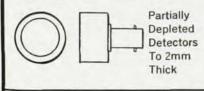
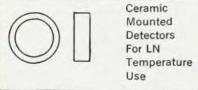
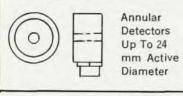
## SILICON SURFACE BARRIER PARTICLE DETECTORS

A Complete Line To Meet All Your Requirements











Rectangular Detectors Up To 50mm long and 15mm wide

Nuclear Diodes now offers a new and improved production capability with most detectors available from stock or short delivery.

Call us with your special requirements for any of our products including position sensitive silicon detectors, germanium detectors, cryostats, vacuum chambers and F. E. T. preamplifiers. Phone: 312-634-3870

nuclear diodesinc STATE AND SOCIETY

physical oceanographer. Both of these views agree that the student should first get the best possible baccalaureate degree in physics. school of thought, however, suggests that the student then receive his graduate training in oceanography at a good oceanography institution (of which there are only a limited number at present). "The best oceanographers," says Nierenberg, "are not physicists who have turned to oceanography but physics baccalaureates who got their graduate training in oceanography. The weakness of a physics PhD entering oceanography is that he has a whole background to make up to approach the world with a different viewpoint."

The other view recommends that the physics student take his graduate training in applied or engineering physics with heavy doses of potential theory, mathematical physics, hydrodynamics and electromagnetic theory. "Classical physics," says Ewing, "is ideal training for a future oceanographer. When a student has acquired his PhD or equivalent he can then apply his training to oceanography."

Whatever course is followed, oceanographers hope that the supply of trained manpower in the field will greatly increase. The supply, they say, has not caught up with the demand, and chronic vacancies exist in many public and private organizations that may retard oceanographic research for the future.

## Alt Heads New AIP Program For Computer Applications

The American Institute of Physics recently appointed Franz Alt, an expert in computer technology, to the newly created Computer Applications Division. On 1 August Alt came to AIP from his position with the National Bureau of Standards, where he was responsible for the design of the information program for the National Standard Reference Data System. At AIP Alt arranges the assignment of computer use that may arise in other divisions or institute activities (such as the information retrieval division, computer composition program, accounting, etc.).

The growing concern with the future of computers, particularly in relation to physics information programs, is reflected in the creation of the new division. AIP Director H. William Koch pointed out that the impact of computer technology on information storage, processing, dissemination and retrieval is an important element in developing the concept of the physics information system of the future. He foresees the physicist, as generator, handler and user of information, interacting with the computer to an increasing extent.

Alt joined NBS in 1948 as assistant chief of the Applied Mathematics Division and, for a time, chief of the Bureau's Office of International Relations. Before coming to NBS he served as deputy chief of the computing laboratory of the Ballistic Research Laboratories, Aberdeen Proving



ALT

Grounds. In both organizations he directed the operation of some of the early, large, fast computing machines and conducted research on methods of numerical computation, including various computations required in physics and engineering, and on computer applications in management, operations research, translation of languages and information retrieval.

Before working at Aberdeen Alt was chief analyst and later assistant research director for the Econometric Institute in New York City, an organization engaged in mathematical analysis of statistical data related to various phases of the national economy. He was also president and chairman of the editorial board of the Association for Computing Machinery.