienced teacher, medical and dental schools. D.D.S., M.S., M.A. Competent also in neuroanatomy, histology, and embryology. Box 122. SCIENCE

Immunochemist/Biochemist/Electron Microscopist, Ph.D., 1971. Seeks research or research/teaching po-sition in East, Midwest. Five years of college teach-ing and 3 years in industrial diagnostic (immuno-logical) test development. Box 132, SCIENCE. X

Insect Physiologist, British Ph.D. 1971. Five years of teaching experience in Canadian universities. Cur-rent interests: (i) digestive physiology and (ii) micro-bial symbiosis. Publications. Seeks teaching, re-search, or industrial position. Box 123, SCIENCE. X

Microbiology, medical and general mycology, plant pathology; Ph.D., postdoctorate, senior post-doctorate; experience teaching (tenured), adminis-tration, publications, research in government/uni-versities/industry in United States and abroad; seeks responsible, respectable position. Box 125, SCI-ENCE. X

Microbiologist. Ph.D. and pharmacist. Many years of experience in research and teaching of general, clinical, molecular, environmental, water, food, and pharmaceutical microbiology. Fifty-seven publica-tions and many textbooks. Looking for an appropri-ate position in research institution, university, or in-dustry. Box 133, SCIENCE. X

POSITIONS WANTED

Microbiologist/Biochemist. Ph.D. Seeks position, ei-ther academic or industrial. Training in isolation-purification techniques, enzymology, tissue culture; also experience in clinical microbiology. Teaching experience. Box 134, SCIENCE. X

Neuroscientist/Pharmacologist, Ph.D. 1969. Multi-disciplinary background in human, animal EEG and sleep, aging, neuroendocrine biorhythms. Publica-tions, students, grants. Seeks research/teaching posi-tion. Box 135, SCIENCE. X

Pharmacology. Ph.D. Medical, undergraduate teaching experience. Seeks teaching/research/administrative position in pharmacology, physiology, health sciences. Box 136, SCIENCE. X

Photographer/Biologist. M.S. entomology 1973. Diverse background in biology, including systematics, field biology, and medical research. Good communications ability. One year of professional-level photographic training, Box 137, SCIENCE. X

Physiologist, Ph.D. (1974), seeks teaching position in small college or university. Published. Teaching, postdoctoral experience. Box 138, SCIENCE. X

Scientific and Technical Translations, German, French, by engineer with ATA accreditation; back-ground in physics, electronics, aerodynamics re-search. Box 115, SCIENCE. X

Toxicologist/Pharmacologist, D.V.M., M.S., Ph.D. Associate professor. Broad experience includes ad-ministration. Interdisciplinary outlook. Seeking chal-lenge and advancement. Box 139, SCIENCE. 3/19, 26

Ultrasound Teaching and Research. Ph.D. To teach physics of ultrasound to individuals entering field of diagnostic ultrasound; to perform basic research on interaction of ultrasound and biological materials; medical school environment preferred; available 1 July. Box 140, SCIENCE. X

Vertebrate Ecologist, Ph.D. 1971. Desires position at verteorate Ecologist, Ph. D. 19/1. Desires position at 4-year institution. Teaching experience; general biol-ogy, ecology, vertebrate biology, mammalogy. Re-turned from Indonesia: 3 years directing research; ecology of bubonic plague (rats and fleas). Publica-tions (350 pages). R. W. Turner, Natural History Mu-seum, University of Kansas, Lawrence, Kansas 66045. X

POSITIONS OPEN

ASSISTANT AND ASSOCIATE INHALATION RESEARCH TOXICOLOGISTS

Required at the Toxic Hazards Research Laboratory in Dayton, Ohio.

Both positions require minimum of B.S. degree in biological sciences or chemistry. Assistant must have 2 years and associate 5 years of experience in applied toxicology or equivalent.

Starting salary-\$1128 and \$1371 per month, respectively.

Send résumé to: Mrs. Lois A. Doncaster, University of California, Overlook Branch, P.O. Box 3067, Day-ton, Ohio 45431. Affirmative Action Employer-minorities and women are encouraged to apply.

ASSISTANT PROFESSORSHIPS Department of Biological Sciences North Texas State University Denton, Texas 76203

Physiologist (endocrinology, neuroendocrinology) to teach undergraduate and graduate physiology including vertebrate and comparative physiology.

Animal virologist (viral genetics, viral transformation, oncogenesis) to teach general microbiology, virology, and microbial genetics at undergraduate and graduate levels.

Each appointee will be expected to develop a re-search program and to direct graduate students. Pref-erence will be given to candidates with teaching exeffective 1 September 1976.

Applicants should submit curriculum vitae, three let-ters of recommendation, and statement of research and teaching interests to **Dr. Karl R. Johansson**, **Chairman**. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

AGRICULTURAL OR ECONOMIC ENTOMOLOGY

Applications are invited from individuals with a strong background in agricultural or economic entomology and an established reputation in research. Administrative experience helpful, but not necessary. The candidate must be able to effectively interact with commodity groups and University administration. Salary and rank commensurate with experience for Individual be addressed to: **Dr. Honey**. ence. Inquiries should be addressed to: Dr. Henry H. Hagerdorn, Search Committee, Department of En-tomology, Fernald Hall, University of Massachusetts, Amherst, Mass. 01002. The University of Massachu-setts is an Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR-ANATOMY

Ph.D. to teach gross anatomy in physical therapy curriculum. Send curriculum vitae to Clarence W. Hardiman, Ph.D., University of Maryland, Depart-ment of Physical Therapy, 32 South Greene Street, Baltimore, Maryland 21201. Equal Opportunity Em-languated and a statement of the street of the str ployer/Affirmative Action.

ASSISTANT PROFESSOR OF BIOLOGY

This department invites applications from quali-fied individuals for the position of assistant profes-sor. Appointment will be effective September 1976 and the starting salary will be \$13,930. Candidates should have a recent Ph.D. in physiology and prefer-ably some postdoctoral training. The position in-volves the teaching of anatomy and physiology to un-dergraduate nursing students. Candidates should al-so have the ability and enthusiasm to develop undergraduate and graduate courses in physiology for biology students and must exhibit promising ca-pability for establishing an independent research pro-gram. gram.

Applicants should provide curriculum vitae, in-cluding concise description of their research and teaching background, current interests, transcripts of undergraduate and graduate grades, and three let-ters of reference ters of reference.

Send materials to:

Dr. Robert Jones, Chairman Department of Biological Sciences Herbert H. Lehman College City University of New York Bronx, New York 10468

City University of New York is an Equal Opportunity and Affirmative Action Employer.

MCMASTER UNIVERSITY BIOLOGY DEPARTMENT

Applications are invited for an ASSISTANT PRO-FESSORSHIP. Applicants should hold a Ph.D. in vertebrate biology with a special interest in physi-ology, neurophysiology, or development. The suc-cessful applicant will be expected to teach at under-graduate and graduate levels and to engage in re-search. Minimum salary for 1975-76 is \$14,300. Applications, including a detailed curriculum vitae and the names of at least two referees, should be sent as soon as possible to Dr. D. Davidson, Chair-man, Department of Biology, McMaster University, 1280 Main Street West, Hamilton, Ontario, Canada L&S 4K1. Applications are invited for an ASSISTANT PRO-L8S 4K1.

ASSISTANT PROFESSOR OF BOTANY. To develop/teach large introductory course. Also to teach ad-vanced course in one or more: bryology, paleobot-Vanced course in one or more: bryology, paleobot-any, lichenology, pteridology, or palynology, and de-velop research program. Qualifications: Ph.D. and teaching excellence. Application deadline 15 April 1976. Position starts fall 1976. Send curriculum vitae, three letters of reference, and research inter-ests to Dr. Garrett E. Crow, Department of Botany and Plant Pathology, University of New Hampshire, Durham, N.H. 03824. The University is an Affirma-tive Action/Equal Opnortunity Employer. tive Action/Equal Opportunity Employer.

ASSISTANT PROFESSOR OF PHYSIOLOGY. A dynamic Ph.D. to join an active innovative teaching faculty. Must be an excellent teacher with outfaculty. Must be an excellent teacher with out-standing credentials. Expected to carry out some fac-ulty-student research. Teach courses in biology, physiology, anatomy, and physiology and/or devel-opmental biology. Send curriculum vitae, tran-scripts, and list of references to: Head, Division of Science Northeast Missouri State University Kirksville, Mo. 63501 Equal Opportunity/Affirmative Action Employer

The Department of Meteorology, University of California, Los Angeles, has a faculty position open-ing at the beginning **ASSISTANT PROFESSOR** level starting 1 July 1976.

The candidate must have a Ph.D. in atmospheric sciences and a strong background in dynamic meteo-rology. The candidate will be expected to do re-search in the general area of modeling of the global atmosphere and/or oceans and will be expected to teach undergraduate- and graduate-level courses in atmospheric dunaries. atmospheric dynamics.

Applicants should submit résumés, including a list of publications and the names of three references, to the Chairman, Department of Meteorology, Universi-ty of California, Los Angeles, California 90024. UCLA is desirous of receiving applications from and recommendations of minority and women can-didates as well as from other qualified persons.

UCLA is an Equal Opportunity/Affirmative Action Employer

ASSISTANT PROFESSOR OF MOLECULAR BIOL-OGY sought for September 1976. Must teach basic genetics and advanced courses in areas of special-ization to undergraduates, direct graduate students, and conduct active research program. Ph.D. re-quired, postdoctoral experience preferred. Apply to **R. F. Nunnemacher, Chairman, Department of Biol-ogy, Clark University, Worcester, Mass. 01610.** An Equal Opportunity/Affirmative Action Employer.

ASSISTANT PROFESSOR OF PHARMACOLOGY

Faculty position available 1 July, preferably for Ph.D. in pharmacology with 2 years of postdoctoral research and/or teaching experience. Candidate to assume teaching responsibilities in physiological pharmacology and to develop independent research program in neuro- or cardiovascular pharmacology. Reply by 19 April to Dr. H. George Mandel, Depart-ment of Pharmacology, George Washington Universi-ty Medical Center, 2300 Eye Street, NW, Washing-ton, D.C. 20037.

An Equal Opportunity/Affirmative Action Employer

DEPARTMENT OF PHYSICS-ENGINEERING

Assistant professor, Ph.D., in a growing University Assistant professor, Ph.D., in a growing University to teach mainly introductory engineering courses. The applicant must have experience in computer pro-gramming and ability to teach elementary physics laboratories. In the future the applicant might be in-volved with the development of new courses and programs in engineering. The conduct of individual research will be encouraged. Please send résumé by 30 April 1976 to Professor D. A. Papaconstanto-poulos, Department of Physics, George Mason Univer-sity, Fairfax, Va. 22030. Equal Opportunity/Affirma-tive Action Employer.

ASTROPHYSICIST. The Department of Astronomy of the University of Pennsylvania expects an open-ing at the assistant professor level for September 1976, pending approval by the University administra-tion. We seek an astrophysicist actively engaged in theoretical, experimental, or observational research. Applicants should send curriculum vitae, bibliogra-phy, and the names of three references to B. S. P. Shen, Chairman, Department of Astronomy, Universi-ty of Pennsylvania, Philadelphia, Pa. 19174, before 9 April 1976. An Equal Opportunity/Affirmative Ac-April 1976. An Equal Opportunity/Affirmative Action Employer.

BIOCHEMICAL PHARMACOLOGIST

Bio/Basics International, a well-established organi-zation concerned with the clinical development of drugs domestically and internationally, has a posi-tion available for a Ph.D. to evaluate pharmacolo-gical data. The position provides opportunities to travel and to interact with leading authorities in both the academic community and the pharmacoutied in the academic community and the pharmaceutical in-dustry. Applicants should send their résumés to:

Dr. Monroe Klein Director, Scientific Operations Bio/Basics International 260 Madison Avenue New York, New York 10016

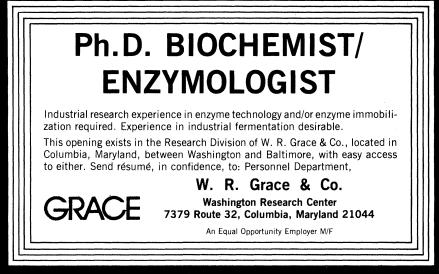
BIOCHEMIST, Ph.D.

To participate in interdisciplinary research project related to protein chemistry and coagulation studies in an academic setting in New York City. Send cur-riculum vitae and bibliography to **Box 141, SCI-ENCE.** An Equal Opportunity Employer/Affirmative Action Employer Action Employer

19 MARCH 1976

POSITIONS OPEN

POSITIONS OPEN



BIOLOGY. Two positions, assistant or associate professor, for appointment in September 1976. Ap-plicants must have the Ph.D. degree, a strong com-mitment to both research and teaching, and should be professionally interested in one of the following areas: biophysics, ecology, genetics, microbiology, physiology, or radiobiology. Interested prospects should send a curriculum vitae, transcripts, and oth-er supporting material to: Dr. David B. Dusenbery, Chairman of Search Committee, School of Biology, Georgia Institute of Technology, Atlanta, Georgia 30332. The Georgia Institute of Technology is an Equal Opportunity/Affirmative Action Employer.

BIOLOGISTS. Northeastern Illinois University, Chi-cago, Illinois 60625. Two biologists, assistant profes-sor, Ph.D. Areas considered: biochemistry, devel-opmental biology, population biology. To teach in in-troductory courses and to develop new courses in specialization. Send complete credentials or place-ment file, including three letters of recommendation, immediately to Dr. Herbert F. Lamp, Chairman, Bi-ology. Minority candidates invited to apply.

BIOLOGY STATE UNIVERSITY OF NEW YORK AT BUFFALO

Applications are invited for two positions at the rank of assistant professor beginning 1 September 1976. Applicants are expected to have postdoctorate experience, demonstrated research capabilities, and be able to teach in undergraduate and graduate courses.

RADIOECOLOGY OR ECOLOGY: Either (i) a radioecologist with extensive use of radionuclides in ecosystem studies or (ii) a population biologist with specialization in population dynamics or modeling.

PHYSIOLOGY: Specialization in invertebrates and ethology

Note: both positions are contingent upon the avail-ability of funds and lines. Applications are due 17 April 1976. Send curricu-lum vitae, reprints, résumé of current research inter-ests, and three letters of reference to: **Dr. K. M.** Stewart, Division of Biology, State University of New York, Buffalo, N.Y. 14214.

The State University of New York is an Equal Opportunity/Affirmative Action Employer.

Applications are invited for the position of CHAIR-MAN of the Department of Biological Sciences in a midwest, private, professional college. Applicants must possess a Ph.D., satisfy at least associate pro-fessor standards, and have demonstrated a capacity for administering teaching and research programs. A strong background in physiology, biochemistry, and histology would be favorable. Position is to be filled by September 1976. Send résumé and names of three references to **Box 142, SCIENCE**. A non-discriminatory Affirmative Action Employer.

BIOLOGISTS. Salem College has two temporary biology openings for 1976–77: 1-year position teaching microbiology, anatomy, and physiology, and team-teaching general biology. Spring semester (February to May) sabbatical replacement teaching zoology and embryology. M.S. or Ph.D. Submit curriculum vitae, transcripts, and three letters of recommendation to Dr. V. C. Chase, Salem College, Winston-Salem, North Carolina 27108.

lina 27108.

BIOLOGY TEACHING POSITION available fall 1976 for qualified Ph.D. to teach two-semester in-troductory biology course with laboratory for sci-ence majors. Responsibilities include lectures, testence majors. Responsibilities include lectures, test-ing, and development of supplementary instructional materials. Preference will be given to individuals with experience and demonstrated success. Please request a detailed job description and directions for submitting application before sending credentials. Write to: Teaching Search Committee, Department of Biology, Gilmer Hall, University of Virginia, Char-lottesville, Virginia 22001. Closing date for request-ing information is 4 April 1976. An Equal Opportu-nity/Affirmative Action Employer.

CHAIRMAN

The Department of Geological Sciences of the University of Texas at El Paso seeks a chairperson (pro-fessor) to assume the duties in the 1976–77 academic year. The ideal candidate will possess the following credentials: national recognition for scholarly activicredentials: national recognition for scholarly activi-ty in geoscience; experience in applied geoscience in industry or federal or state agencies; administrative experience; and the ability to teach upper-division or graduate classes in an area which complements the present staff. The Department consists of 11 full-time faculty, approximately 100 undergraduate ma-jors, and 45 graduate students in M.S. and doctor of geological science programs. Interested persons should respond with a letter of application, résumé, and three letters of recommendation by 30 April 1976 to:

Search Committee Chairman Department of Geological Sciences The University of Texas at El Paso El Paso, Texas 79968

An Equal Employment Opportunity (M/F)/Affirmative Action Employer.

The Australian National University invites appli-cations for appointment to the CHAIR OF BOT-ANY, Faculty of Science, which will become vacant during 1976 on the retirement of Professor L. D. Pryor. Applicants should be experienced and inter-ested in any area of the plant sciences. Appointee will be head of Department initially for 3 to 5 years. Appointment to retiring age, 65 years. Salary: A\$24,394 per annum; exchange rate A\$1 = US\$1.26. Reasonable travel expenses. Superannuation bene-fits. Further information from Academic Registrar, Australian National University, P.O. Box 4, Canberra, A.C.T., 2600, Australia, with whom applications close 10 May 1976.

CHAIRMAN, Department of Pathology, Laboratory and Academic Department at Medical College of Vir-ginia, Virginia Commonwealth University, avail-able. Board certifications required. Send curriculum vitae and publications to Lazar J. Greenfield, M.D., Box 786, MCV Station, Richmond, Virginia 23298. An Equal Opportunity/Affirmative Action Employer.

CHAIRPERSON. Indiana State University is seek-ing a chairperson for the 14-member Department of Psychology. Minimum qualifications are 5 years of university teaching, academic administrative experi-ence or the equivalent, and evidence of scholarship. The Department offers master's degrees in general and clinical psychology in addition to baccalaureate degree. Currently, 52 full-time graduate students are enrolled. Salary and rank are open. The position will start contingent unon budgetary approval on 23 Austart, contingent upon budgetary approval, on 23 Au-gust 1976. Send résumé and names of five references to Dr. Thomas C. Cadwallader, Chairperson, Search Committee, Department of Psychology, Reeve Hall, Indiana State University, Terre Haute, Indiana 46809, by 1 April.

Indiana State University is an Equal Opportunity/ Affirmative Action Employer.

Washington University St. Louis, Missouri Department of Earth and Planetary Sciences CHAIRPERSON

Washington University invites applications for the position of chairperson in the Department of Earth and Planetary Sciences, which is located within the Faculty of Arts and Sciences. Candidates should be well qualified in research, teaching, and administration, and willing to play a major role in expanding the department. There is excellent cooperation with the Departments of Chemistry and Physics through the recently established McDonnell Center for the Space Sciences. Current research interests include Space Sciences. Current research interests include geochemistry, comparative planetology, and the study of extraterrestrial materials. Applicants are re-quested to send curriculum vitae and the names of three references to **Professor Michael Friedlander**, **Earth Sciences Search Committee**, **Department of Physics**, **Washington University**, **St. Louis**, **Mo. 63130**. *Washington University (a private university) is an Affirmative Action/Equal Opportunity Employ-er.*

PHARMACOLOGY CHAIRMAN. Applications are invited for the chairmanship of the Department of Pharmacology of the University of Louisville Health Sciences Center. Excellence of leadership in pro-grams of basic research and of instruction in medi-cal, dental, and graduate pharmacology is essential. Send curriculum vitae and references to Dr. J. H. Wallace, Chairman, Pharmacology Search Com-mittee, University of Louisville Health Sciences Cen-ter, P.O. Box 1055, Louisville, Kentucky 40201. The University of Louisville is an Equal Opportunity/Af-formative Action Employme firmative Action Employer.

CHAIRPERSON. Applications are being accepted for position of Chairperson, Department of Pharma-cology, University of Kentucky College of Medi-cine, Lexington, Kentucky. Qualified applicants should submit a current curriculum vitae, along with list of persons who are qualified to assess applicant's teaching, research and administrative capabilities teaching, research, and administrative capabilities. Send information to: Arnold M. Ludwig, M.D., De-partment of Psychiatry, MN 368 University of Ken-tucky Medical Center, Lexington, Kentucky 40506. University of Kentucky is an Equal Opportunity/Affirmative Action Employer.

CHIEF LIBRARIAN. Harvard University is seeking candidates for the position of chief librarian of the Francis A. Countway Library of Medicine, which combines the collections of the Boston Medical Li-brary with those of Harvard's Faculty of Medicine (including the School of Dental Medicine) and Facul-tyof Public Health. The Countway Library contains over 500,000 volumes, including rare books, manu-scripts, and archives. Staff of about 60. Qualifica-tions: broad administrative experience in a large and complex research library and evidence of substantial tions: broad administrative experience in a large and complex research library and evidence of substantial accomplishments. Salary based on qualifications and experience. Send résumés to Secretary of the Search Committee, Philip E. Leinbach, Assistant University Librarian for Personnel, Harvard University Library, Cambridge, Mass. 02138. As an Affirmative Action/ Equal Opportunity Employer, Harvard University encourages applications from minorities and wom-en.

POSITIONS OPEN

The School of Medicine of the University of Califor The School of Medicine of the University of Califor-nia, Davis, invites applicants for the position of CHAIRMAN of the Department of Physical Medi-cine and Rehabilitation. This position requires a Board-certified PHYSIATRIST with substantial, demonstrated teaching, research, and administrative abilities who will provide leadership in a strong, ac-tive department. Applicants should send a curricu-lum vitae and other supporting information to Ernest Coordner MD. Chairmon, Search Committee De Gardner, M.D., Chairman, Search Committee, De-partment of Neurology, University of California, Da-vis, California 95616. The University of California is an Affirmative Action/Equal Opportunity Employer.

CHAIRPERSON—Psychology Department, Colby College. The chairperson is responsible for lead-ership of a department of 6 faculty members and 60 majors in an undergraduate college with an enroll-ment of 1600. Appointment at the associate profes-sor level beginning September 1976. Preferred area of specialization: general/experimental psychology. Candidates should have demonstrated competence in teaching and research, and a strong commitment to liberal arts education. Evidence of administrative ability is highly desirable. Computer and research fa-cilities in a new science complex. Competitive salary cilities in a new science complex. Competitive salary and fringe benefits. Apply to: Paul G. Jenson, Vice-President for Academic Affairs, Colby College, Water-ville, Maine 04901. An Equal Opportunity/Affirma-ting Acting European tive Action Employer.

COORDINATOR: ENVIRONMENTAL STUDIES PROGRAM, ANTIOCH-NEW ENGLAND

Coordinator for interdisciplinary master's pro-gram in environmental studies. Program is ex-periential with concurrent work and study preparing graduates for work in various educational environ-ments. Responsibilities include program devel-opment, teaching, and advising. Ph.D. preferred. Teaching and administrative experience necessary. Minimum salary \$14,000 plus. Send curriculum vitae by 1 April 1976 to Mitchell Thomashow, Environmen-tal Search Committee, Antioch-New England, One Elm Street, Keene, New Hampshire 03431.

DEVELOPMENTAL CELL BIOLOGIST

Assistant professorship available August 1976. Ap-plicants must have the Ph.D. and substantial training in developmental and cellular biology, with research and teaching interests in cellular fine structure. Candidates should have interest in graduate and undergraduate teaching and be active in research. Send curriculum vitae, including reprints, statement of teaching and research interests, graduate and under-graduate transcripts, and the names of three refer-ences by 1 April 1976 to:

William H. Darden, Chairman Department of Biology P.O. Box 1927 University of Alabama University, Alabama 35486 An Equal Opportunity/Affirmative Action Employer

PLANT SYSTEMATIST

Assistant professorship available August 1976. Applicant must have the Ph.D. and substantial training in plant taxonomy and systematics with research and teaching interests in these fields. Duties will in-clude teaching at graduate and undergraduate levels, maintaining an active research program, and curator-ship of the herbarium. Send curriculum vitae including reprints, statement of teaching and research in-terests, graduate and undergraduate transcripts, and the names of three references by 1 April 1976 to:

William H. Darden, Chairman

Villam H. Darden, Charma Department of Biology P.O. Box 1927 University of Alabama University, Alabama 35486

An Equal Opportunity/Affirmative Action Employer

DIRECTOR OF UNIVERSITY ONCOLOGY PROGRAM

Senior position available as Director of Oncology Program at the George Washington University Medi-cal Center, Washington, D.C., an Equal Opportu-nity/Affirmative Action Employer. Ten years of expe-rience in cancer-related work required with appropriate physician specialty boards. For information write to and forward curriculum vitae and bibliogra-phy to John G. Maier, M.D., Ph.D., Chairman of On-cology Search Committee, Division of Radiation Ther-apy, George Washington University Medical Center, 901 23rd Street, NW, Washington, D.C. 20037.

POSITIONS OPEN

An opening is anticipated for an ETHOLOGIST/ PHYSIOLOGIST at the assistant professor level in a developing biology program. The person will be ex-pected to teach courses in organismal biology for freshmen in addition to courses in ethology and phys-iology for upperclassmen. Applicants should also be origited toward some specific research interacts oriented toward some specific research interests which are amenable to undergraduate involvement. We also have an interest in possibly hiring a person in mathematical biology who would jointly serve both mathematics and biology departments. Please send curriculum vitae and names from whom we can request recommendations to Dr. Robert Costa, Chairman, Department of Biology, Clarkson College, Potsdam, New York 13676.

FACULTY APPOINTMENT—FALL 1976 Assistant Professor, Ph.D.

The Department of Biological Sciences, Murray State University, invites applications for a position in the area of developmental biology/molecular biol-ogy, The appointee will teach courses in embryol-ogy, cell biology, and areas of specialty. The suc-cessful candidate is expected to sustain an active research program which will involve both graduate and undergraduate students.

Send curriculum vitae, copies of undergraduate and graduate transcripts, and references to:

Dr. W. J. Pitman, Chairman Biological Sciences Murray State University Murray, Kentucky 42071

Applications received after 15 May 1976 may not be considered. Murray State University is an Equal Opportunity Employer (M/F) and encourages applications from all qualified persons.

FACULTY POSITION

Faculty appointment as assistant professor in the De-partment of Medical Microbiology, College of Medi-cine, University of California, Irvine. Responsi-bilities include teaching both graduate and medical students. Substantial training and research experi-ence in several areas of biochemistry, genetics, and microbiology, or immunology are preferred. Prefer-ence given to candidates who would develop a strong research program in some biochemical or mo-lecular aspect of immunology. Postdoctoral experi-ence is required. Applications from qualified individ-uals are welcome; minorities and women are encour-aged to apply. The application deadline is 1 May 1976. A curriculum vitae and three letters of refer-ence should be sent to Dr. Paul S. Sypherd, Depart-ment of Medical Microbiology, College of Medicine, University of California, Irvine, Irvine, Calif. 92717. Faculty appointment as assistant professor in the De-

DEPARTMENT HEAD, PHYSICS

DEPARTMENT HEAD, PHYSICS The Department of Physics at the University of Illi-nois, Chicago Circle Campus, invites applications for the position of department head, which will be open September 1976. The Department has a full-time faculty of 32 and offers undergraduate, mas-ter's, and doctoral degrees, with experimental and theoretical research in high energy, solid state, nu-clear, and atomic/molecular physics, and research in mathematical physics and physics education. Can-didates for this senior position should have an out-standing record in research and teaching. Demon-strated administrative ability is desirable. Please send curriculum vitae, list of publications, and names of three references by 1 May 1976 to: Dr. J. S. Kouvel, Chairman, Search Committee, Department of Physics, University of Illinois, Chicago, Ill. 60680. An Equal Opportunity/Affirmative Action Employer.

MICROBIAL PHYSIOLOGIST UNIVERSITY OF IDAHO

UNIVERSITY OF IDAHO Applications are invited for a position as assistant professor beginning after 1 July 1976. Candidates must possess a Ph.D. degree with emphasis in micro-bial physiology. The successful candidate will be ex-pected to establish a research program directly re-lated to or closely allied to agriculture problems in Idaho. In addition the candidate will be expected to establish a research program directly re-lated to or closely allied to agriculture problems in Idaho. In addition the candidate will be expected to teach one senior-level course in the specialty field. Send curriculum vitae, letter of application, tran-scripts, and three letters of reference to: Dr. A. J. Lingg, Chairman, Search Committee, Department of Bacteriology and Biochemistry, College of Agricul-ture, University of Idaho, Moscow, Idaho 83843. Ap-plication deadline is 15 May 1976. An Equal Opportu-nity/Affirmative Action Employer. nity/Affirmative Action Employer

FACULTY POSITION

Department of Poultry Science seeks faculty member with interest in poultry science seess faculty memi-ber with interest in poultry management research and teaching. Ph.D. in applicable area (for example, animal physiology) is required. Apply to Head, De-partment of Poultry Science, The Pennsylvania State University, 213 Animal Industries Building, Universi-ty Park, Pa. 16802.

An Equal Opportunity Employer

The University of California, Irvine, Department of Psychiatry and Human Behavior, invites applicants for four full-time **FACULTY POSITIONS**. M.D. de-gree, 3 years of accredited psychiatric residency, California licensure, and evidence of scholarly pro-ductivity required. (i) Assistant professor level, fam-ily therapy and liaison with family medicine (training in family therapy preferred): (ii) assistant professor ily therapy and liaison with family medicine (training in family therapy preferred); (ii) assistant professor level, adolescent and child psychiatry (child psychia-try training preferred); (iii) associate professor level to serve as Chief of Psychiatric Services, respon-sible for overall teaching and service program includ-ing adult, adolescent, child, emergency, and consul-tation services (additional training in administration or inpatient psychiatry preferred); and (iv) assistant professor level to coordinate undergraduate psychia-try curriculum, didactic, clinical, and cognate basic sciences at medical student level. Applications from try curriculum, didactic, clinical, and cognate basic sciences at medical student level. Applications from all qualified candidates are welcome; minorities and women are encouraged to apply. Send curriculum vitae and names of three references to Dr. E. Man-sell Pattison, University of California, Irvine, Calif. 92717, before 15 March 1976.

IMMUNOLOGIST, to establish independent re-search program to study cellular immunity to carci-noma of the bladder in humans. Candidates should have 2 years of postdoctoral experience in studies re-lated to cell-mediated immunity with expertise in these areas: (i) techniques for cultivation of cell lines from human transitional cell carcinoma, (ii) in vitro techniques to demonstrate tumor-specific cellular im-munity, and (iii) immunochemical procedures for iso-lation and purification of tumor-associated antigens. Applicants should submit a curriculum vitae, publi-cation list, three letters of recommendation, and a recation list, three letters of recommendation, and a re-search plan outline to: C. E. Cox, M.D., Department of Urology, University of Tennessee Center for the Health Sciences, P.O. Box 63635, Memphis, Tenn. 38163. An Affirmative Action/Equal Opportunity Employer.

MICROBIOLOGIST, Ph.D. Previous industrial ex-perience not required. Carry out basic research in new sterilization processes and sterility monitoring systems. Develop techniques and procedures appli-cable to hospital operations. Research involves hard-ware application studies.

METALLURGIST, Ph.D. Previous industrial experi-ence preferred but not required. Identify metals, coated metals, metal plating, and processes appli-cable to health care equipment with specific empha-sis on high pressure vessel. Develop test procedures and laboratory operations for continuous evaluation of metals including stress analysis, corrosion poten-tial and so forth tial, and so forth.

Amsco is an Affirmative Action/Equal Opportunity Employer. We welcome applications from qualified minority and female candidates.

Send résumé and salary history to: J. C. Brady, Manager, Factory Relations and Salary Employment, American Sterilizer Company, 2424 West 23 Street, Erie, Pennsylvania 16512.

NEUROPHYSIOLOGIST/NEUROEFFECTOR PHYS-IOLOGIST, Ph.D. Assistant professor position available September 1976. Applicants must have appropriate ability, background, and experience to teach basic anatomy/physiology to nursing stu-dents. Candidate must show recent research ac-tivity involving electrophysiological studies (prefera-bly of marine invertebrates), and will be expected to develop upper-level and graduate teaching and re-search program in this area. Relevant facilities in-clude marine laboratory and EM center. Required salary for three quarters from \$12,500, depending up-on experience. Send curriculum vitae and have three references sent to: Dr. Helen H. Lambert, Chairper-son, Physiology Search Committee, Biology Depart-ment, Northeastern University, Boston, Mass. 02115. Northeastern University is an Equal Opportunity/ Affirmative Action Employer.

19 MARCH 1976

Molecular Oncology

Fast-growing research organization 45 miles NW of Washington expanding its' program in Molecular Oncology and soliciting applications for following staff positions:

IMMUNOBIOLOGIST - Ph.D./MD with at least 5 years of creative experience beyond the doctorate. Will head section concerned with the natural history of RNA tumor viruses.

CELL BIOLOGIST - For section concerned with tissue culture assays of RNA tumor viruses and generation of mutant cell lines:

Ph.D. with at least 5 years creative experience beyond the doctorate to be section head.

MOLECULAR BIOLOGIST - For section concerned with studies of RNA tumor viruses using molecular hybridization techniques:

Ph.D. with at least 5 years creative experience beyond the doctorate to be section head.

IMMUNOCHEMIST - For section concerned with purification and characterization of proteins and tumor virus subunits:

Ph.D. with at least 10 years of creative experience beyond the doctorate to be section head.

BIOCHEMIST - Ph.D. with at least 5 years of experience to work with collaborative study of Herpesviruses.

Additional appointments of senior scientists with similar experience in these disciplines will be made.

Excellent laboratory facilities, a good scientific library, an extensive experimental animal farm and other related support activities are available.

Successful candidates will be offered competitive salary, attractive Company benefits and relocation expenses.

Applicants should send resume complete with bibliography, the names of three professional references and a brief statement of their research interests to:

> M. L. Knill, Recruitment Department 350 Litton Bionetics, Inc. FREDERICK CANCER RESEARCH CENTER Post Office Box B Frederick, Maryland 21701

An Equal Opportunity Employer, M/F

NEUROPHYSIOLOGIST AND REPRODUCTIVE PHYSIOLOGIST

Two faculty positions available September 1976. Applicants preferably with postdoctoral experience who have demonstrated productive research with some teaching experience are invited to apply. Send curriculum vitae and names and addresses of three references to: Dr. H. Mizukami, Division of Regulatory Biology and Biophysics, Department of Biology, Wayne State University, Detroit, Michigan 48202.

An Equal Opportunity Employer

PHARMACOLOGY

The Department of Pharmacology and Therapeutics, Schools of Medicine and Dentistry, State University of New York at Buffalo, invites applications for a full-time faculty position in the area of clinical pharmacology as assistant professor or, if especially qualified, associate professor. Candidates must have an M.D. degree and sufficient clinical training to permit joint appointment in the Department of Pharmacology and Therapeutics and the appropriate clinical department. Joint appointments require approval by both participating departments. Duties include teaching, research, and care of patients within an academic environment.

Send curriculum vitae and also request that three letters of recommendation be sent to: Dr. Edward A. Carr, Jr., i22 Farber Hall, Box M, State University of New York at Buffalo, Buffalo, N.Y. 14214.

An Equal Opportunity/Affirmative Action Employer.

PHYSIC ANS (MULTIPLE OPENINGS) FDA/BUREAU OF DRUGS

Immediate career Civil Service openings for physicians to evaluate clinical data of new drugs. Physicians function as leaders of multidisciplinary review teams reviewing New Drug Applications (NDA's) and Notices of Claimed Investigations Exemptions for New Drugs (IND's). They participate in formulating policy and developing standards and guidelines for the study of new drugs. Positions are available in most specialties with most immediate needs in fields of endocrinology, cardiology, gastroenterology, rheumatology, psychiatry, and anesthesia.

The positions require judgment, ability to plan and organize work, effectiveness in writing, speaking, and interpersonal skills. The positions provide security, good salary, comprehensive fringe benefits, ongoing contacts with professional colleagues, and provision for maintaining clinical expertise. Must be U.S. citizens. Eligibility based on Civil Service regulations. Salary approximately \$33,126 to \$37,800 a year. Equal Opportunity Employer. Send résumé to: FDA Personnel (Frank Mischou), Room 4B-44, 5600 Fishers Lane, Rockville, Maryland 20852.

The **DEPARTMENT OF PHYSICS** of Rensselaer Polytechnic Institute anticipates adding three regular **faculty members** to its staff in time for the fall 1976 semester. Applications are invited from candidates who are able to carry out independent research and teach physics courses at both the undergraduate and graduate levels. Preference will be given to candidates with research interests in the fields of experimental musculoskeletal biophysics, experimental metal physics, and observational astrophysics. Applicants should send résumés and names of three references to:

Professor Philip A. Casabella Chairman, Department of Physics Rensselaer Polytechnic Institute Troy, New York 12181

Rensselaer Polytechnic Institute is an Equal Opportunity Employer.

POSTDOCTORAL POSITIONS

Opportunities for research training in the biochemistry and molecular biology of the cardiovascular system including coagulation muscle metabolism, lipid transport, and adaptation to malnutrition; effective date 1 July 1976 with NIH stipends. Ph.D. or M.D. applicants send résumé with three references to:

Dr. Robert E. Olson St. Louis University School of Medicine Department of Biochemistry 1402 South Grand Boulevard St. Louis, Missouri 63104 POSITIONS OPEN

PHARMACOLOGIST

A challenging opportunity to be involved in Central Nervous System pharmacology exists in R & D. Responsible for primary and secondary evaluation of novel compounds, developing new research models, and performing research on psychoactive drugs.

We require a Ph.D. in pharmacology or related discipline plus a minimum of 1 year postdoctoral research in CNS pharmacology. Must have strong interest and experience in the development of new drugs for psychotic and affective disorders. Please send résumé in confidence to Mr. C. J. Elder.

SMITH KLINE & FRENCH LABS

A Division of SmithKline Corp. P.O. Box 7929 1520 Spring Garden St. Philadelphia, Pa. 19101

Equal Opportunity Employer M/F

POSTDOCTORAL POSITION: Available immediately. Work on isolation, characterization of enzymes involved in insect molting. Salary \$11,000, higher to exceptional applicant.

Dr. M. L. Bade Department of Biology Boston College Chestnut Hill, Mass. 02167

POSTDOCTORAL POSITION. Research cytogeneticist or somatic cell geneticist interested in genetic parameters of aging utilizing diploid cell model. Available immediately. Send résumé including research experience to: Dr. Warren W. Nichols, Institute for Medical Research, Copewood Street, Camden, N.J. 08103. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION immediately available for immunologist or biochemist, interested in cellular immunology, to work on the genetic control of the immune response to defined antigens. Send curriculum vitae and references to Dr. Julia M. Phillips-Quagliata, Department of Pathology, New York University Medical Center, 550 First Avenue, New York, N.Y. 10016. An Affirmative Action/Equal Opportunity Employer.

POSTDOCTORAL POSITION available 1 June 1976 for structural characterization and modification of a biotin-binding glycoprotein leading to in vivo studies of biotin transport. Strong background in glycoprotein techniques is essential and animal handling experience is preferred. Salary \$10,000 per year. Position renewable. Send curriculum vitae and three letters of recommendation by 16 April to Dr. Harold B. White, Department of Chemistry, University of Delaware, Newark, Delaware 19711.

POSTDOCTORAL POSITION—CELLULAR IM-MUNOLOGY. To study immune regulation in vitro. Experience with cell culture and cell separation techniques preferred. Familiarity with basic tumor immunology desirable but not essential. Start 1 June 1976. Send résumé and names of references to: Dr. M. B. Rittenberg, Department of Microbiology and Immunology. University of Oregon Health Sciences Center, Portland, Oregon 97201. An Equal Opportunity/Affirmative Action Employer.

POSITIONS OPEN

PHYSIOLOGISTS with a Ph.D. and/or M.D. and postdoctoral training are invited to apply for the position of assistant, or possibly associate, professor of physiology in the Faculty of Medicine, Memorial University of Newfoundland. The duties include contributing to the teaching of physiology in an integrated medical curriculum as well as some physiology teaching to nursing and science students. The successful candidate should preferably have a strong background in cardiovascular/respiratory and/or renal/body fluids physiology and will be expected to develop a research program. The Faculty of Medicine is presently expanding its facilities in a new Health Science Center which is a part of the Memorial University Campus. The salary will be commensurate with experience

The salary will be commensurate with experience and qualifications and the position will be available from 1 September 1976 or by negotiation.

Applications, including curriculum vitae and the names and addresses of three references, should be sent to: Dr. C. R. Triggle, Chairman, Physiology Search Committee, Faculty of Medicine, Memorial University, St. John's, Newfoundland, Canada A1C

The application deadline is 15 April 1976.

PLANT PHYSIOLOGIST

Rockwell International, Atomics International Division, is looking for a plant physiologist for the Rocky Flats Plant located near Boulder, Colorado. The candidate should have an advanced degree in botany and 5 to 8 years of experience in plant uptake of heavy metals and/or radioactive materials. Duties will include the design of a fundamental research program to investigate the uptake of plutonium and americium by terrestrial and aquatic plants. Candidate will attempt to determine the mechanism of uptake of plutonium and americium and its relation to the physical and chemical form of these elements in the soil and study the behavior, distribution, chemical, and physical forms of these elements when introduced into plant systems. By virtue of our operating contract with the Energy Research and Development Administration, we can consider only U.S. citizens. Interested parties should send résumé and salary history in confidence to:



POSTDOCTORAL RESEARCH ASSO-

CIATES for calcium transport studies with strong background in protein biochemistry. Send letters of application including names of references to **Dr**. **Felix Bronner, Department of Oral Biol**ogy, University of Connecticut Health Center, Farmington, Connecticut 06032. An Equal Opportunity and Affirmative Action Employer.

PROFESSIONAL ASSISTANT

I require a professional assistant with a Ph.D. and research interest in biochemistry. A background in the biochemistry of membranes will be helpful. My smooth muscle research is funded by a grant from the Medical Research Council of Canada, and salary is therefore set according to MRC guidelines. Candidate should request letters from two referees. A decision will be reached as soon as possible after 1 April 1976, and the position will then be immediately available. Address applications and letters of reference to: E. E. Daniel, Ph.D., Professor of Neurosciences, McMaster University Medical Centre, Hamilton, Ontario, Canada L8S 4J9.



Open to both men and women

Department of the Environment Marine Ecology Branch, Bedford Institute Dartmouth, Nova Scotia

Public Service

Canada Dublique

MARINE PHYTOPLANKTON ECOLOGIST

Salary up to \$29,740

Ref. No: 76-STP-32B-35 (Sc)

Duties

Required to conduct research on physiological ecology of phytoplankton, using both natural populations and experimental populations in batch and steady state cultures. The research will be compatible with the laboratory's ongoing studies of the structure and function of the marine plankton community, in which a mathematical interpretation of results is emphasized.

Qualifications

Ph.D. or a lesser degree with evidence of research experience and productivity equivalent to that of the Ph.D. in field and lab studies of physiological ecology of aquatic micro-organisms. Proven excellence in mathematical representation of ecology dynamics, or in steady-state culture of aquatic micro-organisms, or in isolation of phytosynthetic pigments as predictors of primary production, with demonstrated evidence of ability to make substantial contribution to this research field. Knowledge of English is essential.

How to Apply

Forward completed "Application for Employment" (Form PSC 367-4110) available at Post Offices, Canada Manpower Centres or offices of the Public Service Commission of Canada, to:

Sciences and Technology Program Public Service Commission of Canada Esplanade Laurier

300 Laurier Avenue

Ottawa, Ontario K1A OM7 Canada

Closing Date: April 23, 1976

Please quote the applicable reference number at all times.

MEDICAL OFFICER (PULMONARY)

Salary: \$29,782 to \$37,800 per annum (dependent on qualifications)

The Division of Lung Diseases, National Heart and Lung Institute seeks a person with a medical degree and with technical experience in lung diseases and treatment.

The selected candidate will assume responsibilities concerned with directing the programs involving clinical lung research within the Special Programs and Resources Branch of the Division. These responsibilities include program planning and development, and scientific direction, evaluation, and assessment of activities related to the diagnosis, treatment, and rehabilitation of lung diseases. In addition, the candidate would serve as an "in-house" physician/ consultant for all programs of the Division requiring clinical expertise.

This is an opportunity for a professional person specializing in the pulmonary field to make a meaningful contribution to the National Lung Programs and particularly to the clinical aspects of these programs for which the National Heart and Lung Institute has leadership responsibility.

Please send your resume no later than April 15, 1976 to: Ms. Peggy Sands, Personnel Management Specialist, NHLI; National Institutes of Health; Public Health Service; Building 31, Room 5A-32; Bethesda, Maryland 20014 (a suburb of Washington, D.C.)

An Equal Opportunity Employer

AAAS Memberships and Subscriptions

- Whenever you write us about your membership or subscription, please attach a **Science** address label to assure prompt service.
- Mail to: Membership and Subscription Records, AAAS, 1515 Massachusetts Ave., NW, Washington, D.C. 20005.
- □ Change of Address: Please provide 6 weeks' notice. Paste an address label from a recent issue in the space provided. Print new address below.
- **Query:** If you have a question, place your address label here and attach this form to your letter.
- To join or subscribe: Mail this form with your payment, mark the appropriate boxes, and print your name and address in the space below. (For renewals, attach label.)
- □ Membership rates (individual only)
 □ \$25 USA □ \$31 Canada, PUAS □ \$32 Foreign
 □ \$55 Airlift to Europe, North Africa, Near East
- □ Subscriber rates □ \$50 USA □ \$57 Canada, PUAS □ \$58 Foreign □ \$80 Airlift to Europe, North Africa, Near East

State

Zip

Payment enclosed
Bill me later

Name	Please print
Address	

City

MR03

ATTACH

LABEL

HERE

MUCOSAL METABOLISM

An experienced investigator with knowledge of in-An experienced investigator with knowledge of in-testinal physiology is needed for a multidisciplinary program concerned with the endogenous formation of carcinogens in humans. The successful applicant must be capable of preparing intestinal epithelial cells for short-term metabolism studies and devel-oping an in vitro system using intestinal mucosa to predict the carcinogenic potential of various endoge-nous exhertates nous substrates. Qualified Ph.D. should send a curriculum vitae,

complete bibliography, and three references to:

Minister biolography, and three biological of the second s

Frederick, Maryland 21701 An Equal Opportunity Employer, M/F

PULMONARY PHYSIOLOGY RESEARCH/TRAINING

Research and graduate teaching position available in field of mammalian pulmonary physiology as adjunct professorship of appropriate rank in the University of California, Irvine. Collaborative research con-ducting physiologic studies in animals exposed to airof California, Irvine, Collaborator rescale to air-borne materials of environmental/occupational inter-est. Requires Ph.D. in physiology or related field and 2 years of postdoctoral research, preferably with pul-monary measurements in laboratory animals. Prefer-ence given to applicants experienced in inhalation toxicology and published independent work. Research site at Toxic Hazards Research Unit, Wright-Patter-son Air Force Base, Dayton, Ohio; opportunity to participate in training of graduate students of Univer-sity of California, Irvine, and other campuses. Clos-ing date for application is 1 June 1976. Applications from all qualified candidates are welcome; minor-ities and women are encouraged to apply. Submit complete curriculum vitae and names of at least three references to: Dr. J. D. MacEwen, University of California, Irvine, Toxic Hazards Research Unit, Overlook Branch, P.O. Box 3067, Dayton, Ohio 45431. 45431.

DEPARTMENT OF RADIOLOGICAL SCIENCES UNIVERSITY OF CALIFORNIA COLLEGE OF MEDICINE, IRVINE

The Department of Radiological Sciences at the Uni-The Department of Radiological Sciences at the Uni-versity of California, Irvine, invites applications for a position in nuclear medicine as assistant or asso-ciate professor-in-residence. Applicants must be suitably trained and experienced in the use of radio-nuclides with demonstrated evidence of clinical and academic ability. Duties will include interpretation of the clinical nuclear medicine studies and teaching at arguitate and undergraduate levels. Applicants at graduate and undergraduate levels. Applicants will also be expected to develop their own research protocols.

The successful candidate will be based at the Veter-The successful candidate will be based at the Veter-ans Administration Hospital, Long Beach, Califor-nia (Chief of Nuclear Medicine, Dr. Kenneth P. Lyons), and will be appointed to the Faculty of the University of California College of Medicine, Irvine. Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.

If you are interested in this position, please write to the address below including a curriculum vitae, an autobiographical letter, and copies of any publications.

Closing date: 15 April 1976.

Eric N. C. Milne, M.B., Ch.B., F.F.R. Professor and Chairman Department of Radiological Sciences University of California, Irvine College of Medicine Irvine, California 92717

SCIENTIFIC GLASSBLOWER. The Chemistry De-SCIENTIFIC GLASSBLOWER. The Chemistry De-partment, University of Wisconsin-Madison, is seeking an experienced master glassblower to super-vise the glass shop and to design, construct, and re-pair appropriate innovative research apparatus in consultation with the research staff. The University of Wisconsin is an Affirmative Action/Equal Oppor-tunity Employer and welcomes applications from women and minority candidates. Send résumé, names of three references, and salary requirements to Don Gaines, Room 7315, Chemistry Department, 1101 University Avenue, Madison, Wisconsin 53706.

POSITIONS OPEN

RESEARCH ASSOCIATE/CELLULAR IMMUNOL-RESEARCH ASSOCIATE/CELLULAR IMMUNOL-OGY. Applications are invited for a postdoctoral po-sition available immediately in cellular immunology. Areas of investigation include (i) alloimmune react-ivity in transplant recipients, (ii) suppressor cell function in transplant and cancer patients, (iii) lym-phocyte migratory patterns in humans, and (iv) chemical modification of cell surface antigens. Sala-ry dependent upon previous experience. Submit ré-sumé, statement of research interests, copies of pub-lications, and three letters of reference to Dr. Rolf F. Barth, Department of Pathology and Oncology, Uni-versity of Kansas Medical Center, Kansas City, Kan-sas 66103.

RESEARCH ASSOCIATE POSITION available immediately for recent Ph.D. interested in biochemical toxicology. Studies will center on the role of glutathione transferases in the metabolism and toxicity of pesticides in mammals. Send curriculum vitae and two letters of recommendation to:

Dr. R. M. Hollingworth Department of Entomology Purdue University West Lafayette, Indiana 47907

Purdue University is an Equal Access/Equal Opportunity Employer.

RESEARCH SCIENTIST, in the field of transport physiology and biochemistry to perform indepen-dent research in the kinetics of mineral transport across the placenta with the objective of developing across the placenta with the objective of developing biomodels. Requires collaboration with investiga-tors in related ongoing programs. Research experi-ence in biochemistry and physiology of nutrient transport required. Familiarity with biomodeling de-sirable. Salary commensurate with qualifications. Send curriculum vitae and the names of three refer-ences to: J. W. Brown, Administrative Assistant, Comparative Animal Research Laboratory, 1299 Bethel Valley Road, Oak Ridge, Tennessee 37830. An Eaual Opportunity Employer. Equal Opportunity Employer

VETERINARIAN

Large N.J. educational institution has opening for a laboratory animal veterinarian; should have a mini mum of 1 year of clinical supervisory experience in mum of 1 year of clinical supervisory experence in medicine and surgery plus administrative ability. A degree in veterinary medicine from an accredited veterinary school and Board eligibility or Diplomat status in laboratory animal medicine is desirable. The successful candidate must maintain animal care standards for research and teaching programs and visit and evaluate all animal care centers. Acts

and visit and evaluate an animal care centers. Acts as a liaison between municipal, state, and federal agencies in matters of laboratory animal welfare. Excellent benefits include free hospitalization, life insurance, liberal vacation and sick leave, and tui-tion benefits.

Minimum salary for this position is \$20,030. Qualified candidates send résumés and salary re-quirements to **Box 143, SCIENCE.** An Equal Opportunity/Affirmative Action Employer

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIPS. Two positions POSTDOCTORAL FELLOWSHIPS. Two positions available immediately. Must have experience with endogenous viruses (preferably murine) and related virologic techniques including XC test, RT assay nu-cleic acid hybridization, and so forth. To work with established team of tumor immunologists in the area of involvement of endogenous viruses with lymph-oid cell subpopulations. Stipend, \$13,500 per year. Deadline for applications: postmark 1 April 1976. Please send résumé and three references to: Dr. Anne D. Barker, Battelle Columbus Laboratories, 505 King Avenue, Columbus, Ohio 433201. An Equal Opportunity Employer

POSTDOCTORAL FELLOWSHIPS are available FOSTDOCTORAL FELLOWSHIPS are available for research at all levels of the visual process from insect visual systems to human vision. Emphasis is placed on analysis of biologi cal systems by appli-cation of the techniques of nonlinear analysis, con-trol and communication theory, and computer data processing. Applicants should have experience in these areas. Curriculum vitae should be sent to: Dr. G. D. McCann or Dr. D. H. Fender, Mail Code 286-80, California Institute of Technology, Pasadena, Cal-f. 91125. starting immediately. *Equal Opportunity*/ **if. 91125**, starting immediately. Equal Opportunity/ Affirmative Action Employer.

FELLOWSHIPS

POSTDOCTORAL FELLOWSHIP in molecular **POSTDOCTORAL FELLOWSHIP** in molecular biology of the eye at the Jules Stein Eye Institute, University of California at Los Angeles. Appli-cations are invited from U.S. citizens and permanent residents, with Ph.D. degree in biochemistry or mo-lecular biology, for a 2-year fellowship. Areas of re-search interest are: cell surface receptors, trans-cellular transport, and developmental biology of the eye Send résumé and curriculum vites with three eye. Send résumé and curriculum vitae with three letters of reference to Dr. Joram Heller, Jules Stein Eye Institute, University of California School of Medi-cine, Los Angeles, Calif. 90024. An Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL FELLOWSHIPS IN VIRAL ONCOLOGY AND RELATED DISCIPLINES

A number of postdoctoral fellowships are avail-A number of postdoctoral fellowships are avail-able for research in the fields of viral oncology and related disciplines in several departments at the Uni-versity of Wisconsin–Madison, including the depart-ments of Bacteriology, Biochemistry, Biophysics, Genetics, Human Oncology, Medical Microbiology, Oncology, Pharmacology, and Physiological Chem-istry. These National Research Service Fellowships pay \$10,000 to \$14,000 per year depending on experi-ence.

ence. The training program is under the direction of Howard M. Temin, with Paul Kaesberg* as co-direc-tor. Other trainers include: Fred Blattner*, Ernest for other traners include: Fred Blatther', Erlest Borden*, Richard Burgess, James Dahlberg*, Julian Davies*, Harry Hinze*, Martha Howe*, Ross In-man*, Lawrence Kahan*, William McClain*, Janet Mertz, Masayasu Nomura*, June Osborn*, William Reznikoff, Rex Risser, Roland Rueckert, Bill Sug-den, Waclaw Szybalski*, Duard Walker*, and Rob-ert Wells* den, Wacl ert Wells*

Training consists of research experience in the lab-oratory of one trainer, as determined by available openings (*indicates opening for 1976–77), and regular contact with the entire group at twice-weekly seminars.

Postdoctoral candidates who are U.S. citizens or permanent residents are invited to send a complete curriculum vitae with detailed research experience, background, field of interest, and date available to:

Mrs. Helen Iverson Mrs. Helen Iverson McArdle Laboratory for Cancer Research University of Wisconsin 450 North Randall Avenue Madison, Wisconsin 53706

The University of Wisconsin is an Equal Opportu-nity/Affirmative Action Employer and does not dis-criminate on the basis of sex or race with regard to either admissions or employment in the education programs or activities which it operates.

ANNOUNCEMENTS

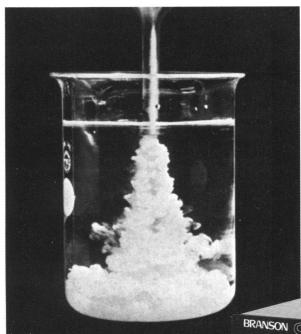
The 34th Annual Meeting of the Electron Microsco-py Society of America will be held 9 to 13 August 1976 at the Fontainebleau Hotel in Miami Beach, Fla. This will be a joint meeting with the companion society, Microbeam Analysis Society. Tutorial ses-sions will be held on Monday, 9 August. The pro-gram will be mostly related to biomedical appli-cations of electron microscopy. Symposia on male reproductive systems, central nervous system trans-mitter, and quantitative analysis are being planned. A joint symposium sponsored by both the Electron Microscopy Society will deal with x-ray energy dis-persive analysis. Sessions of contributed papers will cover a large variety of topics, from pathology to cell surface and viruses. Abstracts should be submitted The 34th Annual Meeting of the Electron Microscosurface and viruses. Abstracts should be submitted before 1 April to the **Program Chairman**, **Dr. R. D. Yates**, **Department of Anatomy**, **Tulane University School of Medicine**, **New Orleans**, **La. 70112**. The spe-cial forms for presentation of the abstract can be ob-tained from Dr. Yates' office.

COURSES

SCANNING AND TRANSMISSION ELECTRON MICROSCOPY. Classes are designed to introduce participants to theoretical and practical aspects of electron microscopy. Emphasis will be on specimen preparation, operation of electron microscopes, and photographic techniques. Tuition: \$450 for TEM, 31 May to 11 June (2 weeks); \$375 for SEM, 14 to 18 June and 21 to 25 June (1 week each); \$750 for com-bined program, 31 May to 18 June. Write or phone Fred Lightfoot, Department of Anatomy, George Washington University, 2300 Eye Street, NW, Wash-ington, D.C. 20037. Telephone: 202-676-2881 or 3511.

A multipurpose ultrasonic activator for every laboratory

BRANSON SONIFIER® cell disruptor



- DISRUPT cells, bacteria, viruses, spores and tissue.
- EXTRACT compounds from animal and botanical tissues.
- EMULSIFY immiscible liquids.
- POLYMERIZE some materials and depolymerize others.
- DISAGGREGATE shale and fine grained sedimentary rock.
- SEPARATE micro fossils such as pollen.

CELL DISRUPTOR 200

The Branson SONIFIER[®] product

line consists of three versatile cell disruptors for ultrasonic disintegration and homogenization: Model 350, 200 and 185. Each unit can be adjusted for either high or low intensity ultrasonic energy, and includes the following features:

- ADJUSTABLE POWER OUTPUT Controls the intensity of ultrasonic vibrations transmitted into a solution, permitting the disruption of one compound, while leaving others, slightly more resistant, intact.
- TIMER and OUTPUT METER Permit processing time and loading conditions to be recorded and repeated.
- PULSER MODE Enables a solution to be processed on a pulsed basis to maintain constant temperature levels (available with the Model 350 and 200 only).
- SOLID STATE CIRCUITRY For instant power with no warm-up time.

 FANLESS CONVERTER – Eliminates vibrations and air turbulence around the material being processed reducing the possibility of cross contamination.

3

 ONE YEAR WARRANTY – available with each unit and a five year warranty on SONOMAX® Circuitry.

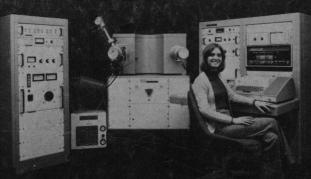
A complete line of accessories includes micro tips, cooling cells, tissue disintegrators, sealed chambers, continuous flow horns and sound enclosures.

The BRANSON SONIFIER® Product Line is available from Branson Sonic Power Company through Branson Sales Representatives worldwide. For further information, including a complete list of applications, contact your nearest SONIFIER sales representative or: Fred Vitale, Branson Sonic Power Company, Eagle Road, Danbury, Ct 06810 Ph: (203) 744-0760. Telex 969640



division of Branson Ultrasonics Corporation

See us at: American Chemical Society, New York City (April 4-9); Federation of American Societies for Experimental Biology, Anaheim, CA (April 12-15); American Society of Microbiology, Atlantic City, N.J. (May 5-7); Bio-Chem '76, San Francisco, CA (June 7-10).



The GCA ESCA 36. In just four years it's gone from the best to the best.

Four years ago we introduced the best, most advanced ESCA on the market. Today the GCA/McPherson ESCA 36 is still the best. And still the most advanced.

Naturally we've made changes. Important options have been added. And we've expanded ESCA technique through meaningful improvements like X-EL high resolution.

But the basic design remains the

same. (Has Rolls Royce ever changed for the sake of change?)

And our list of standard features is the envy of the industry. The ESCA 36, for example, is

The ESCA 36, for example automated, which allows the system to perform unattended long term analysis. In fact, it's the only fully computerized system available

It's also capable of performing analyses on solids, liquids and gases. And its 3500 L/sec cryopump provides the ultimate in vacuum for contaminant-free surface analysis.

Other features abound, of course. But one stands out from the rest. And technically it's not even a feature. Throughout its four year life, our users have discovered – to their joy and ours – that the ESCA36 is virtually maintenance free. And that, we submit, is the frosting on a remarkably delicious cake.

For more information on this highly versatile system, call or write GCA/McPherson Instrument.

GCA/McPHERSON INSTRUMENT 530 Main Street, Acton, Massachusetts 01720, (617) 263-7733, TELEX: 928435, ANS: GCAMcPHER ACTO Circle No. 372 on Readers' Service Card