million, the new plant is designed to make possible developmental research on techniques for fabricating plutonium fuel elements. It will also be used to fabricate experimental plutonium fuel elements for several of Argonne's nuclear reactors. The Facility will be operated by the staff of the Laboratory's Metallurgy Division under the direction of Frank G. Foote. A Fuels Technology Center, designed to place even greater emphasis on metallurgical research, is now under construction at the Argonne site, and when it is completed much of the research effort carried out there will receive practical application at the Fuel Fabrication Facility, which is intended primarily as a development unit for fuel fabrication methods.

Acoustica Associates, Inc., has opened a new plant in Plainview, N. Y., to consolidate the company's executive headquarters and the Eastern Division's ultrasonics production and research operations. To highlight the opening ceremonies, Acoustica demonstrated a new long-range underwater antisubmarine warning device recently developed for the US Navy. The ultrasonic device, called SEFAR, figured in the ribbon-cutting formalities which signified the opening of the new plant.

The Nortronics Division of the Northrop Corporation has acquired a 50-acre site for the construction of a new research center within the recently created Palos Verdes Research Park, which is located on the Palos Verdes peninsula south of Los Angeles, Calif. The first segment of the center is scheduled for completion in the summer of 1960 and will cost about $4 million to build. Research at the center will be concerned primarily with astronertial and inertial guidance systems, navigation and guidance computers, and infrared optical systems and equipment.

Armour Research Foundation of Illinois Institute of Technology has inaugurated a program of radiation research in petroleum technology, under the sponsorship of the Standard Oil Company of Indiana. Plans call for both fundamental and exploratory studies of the effects of radiation on petroleum and petrochemical processing. The program, which will be carried out under the direction of Paul Feng, Armour's supervisor of chemical physics, will have at its disposal the Foundation's 100 kw water-boiler reactor and two accelerators, a 35-Mev machine and a high-intensity 8-Mev machine made available to the program by Michael Reese Hospital of Chicago and the W. F. & John Barnes Company.

Technical Operations, Inc., is expanding its Burlington (Mass.) Laboratory, where work was started in April on new chemistry laboratory facilities and offices for the recently established Computer Applications and Research Group, part of which is moving to Burlington from Washington, D. C. Further construction was begun in June on a new building to house experimental apparatus which the firm has designed for simulation studies for the Air Force of certain effects of atomic detonations on materials.

On June 12, the Rheem Semiconductor Corporation broke ground for a new addition to its Mountain View, Calif., facilities, which will house the manufacturing, engineering, and administration departments of the firm. Formed in March as a subsidiary of the Rheem Manufacturing Company, the firm has already outgrown its original facility and is opening a new building this month for the production of silicon diodes.

The Semiconductor Division of the Raytheon Company has announced plans to erect a transistor plant in Lewiston, Maine, to be operated in addition to the division's present facilities in Massachusetts. Construction is scheduled to begin early this fall and be completed by mid-1960. When full capacity is achieved, the plant is expected to employ more than 2000 workers and will produce transistors, diodes, and rectifiers.

Committees

The National Academy of Sciences—National Research Council has appointed a 14-man committee to determine how materials research and development in the United States can be accelerated to meet the increasing demands of industrial progress and of national defense. The group will assess the nation's total materials research needs and will explore all feasible means of stepping up the national materials research program in order to satisfy anticipated demands for essential materials. Chairman of the Committee on the Scope and Conduct of Materials Research is Clyde Williams of Columbus, Ohio, formerly head of Battelle Memorial Institute. Other members of the Committee are Allen Astin (National Bureau of Standards), Harvey Brooks (Harvard University), A. J. Herzig (Climax Molybdenum Company of Michigan and chairman of the NAS—NRC Materials Advisory Board), A. B. Kinzel (Union Carbide Corporation), Thomas H. Miller (US Bureau of Mines), John D. Morgan, Jr. (Consultant, Washington, D. C.), Thomas B. Nolan (US Geological Survey), Albert J. Phillips (American Smelting and Refining Company), C. F. Rassweiler (Johns-Manville Corporation), E. Duer Reeves (Esso Standard Oil Company), Frederick Seitz (University of Illinois and chairman of the NAS—NRC Committee on Perspectives in Materials Research), Cyril S. Smith (Institute for the Study of Metals, University of Chicago), and David Swan (Linde Company).

Princeton University has set up a nine-member research board "to shape policy in the acceptance and administration of research grants and contracts". The new board, which includes representatives of the humanities and social sciences, replaces the twelve-year-old Committee on Project Research and Inventions, which was composed entirely of representatives from the Department of Science and Engineering and handled only research projects related to those fields.

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Henry DeWolf Smyth, Joseph Henry Professor of Physics at Princeton, has been named as the board's chairman and will have the rank of dean.

Science Education

A new experiment in cooperative education, combining graduate studies and research in engineering and the physical sciences, will be initiated this fall at the University of Cincinnati in its College of Engineering and Graduate School of Arts and Sciences. The program will combine study for master's and doctor's degrees with basic research under fellowships sponsored by industry. The graduate researchers will work on basic problems selected in a field of mutual interest to both the University faculty and the industry sponsor. Doctorates in physics and in chemical and metallurgical engineering will be offered first. It is hoped the program may be expanded later into other areas. A second University of Cincinnati program to be started this September involves industry-sponsored applied research projects to be carried out by engineering juniors and seniors.

Western Reserve University in Cleveland has received a $19 180 grant from the National Science Foundation to assist in inaugurating its undergraduate research participation program in the sciences. The program's objective is "to determine if by providing superior undergraduates with an opportunity for actual research participation, they can make an important contribution to science education". According to the Foundation the success of the venture will be judged in terms of the educational experiences offered to the undergraduates, each of whom will be under the supervision of experienced scientists. Members of the Western Reserve Physics Department who will help to direct the program include John K. Major, William T. Achor, Stefan Machlup, John D. Nixon, Berol L. Robinson, and Gerald E. Tauber.

The Atomic Energy Commission expects to start a new program this fall which will provide students in small colleges with the opportunity for specialized training in the techniques of using radioisotopes. A 35-foot, bus-type, mobile training laboratory will be moved from campus to campus for presentations of two-week concentrated courses on the basic techniques of handling radioisotopes. Scientists and technicians from the Oak Ridge Institute of Nuclear Studies, which will administer the program for the Commission, will accompany the mobile radioisotope laboratory to lecture and direct laboratory experimentation. Available initially to colleges in the South and Southeast, the course will be a condensed version of one that has been conducted in Oak Ridge by the Institute since 1948. The mobile laboratory will be equipped with hoods and sinks and will be able to accommodate six students at a time. Dual laboratory sessions, alternated with lectures, will permit 12 students to participate in each course. The number to be trained at a particular institution will be