

Technical Proceedings

OPENING CEREMONIES

Frank White,
chairman of the Conference:

At this World Conference on the subject of edible oils and their seeds, attended by representatives from more than sixty countries, we are honored to have with us His Royal Highness, Prince Bernhard. Your Royal Highness, would you be kind enough to open this Conference.

H.R.H. Prince Bernhard
of the Netherlands:

Mr. President, ladies and gentlemen. I was happy to accept the invitation to open this World Conference on Oilseeds and Edible Oil Processing. In 1976, and I just heard also in 1978, this Conference was held here. I am pleased and happy that once again our country has been chosen to host this very important event.

This year, we commemorate and celebrate the 200th year of ties of friendship with the United States of America. Besides the many diplomatic ties which have always existed between our two countries, trade and industry in the United States have always maintained close relations with trade and industry in The Netherlands. Many American companies have subsidiaries in The Netherlands, while Dutch trade and industry have subsidiaries or interest on the other side of the ocean. We even are one of the largest foreign investors in the United States. This Conference testifies to the strong ties existing between the American Oil Chemists' Society and the Dutch Seed Crushers and Edible Oil Processors Association.

Now, the purpose of this Conference is to effect a worldwide exchange of information and ideas concerning the technological developments in the fat and oil industries in the last five to ten years, to evaluate the current situation, and finally to look into the future. Computer control processes will come under particular scrutiny. A great deal of attention will be devoted to energy conservation and waste control, matters which have become very important in our present day economy and society. Traditionally, The Netherlands is a country where the processing of oil-yielding raw materials, particularly seeds, is an important branch of industry. Primitive oil mills existed in this country as early as the Middle Ages, and one is still going. In the 17th century, better processing methods were developed, and our country became widely known for its own methods and techniques of oil production. The old windmills used in that time are proof of this. Mother Nature supplied free energy in the form of wind, of which our low-lying country has an abundance.

Not only in the production of food oil but also later in the refining of those products for technical and nutritional purposes, The Netherlands gave the entire vegetable oil industry powerful impulses. The oil mills' proximity to ports, of course, was an important element. And when we now compare the processing method used in an old oil mill with that of a modern oil plant today, we realize what a giant technical development has taken place in the entire manufacturing process. Improvements in extraction, refining, fractionation and hydrogenation made for better processing and refining results, but also necessitated more and more adjustments in the manufacturing process. On the other hand, the use of waste materials for animal feed and of byproducts, such as fatty acids, by other industries, notably the technical industry, signify an increase in value for the whole fat and oil industry, placing it on an ever-broader basis. The growing popularity of the soybean as a raw material for oil and very rich protein in soymeal gave the industry yet another boost.

Fat is a much more important constituent of the human diet in areas less richly endowed with sun and heat than in tropical areas. The latter, however, possess a much larger raw materials' potential. Our world economy is confronted now with the fact that many countries which have so far supplied raw materials, mostly developing countries, are starting to perform the first stages of processing themselves. And, as regard to fat and oils, the developing countries themselves have been processing by far the greater part of the oil-yielding raw materials produced in their own countries for many years. The share of the developing countries in the total world output of fats and oils is about 50%. Moreover, the use of fats and oils for human consumption is increasing much more rapidly in those countries than in the Western world. Even so, I am convinced this trend need not affect the basis of existence of the Western fat and oil industry. Cooperation with the vegetable oil industry in the countries of origin, for instance, with regard to quality improvement in refining could be of vital importance, and further treatment and processing of semimanufacturers from the countries of origin into raw materials, which can be used in various branches of the industry, will remain an essential means of existence for the fat and oil processing industry in the industrialized countries.

From all over the world, you have come together to exchange ideas on the latest technical developments and possibilities. Particularly the application of electronics and automation, such as computer control processes, plays an increasingly important role. In the next few days, you will also consider the technical developments predicted for the next twenty years with regard to processing and marketing. On the last day of your Conference, the link will be made between the fats and oils of vegetable and animal origin and the products of the petrochemical industry and those of fossil origin. In the past ten years, our economy has come up against the fact that energy costs play an increasingly prominent role in the production process. We will have to learn to use energy more sparingly. Our society has to contend ever more seriously with the wastes which can pollute and damage the environment, eventually posing a threat to human life. I was happy to find that the study of these matters and the search for solutions constitutes an important item of your Conference. The exchange of ideas and experiences between science and industry will certainly prove very helpful.

Now, in studying your program, I came across a list of current fat-and-oil-containing raw materials. I didn't find one product. That is the babassu nut. In the course of one of my trips to South America, I found out about babassu. In Brazil, this palm grows the babassu nut. When this nut is pressed, it yields a very good edible oil and a protein-rich meal, which is suitable for use in animal feed. The hard black shell yields a high quality charcoal, which in its turn can be used for energy purposes. I personally hope this product can get more attention in the future. It seems that the babassu nut might prove a solution for many developing countries in the tropics, which are often hardest hit by rising energy prices, since one of its residual products, namely the oil, can also be used as a source of energy.

There's yet another aspect to which I would like to draw your attention for a moment. To protect the whale population, the European community closed its borders to products derived from whale as from January 1, 1982. In view of my involvement in the protection of endangered animal species, I am, of course, very happy about this measure and welcome it wholeheartedly with all my friends in this field. Now, since sperm whale oil is especially important for refined technical applications in aviation and space travel, the measures taken here by the community will have consequences for the uses of this oil. Now, it appears that

oil extracted from a bean—in spelling, it's j-o-j-o-b-a, but it's supposed to be pronounced "hohova"—is an excellent substitute. As yet, the availability of this bean is limited; but I am sure you will agree with me that, in future, we should give more attention to its production and development.

I end this opening speech by wishing you all a very productive and successful week of study. I do hope that the result will contribute to an economically sound development of your industry, and I herewith declare your Conference open. Thank you!

Frank White: Your Royal Highness, we appreciate very much the thoughtful statements which you have made. You've given us good reason for consideration of many areas which concern our scientific technology and our industry. I think that it is quite possible that you may have superceded some of the efforts of our Program Committee Chairman, Norman Witte, but I would suggest to the Chicago Meeting of the AOCS to try to get His Royal Highness to come and make the opening address there as well. Thank you very much for being with us.

And now, welcome to you all. As General Chairman of this meeting, I greet you on behalf of the American Oil Chemists' Society. We are scientists and engineers engaged in the science and technology relating to oils and their seeds. This Conference, which we are all privileged to attend, relates to these.

Please allow me to try to make possible the impossible. The next three sentences are addressed specifically to our friendly Dutch hosts. "Aan onze vrienden in Nederland doe ik de hartelijke groeten van de American Oil Chemists' Society. Wij zijn dit jaar wederom in Uw land vanwege de grote gastvrijheid die U ons in het verleden hebt betoond. Wij danken U hiervoor zeer." And for those of you who for one reason or another did not understand what I said, I'll repeat. "To our friends in The Netherlands, greetings from the American Oil Chemists' Society. We are here in your country again this year because of the warm hospitality you have shown us in the past. We thank you very much."

And I should add that this warm hospitality is exemplified by the extreme helpfulness and cooperation of the local committee from VERNOF and in particular their Executive Secretary, Kees Meershoek. We are grateful also for the help of the many societies and associations who have joined with us in sponsoring this World Conference. The American Oil Chemists' Society is comfortable in this hospitable nation: not only, as His Royal Highness has already told you, was the first World Conference held here in 1976, but the subject was substantially the same as the one we will have this week. Therefore, this year we will try to cover old subjects rather quickly and spend more time with the new. It is fitting and timely for us to be in The Netherlands. This marks the bicentennial anniversary of diplomatic relations between The Netherlands and the United States of America. These date from 1782 and only one month after a new British cabinet recognized its former colonies. The newly independent United States was grateful to the Dutch people. On Christmas Day in 1775, General George Washington was almost without supplies; yet, with the help of the Dutch people and their island in the Caribbean known today as St Eustatius, the continental army did receive cloth for its uniforms and powder for its guns. The Dutch people and their island were truly an essential ingredient in the success of the American Revolution.

This week will enjoy a fine technical program directed toward new achievements with attention also being paid to the current state of the art. As fine as this program will be, you will not obtain maximum benefit from this Conference unless you leave it with new or renewed personal and professional friendships. In

this regard, I think it's noteworthy that despite the tensions which exist around the world today between governments, we as chemists and engineers, people, ignore these barriers of tension in our search for friends and truth.

On the technical side, please do not overlook the daily discussion periods which will follow the plenary sessions. Experience shows that these include information of significant importance which, due to the lack of time, cannot be covered during the plenary sessions.

You should also not miss the opportunity to visit the exhibit area—not once, but several times. You will find there many people from international companies around the world who are equipped to answer questions which may have puzzled you. And finally, do not overlook also that there are volunteer technical papers. These are on subjects which may be of particular value to you.

A Conference like this one does not take place spontaneously. Its program is the result of planning meetings which were held several times in Europe as well as in the United States. A great deal of preparation is required. Many people have given many hours of their time. I refer you to our program for names of the people who have helped so well. I also refer you to the program for names of associations and societies which have joined the American Oil Chemists' Society and VERNOF in sponsoring this World Conference. However, I think it appropriate to single out three persons who have given much in making this Conference possible. One is our Program Committee Chairman, Norman Witte, who you will meet later. The second is Jim Lyon, Executive Director of the American Oil Chemists' Society, without whose wisdom and experience meetings of this sort could not take place. And finally, Kees Meershoek of VERNOF was invaluable in placing this Conference here in The Netherlands. These men have given monumentally. On behalf of all of you, I thank them.