Gas in Canada, 1915–1920, the document is available from the Department of Mines and Technical Surveys, Ottawa, Canada, as "Mines Branch Information Circular IC 105" (25¢ per copy).

Facilities

Construction has commenced on a building to house the Union Carbide Research Institute, a special research activity of Union Carbide Corporation, which was formed in 1956 in order to complement and extend the scope of the basic research being carried on in the Corporation's research laboratories. A major purpose of the Institute is to conduct fundamental studies of the physical and chemical behavior of matter under ordinary as well as extreme conditions of pressure and temperature. Programs already under way or in the planning stage include such areas of study as solid-state physics, the theory of metal bonds, and the structure of plastics. The new building will be located at Union Carbide's 280-acre site in Eastview, N. Y., and is expected to be ready for occupancy in the latter part of 1960.

The California Institute of Technology in Pasadena has received a gift of more than $1 million from The Firestone Tire & Rubber Company for the construction of a new facility to be known as the Firestone Aeronautical Research Laboratory. The new building will house several kinds of advanced research equipment including plasma jets, shock tubes, electric-arc wind tunnels, and hypersonic tunnels to operate at speeds up to the equivalent of 12 400 mph. Work in the new building will be devoted chiefly to studies of missile and aircraft structures at hypersonic speeds, design criteria for solid propellants for missiles and rockets, flow problems at hypersonic speeds, heat transfer, and theoretical fluid mechanics.

Microwave Associates, Inc., has begun construction of two new buildings in Northwest Industrial Park, Burlington, Mass. One building will be utilized by the firm's semiconductor and tube operations and the second building will house WAVECO Corp., a subsidiary of Microwave Associates which manufactures microwave radar components, and the parent company's Component and Research and Engineering Group. The two buildings are scheduled for completion during the spring of 1960 at a cost of approximately three-quarters of a million dollars.

American Metal Products Company of Detroit began construction in August of a research, engineering, and development center in Ann Arbor, Mich. The location was chosen because of consulting services and facilities that are available to industry at the University of Michigan. The new center, which will open in December and is expected to reach full operation sometime next year, will contain high-temperature enclosures, laboratories for metallurgical and chemical research, and engineering facilities and equipment for

production, testing, and evaluation of nuclear and high-temperature materials.

A metallurgical research center for the development of high-temperature metals for jet engines, rockets and missiles, atomic power generators, and other "hardware" of advanced design, will be constructed at the Du Pont Company's Baltimore plant. The installation will contain equipment to forge, extrude, roll, draw, and heat treat such refractory metals as niobium, tantalum, titanium, zirconium, tungsten, and chromium and to produce mill products. It is scheduled for completion by the fall of 1960.

Education

Colleges, universities, and nonprofit research institutions are invited by the National Science Foundation to submit proposals for summer (1960) and academic-year (1960–61) study-training-research projects designed to provide educational opportunities for college undergraduates and teachers. The Undergraduate Research Participation Program and the Undergraduate Research Training Program are intended to help colleges and universities provide means for high-ability students to advance in their understanding of scientific methods and in their ability to employ investigative procedures. One approach is to introduce more actual research activity into undergraduate education, as in the Foundation's Undergraduate Research Participation Program under which students participate in established programs financed primarily for objectives other than undergraduate education. Another is to make it possible for colleges and universities to initiate new programs with the primary objective of providing educational experience for undergraduates and financed largely from funds for educational purposes, as in the Undergraduate Research Training Program. Proposals for these programs beginning in the summer of 1960 should be postmarked not later than midnight November 15, 1959; those beginning in the 1960–61 academic year, not later than January 8, 1960.

The Research Participation for Teacher Training Program is designed to encourage colleges and universities to provide research experience for science and mathematics teachers in high schools, and for instructors in science, mathematics, and engineering in colleges (including junior colleges) which have few, if any, research facilities. Training in these cases is to be provided through participation in research activity under the tutelage of experienced scientific investigators. Actual research experience, full time in the laboratory, in the field, or in theoretical investigations, should form the basis of a research participation program. These are summer programs only, and proposals should be postmarked before midnight October 26, 1959.

Suggestions for the preparation of proposals may be obtained from the Special Projects in Science Education Section, Scientific Personnel and Education Division, National Science Foundation, Washington 25, D. C.