

NEWS OF THE INSTITUTE

Regional Counselors build physics at the grass-roots level

A regional counselor in Alaska flies 400 miles in an afternoon to discuss atomic and molecular structure with ninth graders; a counselor in South Carolina sends out a newsletter to high-school physics teachers; another in Missouri helps set up a coöperative college-school program. In every state

ers and their colleagues in colleges.

Some recent counselor projects exemplify the range and variety as well as the initiative of individual counselors. For example, William S. Wilson, head of the department of general sciences at the University of Alaska, travels about his state by plane



ALEXANDER CALANDRA making a point as James B. Conant and teachers look on.

of the union, the District of Columbia and Puerto Rico, AAPT-AIP regional counselors are busy laying the groundwork for a stronger physics community. Serving without pay, these 52 counselors work at the local level to improve physics teaching and encourage greater physics enrollments in the high schools and junior colleges. The program is jointly administered by the American Institute of Physics and the American Association of Physics Teachers.

Recently Arnold A. Strassenburg of the University of Kansas was named chairman of the program's advisory committee, replacing Leonard Olsen of the US Naval Post-Graduate School. Strassenburg believes that the program should focus attention on teacher education activities and exert its main thrust toward improving communication between high-school physics teach-

to provide physical-science programs for high-school students and discuss problem areas with teachers. Wilson is concerned with conveying to students what is going on in modern physics. "Many of our native people become good technicians," he says. "I try to give them some idea of what they will be doing later on and how basic physics will be needed as a background in their future professions. I also make a point of talking to junior groups in the smaller schools, to spark their interest in physics and mathematics."

As regional counselor for Missouri, Alexander Calandra of Washington University in St. Louis has helped to develop the Missouri Coöperative College-School Science Program—Physics. The project is a joint venture of four institutions (Columbia and Rolla

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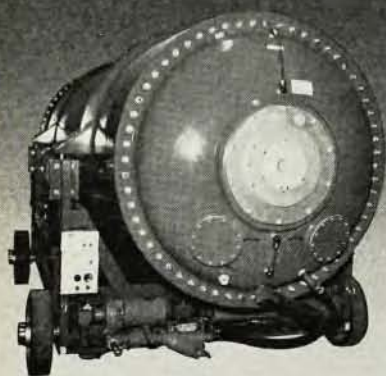
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campuses of the University of Missouri, St. Louis University and William Jewell College) and the state department of education, and it aims for the improvement of high-school physics teaching in Missouri. About 140 Missouri high-school teachers have already made formal application to participate in the program, and some 100 of these will spend the summer at one of the four institutions. A primary goal of the program is better training of teachers at both in-service and preservice levels. In-service training courses are arranged to meet the needs of differently situated students, and the preservice problem is actively pursued at the recruiting level.

Whenever the New York section of the American Physical Society holds a meeting, Robert L. Sells, the New York regional counselor, sends out invitations to all high-school physics teachers within a 50-mile radius of the gathering. At the same time he mails letters to their principals, requesting that the teachers be excused for the day to attend the conference. Special programs are arranged at the meeting for these teachers, and much of what they glean from the general sessions is used to good advantage in their classrooms and science clubs.

In Oklahoma, Richard G. Fowler is studying high-school-to-college transition problems. Through the state office of education he has organized regional meetings involving high-school science teachers and college faculty to determine what can be done to smooth a student's transition from high school to college. Some of the questions his group will discuss include: Are the high schools doing what the colleges think they are in science preparation? Are the colleges taking advantage of high-school science preparation? How effective are teacher-preparation curricula and in-service institutes in meeting these problems?

Future regional counselor goals. Says Strassenburg, "My experience has shown me that what is lacking in many places is effective communication between the university on the one hand and the high-school physics teachers and state school systems on the other. The universities have abundant facilities that could be used to help high-school teachers, but teachers

and state organizations are not always aware of opportunities available to them. An excellent model that we would like to follow in this respect is the Missouri Coöperative College-School Science Program, which Dr. Calandra was instrumental in developing.

"I think the regional counselor program can be more influential in establishing new teacher-preparation and in-service programs. I also feel that the program should establish a focus for its goals and restrict the range of its activities. In this way our efforts could be more effectively channelled, and we could perhaps attract a greater measure of financial support."

Physics history conferences

As part of its effort to improve historical documentation of contemporary physics, AIP is cosponsoring with the American Academy of Arts and Sciences three exploratory conferences on recent developments in physics. These meetings, which will be held at various times during the next two years, will consider guidelines for future historical research in such areas as beams and detectors (accelerators, etc.), concepts of the nucleus and solid-state physics. Participants will include not only physicists and science historians but also sociologists and general historians gathered from the academy's interdisciplinary membership. Supported by a grant from the American Academy, the project will be under joint direction of an Academy-AIP group headed by I. Bernard Cohen and including Gerald Holton, Philip Morrison and Cyril S. Smith. Charles Weiner, head of the Center for the History and Philosophy of Physics at AIP, will serve as project director.

These conferences are the outgrowth of long-standing interest by AIP in the historical development of twentieth-century physics. Five years ago the institute inaugurated its project on the history of recent physics in the United States as a means of locating, preserving and cataloging significant source materials. Through AIP efforts, source material not previously available has been located, and two new