
Miscellany

Publications

A 336-page *Purchase Guide for Programs in Science, Mathematics, and Modern Foreign Languages* has been compiled for the Council of Chief State School Officers under a project directed by Edgar Fuller, executive secretary of the Council. Brief descriptions (an item number, accepted name, short statement about its possible uses in instruction, and functional specifications) are given for each of approximately one thousand items of equipment used for instruction in elementary science, mathematics, general science, modern foreign languages, biology, chemistry, and physics. Each item is coded to indicate suggested areas of instruction and the level (basic, standard, or advanced) in which it is believed to find its greatest usefulness. The book also contains short essays on special problems of instruction and a select list of books and films for each area. Copies of the *Purchase Guide* are available at \$3.95 per copy from Ginn and Company, Statler Building, Boston 17, Mass.

A new quarterly publication, *Nuclear Safety*, has been established by the Atomic Energy Commission as a part of its Technical Progress Review series. The periodical will deal with developments in reactor design, construction, and operation; fabrication and reprocessing of reactor fuels; and handling of fissionable material, including shipment and storage. Intended to serve as an informational aid to reactor designers and builders, reactor fuel specialists, regulatory and public safety officials, and others concerned with nuclear safety, the quarterly is available by subscription at a rate of \$2 per year (individual copies may be obtained for 55¢) from the Superintendent of Documents, US Government Printing Office, Washington 25, D. C.

Another reference work intended for the use of reactor specialists is a new compendium entitled *Physical and Engineering Properties of Materials for Nuclear Fuel Elements*. Compiled by Henry H. Hausner, adjunct professor at the Polytechnic Institute of Brooklyn, it has been published by Sylvania-Corning Nuclear Corporation, Bayside, L. I., N. Y. The 55-page booklet, priced at \$1, contains eighty tables giving thermal-neutron cross sections of fifty commonly available elements, as well as various physical and thermal properties of uranium, uranium alloys, thorium, plutonium, ceramics, zirconium and Zircaloy-2, aluminum, stainless steel, graphite, and other high-temperature materials.

The Division of Mathematics of the National Academy of Sciences—National Research Council has

announced the appearance of its annual list of Visiting Foreign Mathematicians. This bulletin includes information regarding mathematicians and statisticians spending some part of the current academic year in the United States and gives the dates of their visit together with the host institution. Since many visiting scholars have limited resources, they often welcome invitations to give lectures or informal talks to college, community, or other groups. Copies of the list may be obtained by writing to the Division of Mathematics, National Academy of Sciences—National Research Council, 2101 Constitution Avenue, Washington 25, D. C.

The National Inventors Council, which serves as the liaison agency between the armed forces and the nation's civilian inventors, has, in this year's burst of wishful thinking, released a new list of some 300 unsolved problems to challenge the inventive ingenuity of persons whose interests may range from problems of long-range space vehicle flight to those associated with the mechanical details of machine tooling small parts. The Council, whose chairman is C. S. Draper, head of the Department of Aeronautics and Astronautics at the Massachusetts Institute of Technology, is composed of scientists and engineers and the heads of research of the Army, Navy, and Air Force. Its administrative staff is a part of the Department of Commerce's Office of Technical Services, whose director, John C. Green, serves as executive director of the Council. The list includes problems in many fields. In electronics, improved transistors and microwave oscillators are needed, as are self-activating spare electronic components to go into operation automatically as other parts fail. New adhesives for explosives, solar cells, metals, and fabrics are needed, as are new instruments such as improved airspeed indicators, a fuel contamination detector, and specialized computers. The complete list may be obtained on request from the National Inventors Council, US Department of Commerce, Washington 25, D. C.

Awards

The Nobel Prize in physics for 1959 has been won jointly by two Berkeley experimentalists, Emilio Segrè and Owen Chamberlain, for their contributions in 1955 to the first successful demonstration of the reality of the antiproton. Both are members of the physics staff at the University of California's Lawrence Radiation Laboratory, although Dr. Chamberlain is currently at Harvard University as a visiting lecturer. A long-postulated necessity in nuclear theory, the search for the antiproton was delayed for many years for lack of means to accelerate protons to the very high energies required for antiproton production. One of the original suppositions in planning for the Berkeley Bevatron, in fact, was that its projected 6.2 billion electron volts would prove more than adequate for the production of proton-antiproton pairs, and it was hoped, in spite of the short lifetime which the scarce new particle was