

# BIOLOGICAL RESEARCH



Rapid growth in the Biological Research program at Sandoz has created excellent opportunities for high calibre professional personnel.

We are seeking individuals with experience at the Post Doctoral level in . . .

**GENERAL CNS PHARMACOLOGY  
CARDIO VASCULAR PHARMACOLOGY  
RENAL PHARMACOLOGY  
AND TOXICOLOGY**

Qualified applicants will be invited to visit the Sandoz facilities and meet members of the Research Staff. In addition to liberal company benefits, these positions offer suburban living at its best in convenient North Jersey, just 30 miles from N.Y.C. Served by fine schools and close to all recreational and educational facilities.

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*"See the Dynamic Progress in Chemistry"*

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**September 13th Tuesday . . . . . 9 A.M. to 9 P.M.**

**September 14th Wednesday . . . . . 9 A.M. to 5 P.M.**

**September 15th Thursday . . . . . 9 A.M. to 4 P.M.**

Admission Free. To obtain your badge, please register at the Exhibits Registration Desk at the Exposition Hall—1 flight up. Please use escalators.

**CHILDREN NOT ADMITTED**

## PERSONNEL PLACEMENT

Replies to blind ads should be addressed as follows:

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

### POSITIONS WANTED

**Have Experience Will Travel.** Isotope, EM-radiography, computer, etc. Some publications, age 41. Ben Bloom, Ph.D., NIH.

(a) **Medical Chemistry Ph.D.;** Radioisotope Techniques; synthesis experience; prefers pharmaceutical research appointment. (b) **Microbiology Ph.D.;** extensive clinical supervising, teaching experience; seeks research or clinical administration opportunity; write **WOODWARD MEDICAL PERSONNEL BUREAU**, 185 North Wabash, Chicago 60601.

**Medical Translator (German/English)** accepts freelance assignments. Prompt service. Reasonable rates. Please write: 68-43 Groton Street, Forest Hills, N.Y. 11375.

**Physiologist, Immunologist, Radiologist, M.D., Ph.D.,** desires academic or research position. Research experience in immunopathology. Box 175, SCIENCE. 9/9,16

**Position** in research and teaching for electron microscopist, Ph.D. Publications in microbiology, and references available. Box 184, SCIENCE. X

**Senior Physiologist**—biochemist requests temporary appointment. Box 185, SCIENCE. X

### POSITIONS WANTED

**Electron Microscopist Ph.D.** Experienced in teaching and research. Publications. Desires academic teaching position. Zoology, histology, embryology background. N.W. preferred area. Box 181, SCIENCE.

### POSITIONS OPEN

**LABORATORY INSTRUCTOR:** B.S. or M.S. in Chemistry or Bio-chemistry, male, to take charge of setting up laboratories in course taught as part of Ph.D. degree Program in Cellular and Molecular Biology at the University of Miami, good salary. Research in off-teaching periods, to work directly with Program Chairman: Edward L. Chambers, Medical Research Bldg., 1600 N.W. Tenth Avenue, Miami, Fla. 33136. Send résumé and salary requirements.

**Literature Scientist:** Position available in Division of Nutrition Research. Responsibilities include writing a bi-monthly interpretive review of recent nutrition research, answering inquiries pertaining to nutrition and health, and providing scientific assistance for the library. Applicants must have advanced training in nutrition, preferably a Ph.D. in nutrition or biochemistry. An M.S. with experience will be considered. Writing ability essential. Excellent opportunity for professional growth and development at the national level. Starting salary commensurate with training and experience. Liberal fringe and retirement benefits. Write: **Dr. M. F. Brink**, Director of Nutrition Research, National Dairy Council, 111 North Canal Street, Chicago, Illinois 60606.

(a) **Ph.D. Pharmacologist**, research; liaison between research; production; marketing; to \$25,000; New York State (b) **Clinical Chemist** and (c) **Microbiologist**; to \$18,000; private lab and hospital; Los Angeles. (d) **Research Pharmaceutical Chemist**; create dosage forms; expanding co.; top salary; leading city, M.W. (e) **Research: MS degree and exp. Immunology; Virology**; to \$16,000 plus bonus; near D.C. Write **SCIENCE SERVICE**, The Medical Bureau, 900 North Michigan Avenue, Chicago, Illinois 60611.

### POSITIONS OPEN

#### BACTERIOLOGIST

Biological research company offers challenging opportunity for a bacteriologist who will be responsible for testing media, sera, and tissue cultures. Requires BS or MS with at least two years experience. Liberal starting salary. Fine company benefits and opportunity for advancement.

Send resume to **B. Brooke Bright, Personnel Director**

FLOW LABORATORIES INC.  
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Rockville, Maryland 20852

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#### Clinical Chemist Ph.D.

Opportunity for Clinical Chemist interested in general clinical chemistry situated in central referral and hospital laboratories located in Los Angeles area. Extensive automation. Salary open and dependent on training and experience. Please send resume to Box 178 SCIENCE.

#### PHYSIOLOGIST-BIOPHYSICIST OR MEDICAL ENGINEER

To assist in expanding exciting new graduate program in Bioscience-Bioengineering. Teaching and Research. Ph.D. required. Medical Engineer; B.S. in engineering, graduate work in Physiology, Medical Engineering, Physiologist-Biophysicist; B.S. in Science, graduate work in Physiology, Biophysics. Send letter, indicating starting date, and resume to: **Dr. Robert M. Arthur, Rose Polytechnic Institute, Terre Haute, Indiana.**

## Microbiologist—Ph. D. for Biosynthesis Research

Continuing progress by Esso Research and Engineering in the production of a new protein-rich food source through biosynthesis has resulted in a challenging and rewarding opportunity for a Ph.D. in microbiology.

The candidate will be responsible for evolving and executing exploratory fermentation programs aimed at developing new products. He will also advise management on the feasibility of developing the most promising of these exploratory programs.

In addition to from 3-12 years experience, a candidate should be familiar with continuous fermentation and the isolation and adaptation of organisms for growth on a wide variety of substrates, including hydrocarbons. It is also desirable to have an understanding of intermediary metabolism and familiarity with methods of altering the biosynthesis pathway to give desired end products.

If you're interested in being part of this important research team, send your résumé in confidence to: W. G. Dewhurst, Esso Research and Engineering Company, Dept. 379, P.O. Box 175, Linden, New Jersey.

## ESSO RESEARCH AND ENGINEERING COMPANY

An Equal Opportunity Employer (m & f)

## BACTERIOLOGIST

Exceptional opening for individual to conduct research involving basic studies in bacterial genetics and virial replication. Experienced Ph.D. with strong background in bacterial physiology, virology and enzymology required.

## TOXICOLOGIST

Excellent opportunity to carry out investigations in inhalation and acute, subacute and chronic toxicology, with emphasis on biochemical techniques in the study of mechanisms of actions and toxicological research. Ph.D. or 5 years' experience in toxicology or pharmacology, or DVM with research training in toxicological area required.

CONTACT: MARTIN N. SCHULER



MIDWEST  
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425 VOLKER BOULEVARD  
KANSAS CITY, MISSOURI 64110

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POSITIONS OPEN

POSITIONS OPEN

# Chemotherapists

**MICROBIOLOGIST, Ph.D. OR D.V.M.:** Interest and experience in experimental infectious diseases and broad chemotherapy screening program. Sufficiently mature and experienced to assume share of multidiscipline project leadership.

**M.S. OR B.S.:** With experience in chemotherapy of experimental bacterial infections.

The Sterling-Winthrop Research Institute is the research division of Sterling Drug Inc., one of the world's largest producers of medicinal agents. Sterling Drug manufactures professional, consumer and industrial products identified by more than a thousand brand names. The Institute employs over 600 people and is engaged in a very active pharmaceutical research program. It is near Albany, on a plateau overlooking the Hudson River Valley.

Salaries open. Excellent employee benefits include educational assistance at local colleges. Travel and moving expenses paid.

Send complete resume to C. E. Alford, Director of Personnel

**STERLING-WINTHROP RESEARCH INSTITUTE**

Rensselaer

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### MEDICAL ENTOMOLOGIST

For Hawaii State bubonic plague surveillance and suppression studies. Requires graduation with degree in entomology or related field and 3 years experience in research projects relating to ectoparasites or other insect pests. \$7,344 — \$9,372 per year. Write Dept. of Personnel Services, 825 Milliani St., Honolulu, Hawaii 96813.

### ANIMAL ECOLOGIST I

For Hawaii State bubonic plague surveillance and suppression studies. Requires 2 years research experience in biological science and graduation with degree in zoology, entomology or related field. \$6,348 — \$8,160 per year. Write Dept. of Personnel Services, 825 Milliani St., Honolulu, Hawaii 96813.

### VIROLOGIST

Excellent opportunity for recent Ph.D. with training in virology and tissue culture techniques or M.S. with extensive experience to conduct study on epidemiology of ornithosis virus in domestic pigeons. Three year study. Salary \$9,441-\$11,407 (plus 3 percent increase in 1967 and 1968). Liberal fringe benefits. Write: **Dr. Frank Piraino, Milwaukee Health Department, 841 North Broadway, Milwaukee, Wisconsin 53202.**

## Ph.D. VIROLOGIST

Virologist with strong bio-chemical background for basic research program in virology and molecular biology.

**SALARY COMMENSURATE WITH  
TRAINING AND EXPERIENCE**

Send full resume including salary requirements in confidence to:

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### BOOKS AND MAGAZINES

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*Seth Richards*  
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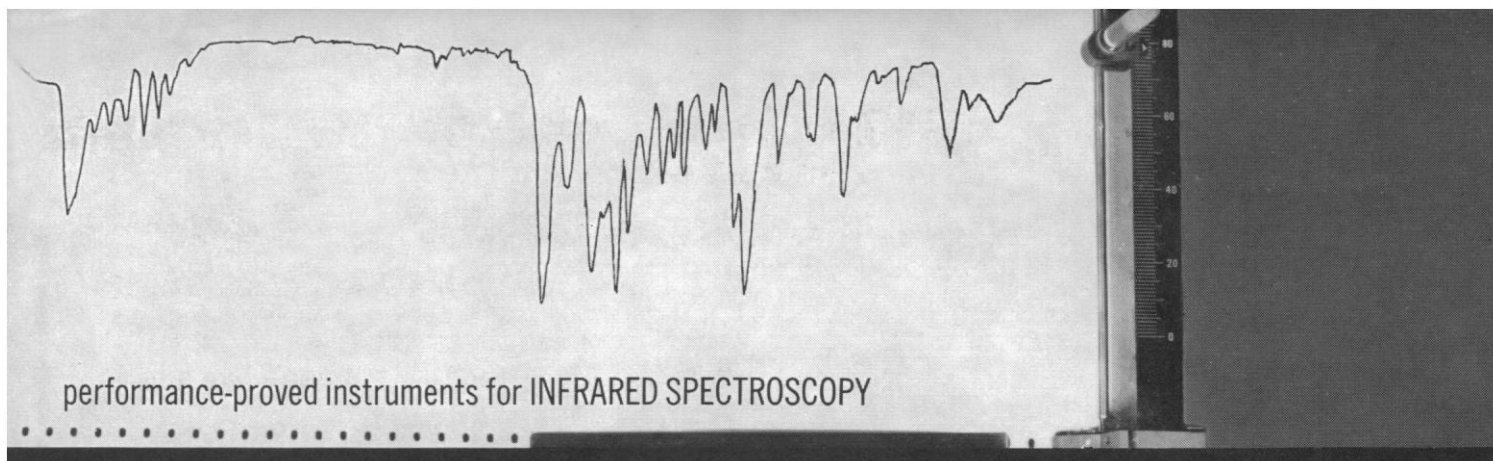
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This uninterrupted 12-minute scan of phenacetin was run on the Model 257 using a .5mm KBr pellet in a 1x4 Refracting Beam Condenser. Sample volume was 1 microgram. A Refracting Beam Condenser was also placed in the Reference Beam.

## FLEXIBILITY AT THE TOUCH OF A BUTTON—THE MODEL 257

**Here is a high-resolution double-grating infrared spectrophotometer that gives you flow-chart recording and automatic control features not found in any other instrument in its moderate price range. The Model 257 offers:**

- A wider range of scan speeds: 5, 12, and 48 minutes per run.
- Automatic reset—at the end of the run, monochromator automatically returns to 4000  $\text{cm}^{-1}$ .
- Abscissa expansion, by factors of 2.5 and 10X, to spread out the close, sharp bands typical of grating spectra—particularly in the analysis of gases.

- Time drive, to permit the quantitative determination of kinetic changes in a sample, at one significant frequency, over a period of time.

- Variable slit control, allowing very narrow slits for high resolution, as well as the wide openings required for energy-limited analyses such as by ATR and micro-sampling.

- Visual mode and frequency indicators: you always have a positive indication of mode of operation and frequency position.

The Model 257's large  $f/5$  aperture enables you to obtain accurate spectra even with very small samples. You can vary the slit program to suit the requirements of the analysis. Or you can keep the frequency fixed and record the changes in transmittance as a function of time.

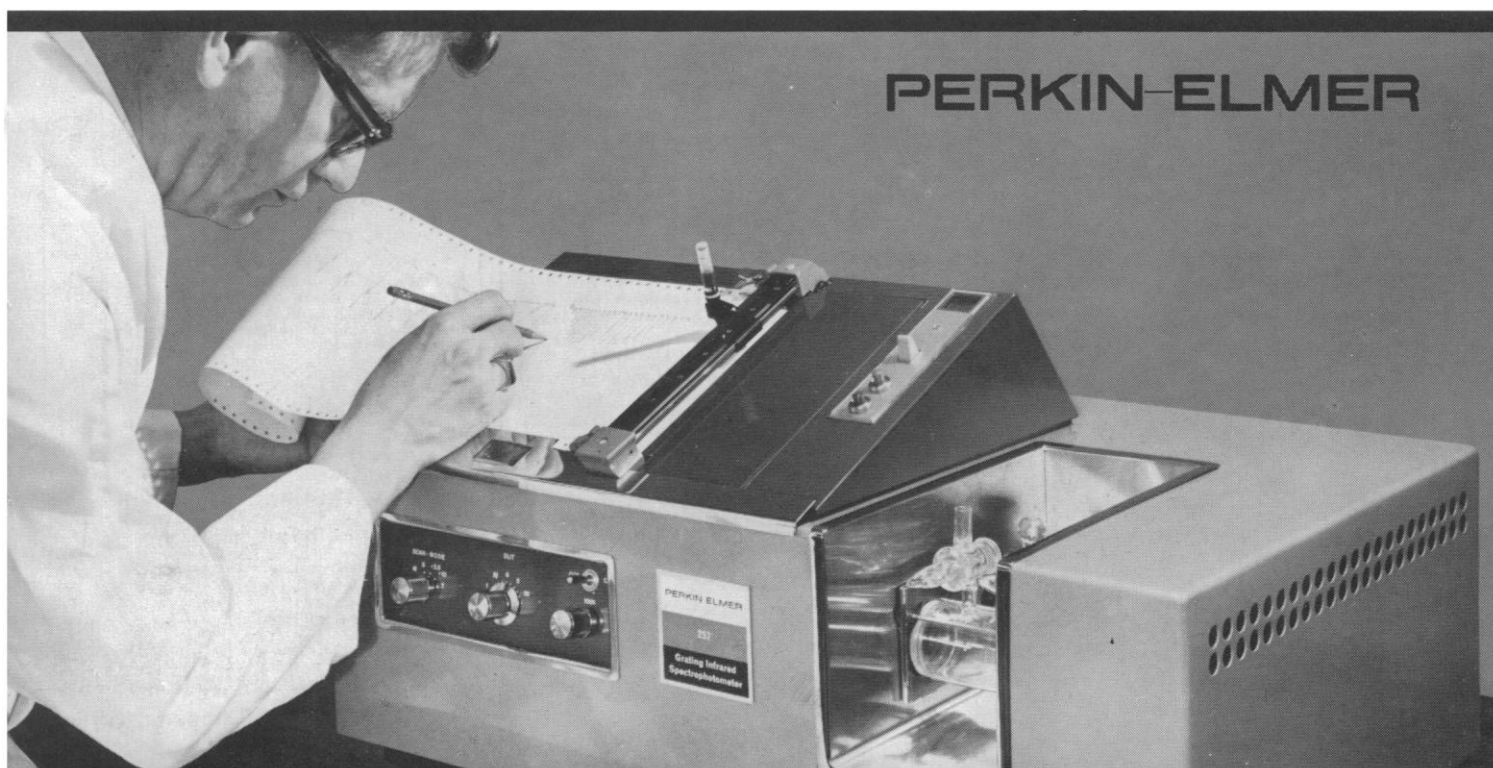
You have a choice of three recording speeds—plus an extra-fast speed control

that lets you move quickly from one spectral region to another.

You read your results on a flow chart recording system (linear transmittance vs. linear frequency) which is continuous in presentation. The chart is synchronized with the monochromator drive, and both start with a single pushbutton.

At the end of the run the monochromator setting automatically returns to the start position while the operator tears off the completed chart prior to recording the next spectrum. The chart is pre-calibrated; no alignment is necessary to start a new recording. You can make forty complete recordings on a single roll of chart paper. Because of the unique positive sprocket drive, abscissa accuracy is unaffected by humidity or temperature fluctuations.

For full details and sample spectra, write The Perkin-Elmer Corporation, 723 Main Avenue, Norwalk, Connecticut.



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