

Industrial Research PHYSICISTS and Electronic Engineers

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Sonics . Instrumentation
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—If you are a physicist or electronic engineer and have broad technical interest in any of the above fields, then the Physics Department of Continental Can Company offers you a unique opportunity for interesting non-defense work and professional growth.

THE POSITIONS

We have openings for both recent graduates and more experienced individuals and one, with the title of General Physics Laboratory Director, for an outstanding man who has demonstrated considerable creative ability.

THE WORK

We are pioneering long-range and radically new processes and products arising out of the company's major position in high-speed fabrication of metal, glass, paper, fiber, cork and plastic containers, and other products. In addition, we render consulting services to other divisions.

THE BENEFITS

Salary structure is excellent, and there are numerous benefits including company-paid hospitalization and life insurance, relocation assistance. Staff members are encouraged to keep ahead in their profession.

THE LOCATION

The division's new laboratories are located within easy reach of the University of Chicago, The John Crerar Library, Argonne National Laboratory and of the finest southern and western residential suburbs.

You are invited to investigate these opportunities at Continental Can Company, in complete confidence. A few minutes now can mean a jump of years in your professional progress.

Please write or call collect to Dr. Harold K. Hughes, Director of Physics Research



**CONTINENTAL CAN
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Central Research & Engineering Division
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elements 95 through 101. A fellow of the American Physical Society, he has been Professor of Chemistry and Chemical Engineering at Berkeley since 1945, served as a member of the General Advisory Committee of the AEC from 1946 to 1950, and was a consultant to the Office of Scientific Research and Development from 1950 to 1953.

In addition to the Nobel Prize (which he shared with Edwin M. McMillan in 1951) Seaborg's other honors include the Chemical Society Award in 1947, the Ericsson Gold Medal from the American Society of Swedish Engineers in 1948, the Nichols Medal in 1948, and the Scott Award and Medal in 1953.

Humanities Fund, Inc., will give its annual \$3000 Boris A. Bakhmeteff Research Fellowship for a "definite research project of an original and creative nature in the general field of mechanics of fluids". The recipient must be a full-time graduate student who is a candidate for the master's or doctoral degree. Applications for the 1960-61 award should be filed by February 15 with Dean William Allan, School of Technology, The City College of New York, New York 31, N. Y.

Oxford University is again offering ICI and Pressed Steel Fellowships, tenable for three years, to commence at the beginning of the 1960-61 academic year. The fellowships (open equally to men and women) are for research in physics or chemistry or allied subjects. Stipends will be normally within the range £700-£1000, depending on age and qualifications, and fellows will be expected to have a doctoral degree by the date of their appointment. Applications should reach the Registrar, University Registry, Clarendon Building, Oxford, England, no later than February 13, 1960. Further information can be obtained from the Registrar.

Science Education

Grants totaling over \$9 million have been made by the National Science Foundation to 33 colleges and universities to support Academic-Year Institutes for science and mathematics teachers. While most of the programs will be for high-school teachers, a limited number of openings for college teachers will also be available in some of the Institutes. The Foundation grants will provide stipends of \$3000 for each participant, with additional allowances for dependents, books, and travel. Information and application forms must be obtained from the directors of the individual institutes, but a list of the participating schools is included in an "Academic Year Institutes Announcement" for 1960 which is available on request from the National Science Foundation, Washington 25, D. C.

During the summer of 1960, the National Science Foundation will support 379 Summer Institutes at 265 educational institutions. Of these, 316 will be open to high-school teachers only, 37 will be for college teachers only, 24 will be for both high-school and college teachers, and 2 will be for technical institute personnel.



Environment for Exploration

The John Jay Hopkins Laboratory for Pure and Applied Science at General Dynamics' General Atomic Division in San Diego, California, is a modern center of research and development, where new ideas and techniques are vigorously pursued. Here, strong engineering and development activities are matched with broad basic theoretical and experimental research to create an ideal environment for productive efforts in the nuclear field.

Here, advanced work is underway on the High Temperature Gas-cooled Reactor (HTGR), which promises to be a major short cut to the nation's goal of economic nuclear power. The prototype HTGR plant will be constructed by 1963 for Philadelphia Electric Company and High Temperature Reactor Development Associates, Inc.

Here, engineers and scientists work in a creative atmosphere on other advanced programs, including the MGCR gas-cooled reactor and closed-cycle gas turbine system for merchant ship propulsion . . . TRIGA reactors for training, research, and isotope production, which are now being installed on five continents . . . small nuclear power systems . . . test reactors . . . nuclear power for space vehicles . . . thermoelectricity . . . controlled thermonuclear reactions.

Rapid expansion of these programs has led to increased engineering activity and created openings, including senior positions, for men who seek a high degree of individual responsibility coupled with unusual opportunities to demonstrate their initiative and ability.

In addition to **Nuclear Engineers**, **Metallurgists** experienced in materials development, **Mathematicians - Programmers**, and **Experimental and Theoretical Physicists** are invited to consider opportunities now existing in varied program areas. Please address your letter of inquiry to Manager of Personnel, P.O. Box 608-R4, San Diego 12, California.

GENERAL ATOMIC
DIVISION OF **GENERAL DYNAMICS**



Physicists NUCLEAR ENERGY DEVELOPMENT



At
Combustion
Engineering's
Nuclear Division,
R&D programs in
physics concern
three interrelated
areas:

- * theoretical reactor descriptions of neutron behavior, with method applications involving large digital computers;
- * experimental reactor measurements on two critical assemblies to indicate validity of theoretical predictions;
- * evaluation of advanced core types, fission fuel cycles, often necessitating fresh approaches and new techniques.

Available staff appointments in this work require:

Ph.D. in Theoretical Physics, reactor theory experience desirable, for: Development of theoretical methods of reactor design; evaluation of theory-experiment agreement; computer solution methods.

M.S. or Ph.D. in Physics, experience in low energy nuclear physics desirable, for: Nuclear core design and reactor studies; calculations on criticality, shielding, core life, fuel loading, reactor control.

For more information, please write: Mr. Raymond Killelea, Manager, Professional Recruiting. Or, talk with our representative at annual American Physical Society Meeting, January 1960, N.Y. City.

NUCLEAR DIVISION
COMBUSTION ENGINEERING, INC.
WINDSOR, CONN.

As in the case of the academic-year program, a list of the institutions and their directors may be obtained by writing to the Foundation, requesting the Summer Institute Announcement for 1960.

The University of Colorado in Boulder will hold its Third Annual Institute for Theoretical Physics from June 20 to August 25. This year's program will emphasize low-energy nuclear physics and nonequilibrium statistical mechanics. A number of postdoctoral and predoctoral stipends are expected to be available, and some travel allowance will be granted in each category. Inquiries concerning the program should be addressed to Dr. Wesley E. Brittin, Chairman, Department of Physics, University of Colorado, Boulder, Colo.

The eleventh summer program on "Technique and Applications of Infrared Spectroscopy" will be held by the Massachusetts Institute of Technology during the weeks of August 8 and 15. Offered jointly by MIT's Spectroscopy Laboratory and Department of Chemistry, the program will be under the direction of Richard C. Lord, director of the Spectroscopy Laboratory, in collaboration with Foil A. Miller of the Mellon Institute and Ellis R. Lippincott of the University of Maryland. Application forms and full information may be obtained from Dr. James M. Austin, Director of the Summer Session, Room 7-103, Massachusetts Institute of Technology, Cambridge 39, Mass.

Armour Research Foundation has established three professorships (in physics, electrical engineering, and computer technology) at the Illinois Institute of Technology. The endowment will augment the Institute faculty and, the Foundation hopes, will encourage the establishment of similar professorships by industry and other scientific organizations.

The Philosophy of Science Institute at St. John's University, Jamaica, N. Y., is planning to offer a course in the philosophy of physics during the spring semester. Vincent E. Smith, director of the Institute, will be course lecturer, and visiting philosophers of science from other institutions will participate.

An industry-sponsored evening graduate program leading to the MA and PhD degrees has been established at Boston University for Raytheon engineers and scientists. The company will foot the tuition bill, arrange work schedules to facilitate attendance in classes, grant leaves of absence for those preparing for comprehensive examinations, and encourage research for doctoral dissertations in Raytheon laboratories on topics of interest to the company. Senior Raytheon scientists may act as dissertation advisers, serving in an academic capacity for Boston University.

Wheeler P. Davey, emeritus professor of physics and chemistry at the Pennsylvania State University, died on October 12 at the age of 73. Born in Cleveland, Dr. Davey did his undergraduate work at Western Reserve University, earned an MS degree from Penn-