

THERMOCOUPLE GAGE

Continuously measures total pressure of gases in the range 1-1000 microns Hg. Direct reading, selfregulating, sturdily built for industrial use. 115 volt, 60 cycle AC operation. Write for details.

CENCO No. 94178, in compact metal case, each \$110.00



CENTRAL SCIENTIFIC CO.

A Subsidiary of Cenco Instruments Corporation
1718-B hving Park Road • Chicago 13, Illinois
Branches and Warehouses—Mountainside, N. J.
Branches - Birmingham • Santa Clara • Los Angeles • Tutsa
Houston • Toronto • Montreal • Vancouver • Ottawa

Key Positions

BASIC RESEARCH

in

- High Temperature Physics
- High Temperature Chemistry

Union Carbide Research Institute located in an attractive area north of New York City

Write to
Manager, Research Administration
Union Carbide Corporation
30 East 42nd Street
New York 17, N. Y.

UNION CARBIDE The record album, entitled *The Science of Sound*, demonstrates 19 different acoustic phenomena with narration written by Bell Laboratories scientists.

All six are loaned without charge to professional groups as well as to educational institutions through local Bell Telephone Company offices.

A series of twenty films on the teaching of mathematics, prepared under the sponsorship of the Illinois School of Mathematics and the National Educational Television and Radio Center, is to be evaluated in terms of their effectiveness in the training of mathematics teachers. The two groups have received a grant of \$266,000 from the US Office of Education in order to carry out the program.

Grants and Fellowships

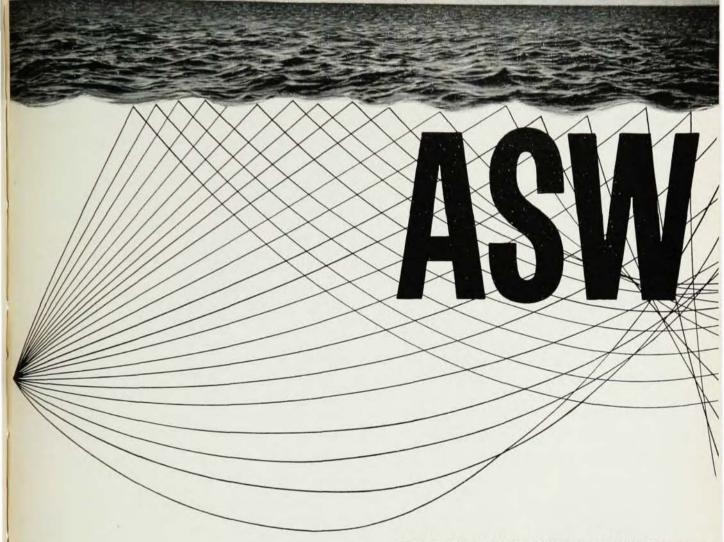
Grants totalling \$189 000 to support the development of new science teaching aids have been made by the National Science Foundation. The purpose of the grants is to encourage mathematicians, scientists, and engineers to devise new laboratory equipment of potentially wide usefulness for high-school- and college-level courses. Grantees are expected to supply teachers with full information about apparatus they devise and this may be done in the form of reports, articles in professional journals, or presentations at professional meetings. They are also expected to permit interested commercial suppliers to enter negotiations for the production and marketing of the equipment once it is developed. Support for the program will be extended during the current fiscal year, and proposals must be received by the Foundation by December 31. Further information may be obtained from the Course Content Improvement Section, National Science Foundation, Washington 25, D. C.

Interhemispheric exchange of scholars is to be encouraged under the terms of a \$130,000 grant made by the Carnegie Corporation of New York to the Institute of International Education. The funds will be used to support the work of the Council on Higher Education in the American Republics, whose program is intended to strengthen the relationships among institutions of higher learning in North and South America through the exchange of university personnel.

Owens-Illinois Glass Company, Toledo, Ohio, has established two fellowships for advanced studies in glass as part of the company's expanding activities in fundamental research. One has been set up at Ohio State University under the direction of E. Leonard Jossem of the Physics Department. The second is at Brown University and is under the direction of physics professor Philip J. Bray. Each fellowship offers \$3500 for the support of the student and additional funds for equipment, materials, and supplies.

Awards for postdoctoral study in statistics by persons whose primary field is not statistics but one of the physical, biological, or social sciences to which statistics can be applied are again offered by the Depart-

OCEAN SURVEILLANCE



Martin-Baltimore now has unusual opportunities in the field of Anti-Submarine Warfare. A number of superior positions are open, requiring a minimum of 3 years' experience, in the areas of Underwater Acoustics listed here.

If you are qualified in any of these areas, we would be glad to tell you in detail the advantages of working at Martin. Send resume to R. W. Bonner, Director, ASW, THE MARTIN COMPANY, Baltimore 3, Maryland.

SIGNAL PROCESSING SYSTEMS ENGINEERS with experience in Advanced Acoustic Detection Systems, ASW Fire Control or related work in signal processing as applied to other types of systems.

ASW ACOUSTIC SYSTEM ENGINEERS with broad background in active or passive acoustic long-range detection systems . . . must be able to work with basic system parameters and acoustic environment to generate optimum detection system characteristics.

OCEANOGRAPHERS AND PROPAGATION SPECIALISTS to design experiments and evaluate resulting data to aid in detecting system synthesis.



THE NEW MONTHLY

Journal of Geophysical Research

THE SCIENTIFIC PUBLICATION of the AMERICAN GEOPHYSICAL UNION

publishing fundamental contributions to

AERONOMY GEOMAGNETISM OCEANOGRAPHY
GEOCHEMISTRY HYDROLOGY SEISMOLOGY
GEODESY METEOROLOGY TECTONOPHYSICS

 underground nuclear detonations - cosmic-ray measurements - satellite observations - space explorations - IGY discoveries

ANNUAL DUES . ten dollars
SUBSCRIPTIONS TO NONMEMBERS:
1959 sixteen dollars . 1960 twenty dollars

ADDRESS INQUIRIES TO:

American Geophysical Union
1515 Massachusetts Ave., N.W., Washington 5, D. C.

ARE YOU PLANNING
A NEW PHYSICS BUILDING?



SELECTED
REPRINTS OF
ARTICLES ON
PHYSICS BUILDINGS

A 182 page republication of some of the most interesting and significant articles from architectural magazines and from the American Journal of Physics. This book assists those now faced with immediate problems in programming and planning for new building facilities for physics teaching and research. PROJECT ON DESIGN OF PHYSICS BUILDINGS

> Checks for two dollars per copy should accompany orders to the

AMERICAN INSTITUTE OF PHYSICS 335 East 45th Street, New York 17, N.Y. ment of Statistics of the University of Chicago. The awards range from \$3600 to \$5000 on a nine-month basis or from \$4400 to \$6000 on an eleven-month basis. The closing date for applications for the 1960-61 academic year is February 15, 1960. Further information may be obtained from the Department of Statistics, Eckhart Hall, University of Chicago, Chicago 37, Ill.

N. Ernest Dorsey, who retired in 1948 from his position as a physicist at the National Bureau of Standards after 40 years of nearly continuous service to the Bureau, died on July 6 at Towson, Md. His age was 86. Born in Annapolis Junction, Md., Dr. Dorsey graduated from the Johns Hopkins University and received his doctorate in physics there in 1897. Before joining NBS, he taught at Hopkins and served briefly (1901–03) with the Department of Agriculture.

Dr. Dorsey is remembered at the Bureau as an extremely capable physicist with broad interests. Besides his compilation of the properties of liquid, vapor, and solid states of water (which was published as a book entitled *Properties of the Ordinary Water Substance*), he made an exhaustive study of the phenomenon of supercooling, a pioneering comparison of the electrostatic and electromagnetic units of electricity, an absolute determination of the international ampere, and an evaluation of the various determinations of the velocity of light. He also served as an associate editor of the *International Critical Tables* from 1922 to 1929. He remained active in research after his retirement from the Bureau in 1943 and published several short papers in recent years.

He was a fellow of the American Physical Society and a member of the Optical Society of America.

John G. Kirkwood, a physical chemist and chairman of the Department of Chemistry at Yale University, died of cancer on August 9 at Grace-New Haven Community Hospital. He was 52 years of age. Born in Gotebo, Okla., Dr. Kirkwood graduated from the University of Chicago and received his PhD from the Massachusetts Institute of Technology in 1929.

After doing research at MIT, Harvard University, and the Universities of Leipzig and Munich, he was named an assistant professor of chemistry at Cornell in 1934. He rose through the teaching ranks at Cornell, Chicago, and the California Institute of Technology and in 1951 was appointed Sterling professor and chairman of the Department of Chemistry at Yale University. Shortly before his death, Dr. Kirkwood had returned from the University of Leiden in the Netherlands, where he was serving as Lorentz professor of science, while on leave of absence from Yale.

A fellow of the American Physical Society, he had been a member of the Board of Editors of *The Physics of Fluids* and had served as an associate editor of the *Journal of Chemical Physics*, the *Journal of Physical Chemistry*, and the *Chemical Reviews*.