

PUBLISHING NEWS

Abstracts of Proceedings

The editor of the journal *Science Abstracts* and the Committee on Physics Abstracts of the American Physical Society and the American Institute of Physics have joined in urging that steps be taken to insure the indexing and abstracting of conference proceedings. Organizers of physics meetings are asked to arrange to have copies of published proceedings submitted promptly to *Physics Abstracts*, Institution of Electrical Engineers, Savoy Place, London W.C.2, England.

It is emphasized that only the full and authoritative texts are of value to the journal for the purposes of preparing abstracts and indexes, and it is not sufficient to submit announcements or abstracts alone. Only published proceedings having unrestricted circulation should be sent, and complete information should be included to indicate the proper procedure to be followed by individuals wishing to obtain copies of the publication.

Space Exploration

The National Aeronautics and Space Administration has announced that the proceedings of its University Conference on the Science and Technology of Space Exploration that took place in Chicago last November is now available in two separate forms. In addition to the original two-volume publication, which can still be obtained from the Government Printing Office for \$5.50, 16 separate monographs written by NASA scientists working in the various fields covered are now available at prices ranging from 25 to 55 cents. The publications, each of which develops the state of the art in one of the areas considered by the conference, should also be ordered from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. The titles and prices are listed below:

- NASA SP-13, *Geophysics and Astronomy in Space Exploration*, 35¢;
- NASA SP-14, *Lunar and Planetary Sciences in Space Exploration*, 55¢;
- NASA SP-15, *Celestial Mechanics and Space Flight Analysis*, 35¢;
- NASA SP-16, *Data Acquisition from Spacecraft*, 40¢;
- NASA SP-17, *Control, Guidance and Navigation of Spacecraft*, 40¢;
- NASA SP-18, *Bioastronautics*, 30¢;
- NASA SP-19, *Chemical Rocket Propulsion*, 40¢;
- NASA SP-20, *Nuclear Rocket Propulsion*, 45¢;
- NASA SP-21, *Power for Spacecraft*, 25¢;
- NASA SP-22, *Electric Propulsion for Spacecraft*, 35¢;
- NASA SP-23, *Aerodynamics of Space Vehicles*, 40¢;
- NASA SP-24, *Gas Dynamics in Space Exploration*, 40¢;
- NASA SP-25, *Plasma Physics and Magnetohydrodynamics in Space Exploration*, 50¢;

NASA SP-26, *Laboratory Techniques in Space Environment Research* 40¢;

NASA SP-27, *Materials for Space Operations*, 35¢; and

NASA SP-28, *Structures for Space Operations*, 45¢.

The Upper Atmosphere

Three technical monographs and a bibliography, all dealing with the upper atmosphere, have recently been prepared by the National Bureau of Standards and can be obtained from the Superintendent of Documents, US Government Printing Office, Washington 25, D. C.

Mean Electron Density Variations of the Quiet Ionosphere, No. 8—October 1959. (NBS Technical Note 40-8, 35¢), is the eighth in a series of twelve monthly reports, beginning with March, 1959, illustrating graphically the electron density variations between latitudes 15°N and 50°N along the 75°W meridian. From ionospheric vertical soundings taken at NBS and other field stations, hourly profiles were computed at a central laboratory and combined to form hourly mean quiet profiles for each station and month.

The results of an investigation using the thermal balance in the *F* region to study the atmospheric temperature and density are provided in *Thermal Balance in the F Region of the Atmosphere* (NBS Technical Note 162, 50¢). Another report relating to the *F* region is given in *Equatorial Spread F*, (NBS Technical Note 145, 60¢).

More than 850 titles on direction finding and related topics such as instrumental details, data analysis, and theories of propagation, are listed in *Bibliography on Direction Finding and Related Ionospheric Propagation Topics*, (NBS Technical Note 127, 60¢). The 115-page guide, an extension of an earlier bibliography prepared by the Numerical Analysis Research Staff of the University of California at Los Angeles, contains references to subject literature for the period 1940 through mid-1961.

Frontiers of Physics

The New York publishing house of W. A. Benjamin, Inc., is reissuing its "Frontiers of Physics" series in a hardbound format. Previously available only as paperback books, the series was begun in 1961 with the purpose of providing collections of lecture notes and reprints in rapidly evolving fields of physics. The series is under the general editorship of David Pines of the University of Illinois. Volumes now obtainable in cloth-bound form include: *S-Matrix Theory of Strong Interactions* by G. F. Chew (182 pp, \$5.95), *The Theory*

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of *Fundamental Processes* by R. P. Feynman (172 pp, \$5.95), *Quantum Electrodynamics* by R. P. Feynman (198 pp, \$5.95), *The Mössbauer Effect* by Hans Frauenfelder (336 pp, \$6.95), *Quantum Statistical Mechanics* by Leo P. Kadanoff and Gordon Baym (203 pp, \$6.95), *Paramagnetic Resonance* by George E. Pake (205 pp, \$6.95), and *The Many-Body Problem* by David Pines (457 pp, \$6.95).

Index

The NAS-NRC Office of Critical Tables has issued a new compilation entitled, *Consolidated Index of Selected Property Values: Physical Chemistry and Thermodynamics* (NAS-NRC Publication 976). The *Index* contains more than 100 000 bits of coded information and covers the contents of six well-known thermodynamic and physicochemical compilations. Each entry designates a substance or process, all available associated properties, and the publications listing numerical values for the cited properties. Entries are ordered by formula according to a system based on the periodic table. Twelve thousand substances are listed, for each of which values are indexed for any of 73 properties for which they may have been computed.

The 274-page *Index* is priced at \$6 and can be ordered directly from the National Academy of Sciences—National Research Council, 2101 Constitution Ave., N.W., Washington 25, D. C.

Bibliography

A reading list of books and journals in astronomy has been prepared by the library of the Bell Telephone Laboratory at Holmdel, N. J. Intended as a guide for the firm's scientific and technical personnel, the booklet contains a selected list of titles ranging from elementary to advanced presentations. To each title is added a short description of the contents, which also indicates the level of sophistication of the work. Categories include general astronomy; the solar system; stars, galaxies, and cosmology; and celestial mechanics and positional astronomy. Copies of the 20-page booklet are available free of charge, while they last. Requests should be addressed to Mr. R. G. Krupp, Holmdel Librarian, Bell Telephone Laboratories, Holmdel, N. J.

Errata

In the article "Statistical Properties of Spectra" by C. E. Porter (*Physics Today*, February 1963, p. 26), the following errors have been noted:

On page 32, second column, line 22, omit equal sign.

On page 34, caption to Fig. 17, line 5, read $2/(N+2)$, instead of $2/(N^2)$.

On page 35, equation 9, read $H = SH_D S^{-1}$,
= $SH_D \tilde{S}$, instead of $H = SH_D S^{-1} = SH_D S$.

On page 35, equation 10, read $dH = [dS \tilde{S}, H]$
+ $S dH_D \tilde{S}$, instead of $dH = [dS \tilde{S}, H]$.