bined with special shaping of the magnetic field, will allow protons to be extracted after only a single turn in their acceleration.

Two very powerful Van de Graaff machines will be constructed with the help of the remaining two grants. A 22-Mev Van de Graaff at the University of Washington will be used in conjunction with a fixed-energy cyclotron to extend the range of energies available for studies of alpha-particle scattering. Pittsburgh's 18-Mev, three-stage Van de Graaff will replace a 47-inch cyclotron which has been used for a number of years in a study of deuteron-induced reactions. The new accelerator will make possible the resolution of closely-spaced energy levels to test the conjecture of the Pittsburgh group that the nuclear structure of the heavy elements may be less complicated than has been supposed.

## Research Support

February 1 is the deadline for receipt of applications for grants-in-aid offered by the American Academy of Arts and Sciences. Amounts ranging between \$500 and \$1500 are available for research in any scientific field, including the mathematical, physical, biological, and social sciences. Preference is generally given to applications from individual scientists, especially those at the beginning of their research careers and those handicapped by inadequate resources or facilities. Support is not usually provided for bibliographic research, preparation of manuscripts for publication, studies intended to fill the requirements for an academic degree, or purchase of nonexpendable equipment that is ordinarily available in an institutional laboratory.

Applications must be filed on forms supplied by the Academy. Correspondence should be addressed to the Chairman, Committees on Research Funds, American Academy of Arts and Sciences, 280 Newton St., Brookline 46, Mass.

Hydromechanics research projects considered of importance to the Navy are conducted annually by nongovernment laboratories under a financial support program maintained by the Bureau of Ships. The program, which is technically administered by the David Taylor Model Basin, is formulated in the early part of the calendar year and the next deadline for submitting proposals is the middle of March. Areas of interest are resistance, propulsion, stability, control, seakeeping characteristics, radiation of underwater sound, and other hydromechanics problems which may be applicable to surface and subsurface Navy craft.

Proposals for contract research under the program should be submitted in quadruplicate by March 15 to the Commanding Officer and Director, David Taylor Model Basin, Washington 7, D. C. (Attention: Code 513); requests for additional information about the program and the form to be followed in preparing proposals should be sent to the same address.