

RESEARCH ASSOCIATE

Applications are invited for a postdoctoral research associate in experimental spectroscopy. The position carries an annual salary of \$9,000 and is tenable for one to three years.

The research program at the Harvard College Observatory is directed toward fundamental wavelength and intensity measurements in the wavelength region extending from 8000 Å thru the vacuum ultraviolet. The basic spectroscopic source is the aerodynamic shock tube. Spectrographs available are:

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1.0 meter normal incidence vacuum spectrograph
1.5 meter concave grating Eagle spectrograph
3.0 meter normal incidence vacuum spectrograph

Applicants should include a list of publications with their resume. Resume should be sent to

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derwater sound: the production of underwater signals, the nature of underwater sound, measurement and uses, and the reduction of underwater noise. The various chapters do not deal exclusively with one or the other of these four subjects—some of the lectures are primarily concerned with direct applications, giving descriptions of equipment currently in use and results of representative measurements, while other papers deal with basic theoretical concepts. Even the less advanced reader will be able to follow most of the papers without difficulty. The value of this compilation has been increased further by the addition of references and the inclusion of the discussions which followed the formal lectures.

Proceedings are not commonly expected to resemble coherent, well-organized, and unified textbooks; this book, however, comes rather close. It is a fine source of information for the physicist or engineer working in underwater sound and related branches of physical acoustics.

Fundamental Problems in Turbulence and Their Relation to Geophysics. Symp. Proc. (Univ. of Aix-Marseilles, Marseilles, Sept. 1961). F. N. Frenkiel, ed. 241 pp. American Geophysical Union, Washington, D. C., 1962. \$5.00. *Reviewed by E. J. Öpik, University of Maryland.*

WHEN man-invented hydrodynamic models of steady or laminar flow become impossible, nature solves the problem through turbulence. With different degrees of organization and randomness, whole packets of a fluid begin imitating the unpredictable gaseous motions of molecules, taking over from conduction and diffusion the vital functions of transport of heat, momentum, and substance.

The functions, in their relation to our terrestrial and cosmic environment, are discussed empirically and theoretically in 32 contributed papers.

The atmospheres and hydrospheres of the earth and other celestial bodies, the earth's interior, stellar interiors, cosmic spaces, the physicist's laboratories, and human dwellings are all seats of turbulence. The entire spectrum of scientists and engineers concerned with the fluid regions of the universe will find useful information in the papers of this volume, as well as in the quoted literature.

Meteorites. By Brian Mason. 274 pp. John Wiley & Sons, Inc., New York, 1962. \$7.95. *Reviewed by Edward Anders, University of Chicago.*

THIS is an excellent book. All important aspects of meteoritics are covered, with emphasis on modern work. The level will appeal not only to novices, graduate students, and kibitzers, but also to established workers in the field.

As stated in the preface, Mason wrote this book in order to provide "... a comprehensive account of our present knowledge of meteorites, with special reference