

the committee. The American Institute of Physics is represented on the committee by J. W. Buchta of the National Science Foundation.

The Southeastern Section of the American Physical Society, at its Twentieth Meeting, held at the University of Tennessee in Knoxville April 1-3, elected the following officers for 1954-55: Chairman, W. M. Nielsen, Duke; Vice-chairman, M. S. McCay, Chattanooga; Secretary, Dixon Callihan, ORNL; Treasurer, Robert Lagemann, Vanderbilt; and Member, Executive Committee, R. C. Williamson, Florida.

Publications

The Directory of Commercial and College Laboratories, hitherto compiled and published by the National Bureau of Standards of the U. S. Department of Commerce, will be published in the future by the American Society for Testing Materials, according to a recent agreement between the two organizations. First published in 1927, the Directory has been periodically revised. It provides interested persons with information concerning the location of testing laboratories together with the types of commodities and the nature of the investigations the laboratories are prepared to undertake. Until the revised ASTM Directory is completed, the present Directory, NBS Miscellaneous Publication M187, published in 1947, will continue to be available from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

Investigation of Electron Tube Reliability in Military Applications is the title of a 97-page report published by Aeronautical Radio, Inc., 1520 New Hampshire Ave., N.W., Washington 6, D. C., and available for \$.50 from L. E. Davis of that organization. The subject of this study, which was sponsored by the Bureau of Ships, is of considerable importance, since it is estimated that from one-half to two-thirds of military equipment failures are due to faulty tubes. According to the report "an over-all 3-to-1 improvement in tube reliability could eventually cut maintenance costs by not less than a half-billion dollars a year, even if the improved tubes cost five times as much as the original types". Aeronautical Radio's investigation involved collecting defective tubes and controlled testing of several of the least reliable tube types. An evaluation of tube weaknesses and a discussion of factors contributing to the unreliability is incorporated in the report.

The Optical Industry Directory has as its purpose "to supply information concerning the sources of the materials, tools, components, finished instruments, design facilities, and services available to those interested in the Optical Industry and its products." The result is a compilation of American optical manufacturers, distributors, and designers, foreign optical manufacturers, optical industry personnel, and a classified products listing. The Directory is published by the Optical Publishing Company, Huntington, Long Island, New York, and sells for \$5.00.

Summer Programs

Mechanical Properties of Metals is to be the topic of this summer's conference on the chemistry and physics of metals, held August 16-20 at New Hampton School in New Hampshire as part of the Gordon Research Conferences, AAAS. Purpose of the conferences is to stimulate research "by fostering a free and informal exchange of ideas between persons actively interested in the subjects under discussion". Further information can be obtained from W. George Parks, Colby Junior College, New London, New Hampshire.

Laboratory courses at Brooklyn Polytechnic this summer will cover: Progress in Polymerization and Copolymerization Techniques (June 28-July 2); Properties of Macromolecules in Solution, Including Polyelectrolytes and Other Water Soluble Polymers (July 12-July 16); and Industrial Applications of X-Ray Diffraction (August 23-September 3). The courses are intended "as an experimental program for teaching modern laboratory techniques to meet the growing demand by scientists, particularly industrial scientists, for advanced instruction in the use of specialized physical tools in chemistry and physics". Inquiries should be addressed to Mrs. Doris Cattell, Secretary, Summer Laboratory Courses, Polytechnic Institute of Brooklyn, 99 Livingston Street, Brooklyn 1, New York.

Grants for Research

Thirty-six unclassified physical research contracts have been awarded recently by the Atomic Energy Commission, of which six are new contracts and the rest renewals. The new contracts are with the University of Buffalo, applications of isotopes in chemical kinetics (G. M. Harris); Columbia University, helium in the atmosphere and lithosphere (J. L. Kulp); Bartol Research Foundation, neutron scattering measurements (C. E. Mandeville); Providence College, the nature of gaseous negative ions formed by electron impact (M. A. Fineman); Rutgers University, anionic complexes and polymers of oxy-acids of some of the transition elements (E. R. Allen); and University of Texas, effects of biological slimes on sea water (E. W. Steel).

A total of \$30 000 in grants for the support of fundamental research in West Germany has been awarded by the Research Corporation as the start of a five-to-ten-year program of that magnitude. The financing of the program is to come from royalties collected in Germany on American patents on the manufacture of vitamin B₁ that were assigned to the Research Corporation by the developers of the process. Physics, chemistry, and biochemistry are the principal fields involved in the present eleven grants. Among the latter are: research concerning deviations from the thermic balance in the outer layer of the sun, P. ten Bruggencate; research concerning the velocity and mechanism of high-speed ionic reactions, M. Eigen; and luminous phenomena in active nitrogen, U. Stille.