

1961-62. The grants are designed to aid and encourage outstanding students who are studying for master's or doctor's degrees in nuclear fields. Administered for the Commission by ORINS, the awards have a term of one year and may be used for study at one of 54 designated universities in the United States.

Degree Programs in Physics

The City College of New York has announced plans to inaugurate a master's degree program in physics beginning with the fall semester. Ten new graduate courses will be introduced into the curriculum as part of the CCNY graduate program in mathematical physics, analytical dynamics, electromagnetic theory, nuclear physics, and quantum physics. Classes in mathematical physics and analytical dynamics, taught by Lawrence A. Wills and Harry Lustig, will also be offered in the evening during the fall semester. In previous years, the physics department has offered graduate courses in the School of Technology and in connection with the MS program in mathematics. Students who are candidates for the MA degree, as well as those who meet the requirements for particular courses, will be accepted into the graduate program. Each degree candidate must include a minimum of 30 credits in approved courses. Information and applications for the master's degree program in physics may be obtained from the Graduate Division of CCNY's College of Liberal Arts and Science, 139th Street & Convent Avenue, New York 31, N. Y.

The number of undergraduates majoring in physics at City College has increased steadily over the past decade, according to Henry Semat, chairman of the Physics Department, and college rolls for the current year indicate that more students are majoring in physics than in any other subject in the College of Liberal Arts and Science. Prof. Semat pointed out that a recent report of the Department of Health, Education, and Welfare revealed that only three other institutions in the nation (two branches of the University of California and MIT) produced more bachelor's degrees with majors in physics than did City College. The report covered the 1957-58 academic year and since that time the number of students majoring in physics at CCNY has more than doubled. In another survey, by the National Academy of Sciences—National Research Council, City College ranked fifth in the nation in the number of its graduates (141) who went on to obtain the doctoral degree in physics and astronomy during the twenty-year period between 1936 and 1956.

An interdisciplinary degree program in chemical physics at the master's and doctor's levels, to begin with the fall semester, has been announced by Polytechnic Institute of Brooklyn. The program was planned by an interdepartmental committee consisting of members of the chemistry and physics departments and other research personnel studying problems in chemical

physics. Its chairman is Robert Ullman, professor of chemistry.

Among the fields covered are solid state, x-ray diffraction, polymer physics, spectroscopy, resonance methods, chemical kinetics, and liquid state. Thirteen Polytechnic professors are currently engaged in chemical-physics research. Three National Defense Graduate Fellowships will be available to applicants for the new curriculum.

Gifted Students

Columbia University's Science Honors Program, which offers Saturday science courses to gifted high-school students, has received a grant of \$76 460 from the National Science Foundation for the continuation of its work during the next academic year. Under the program, three hundred high-school students study in the University's classrooms every Saturday from September through May. They are given an opportunity to do creative work at an advanced level in such fields as astrophysics, solid-state physics, computer mathematics, surface chemistry, stoichiometry, population genetics, etc., and according to the director of the program, Assistant Dean Donald Barr of the Columbia School of Engineering, teams of students have been engaged in such projects as building and experimenting with a Stern-Gerlach molecular-beam apparatus, constructing an electron microscope, and building an instrumented research rocket. One of last year's students, now a high-school senior, has his own grant from the US Public Health Service for original biochemical research.

"It is understood," Dean Barr said, "that the Columbia grant comes under a relatively new NSF program, the College-School Cooperative Program. This exactly expresses what we are doing. There has been an unfortunate separation, even aloofness, between colleges and high schools in all subjects. The high schools have a great deal of trouble meeting their responsibilities to their most talented students because of the shortage of qualified teachers and the shortage of advanced laboratory facilities. In the last few years, many colleges have tended to stop criticizing and start co-operating. We have tried to encourage this tendency."

Nuclear Oceanography

August 1 is the deadline for return of applications for a two-week course on nuclear methods applied to oceanography which is to be conducted by the Special Training Division of the Oak Ridge Institute of Nuclear Studies from November 6 to 17. The course will be limited to twenty participants. Those who wish to explore the feasibility of applying nuclear methods to their own research problems may remain at the Institute an additional week for this purpose. Further information and application blanks can be obtained from Dr. Ralph T. Overman, chairman, Special Training Division, Oak Ridge Institute of Nuclear Studies, P. O. Box 117, Oak Ridge, Tenn.