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- Solar Phenomena and its Terrestrial Effects
- Atmospheric Electricity

Requirements: Background and competence in theoretical and experimental physics.

Junior applicants must have sufficient background to work under the supervision of recognized authorities in the above fields.

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Write to: Mr. Richard Rubino
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Your reply will be accorded absolute confidence
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be awarded this spring by the Daniel and Florence Guggenheim Foundation. They will be granted for study at the Guggenheim Jet Propulsion Center at Princeton University, the California Institute of Technology, and the Guggenheim Institute of Flight Structures at Columbia University and each will provide tuition and a stipend ranging from \$1500 to \$2000. Applications must be filed with the university selected by March 1.

#### Documentation

A proposal that action be taken to make electron diffraction data more generally available has been advanced by a group of some 20 scientists who met at the Mellon Institute last November to consider the need for better access to such information. The group, under the leadership of Victor Hicks of the Allen-Bradley Corporation, has suggested that the ultimate goal should be to prepare compilations of electron diffraction data in a form similar to the x-ray diffraction card file of the American Society for Testing Materials. William Fink, vice chairman of the Joint Committee on Chemical Analysis by Powder Diffraction Methods (a joint project of the ASTM, the American Crystallographic Association, and the British Institute of Physics), has been designated to represent the group at the meeting of the International Union of Crystallography to be held next August in Cambridge, England, and to present the problem to the international organizations involved. To determine the extent of interest in the proposed program, individual comment has been invited. Those having views on the subject should write (before July 1) to Karl E. Beu, chairman of the Powder Diffraction Subcommittee of the American Crystallographic Association, Goodyear Atomic Corporation, P. O. Box 628, Portsmouth, Ohio.

A bibliography entitled Aerodynamic Phenomena in Stellar Atmospheres has been prepared under the editorship of Richard N. Thomas, consultant in astrophysics to the director of the Boulder Laboratories of the National Bureau of Standards. Published as NBS Technical Note No. 30, it was compiled for use in preparation of the forthcoming symposium on cosmical gas dynamics to be held during August in Varenna, Italy, under the joint sponsorship of the International Astronomical Union and the International Union of Theoretical and Applied Mechanics. Copies of the bibliography, PB 151389, may be obtained for \$1.25 from the Office of Technical Services, Washington 25, D. C.

To provide additional space for the increasing number of papers on the physics and chemistry of glass, the British Society of Glass Technology is now publishing its Journal in two bimonthly parts. Section A, Glass Technology, is to contain reports of applied science in the glass industry, while Section B, Physics and Chemistry of Glasses, will carry reports of original experimental and theoretical work. Each will also include abstracts, letters, and book reviews. Those wishing to submit papers or obtain subscription information should

\* Διαφέρομεν δε καὶ ταῖζ τῶν πολεμικῶν μελέταιζ τῶν ἐναντίων τοῖσδε. Τήν τε γὰρ πόλιν κοινὴν παρέχομεν καὶ οὐκ ἔστιν ὅτε ξενηλασίαιζ ἀπείργομέν τινα ἢ μαθήματοζ ἢ θεάματοζ, ὁ μὴ κρυφθεν ἀν τιζ τῶν πολεμίων ἰδὼν ὡφεληθείη, πιστεύογτεζ οὐ ταῖζ παρασκευαῖζ τὸ πλέον καὶ ἀπάταιζ ἢ τῷ ἀφ' ἡμῶν αὐτῶν ἔζ τὰ ἔργα εὐψύχω.

### THUCYDIDES



"We feel superior to our enemies in the art of war for these reasons: We throw open our city to all, and we never drive any stranger away to prevent him from learning or seeing anything; we conceal nothing, even though the knowledge of it may aid our foes; for we do not trust to preparations and crafty devices so much as to our natural courage in the hours of danger."

Present conditions no longer permit a situation quite so ideal as Thucydides' "open city" as a realistic basis for national security. Work in basic research, however, is relatively free from the restrictions that are necessary for security in other areas. Basic research at the Physical Research Laboratory of Space Technology Laboratories, Inc., is conducted in an academic atmosphere which takes full account of the fact that free communication is essential to the development of science.

STL's Physical Research Laboratory is engaged in frontier research in the physical sciences, as applicable to ballistic missile and space vehicle systems, and to space technology generally. Analytical and experimental investigations of particular interest are fundamental studies in the fields of magnetohydrodynamics, plasma physics and low temperature solid state physics.

Members of STL's Senior Staff will be attending the annual meeting of the American Physical Society, New Yorker Hotel, New York City, January 27-30, 1960.

They will be available for local interviews for those who are interested in openings now available at STL.

For an appointment please call Mr. T. W. Griesinger at the STL suite, Hotel New Yorker, LOngacre 3-6839 or send resumes and inquiries to:



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write to R. W. Douglas, Editor and Honorary Secretary, Society of Glass Technology, Thornton, Hallam Gate Road, Sheffield 10, England.

The first quarterly issue of the official organ of the Society of Nuclear Medicine is scheduled to appear in January. Editorial content of the new Journal of Nuclear Medicine will be directed towards "those members of the medical and allied professions who are interested in the diagnostic and therapeutic application of radioisotopes and in human radiobiology". The editor is Dr. George E. Thoma, Southwest Medical Center, 3915 Watson Road, St. Louis 9, Mo. Subscriptions (\$10 per year) can be ordered from Samuel N. Turiel & Associates, Inc., 430 N. Michigan Avenue, Chicago 11, Ill.

Over one million books and journals have been distributed to educational institutions, libraries, and qualified individuals throughout Asia under the "Books for Asian Students" project of the Asia Foundation. A nonprofit, nonpolitical organization, the Foundation was established some four years ago by private American citizens as an interim measure to advance education in those countries of Asia where there is a known lack of the fundamental tools for learning. In addition to the amount of published material already distributed by the Foundation, much more is required to fill the valid requests which it receives. Books and journals (in runs of five years or more) are needed on the university, college, and secondary levels in all of the physical and social sciences and in the arts. They should be in good condition and, although material published after 1945 is preferred, works by standard authors of any vintage are welcome. On large shipments, the Asia Foundation will pay transportation costs from the donor to its office in San Francisco. All shipments or questions concerning specific categories, criteria, shipping, and program details should be addressed to Books for Asian Students, 21 Drumm Street, San Francisco 11, Calif.

#### Prizes and Awards

Nobel Laureate Glenn T. Seaborg, chancellor of the University of California at Berkeley, has received the \$50 000 Enrico Fermi Award for "discoveries of plutonium and several additional elements and for leadership in the development of nuclear chemistry and atomic energy". The highest honor conferred by the United States for contributions in science, the Award was established by Congress in honor of the late Enrico Fermi and is presented each year on December 2, the anniversary of the day in 1942 when Fermi and his associates in Chicago achieved the first self-sustaining nuclear reaction. The initial award was made in 1954 to Fermi himself, shortly before his death, but the prize did not bear his name until two years later when it was awarded to the late John von Neumann. Other recipients were Ernest O. Lawrence and Eugene Wigner.

Seaborg was codiscoverer of plutonium and later found its isotope, PU<sup>239</sup>, and the uranium isotope, U<sup>233</sup>. He also discovered, or took part in the discovery of,