

## REPORT

### GROUP DISCUSSION OF ADMINISTRATIVE AND OVERALL PROBLEMS.

The following topics were discussed during the meeting sessions:

- I. Administrative pressure to eliminate classes with small enrollments.
- II. Recruitment of new chemistry majors.
- III. The background of chemistry majors in social science and the humanities.
- IV. The financing of chemistry departments.
- V. Departmental libraries.
- VI. Research in liberal arts colleges.

I. Few members of the group stated that they had experienced any direct pressure from college administrations that small classes be dropped from schedules. Most often, the pressure is of a more subtle nature, that of having an instructional staff so small that some advanced courses can not be offered as desired. One method for relieving pressure is to offer advanced courses in alternate years, but in the case of the courses in Organic and Physical Chemistry, this is not permissible under the American Chemical Society accrediting program. The best method for relieving this pressure is to remind the administration of the importance of guaranteeing a satisfactory major in all departments. It is also desirable to mention that most former graduates were at one time members of small classes. Whether this problem is satisfactorily solved or not has an effect upon prospective majors as well as on present majors.

II. In order to attract more high school students to the study of chemistry in college, it was agreed that the most effective approach is to make as many personal visits and contacts with high school instructors and students as possible. Here, the emphasis should be on the cultivation of proper interests and attitudes rather than on rigidly specifying the manner of preparation for college. Supplementing this program could be the benefits derived from printed matter and brochures, and from encouraging attendance at science fairs and science open houses, sponsored both by colleges and by outside organizations. The most effective results of this program can be obtained in local high schools.

Once a student has arrived at college, interest and enthusiasm in his work should continue. To have the best and most interesting teacher at work on the general chemistry course is almost a necessity. In order that a prospective major will have some idea of the nature of his work after graduation, it is advisable to publicize the accomplishments and success of former graduates. It may be necessary to make some adjustment in the handling of first year chemistry students in order to increase the confidence of students who have come to college without having had high school chemistry, especially if it is not possible to separate those who have ~~not~~ had the high school course from those who have not.

III. Among the institutions represented, there was found to be no great difference in the science course requirements for majors in chemistry. However, there was found to be some

difference in the general non-science requirements, but in no case was the variance significant, and it does not appear that there will be any changes, for all institutions seem to realize the necessity for retaining these elements of general education. In deciding which courses to require of chemistry majors, it is well to keep in mind the attributes which employers desire of an employee in addition to satisfactory technical preparation:

1. The ability to express oneself clearly both in speaking and in writing.
2. Personality characteristics which will enable him to work comfortably in close contact with others, for few companies can afford to maintain a staff of prima donna geni.
3. A variety of productive interests outside of the field of technology.

IV. Two methods for financing chemistry departments were in general usage, (a) by appropriations from general operating funds, and (b) from laboratory fees only. There seemed to be no outstanding advantage of one over the other. The group agreed on the following recommendations:

1. Departmental accounts should be on a continuing basis, so that deficits and surplus funds can be carried over from year to year, thereby facilitating the purchasing of expensive items of equipment.
2. Fees collected from students for laboratory breakage should be returned to the department so that the capital investments may be replaced.

*no comma*  
V. Where possible, department libraries should be set up for convenience sake. Proximity of reference volumes to the laboratory~~x~~ encourages students to make greater use of them than if it is necessary to go to another building.

VI. In connection with research in small liberal arts colleges, it is a recommendation of this group that this conference request the American Chemical Society to address questionnaires to various industries inquiring their willingness to support research in small colleges. It is suggested that information obtained from this undertaking be made available to all colleges. For research, it should be the custom to include in the contract some provision for personal service fees, and it is suggested that, to avoid ~~any~~ ill feeling on the campus, these fees be made payable during the summer months when research would be on a full time basis.

It was the opinion of this group that industry is in some way obligated to assist small coll<sup>e</sup>ges~~x~~, for in past years, they have not hesitated to entice, with attractive salaries, the cream of the small college instructors to industrial employment, without concern for the possible lowering of instructional quality. Unless competent instruction is available at the college level, there will be a consequent absence of adequately trained scientists available for industrial employment in the future.

Members of the group:

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