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year study of the properties of superconducting coils and wires at Argonne, the new system consists of three concentric coils, 18 inches, 11 inches, and 7 inches, respectively, in inside diameter. The magnets use a superconducting wire developed at Argonne and manufactured by Supercon and Westinghouse Cryogenic Systems Department, which was wound into cables at Argonne. The maximum energy stored in all three coils exceeds 600 000 joules.

In its first application, the two outer coils, which can hold a field of 42 000 gauss, will enclose a ten-inch hydrogen-helium bubble chamber used with Argonne's 12.5-BeV zero-gradient synchrotron. A six-inch bubble chamber is being designed to fit within the seven-inch bore of the entire system. Charles Laverick, of the Laboratory's Particle Accelerator Division, has been in charge of the program.

New cyclotron

The Atomic Energy Commission and the University of Maryland have agreed to negotiate a contract for the design and installation of a sector-focused cyclotron on the Maryland campus. Three million dollars of the total cost will be provided by the AEC; all additional funds will be supplied by the University. The cyclotron's maximum proton energy will be about 100 MeV, and its design will also permit the acceleration of deuterons and other heavy nuclei.

When the machine is operational, in about three years, it will be used for a research program in nuclear structure (particularly by means of proton interactions at 100 MeV), nuclear chemistry, and related fields. Professor Harry Holgrem of Maryland's Department of Physics and Astronomy will direct the cyclotron program.

Florida Van de Graaff

A Model KN-4000 Van de Graaff accelerator has been installed in the newly constructed \$2.2-million Nuclear Sciences Building at the University of Florida. The machine, which is capable of producing a four-million-volt potential difference, with beam

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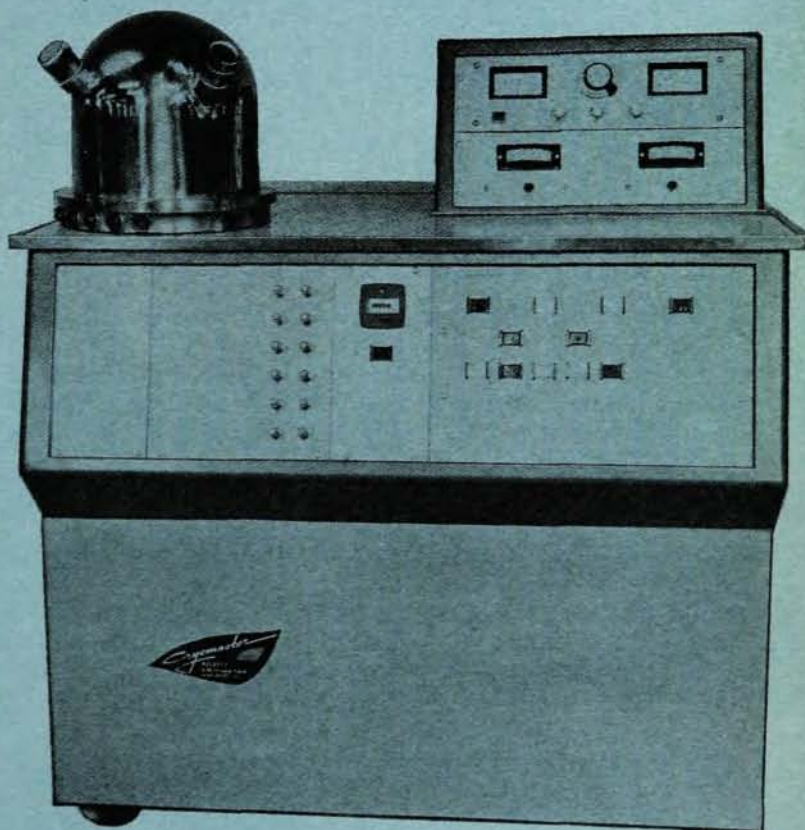
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loads up to 400 microamperes, will be used by the Departments of Physics, Nuclear Engineering, Chemistry, and Biology. The Nuclear Sciences Building was dedicated during ceremonies held on October 10, with Glenn T. Seaborg, chairman of the US Atomic Energy Commission, as the principal speaker.

Work is under way in the Physics Department on gamma-ray angular-distribution and correlation measurements, and on neutron-polarization studies in (p,n), (d,n), and (^3He ,n) reactions.

For the Nuclear Engineering Department, the accelerator serves as a prolific source of kilovolt-energy neutrons from the ^7Li (p,n) ^7Be reaction. Post-acceleration pulsing is currently being used, but nanosecond terminal pulsing and bunching is contemplated for the near future. The kinetic behavior of reactor systems is under study, using neutron-wave propagation, neutron-pulse propagation, and noise-analysis techniques.

New crystallographic center

A Center for Crystallographic Research is being established in Buffalo, N.Y., with David Harker as its director. Its financial support comes from the Roswell Park Division of Health Research, Incorporated, an organization created to administer grants in support of scientific research at the Roswell Park Memorial Institute, the Cancer Research Institute of the New York State Department of Health. The two story 60' $\times$ 100' building in which the Center will be housed is under construction on a site adjacent to the Roswell Park complex near downtown Buffalo, and is expected to be ready early in 1965. The Center's intended personnel will consist of: (1) About five scientists at the professional level. (2) About ten scientists with standings ranging from postdoctorate fellows to associate professors. These people will often have temporary appointments of from one to five years. (3) Eventually about thirty graduate students. They will be students in departments of established universities, but doing research under the direction of members of the first two categories.