

electron-positron pairs, his theoretical description of the carbon cycle reaction as a mechanism to explain the phenomenon of stellar energy production, his quantum mechanical calculation of the stopping power of matter for fast charged particles, and his explanation of the electromagnetic shift of hydrogen energy levels.

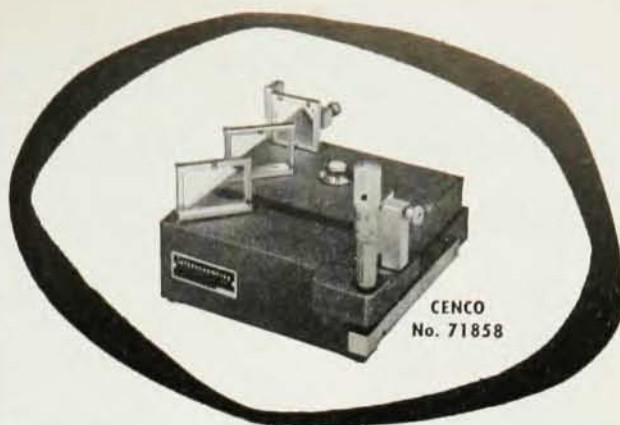
Born in Alsace-Lorraine, Dr. Bethe was educated at Kiel and Frankfurt and received his PhD from the University of Munich. He taught at various German universities until 1933 when he left Germany. He spent two years in England at the Universities of Manchester and Bristol before coming to the United States to join the Cornell faculty in 1935. During World War II, he took an extended leave of absence from Cornell while serving as leader of the Theoretical Physics Division at the wartime Los Alamos laboratory. A fellow and former president (1954) of the American Physical Society, Dr. Bethe has been a post-war consultant to the Atomic Energy Commission and a member of the President's Scientific Advisory Committee.

Grants and Fellowships

The Virginia Institute for Scientific Research in Richmond has received a \$75 000 grant to help underwrite two research scholars for three years of uncommitted, fundamental research. The award, which the Institute must match with gifts from other sources, was made by the Old Dominion Foundation. The Institute is a nonprofit corporation started in 1949 under the sponsorship of the Virginia Academy of Sciences. Its work has been primarily in the fields of surface chemistry and physics, the solid state, and plant biochemistry.

The Massachusetts Institute of Technology has established a new program of predoctoral fellowships in the atmospheric sciences (meteorology) and oceanography. The first awards under the program, which is made possible by a grant from the Ford Foundation, will be for the 1960-61 academic year. Fellowships will be awarded on the basis of the extent and quality of the applicant's preparation in the physical sciences and mathematics, his over-all academic record, the nature of references, his scientific objectives, and (when available) results of the Graduate Record Examinations, but prior training in the specific fellowship fields is not a prerequisite. The stipend is \$3000 per year plus full tuition and fellowships may be renewed for a maximum of three years. February 1 is the deadline for filing applications, which may be obtained along with further information from Prof. Henry G. Houghton, Room 24-516, Massachusetts Institute of Technology, Cambridge 39, Mass.

Harvard University has also received a Ford Foundation grant to support a doctoral-level fellowship program in problems of atmospheric physics. Theses can be submitted for degrees in physics, applied physics, or applied mathematics and the only stipulation is that the area of research must fall within some branch



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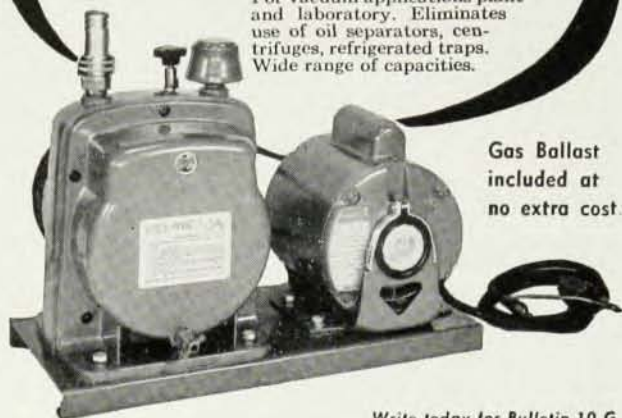
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of atmospheric studies, including such topics as the upper atmosphere, dynamical processes, fundamentals of convection and turbulence, radiative transfer, physics of clouds, atmospheric spectroscopy, etc. The program will be under the guidance and direction of Prof. R. M. Goody, Pierce Hall, Harvard University, Cambridge 38, Mass., from whom further information may be obtained.

The Atomic Energy Commission is accepting applications for 237 AEC graduate fellowships for the 1960-61 academic year in nuclear science and engineering, health physics, and industrial hygiene. The programs are open to US citizens and are administered for the Commission by the Oak Ridge Institute of Nuclear Studies.

The prerequisite for nuclear science and engineering fellowship applicants is a bachelor's degree in engineering or physical science, and mathematics through differential equations. A total of 150 fellowships will be granted for 12 months of study at 49 participating universities, and renewals are available. The basic stipend is \$1800 for the first year and increases to a maximum of \$2200 for the final year, with additional allowances for dependents. The deadline for filing applications is January 1, 1960.

Seventy-five fellowships, five leading to the PhD degree and 70 for one year of graduate study, are being offered in the health physics program, for which applications must be submitted by February 1. The five fellowships for advanced training in health physics, leading to a doctorate in disciplines closely related to health protection, will be available each year. Applicants must be actively engaged in health physics work and have a minimum of two years of productive experience in the field. Fellows may choose their graduate school, subject to the concurrence of the ORINS Fellowship Board. The stipend is \$4000 per year plus \$400 for each dependent. Up to \$2500 per year is allowed to the graduate school selected to cover tuition and extraordinary costs.

To be eligible for the other 70 fellowships, applicants (under 35 years of age) must have bachelor degrees in biology, chemistry, engineering, or physics, with adequate preparation in other related fields, and must have completed mathematics through calculus. These fellowships provide for a year of study at an assigned university, followed by three summer months of training at an AEC installation. Participating institutions are Harvard, Vanderbilt, and the Universities of California, Kansas, Michigan, Rochester, and Washington. Commission installations cooperating in the program are Argonne, Brookhaven, and Oak Ridge National Laboratories, Lawrence Radiation Laboratory, National Reactor Testing Station, and Hanford Atomic Products Operation. A limited number of extensions are available for additional work to complete the master's degree. The stipend is \$2500 for 12 months with an additional allowance for dependents.

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