# Lectures of the 1950 Short Course on Drying Oils

SPONSORED JOINTLY BY

## American Oil Chemists' Society

AND THE

# Federation of Paint and Varnish Production Clubs

## at the University of Minnesota, Minneapolis

August, 7-11

## Foreword

IN each of the last two years the American Oil Chemists' Society has presented a general review course of one-week duration on fats and oils in collaboration with the University of Illinois at Urbana.

This year the American Oil

Chemists' Society and the

Federation of Paint and

Varnish Production Clubs

jointly sponsored a general

short course on drying oils

at the Center for Contin-

uation Study of the Uni-

versity of Minnesota. As

in previous years, the short course proved to be very

popular. One hundred and

six students were enrolled.

Because no more than this

number could be conven-

iently accommodated it was necessary to accept applica-

tions on a first-come-first-

served basis, and it was not

possible to accept all the



W. O. Lundberg

applications that were received. The success of the program was in a large measure due to the excellent lectures given without remuneration by men who are highly experienced in various aspects of the drying oil field. The course consisted of a general coverage of the production, processing, and uses of drying oils. In addition to lectures the program included visits to the new processing plant of Minnesota Linseed Oil Company and the research laboratories of Archer-Daniels-Midland Company.

A great deal of credit for the success of the course is due J. P. Harris and the committee members who were in charge of the general arrangements, and to Frederick E. Berger, program director of the Center (Continued on page 434)

## Address of Welcome

LET me extend to all in attendance at this conference the heartiest welcome of the University of Minnesota, especially of the Extension Division and the Center for Continuation Study. I have been privi-

leged to see the attractive "proceedings" of the 1949 meeting, which took place at the University of Illinois with my good friend Dean Robert Browne, and I am tempted to refer you all to his published remarks as an example of nicely blended personal and philosophical sentiments. I should like to congratulate the sponsoring organizations of this conference upon the wisdom of a policy of attending different universities from year to year. There ought to be an ever closer liaison between those daily involved with applied re-



J. M. Nolte

search and those chiefly devoted to that disinterested research known as "pure." You ought to know what universities are doing and thinking, and universities should know more about your professional activities.

It was in recognition of this way of thinking, as applied not only to science and technology but also to all disciplines nurtured by universities that in 1936 the University of Minnesota established the Center for Continuation Study, your present host institution. It was then unique among university departmental ventures. Indeed, it still retains many of the characteristics of its original uniqueness.

Some score of years ago the late Lotus Coffman, then president of the University of Minnesota, addressing a group of ministers of this state, expressed

#### FOREWORD (Continued)

for Continuation Study at the University of Minnesota, who cooperated with the committee in providing the excellent accommodations and facilities.

Manuscripts of the lectures have been assembled and are presented herewith. Much credit is due the editor of the Journal, A. R. Baldwin, and the Journal staff for their painstaking work in preparing the manuscripts for publication.

W. O. LUNDBERG, chairman

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#### ADDRESS OF WELCOME (Continued)

the opinion that one reason for the decline of interest in formal religious observances must be sought in the failure of the clergy, as professional men, to keep abreast of the times. The ministers accepted as valid the criticism thus made of their efforts but retorted that in their opinion American colleges and universities were, as a class, doing practically nothing to help ministers in their attempts to keep themselves informed about what is going on in the world, particularly about technical and philosophical changes which influence the attitudes of men toward religious observances and experience.

Pondering this retort, President Coffman became convinced that the ministers had touched American education in a vital spot, that they had described an important deficiency of the American educational practique. He became acutely conscious of a gap in the facilities offered by our institutions of learning. Demands made upon schools, colleges, and universities by the ever accelerating pressure for adaptability in their services had, to be sure, led to a great expansion of educational opportunities, but such opportunities concerned themselves with the task of bringing to thousands who might otherwise be denied it what might be called primary or initial training in various skills. The American university system had flowered into night-school classes, into extension divisions and correspondence courses, but in all this training the reconditioning, the re-education, of the professional or technical person already educated was almost left out.

That such conditions should exist appeared to President Coffman as a sign of inexcusable waste, and, as a result of his study of the situation, he was moved to include in his official report for the biennium 1932-34 the suggestion that the University of Minnesota should provide facilities especially for the maintenance of the intellectual efficiency of the professional and technical man.

"It is my opinion that universities should become centers of stimulation within the state for the continuing education of adults who are exercising leadership or are in a position to exercise it. A few random lectures delivered here and there will not accomplish much. . . I think the work that universities do for education of adults should be done in large part at the institutions themselves. Potentially they are the most powerful agencies we possess for promoting adult education on the higher levels.

"Not long ago I discussed this problem with 200 pastors of one of the church organizations of the state. These men hold important positions in the communities in which they reside. They feel handicapped because it is difficult, if not impossible, for them to keep themselves informed about the recent contributions to science. They are not certain that they understand economic theory; they are anxious to learn more about international relations; in fact, they are hungry for the opportunity to learn more about everything. I suggested that we should have at the university a building to which the representatives of the church could come once a year for a short course of 10 days or more. This building should house a working library; it should have seminar rooms, living accommodations, and a chapel. The instruction would be given by members of the university faculty

and by noted scholars of theology who would be invited for this purpose. The suggestion met with an encouraging response.

"I would not confine my program of adult education to the ministers. I would do the same thing for the medical profession... What I would do for the ministers and doctors I would do also for the other professional groups."

These words may stand as brief specifications of the Center for Continuation Study of the University of Minnesota, which last November 13 finished its thirteenth year of operation. It is a residence college, with lounge, library, chapel, seminar and class rooms, dining room, and dormitory (bedroom space for 78 persons). To this building individuals, and groups like your own, repair for continuation study in specialized departments of knowledge. When they come as individuals, they make arrangements in advance for study under the direction of appropriate faculty members. When they come as groups, the university conducts for them a course or program responsive to their needs.

In its first 13 years the new department conducted 937 "schools" or conferences or courses for a total of 47,906 persons. The courses varied in length from two days to a full quarter, with the average about seven days. The registrants have come from all parts of the United States. Most of them have been residents of Minnesota (37,219), but about a fifth have come from other states (10,212).

The subject-matter of the courses offered has been varied indeed. Strange to relate, the ministerial profession, from which came the idea for the venture, has not been among the frequent users of the building. There have been, however, many courses for educators, ranging in content from problems of revising elementary- and secondary-school curriculums to improvement in the methods of preparing and selecting teachers. There have been many courses for physicians and surgeons and for persons working in hospitals and institutions associated with the medical profession; many courses for public employees in positions which, because of the direct impact of their duties upon the public welfare, have decidedly professional qualifications; many courses for engineers, chemical, civil, mechanical, and mining. There have been several courses for social-welfare workers, in both public and private agencies. There have been courses for dentists, pharmacists, and lawyers. And there have been some courses which might be classed

as civic or cultural, which although they have been conducted upon a professional level, have been attended by many who took them less from a professional interest than from the equally keen interest of the enlightened amateur: courses in government, child health and guidance, photography, Scandinavian culture, and creative writing. Of the total of 937 courses, approximately 70% have been given for professional persons actively performing or practicing in the professional occupations.

The philosophy of the Center boldly assumes that for the professional person a continuing half-formal education, hand-tailored to fit individual needs, is not only vitally necessary but also economically possible. That is, it assumes that the professional person will see the importance of periodical further study, that he will know what he wants to study, and that he will be willing to make sacrifices in order to study. It is still too early to assert categorically that this assumption has been proved correct; it is, however, possible to say conservatively that the experience of the Center indicates that it will be thus proved.

The Center for Continuation Study is devoted to leadership training on an unofficial graduate level. The experiment may well lead to attempts at similar units on other levels. Perhaps this is only a fanciful way of saying that, for all men responsive to the urge toward competence, repeated and continuing training is nowadays a necessity and that society must so far expand its ideas of education as to include the opportunities for such training. Increasing division of labor and the concomitant tendency of trade and business groups to regard themselves as members of professionalized occupations may support this idea. As the true evaluation of the social effects of what workmen do becomes more and more accurate as a result of continuing diversification of functions under more and more exacting governmental controls, will not the value of specialized and continuous training for all sorts of work also become more apparent? The Center for Continuation Study has already shown the presence of many such professional groups, like this one, more or less definitely articulate about their needs. The diversity of functions performed here suggests that the usefulness of the Center idea is even more general than President Coffman suspected and that present plans of many higher educational institutions to copy it and improve upon it are well justified.

> J. M. NOLTE, Dean of University Extension