

Challenging Career Opportunities in IBM

PHYSICAL OPTICS

IBM's Data Systems Division is engaged in challenging programs in its Technical Development Laboratory that are concerned with the interaction between optical systems and computer technology. Inquiries are invited from scientists with experience in photo-materials, optical systems engineering, and optical physics.

Scientists participating in these studies will receive extensive technical and scientific support in a professionally stimulating atmosphere. The results of their efforts are expected to have a significant impact on data processing techniques and communications.

Requirements—Ph.D. in Physics or Optics and/or appropriate creative experience in relevant areas.

Assignments are in Poughkeepsie, New York, a pleasant, non-metropolitan environment just 80 miles from New York City. All qualified applicants will receive consideration without regard to race, creed, color or national origin. Excellent schools and housing. Extensive employee benefits program.

Please write, outlining your experience and interests, to . . .

**Mr. H. J. Cooke, Dept. 640L
IBM Development Laboratory
Box 390
Poughkeepsie, New York**



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University, Howard A. Robinson of Adelphi College, Rolf M. Steffen of Purdue University, and Karl S. Woodcock of Bates College, will assist in the project. All royalties from the sale of the reference source will revert to the AAPT and be used to sponsor activities of interest to the Association. The contributions of all individuals will be recognized in each article and a complete list of all contributors will be included in an appendix.

A brochure, including detailed information on all aspects of the preparation of material to be submitted for inclusion in the text and containing sample demonstration contributions, will be mailed to all members of the AAPT, to the chairmen of all physics departments at academic institutions, and to research laboratories and equipment manufacturers. Other persons wanting copies, or contributors wanting further information, should write to Harry F. Meiners, Demonstration Book Project, Science Center, Rensselaer Polytechnic Institute, Troy, N. Y.

Visiting Astronomers

The American Astronomical Society, with the continued support of the National Science Foundation, has recently announced the fourth program of Visiting Professors in Astronomy. Participation in the 1961-62 program is open to interested colleges, junior colleges, and universities, and since one of the purposes of the visits is to stimulate interest in astronomy and to promote college curricula in the subject, the Society feels it to be desirable that the program include institutions which do not already offer astronomy courses. The visiting astronomers are prepared to give general lectures, address astronomy classes, participate in seminars, advise students on advanced study and employment opportunities in astronomy, and discuss teaching and curriculum problems with members of the faculty. Visits normally last two days.

Additional information about the program can be obtained by writing to Dr. Franklyn M. Branley, The American Museum-Hayden Planetarium, 81st Street and Central Park West, New York 24, N. Y.

Institute in Biophysics

Since its creation in 1955, the Biophysics and Biophysical Chemistry Study Section of the National Institutes of Health, in addition to its customary function of reviewing research-grant applications, has been conducting special programming activities to stimulate the development of biophysical research and training. In this connection, the Study Section organized and sponsored an experimental conference, the Summer Institute in Biophysical Science.

Held in Cambridge, Mass., from August 28 to September 9, 1960, and attended by 63 mid-college students from sixteen outstanding small liberal arts schools, the Summer Institute was designed to demonstrate the ways in which the principles of the physical



Increased technical responsibilities in the field of range measurements have required the creation of new positions at the Lincoln Laboratory. We invite inquiries from senior members of the scientific community interested in participating with us in solving problems of the greatest urgency in the defense of the nation.

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- *A more complete description of the Laboratory's work will be sent to you upon request.*

All qualified applicants will receive consideration for employment without regard to race, creed, color or national origin.



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Senior scientists and engineers are needed to fill new positions in our rapidly expanding research and development laboratories near San Francisco. Our broadening interests have created challenging positions for individuals with significant backgrounds in the following fields:

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ADVANCED CIRCUIT DEVELOPMENT
MICROWAVE PHYSICS

A Ph.D. Degree or commensurate experience is especially desirable.

Applicants are invited to send detailed resumes, including salary history and requirements, to Mr. Donald Palmer. Palo Alto interviews for qualified applicants will be arranged from anywhere in the United States. All inquiries strictly confidential and acknowledged promptly. All qualified applicants will be considered regardless of race, creed, color or national origin.

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sciences are applied to the investigation of biological problems, and to answer the questions "What is biophysics?" and "Why biophysics?". By exposing students to current biophysical research it was anticipated that some would undertake graduate studies in this field. Also, the interaction of these students with others on their campus and with their teachers was expected to be of significant value.

Although the central theme of the program was molecular biology, sessions on organ systems and instrumentation were also included. Throughout, emphasis was placed on the biological aspects of the subjects discussed. Daytime lectures were divided into three segments. The first was clearly biological and dealt with cell structure, division, and differentiation. The second was more physically and chemically oriented and covered macromolecular structure and interactions, bioenergetics, membrane phenomena, and instrumentation. In the final phase, nerve and muscle systems were discussed. These topics were not alleged to cover the field of molecular biology completely, but were merely intended to serve as examples. Evening lectures, laboratory tours, and social activities were integral parts of the program.

The organization and evaluation of the Summer Institute are the substance of a report which is available from the Office of the Principal Consultant, Biophysics and Biophysical Chemistry Study Section, 2020 Milvia Street, Room 300, Berkeley 4, Calif.

NSF Fellowships

Applications will be accepted until December 18 for National Science Foundation postdoctoral fellowships and until January 5, 1962, for NSF graduate fellowships. Awards will be made in the mathematical, physical, medical, life, and engineering sciences, in the history and philosophy of science, and in various interdisciplinary fields. Applicants must be citizens or nationals of the United States who have demonstrated ability and special aptitude for advanced study in the sciences. Their qualifications will be evaluated by panels of scientists appointed by the National Academy of Sciences-National Research Council, and final selection of fellows will be made by the NSF.

Postdoctoral fellows will receive \$5000 for the first year and \$5500 for subsequent years; the stipends of graduate fellows will vary between \$1800 and \$2200 depending on academic status. Dependency (\$500 for each dependent) and limited travel allowances will be available to fellows in both categories. Graduate fellows will receive allowances for tuition and laboratory fees. Announcements describing the fellowships are available from the National Science Foundation, Washington 25, D. C. Application forms may be obtained from the Fellowship Office, National Academy of Sciences-National Research Council, 2101 Constitution Ave., N.W., Washington 25, D. C. Awards in both categories will be announced on March 15, 1962.