Practical Methods in Electron Microscopy. Vol. 3. Audrey M. Glauert, Ed. North-Holland, Amsterdam, and Elsevier, New York, 1974. xvi, 354 pp., illus. \$34.75.

Principles of Plant Infection. J. E. Van der Plank. Academic Press, New York, 1975. xiv, 216 pp., illus. \$16.

Problems for General Chemistry and Qualitative Analysis. C. J. Nyman and G. B. King. Wiley, New York, ed. 3, 1975. x, 348 pp., illus. Paper, \$5.50.

Proceedings of the 1974 CERN School of Computing. Godøysund, Norway, Aug. 1974. CERN, Geneva, 1974. viii, 438 pp., illus. Paper. CERN 74-23.

Progress in Polymer Science, Japan. Vol. 7. T. Otsu and M. Takayanagi, Eds. Kodansha, Tokyo, and Halsted (Wiley), New York, 1974. x, 380 pp., illus. \$29.95.

Psychology. A New Perspective. Dalmas A. Taylor and Sidney A. Manning. Winthrop. Cambridge, Mass., 1975. xvi, 400 pp., illus. Paper, \$7.95.

The Psychology of Fire. Donald Scott. Scribner, New York, 1975. x, 148 pp. \$7.95.

Psychometrics of Similarity. Robert A. M. Gregson. Academic Press, New York, 1975. x, 262 pp. \$21.50.

Pyridine and Its Derivatives. Supplement. Part 4. R. A. Abramovitch, Ed. Interscience (Wiley), New York, 1975. xvi, 720 pp., illus. \$65. The Chemistry of Heterocyclic Compounds, vol. 14.

Quantum Chemistry. Ira N. Levine. Allyn and Bacon, Boston, ed. 2, 1974. xiv, 506 pp., illus. \$18.95. The Allyn and Bacon Chemistry Series.

Readings in Behavior. William Van der Kloot, Charles Walcott, and Benjamin Dane, Eds. Holt, Rinehart and Winston, New York, 1974. xii, 796 pp., illus. Paper, \$10.95.

Symmetry and Strain-Induced Effects in Semiconductors. G. L. Bir and G. E. Pikus. Translated from the Russian edition (Moscow, 1972) by P. Shelnitz. D. Louvish, Transl. Ed. Halsted (Wiley), New York, and Israel Program for Scientific Translations, Jerusalem, 1974. x, 484 pp., illus. \$55.

Synthesis of Planar Antenna Sources. Donald R. Rhodes. Clarendon (Oxford University Press), New York, 1975. xii, 210 pp., illus. \$27.25. The Oxford Engineering Science Series.

Systemic Dissections of Vertebrates. A Laboratory Guide. George C. Kent. Mosby, St. Louis, 1975. x, 188 pp., illus. Paper, \$5.50.

Techniques of Anaesthesia. With Management of the Patient and Intensive Care. J. A. Thornton and C. J. Levy with special chapters by H. G. Schroeder, D. S. Robertson, and W. N. C. McCleery. Chapman and Hall, London, and Halsted (Wiley), New York, 1975. x, 482 pp. \$22.50.

Techniques of Biochemical and Biophysical Morphology. Vol. 2. David Glick and Robert M. Rosenbaum, Eds. Wiley-Interscience, New York, 1975. xii, 536 pp., illus. \$24.95.

Thailand. Its People, Its Society, Its 16 MAY 1975 Culture. Frank J. Moore with chapters by Clark D. Neher. HRAF Press, New Haven, Conn., 1974. xxii, 608 pp. \$18.50. Survey of World Cultures, 15.

The Theory of Polarization Phenomena. B. A. Robson. Clarendon (Oxford University Press), New York, 1975. viii, 120 pp., illus. \$17.75. Oxford Studies in Physics.

The Vanishing Lichens. Their History, Biology and Importance. D. H. S. Richardson. David and Charles, Newton Abbot, England, 1975. 232 pp., illus. £5.25.

Variability of Mammals. A. V. Yablokov. Translated from the Russian edition (Moscow, 1966). L. Van Valen, Transl. Ed. Published for the Smithsonian Institution and the National Science Foundation by Amerind, New Delhi, 1974 (available as TT-58007 from the National Technical Information Service, Springfield, Va.). xvi, 350 pp., illus. \$10.

Voiceprinting. How the Law Can Read the Voice of Crime. Eugene B. Black. McKay, New York, 1975. xii, 244 pp. \$8.95.

Whitetail Deer. A Year's Cycle. Curtis K. Stadtfeld. Dial, New York, 1975. x, 164 pp., illus. \$7.95.

The Wild Flowers of Britain and Northern Europe. Richard Fitter and Alastair Fitter. Illustrated by Marjorie Blamey. Scribner, New York, 1975. 336 pp. \$10.



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Faculty opening for pathologist with interest in re-search, teaching, and/or service. Rank and salary commensurate with experience. Send curriculum vitae to:

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Applications from women and members of minority groups are encouraged.

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Ph.D. in Anatomy needed to teach medical, graduate, and some undergraduate students, primary respon-sibility will be to assist in medical gross anatomy and neuroanatomy. Collaborative or independent research neuroanatomy. Collaborative or independent research is strongly encouraged. Must be available by 1 August 1975. If interested, send curriculum vitae, research in-terests, list of publications, and names of at least three references before 1 June 1975 to: Chairman, Search Committee, Anatomy Department, The University of South Dakota, Vermillion, South Dakota 57069. Equal Opportunity Employer/Affirmative Action Employer. All Interested Persons are Encouraged to Apply

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Applications are invited for a faculty position avail-able on 1 July 1975 at the assistant professor level in the Section of Cell Biology of the Yale University Medical School.

Medical School. The applicants should have a general interest in cell biology and research experience in membrane biology, including cell fractionation procedures, purification of membranes fractions, and isolation and character-ization of their components. Experience in protein chemistry is desirable. Research facilities are available for either independent or collaborative research in cel-ular membrane interactione: lular membranes interactions.

The teaching responsibilities of the position include participation in courses and seminars for medical and graduate students. An M.D. or Ph.D. title is required. The applicants should send a curriculum vitae, a list for bilities the sender of the second second

of publications, the names of three potential references, and a brief statement concerning research interests to:

Dr. George E. Palade Section of Cell Biology Yale University School of Medicine 333 Cedar Street New Haven, Conn. 06510

ASSISTANT PROFESSOR IN CELL BIOLOGY

Applications are invited for a faculty position at the level of assistant professor available 1 July 1975. Re-spondents should have a general interest in the area of cell and membrane biology and experience in protein chemistry. Previous laboratory experience in ligand-re-centor, increasing including immunocytochemistry. ceptor interactions, including immunocytochemistry and affinity labeling of hormone receptors, is desirable. Teaching responsibilities will include participation in

courses for medical and graduate students. Doctorate required with promise for developing independent and collaborative research within a group interested in the regulation of secretory processes in mammalian cells. Send résumé, list of publications, names of three ref-

Send résumé, list of publications, names of three erences, and a short statement of research goals to: Dr. George E. Palade Section of Cell Biology Yale University School of Medicine 333 Cedar Street New Haven, Conn. 06510

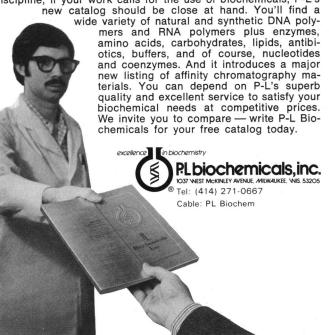
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Temporary faculty position in the Division of Biol-ogy, State University of New York, Buffalo, New York. The position is at the Assistant Professor level for one semester beginning September 1975. Responsi-bilities include developing a new course in Evolutionary Biology and an upper-division course in area of special-ization. (Individuals with strong backgrounds in nu-merical taxonomy population genetics or history of

ization. (Individuals with strong backgrounds in nu-merical taxonomy, population genetics, or history of biology are encouraged to apply.) A Ph.D. is required. Application, supported by curriculum vitae and let-ters from at least three references, must be mailed to arrive not later than 30 May 1975 to: Dr. Philip G. Miles, Director, Division of Biology, State University of New York at Buffalo, Buffalo, New York 14214. The State University of New York at Buffalo is an Equal Opportunity and Affirmative Action Employer.

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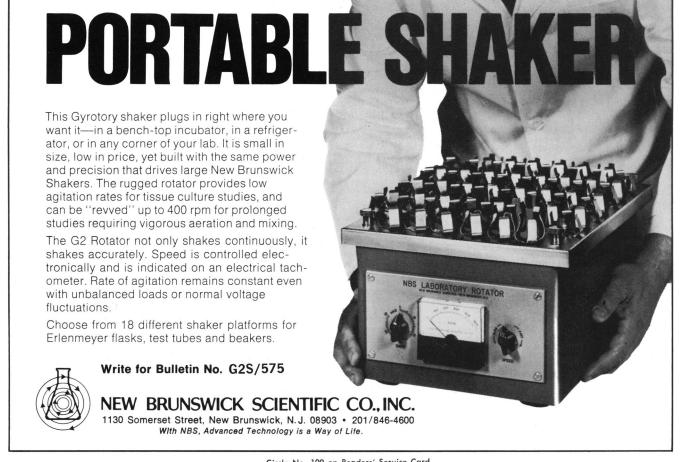
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ASSISTANT PROFESSOR OF ENTOMOLOGY to conduct teaching and research on mechanisms of plant resistance to insects. Candidate must have Ph.D., preferably in Entomology, with background in genetics, in-sect physiology, nutrition, behavior, or biochemistry. Submit curriculum vitae, transcripts, thesis summary, Submit curriculum viac, transcripts, tiesis summary, copies of reprints, and names of three referees to Dr. Charles Judson, Chairman of Search Committee, Department of Entomology, University of California, Davis, California, 95616, by 1 July 1975. An Equal Opportunity and Affirmative Action Employer.

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Send curriculum vitae, bibliography, and three let-ters of reference along with first inquiry to: Marshall J. Orloff, M.D., Chairman, Department of Surgery, University Hospital, 225 W. Dickinson Street, San Diego, California 92103. An Equal Opportunity/Affirmative Action Employer.

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> Department of Biology Central Michigan University Mt. Pleasant, Michigan 48859

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Plans are being made for the establishment in the next few years of a new institute for fundamental re-search in the biomedical sciences in Iran. The senior professional staff members will carry out research pro-grams of their own choosing. They will be responsible for training junior postdoctoral colleagues in the insti-tute, but will not have routine teaching responsibilities for undergraduate or medical students.

Openings may be available for senior and junior pro-fessional staff members and for postdoctoral appoint-ments. Candidates with the Ph.D. and/or M.D. degree and with experience in research are invited to apply as soon as possible. Please forward curriculum vitae and list of publications, and describe areas of research in-

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CHIEF OF PATHOLOGY/ RESEARCH PATHOLOGIST OCCUPATIONAL RESPIRATORY DISEASES

The National Institute for Occupational Safety and The National Institute for Occupational Safety and Health (NIOSH) (Center for Disease Control, U.S. Public Health Service), is seeking a pathologist inter-ested in cardio-pulmonary research to serve as Chief of Pathology or as Pathologist at the Appalachian Labo-ratory for Occupational Respiratory Diseases (AL-FORD) in Morgantown, West Virginia. Responsi-bilities will include: (i) analysis of the data collected through the National Coal Workers' Autopsy Study; (ii) clinical-radiological-pathological correlations in occupational disease; and (iii) basic research in occupa-tional respiratory diseases in a uniquely equipmed faciltional respiratory diseases and (fit) date research in occupa-tional respiratory diseases in a uniquely equipped facil-ity including high-resolution radiography, x-ray fluo-rescence, seanning electron microscopy, microprobe analysis, transmission electron microscopy, and com-puter-aided image analysis. Affiliation with adjacent West Virginia University Medical School affords op-portunity for teaching of medical students and house portunity for teaching of medical students and house staff.

Candidate must be a medical doctor well trained (preferably Board eligible or Board certified) in ana-tomic pathology, with demonstrated excellence as an investigator in at least some of the areas described above. Experience or demonstrated interest in occupational or environmental medicine and epidemiology are desired.

Positions are in the Career Civil Service or the Pub-Ic Health Service Commissioned Corps. Salary range is \$20,000 to \$40,000, depending on qualifications, ex-perience, and personnel system. Liberal fringe benefits apply. Interested candidates should send inquiries, curricu-

Innovitae, and references (within 30 days) to: Pathology Section, ALFORD, P.O. Box 4292, Morgantown, West Virginia 26505. An Equal Opportunity Employer.

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BIOSYSTEMATIST

Position for recent Ph.D. to conduct research on biology and systematics of parasitic *Hymenoptera*, espe-cially *Chalcidoidea*. Some teaching. Appointment will be at the level of Assistant Entomologist and Assistant be at the level of Assistant Entomologist and Assistant Professor of Biological Control. Further information will be sent upon request. Send completed résumé, in-cluding names of referees, to: I. M. Newell, Head, Divi-sion of Biological Control, University of California, Riv-erside, California 92502. The University of California is an Equal Opportunity/Affirmative Action Em-nlower ployer.

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> J. M. Judisch, M.D. 219 Bryant St. Buffalo, N.Y. 14222

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CROP PHYSIOLOGIST. Applications are invited for an Assistant Professor for research and teaching in areas related to plant sciences. Applicants are expected to have a strong background in quantitative physiology of whole plant processes and morphological attributes which control crop productivity. Applicants should ad-dress curriculum vitae, a complete bibliography, and three letters of recommendation to: Dr. D. W. Rains, Chairmon of Search Committee Department of Aeron-Chairman of Search Committee, Department of Agron-omy and Range Science, University of California, Davis, California 95616. Closing Date: 15 July 1975; applications received af-ter that date may not be assured consideration.

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UNIVERSITY OF CALIFORNIA, IRVINE INSTITUTE OF TRANSPORTATION AND TRAFFIC ENGINEERING

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Campus. The ITTE is an Organized Research Unit of the University of California. Research at the Irvine Branch will be multidisciplinary in nature with emphasis on transportation systems, planning, and policy-making. Candidates should have substantial experience in transportation-related areas including demonstrated ex-cellence in research and teaching as well as administra-tive experience. Research field should preferably intwe experience. Research held should preferably in-clude more than one phase of transportation. The Di-rector will be appointed as a tenured member of the professorial series. Applications from all qualified can-didates are welcome; minorities and women are en-couraged to apply. Send résumé, lisit of publications, and names of references to Chairman, Search Com-mittee, ITTE, Room 544, Engineering Building, Univer-sity of California, Irvine, California 92664.

FRESH-WATER PHYCOLOGIST. Assistant Profes-FRESH-WATER PHYCOLOGIST. Assistant Profes-sorship for July 1975 requiring competence in mor-phology, taxonomy, and ultrastructure. Duties: Codi-rection of first-semester general biology course, teach-ing morphology and taxonomy of algae with marine phycologist in alternate years, operation and codi-rection of EM facility, and presenting course in cy-tology and ultrastructure. Submit curriculum vitae, transcripts, and three letters of reference to: J. E. Gunckel, Department of Botany, Rutgers University, New Brunswick, NJ. 08903. Equal Opportunity/Affir-mative Action Employer.

DIRECTOR PROGRAM IN SOCIAL ECOLOGY UNIVERSITY OF CALIFORNIA, IRVINE

The Program in Social Ecology, an interdisciplinary program of the University of California, Irvine, is seek-ing as its Director a distinguished scholar with a coming as its Director a distinguished scholar with a com-mitment to research, teaching, community service, and experience in academic administration. The area of specialty of the Director is open, but must reflect the in-terdisciplinary goals of the program. The Director will be appointed as a tenured member of the Professorial

series. The Director's responsibilities include the leadership of a faculty of 25, more than 70 graduate, and 700 un-dergraduate students. Graduates have gone on to ca-reers in teaching, law, public health, and government. The Program seeks to apply insights and techniques drawn from both the social and life sciences to the anal-wis and solution of major social problems. Current faculty include urban planners, criminal justice special-ists, community psychologists, environmental psychologists, lawyers, environmental health experts, and developmental psychologists. The campus, located 40 miles south of Los Angeles, is close to the beach, mountain, and desert recreational

areas

Applications from all qualified candidates are welcome; minorities and women are encouraged to apply.

Please submit curriculum vitae and names of three references as soon as possible to Gilbert Geis, Chair-man, Search Committee, Program in Social Ecology, University of California, Irvine, Irvine, California 92664.

ELECTRONICS ENGINEER

Chemistry Department of Nuclear Research Organization has opportunity for Engineer to manage small technical support group involved in construction and maintenance of nuclear instrumentation, computer in-terfacing equipment, and other sophisticated experi-mental apparatus. Require B.S.E.E. or equivalent and management in during and experision. experience in design and construction of a wide array of electronics instrumentation and monitoring systems. Send résumé and salary history to: Supervisor of Per-sonnel Placement and Development, Brookhaven Na-tional Laboratory, Associated Universities, Inc., Upton, Long Island, N.Y. 11973. An Equal Opportunity Em-ployer M/F.

EXPERIMENTAL PLANT ANATOMIST/CYTOLOGIST/MORPHOLOGIST

The UNIVERSITY OF CALIFORNIA at DAVIS invites applications for the position of Assistant Pro-fessor or Associate Professor and equivalent rank in the Agricultural Experiment Station beginning 1 Sep-

the Agricultural Experiment Station beginning T Sep-tember 1975. Rank and salary are to be based on qualifications and experience of the applicant. Ph.D. required. Expertise in plant anatomy/cy-tology/morphology with some background in physi-ology and biochemistry. Assume responsibility for a or the second se

Applications will not be assured of consideration if received after 31 July 1975. Applicants should send their curriculum vitae, copies of transcripts, and three letters of reference to: Professor Julian C. Crane, Chairman of the Search Committee, Department of Pomology, University of California, Davis, California 95616. The University of California is an Affirmative Action Equal Opportunity Employer and encourages application from members of minority groups and women. vomen

HUMAN ANATOMY AND PHYSIOLOGY

Assistant professor to develop and teach an integrated Australity professor to develop and teach an integrated human biology course for nurses in associate degree program, to teach advanced course(s) in specialty, and to develop research program. Background in micro-biology needed, Ph.D. Send curriculum vitae and refer-ences to Dr. John W. Thieret, Northern Kentucky State College, Highland Heights, Ky. 41076.

IMMUNOLOGIST, Ph.D., OR M.D.

An experienced immunologist with a Ph.D. or M.D. degree actively working on cell-mediated immunity or related areas is needed for a period of at least 3 years, with a good salary, to do research starting anytime in 1975. Send to

Dr. A. Amin Institute for Biological Studies National University of Iran Tehran, Iran

16 MAY 1975

POSITIONS OPEN

BOSTON STATE COLLEGE FULL-TIME FACULTY APPOINTMENT

Biology: Competency in microbiology, anatomy, physiology, general biology.

Appointment for September 1975. Doctorate pre-Appointment for September 1973. Doctorate pre-ferred. Rank and salary commensurate with education and experience. All résumés, curriculum vitae, and ref-erences must be received by 1 June 1975. All appli-cations should be addressed to:

Office of the President Box 7521 Boston State College Boston, Massachusetts 02115

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

MONTANA STATE UNIVERSITY FISHERIES BIOASSAY LABORATORY

Research staff openings on energy-related research for the following: Aquatic Zoologist (Ph.D. or M.S.), Biol-ogy Technician (M.S. or B.S.), Analytical (Organic) Chemist (Ph.D.), Analytical/Water Chemist (Ph.D.), and Chemistry Technician (M.S. or B.S.). When writ-ing, include a statement of specific interests, résumé, list of references, date available, and salary require-ments. Rosemarie C. Russo, Department of Chemistry, Montana State University, Bozeman, Mont. 59715. *MSU is an Equal Opportunity Employer.*

IMMUNOLOGY/MICROBIOLOGY

Permanent faculty position beginning fall 1975 at Assistant Professor level. Ph.D. and postdoctoral re-search and/or teaching experience required. Responsi-bilities include teaching immunology at undergraduate and graduate level, development of research program, and graduate level, development of research program, and teaching in secondary specialty area, preferably virology. Send curriculum vitae, supporting docu-ments, and three letters of reference by 31 May to Dr. Elizabeth Gaudy, School of Biological Sciences, 318 Life Sciences East, Oklahoma State University, Stillwater, Oklahoma 74074. An Equal Opportunity/ Affirmative Action Employer.

POSITIONS OPEN

INSECT PHYSIOLOGIST. Temporary, short term INSECT PHYSIOLOGIST. Temporary, short term position available for period 1 September to 31 Decem-ber 1975. Responsibilities include teaching one upper-division course in insect physiology, guidance of several students; research area open. Ph.D. in entomology, spe-cialty in insect physiology required. Send by 1 June: de-tailed curriculum vitae, transcripts of academic records, bibliography, and three letters of recommen-dation to: Dr. C. S. Koehler, Chairman, Department of Entomology, Oregon State University, Corvallis, Ore-gon 97331. Oregon State University is an Equal Oppor-tunity/Affirmative Action Employer. tunity/Affirmative Action Employer.

INSTITUTE FOR ENERGY ANALYSIS Physical and Social Scientists/Engineers

A number of senior professional staff from the following fields will be appointed: physics, chemistry, geol-ogy, climatology, systems analysis, law, finance, eco-nomics, political science, mathematics, and engineernomics, political science, mathematics, and engineer-ing. The Institute is examining energy problems from social, political, economic, and technological points of view and is providing these analyses to government pol-ïcy-making groups. Apply to Personnel Department, Oak Ridge Associated Universities, Box 117, Oak Ridge, Tennessee 37830. An Equal Opportunity Em-player plover.

OBSERVATORY PROJECT MANAGER

The University of Texas McDonald Observatory re-quires a person to oversee the daily operations of the lunar laser ranging experiment. Seek recent Ph.D. in observational astronomy or related field. In-strumentation and/or supervisory experience pre-ferred. Residence at McDonald Observatory is re-quired. Beginning salary commensurate with education and experience. Submit résumé to E. C. Silverberg, McDonald Observatory, P. O. Box 1337, Fort Davis, Texas 79734 or apply:

The University of Texas at Austin Office of Personnel Services and Employee Relations 108 East 19th Street Austin, Texas 78712 An Equal Opportunity and Affirmative Action Employer

National Research Conseil national Council Canada de recherches Canada

BIOPHYSICIST AND RADIOBIOLOGIST required for a Multidisciplinary Research Program Ottawa, Canada

A biophysicist and a radiobiologist are required in a multidiscipline research group including at least an electri-A biphysicial at a ratio biologist are required in a initial scipine research group including at least an electri-cal engineer and a part-time medical officer, to study the effects on nonionizing radiation in the frequency range of 1 Mhz to 30 Ghz on biological systems, including man and animals. They will, in cooperation with the other scien-tists of the team, study the distribution of energy absorbed in phantoms and large animals, and investigate biologi-cal effects to determine criteria useful in setting dose limits for man.

For each position, a Ph.D. in a related field is required.

A knowledge of either the English or French language is required for these positions.

Salary will depend on qualifications. A Ph.D. without relevant experience would start at \$14,345. With appropri-ate experience, appointments could be made up to approximately \$25,000.

Please reply giving complete details of your education and experience to the Employment Officer, National Re-search Council of Canada, Ottawa, K1A OR6. In reply please quote BY-74-8.

National Research Council Canada

Conseil national de recherches Canada

HERZBERG INSTITUTE OF ASTROPHYSICS

requires SCIENTISTS AND ENGINEERS

The Herzberg Institute of Astrophysics has openings in its radio astronomy program for five scientists and engineers having experience in one of more of the following related fields:
1) Microwave and Ultra-High Frequency Radiometers. Radio astronomy observations require receivers with ultra-low noise temperature and high gain stability. Applicants must have experience in optimizing noise temperature, gain stability, and system sensitivity.
2) Electronic Circuitry. Applicants must be capable of designing filters, amplifiers, frequency multipliers, phase lock loops, and so forth, for high and low frequencies.
3) Digital Techniques. Applicants require a thorough knowledge of digital techniques applicable to radio astronomy receivers and data processing.

tronomy receivers and data processing.
 Antenna Engineering. Improvement of the performance at short centimeter wavelengths of a 46-meter radio

(4) Antenna Engineering: Inprovement of the performance at short centimeter wavelengins of a 40-meter radio telescope will be a principal task. In addition, applicants should be familiar with the design of feeds and polarizers, optimization of efficiency and minimization of noise contributions from components and the ground. While the laboratory is located in Ottawa, applicants must be prepared to spend a fraction of their time at the Algonquin Radio Observatory, 150 miles from Ottawa. Qualifications: An honor bachelor or higher degree in electronic engineering or physics, with several years of related experience.

lated experience.

Language Requirements: Knowledge of either the English or French language is required for these positions. Salary: Salary will depend on qualifications. Note: Apply in writing giving complete details of education and experience to the Employment Officer, Na-tional Research Council of Canada, Ottawa, Ontario, KIA OR6. In reply please quote HIA-3 to 7.

DIVISION CHAIRMAN—MATH AND SCIENCE DIVISION

Applications are invited for Chairman of the Math and Science Division of a small, rural multipurpose college. Position includes half-time teaching in the areas of ani-mal physiology, genetics, general biology. Earned doc-torate and teaching experience are required. A strong administrative role will give the new chairman an op-portunity to strengthen the Division. Preferred starting date is 1 July 1975. Annlication deadline is 5 June date is 1 July 1975. Application deadline is 5 June 1975. Salary and rank commensurate with experience. Send résumé and three letters attesting to administra-Send resume and three letters attesting to administra-tive and teaching excellence to Dr. Jerome Knapczyk, Chairman, Math and Science Division, Johnson State College, Johnson, Vermont 05656. An Equal Oppor-tunity/Affirmative Action Employer.

IMMUNOLOGIST. Ph.D. or equivalent for new re-IMMUNOLOGIST. Ph.D. or equivalent for new re-search and development laboratory associated with a blood transfusion depot. The successful candidate would be required to participate actively in research in immunology specifically related to blood products. Ex-perience in this area would be an asset. The appropriate individual will be given an academic appointment. Ex-cellent opportunity exists for interaction with major re-search groups in Hematology and Immunology. Fund-ing for this position is assured by the Canadian Red Cross. Send reply with salary requirements to M. A. Blajchman, M.D., Medical Director, Canadian Red Cross Blood Transfusion Service, 299 Main Street East, Hamilton, Ontario. Canada. Hamilton, Ontario, Canada.

INSTRUCTOR Department of Anesthesiology

The University of Michigan Medical School is seeking M.D., Board certified or qualified in anesthesiology. Prefer experience in didactic and clinical instruction of residents and medical students in anesthesia. Com-petent anesthesiologist. Code #900HO. Send résumé to Box 225, SCIENCE.

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MEDICAL GENETICIST

Assistant or Associate Professor, September 1975, to participate in teaching graduate and medical school courses. Ph.D. or M.D. with at least 3 years of post-doctoral experience. Salary \$18,000 to \$21,000 depending on qualifications. Please send curriculum vitae and references to: Head, Division of Medical Genetics, Uni-versity of Oregon Health Science Center, Portland, Or-egon 97201. An Equal Opportunity Employer.

PATHOLOGIST

Board-certified or advanced pathology degree pre-ferred. To join progressive research pathology staff in leading biological research laboratories. Many varied and interesting research problems. Excellent working and living conditions. Send résumé to E. P. Galbraith, Manager-Employment, Pacific Northwest Laboratory, Division of Battelle Memorial Institute, P.O. Box 999, Richland, Washington 99352. An Equal Opportunity Employer.

Ph.D. PATHOLOGIST. To teach general-systemic pathology to second-year medical students. Three lec-tures and four lab hours weekly during academic year. Emphasis on teaching excellence. Research encouraged but not mandatory. Faculty rank and salary com-mensurate with qualifications. Modern 426-bed hospi-tal. Excellent suburban living. Send curriculum vitae to Dr. E. H. Whitten, Associate Dean, College of Osteo-pathic Medicine, 2105 Independence Blvd., Kansas City, Missouri 64124. Telephone: 816-283-2402.

PLANT BIOCHEMIST

A position for a Plant Biochemist at the level of As-sistant Professor will likely be available 1 September 1975. Duties will include instruction in plant biochem-istry, supervision of thesis work of graduate students, maintenance of an active research program in plant biochemistry, and interaction with other plant scien-tists. Preference will be given to individuals with intertists. Preference will be given to individuals with inter-est and research experience in photosynthesis of plant development, although applicants in other areas of plant biochemistry will be considered. Female and other minority candidates are especially encouraged to apply. Send curriculum vitae, including academic record and list of publications, three letters of recom-mendation, and a short statement of your projected re-search interests to: H. F. DeLuca, Department of Bio-chemistry, University of Wisconsin, Madison, Wiscon-sin 53706. The University of Wisconsin is an equal opportunity employer. opportunity employer.

POSITIONS OPEN

1

PHYSIOLOGY POSITION

Teaching with some research. Title: Assistant Profes-Soriel Assistant From Soriel Festive Assistant From Soriel Assista

> Dr. R. L. Preston, Chairman Department of Animal Sciences Washington State University Pullman, Washington 99163

PLANT CYTOGENETICIST

The Departments of Agronomy and Range Science, and Vegetable Crops, University of California at Davis, invite applications for a cytogeneticist position with rank equivalent to Assistant Professor. A Ph.D. and interest in the genetic improvement of crop plants are required. Duties will include research, direction of graduate students, and teaching in cytogenetics and

graduate students, and teaching in cytogenetics and plant breeding. Applicants should submit a curriculum vitae with a list of publications, reprints, transcripts, and three ref-erences to M. Allen Stevens, Department of Vegetable Crops, University of California, Davis, California 95616, by 1 July 1975. The University of California is an equal opportunity employee with an affermative action program.

employer with an affirmative action program

Université du Québec à Montréal Départment des Sciences biologiques

Applications are invited for positions in

Wildlife and/or Resource Management

-Whatte and/of Res -Limnology -Population Genetics

—Population Genetics Applicants (Ph.D.) should be prepared for under-graduate teaching in French and be capable of super-vising research at the M.Sc. level in a new university. Salary and working conditions determined by collec-tive agreement. Positions available 1 June 1975. Send curriculum vitae and references to Luc Desnoyers, di-recteur, départment des Sciences biologiques, Université du Québec à Montréal, C.P. 8888, Montréal (Québec) Canada.

POSTDOCTORAL POSITIONS

Research on regulation of RNA synthesis in carcino-genesis. Chromatin capacity, nuclear and mitochon-drial RNA polymerases of tumors. Molecular mecha-nism of action of steroid hormones. Send résumé and three references to Dr. S. T. Jacob, Department of Pharmacology, Pennsylvania State University College of Medicine, Hershey, Pennsylvania I7033.

An Equal Opportunity Employer

POSTDOCTORAL POSITION. Postdoctoral posi-tions available, starting 1 July 1975, for research on hormonal mechanism of action of steroid hormones, regulation of protein secretion and control of growthregulation of protein section and control of growth-cell cycle using cultured uterine cells. Biochemical and cell biology background desirable. Duration for 1 to 2 years. Salary \$10,000 to \$15,000 according to qualif-cations. Send curriculum vitae and three references to Dr. L. E. Gerschenson, Warren Hall, University of California, 900 Veteran Ave., Los Angeles, California 90024.

The University of California is an Affirmative Ac-tion/Equal Opportunity Employer and encourages ap-plication from members of minority groups and

POSTDOCTORAL RESEARCH ASSOCIATE

Position available for individual interested in areas Position available for individual interested in areas of gene structure, regulation, and genome organization in prokaryotes and eukaryotes; restriction endonu-cleases, DNA cloning, and nucleic acid sequencing. Please send résumé with desired starting date and list of three references to: Arthur Landy, Division of Bio-Medical Sciences, Brown University, Providence, R.I. 02912. An Equal Opportunity/Affirmative Action Employer

A POSTDOCTORAL POSITION IN MEDICAL GENETICS is available after 1 July 1975 for qualified M.D. or Ph.D. The research focus is somatic cell genet-ics of animal cells. The training program in medical ge-netics provides research in biochemical genetics of ani-mal cells, molecular and clinical genetics seminars, clinical training in heritable and genetic diseases through interdepartmental outratient and consulting through interdepartmental outpatient and consulting services, interinstitutional visiting scientists seminars,

Services, internisticutional visiting solutions solutions, and clinical research conferences. Contact Dr. C. Thomas Caskey, Secretary of Medi-cal Genetics, Department of Medicine, Room 543-E, Baylor College of Medicine, Houston, Texas 77025. Equal Opportunity Employer.

POSITIONS OPEN

r US I DUCTORAL POSITION available 1 Septem-ber 1975 to study the replication of chloroplast DNA. A recent Ph.D. with experience in isolating and charac-terizing organelle or viral DNA is preferred. Previous experience in electron microscopy is not essential. Starting salary \$9600 per annum. Send curriculum vitae and three letters of reference to Dr. Sarah P. Gibbs, Electron Microscope Unit, Department of Biol-ogy, McGill University, Montreal, Quebec H3C 3G1, Canada.

POSTDOCTORAL POSITION

Opening for a postdoctoral fellow to study dynamic properties of mammalian cell membranes and cy-toplasmic microtubules with a group of cell biologists and biophysicists headed by Dr. R. D. Berlin, effective I September 1975. Contact Dr. J. M. Oliver, Depart-ment of Physiology, University of Connecticut Health Center, Famington, Con. 06032. An Equal Opportu-tion (Affective Function Contention) nity/Affirmative Action Employer.

POSTDOCTORAL RESEARCH

To work on control of ribosome structure and protein synthesis in eukaryotes. Specific project, salary, and starting date negotiable. Duration: 2 years. Possible topics include ribosomal protein phosphorylation, effects of microbial toxins, and control of messenger uti-lization. Send curriculum vitae and names of two refer-ences to Dr. David Kabat, Department of Biochemistry, University of Oregon Medical School, Portland, Oregon 97201. An Equal Opportunity Employer.

POSTDOCTORAL RESEARCH

Applications are invited for postdoctoral research positions related to the action of cyclic nucleotides on nuclear protein kinases and RNA synthesis. Salary is \$10,000 for 12 months. Applicants should submit a cur-riculum vitae and have two letters of recommendation sent by a referee to Dr. Richard A. Jungmann, Depart-ment of Biochemistry, Northwestern University Medical School, 303 East Chicago Ave., Chicago, Illinois 60611.

PREDOCTORAL STUDY IN PHYSIOLOGY

TREDUCTORAL STUDY IN PHYSIOLOGY The Department of Physiology provides graduate training leading to the Ph.D. degree in the areas of cel-lular and molecular endocrinology; cell membrane transport; lipid metabolism and obesity; myocardial, skeletal, and smooth muscle physiology and biophys-ics; neurophysiology; and tumor and cell biology. As-sistantships are available for qualified applicants. For details write to: Chairman, Graduate Committee, De-partment of Physiology and Biophysics, University of Illinois at the Medical Center, P.O. Box 6998, Chicago, Illinois 60680.

UNIVERSITY OF SASKATCHEWAN SASKATOON, SASKATCHEWAN, CANADA

Applications are invited for the following position in the Department of Crop Science

PROFESSIONAL RESEARCH ASSOCIATE

A plant physiologist with training and experience in

the area of water relations and/or stress physiology. The successful applicant will be one of a team of two other scientists and three technicians who will underother scientists and three technicians who will under-take a comprehensive analysis of the role of plant hor-mones in drought stress in sorghum. The study, sup-ported by the International Development Research Centre, Ottawa, is designed to provide cereal scientists working in the semiarid tropics with a more complete knowledge of the manner in which plant growth and productivity are influenced by drought stress. The project will take approximately 5 years and the suc-cessful applicant will be expected to join the group by 1 September 1975. The commencing salary will be \$14,200, plus a pen-sion and other benefits equivalent to 7.9 percent of salary. Annual increments in salary will be in accordance with University of Saskatchewan increments. Mini-

with University of Saskatchewan increments. Mini-mum qualification is a Ph.D. Applications close 30 June 1975.

RESEARCH ENZYME BIOCHEMISTRY

RESEARCH ENZYME BIOCHEMISTRY One-year position in a lipid metabolism research laboratory of metropolitan medical center. Post-doctoral or assistant research scientist level position for Ph.D. in biochemistry or related area. Send curriculum vitae and bibliography to: Miss M. Kerans, Employ-ment Department, New York University Medical Cen-ter, 587 First Avenue, New York, N.Y. 10016. Equal Opportunity/Affirmative Action employer M/F.

TOXICOLOGIST I

Ph.D. in Toxicology or related discipline with 3-5 years experience as Program Manager or Project Leader. Strong entrepreneurial interest important to build and direct business in areas of environmental toxicology. Experience in proposal writing is essential, and ability to engage in marketing activities and significant sponsor/ customer contact is required.

*Also need:

CHEMIST

Ph.D. to work on environmental literature reviews and state-of-the-art summaries. Experience in pesticides, soil chemistry and/or envi-ronmental monitoring desirable. Writing ability essential. Position has potential for develop-ment of laboratory research.

SYRACUSE UNIVERSITY RESEARCH CORPO-RATION is a not-for-profit organization which offers an academic environment, excellent employee benefits, competitive salary, and ample opportunity for continued personal growth. Please send resume including salary history in confidence to: Personnel Manager, SYRACUSE UNIVERSITY RESEARCH CORPORATION, Merrill Lane, University Heights, Syracuse, N.Y. 13210.



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...a new research probe in **Cell Physiology**

Cytochalasin B [4-³H] 5-15Ci/mmole

Ethanol solution, shipped in dry ice NET-464 \$95/250µCi \$280/1mCi

This fungal metabolite has been implicated in hexose transport inhibition in mammalian cells.¹ It has unusual biological effects on a wide range of cell movements such as: cytokinesis, cytoplasmic streaming, blood clot retraction and associated developmental processes.²

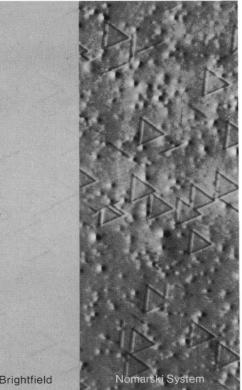
1 S. Lin and J.A. Spudich, J. Biol. Chem. 249, 5778 (1974). 2 E.L. Taylor and N.K. Wessells, Develop. Biol. 31, 413 (1973).



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faster and more informative than any phase contrast system. It's especially valuable for quality control of integrated circuits and metallurgical samples. We'd like to show you exactly how valuable. Contact us and we'll give you a demonstration in your lab. On your sample. 2 Nevada Drive, New Hyde Pk. New York 11040. In Canada: W. Carsen Co. Ltd., 31 Scarsdale Road. Don Mills. Ontario.



UNIVERSITY OF CALIFORNIA AT DAVIS POSTHARVEST BIOLOGY LABORATORY TWO VACANCIES exist in the Postharvest Biology Laboratory—an organized research unit whose mission is the development of basic and applied scientific information requisite to advancements in the efficient distri-bution of fruits, vegetables, and ornamentals. Scientists bution of fruits, vegetables, and ornamentals. Scientists in these positions are expected to fashion individual professional careers that complement those of the existing staff. Staff members participate in teaching and in one or more graduate faculty groups such as Plant Physiology, Biochemistry, Horticulture, and Food Science. The two positions described below com-prise 11-month appointments in the Agricultural Ex-periment Station at ranks equivalent to Assistant Pro-fessor or higher, dependent upon experience and achievement. Minimum requirements are a Ph.D. in a pertinent biological discipline and the capacity for in-dependent, original research. **PHYSIOLOGIST/HORTICULTURIST.**—To con-duct research in plant physiology as related to the

PHYSIOLOGIST/HORTICULTURIST.—To con-duct research in plant physiology as related to the marketing, distribution, and quality of plant products with emphasis on fruits. Excellent opportunities exist for cooperative projects with extension personnel and other agricultural scientists. **CELL BIOLOGIST/PLANT BIOCHEMIST**— **PHYSIOLOGIST.** To advance basic information on aspects of cellular dynamics pertinent to postharvest biology. Preference will be given to candidates who have demonstrated originality and productivity in areas closely related to *cellular and tissue senescence*. **TO APPLY:** Please forward curriculum vitae, list of nublications, undergraduate and graduate transcripts.

TO APPLY: Please forward curriculum vitae, hist of publications, undergraduate and graduate transcripts, and names of three referees to: Dr. Roger J. Romani, Chairman of the Search Committee, Department of Pomology, University of California, Davis, California 95616. Applications received after 30 June 1975 can-not be assured of consideration. The University of Cal-ifornia is an Equal Opportunity Employer. Minority applications are accouraged applicants are encouraged.

RANGE SCIENTIST/MICROBIOLOGIST

Applications are invited for a position at the Assistant Professor level for research and teaching in the area of rangeland symbiotic nitrogen fixation, with emphasis at the whole-plant and root nodule levels. Applicants are expected to have a strong background in soil microare expected to have a strong background in soil micro-biology or closely related area, with research training in symbiotic nitrogen fixation, and strong interest in and understanding of range ecosystems. Interested ap-plicants should send a curriculum vitae, a complete bib-liography, and names of three persons knowledgeable of the candidate's research or teaching ability to: Dr. C. A. Raguse, Chairman of Search Committee, Depart-ment of Agronomy and Range Science, University of California, Davis, Calif. 95616. Closing date for appli-cations: 15 July 1975. Applications received after that date may not be assured consideration. An Equil Opnoctivity (Affenction Action Fundava

An Equal Opportunity/Affirmative Action Employer

An immediate opening is available in a position of RESEARCH ASSOCIATE FOR STUDIES OF STRUCTURE AND FUNCTION OF FILAMENT OUS CONTRACTLE AND REGULATORY PRO-TEINS IN THE NERVOUS SYSTEM. Candidates TEINS IN THE NERVOUS SYSTEM. Candidates should have Ph.D. or equivalent qualifications in bio-chemistry, immunochemistry or molecular biology. They should have been experienced in basic techniques and instruments of protein chemistry and immunology. Salary is \$12,000. For 12 months. Send inquiries, cur-riculum vitae, and references to Dr. J. Metuzals, Elec-tron Microscopy Unit, Department of Anatomy, Fac-ulty of Medicine, University of Ottawa, Ottawa, On-tario, Canada KIN 9A9. Telephone: 613-231-3206.

STRUCTURAL PROTEIN CHEMIST

Assistant Professor, research/teaching position for structural protein chemist with ability to work on a mistructural protein chemist with ability to work on a mi-croscale level and immunology experience. Ability and interest in applying for independent funding desirable. Position open 1 July 1976. Apply to Dr. George E. Kenny, Chairman, Department of Pathobiology, Uni-versity of Washington, Seattle, Washington 98195. An Equal Opportunity/Affirmative Action Employer.

SUMMER TEACHING POSITIONS

The University of Minnesota Lake Itasca Forestry and Biological Station offers 5-week teaching positions each summer to biologists who have distinguished themselves as researchers and instructors. Positions open in 1976 are animal parasites, aquatic ecology, field ethology, introductory mycology, and microbial ecology. Qualified and interested persons should con-tact David F. Parmelee, 349 Museum, University of Minnesota, Minneapolis 55455. An Equal Opportunity Fundove Employer

POSITIONS OPEN

CSIRO DIVISION OF FISHERIES & OCEANOGRAPHY CRONULLA, N.S.W. RESEARCH SCIENTIST

CSIRO has a broad charter for research into primary and secondary industry areas. The Organization has approximately 6500 employees—2100 of whom are research and professional scientists—located in Divi-sions and Sections throughout Australia. *Field*: Population Dynamics.

General. The Division is Australia's principal marine research institution with about 50 scientists investigat-ing the fisheries resources and the physical, chemical, and biological features of the oceans and estuaries around Australia. Headquarters of the Division are at around Australia. Headquarters of the Division are at Cronulla, Sydney, with regional laboratories in Perth, Brisbane, and Karumba. On-line access to a CYBER 76 computer is available at Cronulla. Seagoing facili-ties include a 44-meter chartered vessel and several smaller vessels. Approval has been given to build a 67-meter research vessel, which is expected to be in service in 1978. The appointee will be located in Cronulla. *Duties:* The appointee will be Head of the Division's Population Dynamics Group. This Group, which con-sists of five mathematicians and some supporting staff, is responsible for studies in the population dynamics of

sists of five mathematicians and some supporting staff, is responsible for studies in the population dynamics of major fisheries and collaborates closely with groups concerned with biological aspects of the same fisheries. At present major emphasis is placed on prawn and tuna fisheries but work is expanding in other areas. As Group Head the appointee will be expected to stimu-late the development of new methods and techniques in comulation dynamics as well as the application of exist. population dynamics as well as the application of existing methods

Qualifications: A Ph.D. degree or equivalent qualifi-Qualifications: A Ph.D. degree or equivalent qualifi-cations in mathematics or mathematical statistics, sup-portd by satisfactory evidence of research ability. Ex-perience in population dynamics preferably related to fisheries is also required. Some biological training or experience would be an advantage. Salary: Appointment will be made within the salary ranges of Senior Research Scientist or Principal Re-search Scientist: \$14,462 to \$19,727 per annum. Tenure: An indefinite or fixed term appointment may be negotiated. An indefinite appointment carries Australian Government Superannuation benefits sub-ject to normal conditions.

ject to normal conditions

Ject to normal conditions. Applications, stating full personal and professional details, the names of at least two referees, and quoting reference number 320/533, should reach: The Chief, Division of Fisheries and Oceanography, CSIRO, P.O. Box 21, Cronulla, N.S.W. 2230, Australia, by 26 May 1975.

SENIOR SCIENTIST DERMATO-BIOLOGY

A rapidly growing dermatology company in the Southwest is seeking an innovative biologist with strong technical capabilities to lead an expanding re-search program. Initial responsibilities will begin with search program. Initial responsibilities will begin with a critical review of existing animal models, in vitro and in vivo that correlate to clinical dermato-pathological diseases and the development of new approaches fol-lowed by an aggressive program of applied research in proposed new products for the hair and skin. The successful candidate will be a high achiever who is at present a group leader or equivalent and who has a background in skin and hair biology research. The indi-vidual must have at least a Ph.D. degree in biological sciences or equivalent years of industrial and/or aca-demic research and development experience. Alcon offers excellent working conditions and em-ployee benefits, including free medical care insurance and free life insurance as well as an excellent profit-sharing program. Please send résumé in confidence to: **T** A Gisi

T. A. Gisi ALCON LABORATORIES, INC. P.O. Box 1959 Fort Worth, Texas 76101 An Equal Opportunity Employer

SENSORY NEUROANATOMY —ULTRASTRUCTURE

Interdisciplinary center for sensory sciences has faculty position for investigator of neurosensory system by modern anatomical techniques including ultrastructure modern anatomical techniques including ultrastructure and light microscopy. Must lecture on neuroanatomi-cal systems, offer advanced systems and techniques oriented graduate seminar, and train graduate and postdoctoral students in laboratory. Rank and salary open. Send curriculum vitae to: Dr. H. G. Sperling, Sensory Sciences Center, 6420 Lamar Fleming Avenue, Houston, Tex. 77025. An Equal Opportunity/Affirma-tive Action Employer.

POSITIONS OPEN

WATER QUALITY HYDROLOGIST

Assistant Professor starting 20 August 1975, includes teaching and research in land use-water quality relateaching and research in land use-water quality rela-tionships, water quality analysis, and participating in the Watershed Science Courses. Qualifications include Ph.D. in Watershed Management in related field. One or more years of practical experience is desirable. Let-ters of application, accompanied by résumés and names of references should be submitted no later than 1 June 1975 to Dr. W. D. Striffler, Department of Earth Resources, Colorado State University, Fort Collins, Colorado 80523. Equal Opportunity is provided through an Affirmative Action Program.

WATER RESOURCE ECONOMIST

Salary and level open. Applicants should have a strong knowledge of water and recreation economics and a substantial background in systems analysis techniques used in water resource evaluation. A background in natural resources is highly desirable. Position involves individual and interdisciplinary team research. Ph.D. and minimum of 3 years of experience required. Ad-dress applications, curriculum vitae, and three letters of reference to Dr. Don D. Experien Descart Research Instireference to: Dr. Don D. Fowler, Desert Research Insti-tute, University of Nevada System, Reno, Nev. 89507. An Equal Opportunity/Affirmative Action Employer.

PROGRAM

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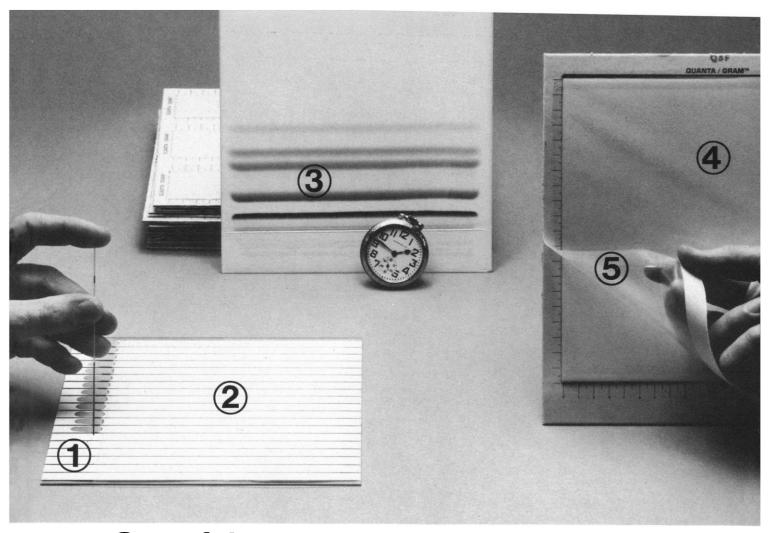
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