

PUBLISHING NEWS

Proceedings

The proceedings of the first national meeting of the National Conference of Standards Laboratories, held at Boulder, Colo. in August 1962, are now available. More than thirty papers, plus transcriptions of panel discussions and a report of the business and information session, are included in the 254-page volume. Areas covered by the papers include NBS service to industry, error analysis of measurement systems, corporate measurement standards programs, measurement agreement comparisons among standardizing laboratories, and calibration recycle analysis and work-load control. *Proceedings of the 1962 Standards Laboratory Conference* can be obtained from the Superintendent of Documents, US Government Printing Office, Washington, D. C. for \$1.75 per copy.

The proceedings of a symposium on *Applications of Computers to Nuclear and Radiochemistry* (NAS-NS 3107), held in the fall of 1962 at Gatlinburg, Tenn., is now available. Sponsors of the meeting were the Subcommittee on Radiochemistry of the NAS-NRC Committee on Nuclear Science and the Atomic Energy Commission, with the Chemistry Division of the Oak Ridge National Laboratory acting as host. The 314-page volume is edited by G. D. O'Kelley of Oak Ridge and represents the latest in the NAS-NRC series of monographs on radiochemistry and radiochemical techniques. Copies can be obtained from the Office of Technical Services, Department of Commerce, Washington 25, D. C., for \$2.50 each.

The proceedings of the fifth conference of the Subcommittee on Nuclear Geophysics of the Committee on Nuclear Science have been added to the National Academy of Sciences' Nuclear Science Series. Entitled *Nuclear Geophysics*, Report Number 38, the 247-page paperbound volume contains the papers of two symposia, one on the Earth's interior and the other on oceanic mixing. The remaining papers cover geochronology, uranium-series dating, stable isotopes, meteorites, and radioisotopes in the atmosphere. The book is priced at \$2.75, and should be ordered as Publication 1075 from the Printing and Publishing Office, National Academy of Sciences, 2101 Constitution Avenue, N.W., Washington 25, D. C.

High Temperature

Starting in January, Consultants Bureau, in cooperation with the American Institute of Physics, will publish a cover-to-cover translation of a new Soviet bimonthly journal of high-temperature physics, *Teplofizika vysokikh temperatur*. The Russian periodical is issued by the USSR Academy of Sciences. Its English-

language counterpart will appear under the title, *High Temperature*, and its distribution and general editorial supervision will be the responsibility of the AIP. The journal covers thermophysical properties of solids, liquids, gases, and plasmas; heat-transfer processes and associated gas-dynamical and MHD phenomena; high-temperature apparatus and methods of measurement; problems of radiation; and the technology of new refractory materials. The cost of the first three issues, which were published in 1963, is \$25; thereafter the rate will be \$50 a year with a special rate of \$70 for the first 18-month period. Titles of the 25 papers in the first issue, as well as a translation of a survey article by Academician V. A. Kirillin, are available without charge from the AIP. Inquiries should be directed to Department SP at the American Institute of Physics, 335 East 45th Street, New York 17, N. Y.

Caveat Emptor

A subscription service in Massachusetts is encouraging students to take advantage of their special rates in ordering publications. Their reply card, which is headed, "Special Rates for Physics Students," lists subscription rates for several magazines under the statement, "As a student you are eligible for special, economical rates to these important publications. Please check the magazines you want." The publications mentioned include *The Physical Review*, which is listed at a rate of \$40 per year, and the *Journal of Applied Physics*, at \$20 per year. Those familiar with journal rates for publication of the American Institute of Physics and its member societies know that the above "special, economical rates" are, in fact, regular nonmember rates. To list them as special rates is clearly a misrepresentation.

Accurate information on regular rates of all publications handled by the AIP is readily available from the Institute and from reputable subscription agencies. Special member rates apply only to subscriptions ordered through AIP by individual members of the Institute's member, associate member, and affiliated societies.

Nuclear Bibliography

The International Atomic Energy Agency has published the first cumulative index to its semimonthly *List of References on Nuclear Energy*. Prepared by the Documentation Section of the Agency's Division of Scientific and Technical Information, the index provides references to books, research reports, and other documents, including microcards, on the peaceful uses of atomic energy and on basic and applied research in the nuclear sciences. Covering the years 1959, 1960, and



checkout procedures on a newly manufactured space vehicle—its every component, subsystem and finally, complete system—have until recently been a monumental task. The complete performance of each item was recorded, then either processed and analyzed using entirely manual techniques, or run through computers, translated into digital language, and then manually interpreted and compared with predetermined optimum standards. Two to three weeks often elapsed before final approval could be given.

With the Lockheed-developed AUTO-DRAPE system—Automatic Data Recording and Processing Equipment—checkout time has been cut to a few days. The key to this time and labor saving system is simple: A "filter" device has been

installed between the checkout signal and the analyst. AUTO-DRAPE thus produces an "exception" report—a printed tabulation of vehicle functions not performing within preassigned limits. This advanced technique—which makes use of a real time, on-line digital computer—eliminates the need to manually examine some 80% of the data.

With this system, engineers at Lockheed Missiles & Space Company are now able to process data at the amazing rate of 40 Kc in real time. Based on these principles, Lockheed is also operating the VADE system, currently performing launch readiness functions at the Pacific Missile Range. A further extension of this concept is being developed to process the telemetered signals of a vehicle in flight.

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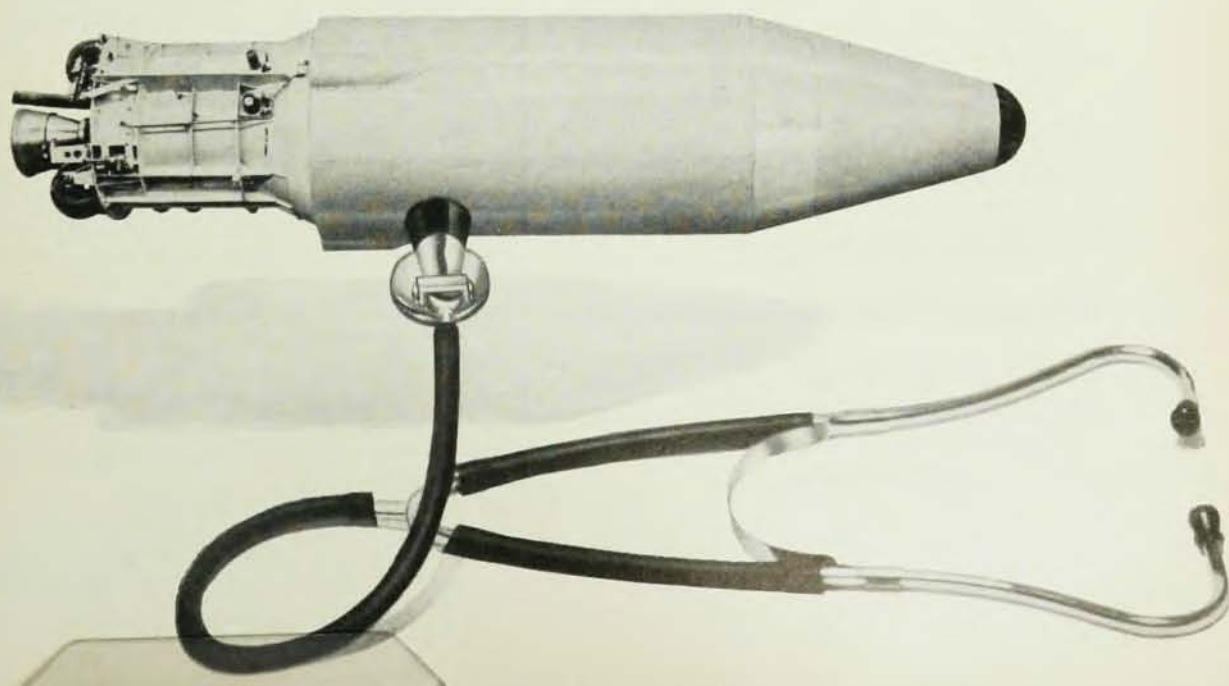
SCIENTISTS & ENGINEERS: In addition to positions relating to Automatic Checkout, such as electronic engineers specializing in digital circuitry and logical design, other important openings exist for specialists in: Laser research • Bio-astronautics • Guidance and control • Operational Research • Trajectory analysis • Gas dynamics • Orbit thermodynamics • Chemical and nuclear propulsion.

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1961, the index is divided into three parts: an alphabetically arranged author's index, an alphabetical corporate-author's index, and a numerical report-number index. *List of References on Nuclear Energy, Index 1959-1961* is sent free of charge to governmental and private organizations, and to individual scientists who receive the *List of References*. Additional requests are fulfilled according to availability, and should be sent to the Director, Division of Scientific and Technical Information, International Atomic Energy Agency, Kärntner Ring 11, Vienna 1, Austria.

Instrument Society Publications

The Instrument Society of America has published a 378-page reference to *Standards and Practices for Instrumentation*. The book contains over 271 instrumentation and automatic control standards and recommended practices developed by 19 technical organizations, listed by title, identifying number, abstract, revision date, and availability. Also included are recommended practices of the ISA in complete form, titles of British and Canadian standards, and names of indexes for further investigation of US Government standards. Copies are available from the Publications Department, ISA, 530 William Penn Place, Pittsburgh, Pa., for \$22.50 (ISA members, \$15) each.

To help fill the need for a single uniform transducer data source, the Instrument Society has prepared an *ISA Transducer Compendium*. Edited by Emil J. Minnar, manager of ISA's technical and educational operations, the volume provides a guide to transducer state-of-the-art and product-performance data for over 37 000 transducers covering 1250 model series. Transducers are grouped according to motion, dimension, pressure, force and torque, flow of materials, sound, electric and magnetic quantities, temperature, chemical composition analysis, time and frequency, electromagnetic radiation, nuclear and penetrating radiation, humidity, and level. Each model is described in more than 20 columns of specific data. Copies of the book can be obtained from the Plenum Press, 227 West 17 St., New York 11, N. Y., for \$25 (\$30 foreign) each.

Nuclear Data Newsletter

Current programs in the collection and analysis of nuclear data are outlined in a recent newsletter by Katherine Way of the NAS-NRC Nuclear Data Group. Included in the first issue of nine pages are brief descriptions of activities of such groups as the Brookhaven Sigma Center, the Mainz-Amsterdam Group, the Nuclear Data Group, and others, as well as the status of latest publications in the field. Inquiries concerning *World-Wide News of Compilations in Nuclear Physics*, Vol. 1, No. 1, September 1963, should be addressed to Dr. Katherine Way, Nuclear Data Group, National Academy of Sciences-National Research Council, Washington 25, D. C.