on the properties of matter and radioactivity. From 1909 until 1911 he continued his work under the direction of Sir Ernest Rutherford at the University of Manchester. Returning to Canada, he lectured at McGill, was appointed assistant professor in 1912, and in the same year was made professor in the University of Alberta. During the war years, on the recommendation of Sir Ernest Rutherford, Dr. Boyle was engaged in research for the Admiralty Board of Invention and the Anti-submarine Division; and in that work he developed important applications of ultrasonics. In 1924 he tested apparatus for the detecting of icebergs and the sounding of depths in the Belle Isle Straits.

Dr. Whitby studied chemistry under Sir William Tilden at the Imperial College of Science and Technology, London, graduating in 1906 with the Frank Hatton prize. He was one of the first scientific workers to study the rubber industry, and one of his books thereon, "Plantation Rubber and the Testing of Rubber," 1920, has markedly influenced the trend of rubber research. In recognition of his contribution in that field, the Institution of the Rubber Industry (Great Britain) recently awarded him the Colwyn gold medal. In 1928 the distinction of Officier d'Académie was conferred upon him by the Government of France. The same year he was president of the Canadian Chemical Association.

As assistant director of the division of physics and engineering physics, Prof. John Hamilton Parkin, associate professor of mechanical engineering at the University of Toronto, has been appointed to direct the development of national aeronautical research laboratories.

Plans for the new National Laboratories building call for completion early in 1931. Meanwhile, temporary laboratory space has been provided.

THE AMERICAN STANDARDS ASSOCIATION

Announcement that the underwriting of the finances of the American Standards Association for a period of three years to permit a total annual expenditure of \$150,000 for its work is now being completed has just been made by William J. Serrill, president of the association. This fund permits an increase in the budget for 1930 of \$80,000 over the previous budget of the association and is expected to result in an expansion of national standardization work affecting practically all industries.

The fund is being underwritten by a large group of industrial organizations. The underwriting was arranged by a committee consisting of James A. Farrell, president of the United States Steel Corporation; Gerard Swope, president of the General Electric Company; George B. Cortelyou, president of

the Consolidated Gas Company of New York, and F. A. Merrick, president of the Westinghouse Electric and Manufacturing Company.

Because of the rapid growth of the industrial standardization movement in this country, the underwriting was planned to permit immediate expansion of the work of providing authoritative national standards while permanent financing is under way. It is expected that this financing will be completed during the three-year period of the underwriting.

Among the companies joining in the underwriting are:

Aluminum Company of America
American Telephone and Telegraph Company
Bethlehem Steel Company
Consolidated Gas Company of New York
Detroit Edison Company
General Electric Company
General Motors Corporation
Gulf Oil Corporation of Pennsylvania
Public Service Corporation of New Jersey
Standard Oil Company of New Jersey
U. S. Steel Corporation
Westinghouse Electric and Manufacturing Company
Youngstown Sheet and Tube Company

Up to the present time the association has adopted approximately 160 national standards, and 190 other national standards are being formulated. The association provides the machinery by which all of the producing, distributing and consuming groups concerned with a standard may cooperate in its preparation. The foremost technicians of all groups are thus brought together to pool their knowledge for the benefit of all. Over 2,000 individuals representing 800 cooperating organizations are in this way working on technical committees under the procedure of the association.

An important feature of the association's work is the adoption of national standard safety codes, which are used voluntarily by industries and also as the basis for state and municipal safety regulations and for the regulations of insurance companies in numerous states. Among the most important of these codes are the National Electrical Safety Code, the Code for Mechanical Power Transmission and several codes for mine safety.

As the result of the recent affiliation of the American Home Economics Association with the American Standards Association, this latter body has also begun important standardization work on projects of direct concern to the ultimate consumer, such as refrigerators, sheets and blankets.

INTERNATIONAL CRITICAL TABLES

THE sixth volume of the International Critical Tables was issued about the middle of October. The

permanent secretary of the National Research Council reports that most of the material for the seventh volume is now in type. It is not possible, however, to say when this volume will be ready for distribution for the reason that this, being the final volume of the series, will contain the general index, which will probably require several months for its preparation, since it is to appear in four languages, and much time must be allowed for translation and attendant correspondence in its compilation.

However, the Council is now in the final stage of this undertaking, the editorial work on which began in the summer of 1922, and the collection of funds two years earlier. Altogether about \$205,000 has been contributed by industrial corporations and philanthropic organizations toward the editorial work of the tables. Royalties on the five volumes published prior to this fall amounting to \$45,078.75 have been received and applied to the editorial expenses. With the receipt of royalties on the later volumes the remaining editorial work can be fully provided for. Together with interest received on funds temporarily invested and from other miscellaneous sources a total sum of about \$235,000 will have been expended through a period of eight years on the editorial preparation of these tables. The total number of subscriptions to the tables at the prepublication rate of \$7 per volume is about 6,700, and at the regular price of \$12 per volume about 400. The total number of paid-up subscribers in both classes for the first five volumes of the series is about 6,300. Of these about 5,000 have subscribed for Volumes VI and VII.

The Council of the National Academy has approved the appointment of the committee recommended at the last meeting of the executive board to pass upon requests to reproduce material from the tables. This committee consists of the editor-in-chief of the tables, the permanent secretary of the council, and the chairmen of the council's divisions of physical sciences, and of chemistry and chemical technology.

RECENT APPOINTMENTS AT THE MELLON INSTITUTE

Dr. E. R. Weidlein, director of Mellon Institute of Industrial Research, Pittsburgh, Pennsylvania, has announced the following appointments at that institution made between July 1, 1929, and January 1, 1930. The appointments for the first half of 1929 appeared in the August 2 number of Science on page 115.

Senior industrial fellow:

James N. Lawrence, Ph.D. (Wisconsin, '12), has been appointed to the senior incumbency of the multiple industrial fellowship on wax. He succeeds Dr. D. K. Tressler, who has joined the research staff of the General Foods Company, Gloucester, Massachusetts.

Industrial fellows:

Henry A. Ambrose, Ph.D. (Mass. Inst. Tech., '30), has been appointed an industrial fellow on the multiple fellowship on petroleum production.

N. J. Beaber, Ph.D. (Iowa State College, '25), has been appointed to the nicotine fellowship. He was previously engaged at the institute in research on the gum fellowship.

Alexander C. Brown, M.S. (Mass. Inst. Tech., '26), has been added to the personnel of the multiple industrial fellowship on fatty acids. Before going to Pittsburgh, he had spent a year in Germany and two years in industrial work on petroleum.

Jasper S. Brown, B.S. (Maine, '26), has been appointed to the multiple fellowship on petroleum production. His previous experience was gained at the Pittsburgh Station of the U. S. Bureau of Mines.

Frank L. Jones, M.A. (Columbia University, '27), has been appointed to the enamels fellowship. Before accepting this position he was engaged in work toward the doctorate at Columbia, and he has also had teaching and industrial experience. He is succeeding B. A. Rice, who has joined the Pfaudler Company.

Ronald B. McKinnis, Ph.D. (Pittsburgh, '30), has been appointed to the can fellowship.

S. M. Martin, Jr., M.S. (North Carolina, '29), has joined the research staff of the multiple industrial fellowship on petroleum refining. Before going to the institute, he had had several years' experience in rubber technology.

Daniel C. L. Sherk, Ph.D. (Wisconsin, '20), has been appointed to the wood by-products fellowship. He has been engaged in industrial work since receiving his doctorate.

Thomas H. Swan, Ph.D. (Ohio State, '24), has been appointed to the garment fellowship. Since 1924 he has been the holder of the institute's bed fellowship.

A. J. Teplitz, B.S. (Kansas, '26), has been appointed an industrial fellow on the petroleum production fellowship.

Richard B. Unangst, B.S. (Lafayette, '16), has joined the personnel of the multiple utensil fellowship. Since 1916 he has been engaged in industrial work.

THE MICHIGAN ACADEMY OF SCIENCE, ARTS AND LETTERS

THE thirty-fifth annual meeting of the Michigan Academy of Science, Arts and Letters will be held in Ann Arbor on March 20, 21 and 22, 1930. The officers of the year are:

President—Oliver Kamm, Parke, Davis and Company, Detroit

Vice-president—Arthur E. R. Boak, University of Michigan

Secretary—Dow V. Baxter, University of Michigan Treasurer—E. C. Prophet, University of Michigan Editor—Peter Okkelberg, University of Michigan Librarian—W. W. Bishop, University of Michigan Section chairmen:

Anthropology, Fred Dustin, Saginaw Botany, Frieda Cobb Blanchard, Ann Arbor