In the Laboratories

■ The Atomic Energy Commission is soliciting proposals for the production of refined uranium salts in privately owned and operated facilities. The process steps employed in the atomic energy program to convert the uranium content of ores to the desired form consist of mining and milling of ores to produce a concentrate, refining the concentrate to produce a purified salt, conversion of the salt to metal or uranium hexafluoride, and in the case of metal, fabrication into suitable shapes, At present the extent of participation by private industry in these activities is limited to the mining and milling steps.

Specifically, the commission is interested in receiving proposals from qualified firms to process, over a 5-year period, uranium ores or concentrates to either uranium tetrafluoride, or uranium hexafluoride, with deliveries to begin about July 1958. The commission will consider proposals for any production rate up to a maximum of 5000 tons U_3O_8 equivalent per year. Proposals may be based on arrangements whereby the U_3O_8 concentrates are supplied by the commission and refined salts returned, or alternatively the commission will consider proposals for direct purchase of the refined salts from a company having or obtaining its own supply of uranium ores or concentrates.

To assist in the preparation of proposals, the commission will make available classified technology relating to refining of uranium salts to those applicants eligible to receive classified data under the access permit procedure. Information relative to obtaining access permits as well as further details relative to the preparation of proposals can be secured by writing to Mr. Harold L. Price, Director, Division of Civilian Application, U.S. Atomic Energy Commission, Washington, D.C. Proposals will be accepted *through 31 Mar. 1956.*

■ North American Aviation has announced establishment of the Autonetics Division for continuation of its engineering and manufacturing operations in the electromechanical field. Developed from engineering studies inaugurated nearly 10 years ago in relation to the company's program of guided missile development, North American's work in electromechanics has grown into an operation now employing nearly 8000 persons.

The new division is engaged in the development and production of automatic navigational systems, autopilots, automatic flight control systems, airborne armament control systems, radar systems, analog and digital computers, data-processing equipment, and automatic controls for machine tools.

John B. Moore, who has been head of the company's electromechanical engineering department, has been named general manager of the Autonetics Division. The newly formed unit will occupy expanded facilities now under construction near North American's Downey plant.

■ The Consolidated Vacuum Corporation, a subsidiary of Consolidated Engineering Corporation, Pasadena, Calif., has been merged with the parent organization and will be known as the ConVac Division of Consolidated.

■ Stockholders of Consolidated Engineering Corporation, Pasadena, Calif., have voted a change in company name to Consolidated Electrodynamics Corporation. The new name became official on 9 Nov.

Miscellaneous

■ The complete collection of technical papers from the Government Synthetic (Copolymer) Rubber Program has been made available to the public for the first time. The rubber research program was begun under the War Production Board in World War II and then was continued under other agencies after the war. Recently it became a responsibility of the National Science Foundation, which has made the reports available.

The 3750 reports, covering the period 1 Feb. 1943 through 30 June 1954, are reproduced on microfilm or photocopy and may be obtained from the Photoduplication Service, Publication Board Project, Library of Congress, Washington 25, D.C. The papers are identified as PB 118310. Microfilm cards giving the title and a brief summary of each of the reports are also available. Prices will be quoted on request.

Also available is a four-volume compilation of abstracts from the program. It is PB 111736, *Abstracts of Technical Papers from the Government Synthetic Rubber Program,* which may be ordered from the Office of Technical Services, U.S. Department of Commerce, Washington 25, D.C.; price, $5 a set.

These abstracts of papers published between 1942 and 1953 were prepared by the Research and Development Division, Office of Synthetic Rubber, Reconstruction Finance Corporation. They include a summary of the research done by the many industrial, institutional, and governmental groups participating in the program.

■ The new Hall of Physical Geology, which has been in preparation at the Chicago Natural History Museum for several years, was opened to the public just over a month ago. In the new hall are presented basic facts about this planet—its origin, its structure and composition, what its interior is like, the nature of its surface, its age, how and why its face is constantly changing, and the forces that act on it from within and without. This information is visually transmitted in a series of 37 large exhibits.

Grouped in the center of the hall are four dioramas. In three of these, the light automatically changes to simulate variations in appearance outdoors that occur with the changing time of day. One of these dioramas illustrates the effect of stream erosion with a model of a scene in the Grand Canyon.

Another diorama shows what a glacier is like, how it acts, and what it does to topography. The third diorama illustrates the processes by which volcanoes come into being, as well as their activity and its effects. The fourth diorama, representing the interior of a cave, demonstrates the solvent action of ground waters.

Many of the exhibits in the hall are devoted to a comprehensive exposition of the subject of rocks. The visual treatment of rocks shows the differences between igneous, sedimentary, and metamorphic.

The new hall was prepared under the supervision of Sharat K. Roy, chief curator of geology. Staff members who aided in the work include Harry E. Changnon, curator of geology exhibits, Henry Horback and Henry U. Taylor, preparators, and Maidi Wiebe, artist.

■ Some of the work being done at the atomic energy center at Oak Ridge, Tenn., is described in a new 44-page booklet, "The atom in our hands," that has just been published by Union Carbide and Carbon Corporation. Copies may be obtained by writing to Union Carbide and Carbon Corporation, Room 308, 30 E. 42 St., New York 17.

■ Among the articles in the December issue of *The Scientific Monthly* are "Effects of nuclear weapons testing," Gordon M. Dunning; "Ecological experimentation with animal populations," Thomas Park; "Herodotus on the subject matter of economics," Joseph J. Spengler; "Beauty and the beast: life and the rule of order," Paul Weiss; and "Homeostasis, society, and evolution: a critique," Jules Henry.

In the "Association Affairs" section there is a preview of the 122nd meeting of the AAAS that is to be held in Atlanta, Ga., 26–31 December. Also included in this section are a report on amendments to the AAAS constitution and condensed statements of AAAS finances for the year 1954.

Twenty-two books are reviewed in this issue.