

PRESIDENT'S REPORT: THE ILLINOIS STATE ACADEMY OF SCIENCE: PROGRESS AND OPPORTUNITY: 25 APRIL, 1969

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I should like to share with you my thinking on the role of the Academy in science and education. Our objects are the promotion of scientific research, the diffusion of scientific knowledge and scientific spirit, and the unification of the science interests of the state. We promote scientific research through our modest research grants program, which we have expanded in recent years and hope to expand still further. We also promote research and diffuse scientific knowledge greatly through the annual meetings at which research reports are presented, and through the publication of research papers in the Transactions. Here again the Academy has made gratifying progress in recent years and continues to sustain this role.

The diffusion of scientific spirit and the unification of the science interests of the state are advanced through several activities of the Academy. All major disciplines in science are represented in one or more of the sections, and in the breadth of coverage to be found in the Transactions. The importance and role of the Academy varies from one discipline to another. All sections have been confronted with the question, whom do we serve? For some disciplines the Academy section serves as a central focus of interest and activity. In other disciplines regional subdivisions of national organizations have been developed. Parent organizations have become larger and larger, and thereby lose much of the informality and the focus of interest treasured by workers in a field of study. The proliferation of scientific groups and scientific meetings leads to multiple demands for an individual scientist's time in attendance, and even for meeting dates. The Academy must continually redefine its role in keeping with these changes.

The future of science lies in the young people who are attracted to it and enter professional life as scientists. The Academy founded and presently cooperates with the Illinois Junior Academy of Science in its programs with high school students and teachers. Our Central Office Committee, chaired by Dr. Yohe, is nearing completion of plans for an Executive Officer to serve both Academies and to strengthen their effectiveness. We plan to secure "start-up" costs for the first five years from interested foundations. By the end of that time increased memberships, industrial contributions to expanded programs, overhead from grants, and other new funds should enable the Academies to be self-supporting financially, with greatly expanded programs. The Michigan Academy recently took this step and was supported by the Kellogg Foundation and by institutional memberships from the state universities.

Interest in science, and in research projects, by high school students are fostered by the Illinois Junior Academy of Science. The Academy Visiting Lecturer program, headed by Dr. Rolf, brings research persons to high schools for talks and discussion. Our present volunteer program is supported by modest Academy funds. With the new Central Office we hope to establish funding equivalent to the former National Science Foundation grant program, and to enlarge greatly the Visiting Lecturer program for high schools.

Existing institutional programs for graduate training in science are heavily committed to research. In contrast, undergraduates spend almost all of their time and energy completing a major. A curious fact of undergraduate training is that, unlike high school and graduate school, there is often little oppor-

tunity for research. Some universities may provide research experience as a student worker for a few students. Many schools, particularly 2- and 4-year colleges, do not offer such opportunities. The Academy council has been interested in possible ways to undertake expanded activities at the undergraduate level. Some states have developed successful collegiate academics. Collegiate academics provide a forum for developing science and research interests, may sponsor seminars, conferences, and publications, and conduct trips for undergraduates to laboratories and field areas. Our Academy may wish to encourage the formation of collegiate sections as means of reaching the rapidly expanding numbers of students and faculty persons in junior colleges and other new institutions. Our collegiate section in chemistry is presenting a program today.

Another way in which the Academy can contribute to science training of students in high schools, and in colleges and universities, is through advising and representation on committees, boards, and councils concerned with teacher preparation and accreditation. An important need is articulation of science courses in the rapidly growing number of junior colleges with the programs of 4-year colleges and universities. Both our Science Teaching and Accreditation and Certification committees have this past year sent delegates to groups and meetings concerned with teacher training and with science requirements in Illinois. My understanding is that decisions are largely made by education groups, and that the Academy is not presently in a position to do more than offer advice when asked.

I hope that with continued effort the Academy will be able to speak more effectively on the needs for science preparation of teachers, and the requirements for science courses in the schools. The science teaching committee has invited Dr. Browne as our keynote speaker today in keeping with the active interest of the Academy in the contributions of science to education at all levels.

During the past few weeks another opportunity for service has been made known to the Academy. The Director of Research of the Illinois Legislative Council has written to inquire about the possibilities of a survey which could identify college and university scientists who would be willing to work with legislators in developing solutions to particular problems, such as strip mining. We have responded enthusiastically and are moving ahead with plans to make this type of service available to the legislature. You will learn more of these plans at our business meeting this noon, and through announcements.

In conclusion, I feel that the Illinois State Academy of Science has made significant and continuing contributions to science in the 62 years since its founding. New opportunities now await us. The office of Executive Officer will greatly strengthen and expand our effectiveness. Programs to reach the newly emerging schools are needed. Representation and consultation on educational and governmental problems will be of direct benefit in science areas. I look forward confidently to a strengthened and expanded program of service in science by the Academy.

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