

NEWS OF THE INSTITUTE

Precollege physics report

Better communication among the physics profession in high schools, colleges, industry and public school administration was the major accomplishment of AIP's precollege physics project during 1965-66. So states Philip Youngner of St Cloud College in his final report as first director of the institute's pilot program to increase physics enrollment and strengthen teaching in the secondary schools of New Jersey and Delaware. The project's advisory committee recently recommended that the program be continued in 1966-67 and are currently seeking a new director to head its activities.

During the past academic year, eight regional conferences were held for high-school and college physics teachers, three meetings to enable high-school teachers to meet with industrial physicists and one special conference to discuss the physics teacher shortage in New Jersey. In addition the project launched a traveling library of physics apparatus, issued eight newsletters and Youngner taught two graduate seminars on problems in physics teaching.

Among the more important points generally agreed upon at the many meetings during the year are the following:

- Teacher-preparation programs should be more appropriate for high-school teachers and less oriented to graduate work and research. Two possibilities are a one-year teaching internship program and a council of physicists to certify adequate college preparation programs for high-school physics teachers.

- A tenth-grade physics course that would precede the biology-chemistry sequence should be developed. Such a course can be made suitably rigorous with only ninth-grade algebra and would provide students with a better grasp of high-school biology and chemistry. Funds are currently being sought to organize this course.

- More National Science Foundation summer institutes are needed and

they should be specifically geared to the physics teachers living in the state. The possibility of organizing in New Jersey a program similar to the Missouri summer institute project, in which several universities and a majority of Missouri high-school physics teachers participate, is now being investigated.

- Colleges and universities do not expect freshmen with high-school physics to have memorized a great many unrelated details. They do hope that the student will have learned from his high-school course what physics is about and what physicists are trying to do. Admissions offices do not generally use physics scores on college-entrance-board examinations to determine whether or not a student should be admitted but do look with favor on transcripts that include physics courses.

- No existing physics course adequately serves the large body of students who are not scientifically inclined. "Further research is necessary," says Youngner, "if such courses are to be made available. But it is also apparent that students rely more on the individual teacher than on a written course of instruction and that the most important element in the learning process is a well trained teacher."

AIP literature

At the beginning of the school year, the AIP education division offers to physics professors and their students the following books and pamphlets that may prove helpful in their work (free of charge unless otherwise noted).

Physics As A Career, *Planning for Graduate Study in Physics*, *Rewarding Careers for Women in Physics*, *Careers in College Physics Teaching*, *Careers in High-School Physics Teaching*, *The Physicist in Industry*, *Novel Experiments in Physics—A Selection of Laboratory Notes Now Used in Colleges and Universities* (\$5.00), *Checklist for Physics Buildings* (\$1.50), *Physics Buildings Today* (\$3.00), *AIP Placement Service*. □

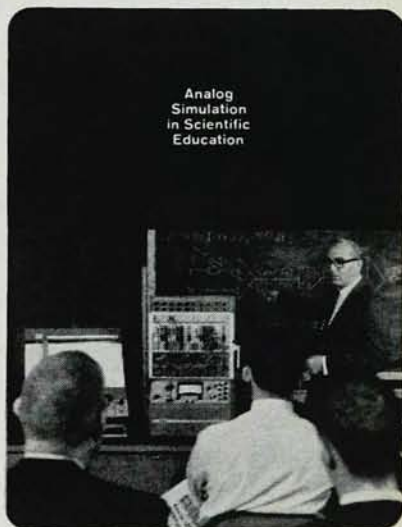
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