

The A.O.C.S. and Academic Research

THERE HAS BEEN a gradual change in the character of the research reported in the publications which have been sponsored by the American Oil Chemists' Society over the period of somewhat more than a quarter of a century during which the Society has functioned in one or another form. It is only natural that, in the early meetings of the organization as a group, the problems discussed would be simple ones in the applied fields. The nature of such studies is even suggested



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by the Society's earlier organ, namely, *Oil and Soap*. With the expansion of the organization to include members outside of industry, the emphasis was given to the consideration of more theoretical problems in fat chemistry and technology. One can expect to find the latter type of articles as well as the corresponding practical reports in the newly christened journal of the Society, namely, *The Journal of the American Oil Chemists' Society*. With each issue of the Journal one sees reasons for classifying it with the research type of journal and less for assigning it to the category of trade journals. Each succeeding issue continues to show an increasing number of contributions which can be considered as "academic research" the longer the Society and its Journal continue to function and to become more mature.

There has not always been a clear picture as to the differences between the so-called "applied" and "basic," "fundamental" or "academic research." Much of the former type of investigation is complicated while basic research may represent simple methods of approach. The differences between them lie rather in the object of the research. Applied research is aimed at settling one point in response to the laws of nature. On the other hand, basic research is designed to determine what such laws of nature are and how they respond to various physical and chemical phenomena. It has been said that the problem "How to Grow Corn" represents

an approach to the problem from the applied standpoint. On the other hand, "How Corn Grows" would represent the fundamental approach to the same problem.

SCIENTIFIC SOCIETY is in a salutary position if it represents a wide diversity of interests among its membership but still maintains a close connection between its groups on the general principles of the broad field of research. The A.O.C.S. does just that in its Journal by having articles of highly theoretical studies blended in with reports of less fundamental and more practical studies. It is by having the various viewpoints conjointly presented at different levels in a successful manner that a publication is able to attain the stature of that enjoyed by the Journal of the American Oil Chemists' Society. In such a Journal the tendency is for the more technical reports to be presented in a somewhat more understandable style when the cross-section of the readers is like that of the A.O.C.S. When general data are recorded in highly specialized journals, they may be in such a highly technical form so as to preclude their being understood by any but a few outside of the authors themselves. Under such conditions the value of the work may not become known to the scientists as early as if it had appeared in a less highly specialized publication.

Much fundamental information about research problems can be gleaned from reports of the simple applied studies. Such research should be, and usually is, of as high a calibre as that which emanates from the "ivory towers." The only difference between the two is the object for which the research is carried out. Good applied research can help fundamental research by aiding in the proper approach to the problems in that area as can the opposite condition obtain in the case of fundamental research *versus* applied research.

The A.O.C.S. is indeed fortunate in having arrived at the position of maturity in the field of chemistry, technology, nutrition and metabolism of oils and fats, and related problems so that it can enjoy the approach at the fundamental as well as at the practical levels. Irrespective of the depth to which the fundamental aspect of fats and oils become investigated (and recorded) in the future, the best interests of the Society will be maintained if the editors retain respect for and allot space to simple but well-executed fundamental research.

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