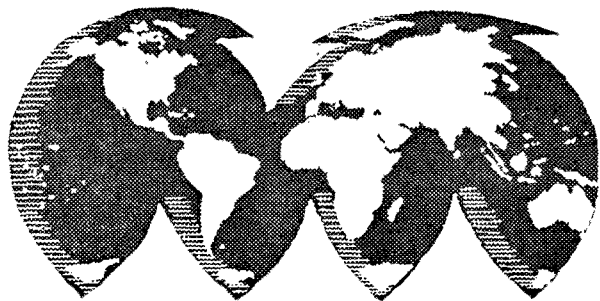


# THE FOUR CORNERS...



By EUGENE MARSHACK, Chairman,  
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K. S. KRISHNAN, EDUARDO VIOQUE  
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## Austria . . . . . Norris D. Embree

In October, Vienna was the host for the 1968 Meeting of the Section on Oils and Fats of the International Union of Pure and Applied Chemistry. The program of the meeting was the development of several methods of analysis to be used for official purposes in all countries of the world. In addition to data from the DPI Laboratories in Rochester, by N. D. Embree, information was also furnished by the laboratories of Eugene Sallee at Cincinnati, Ohio and of George Cavanagh at Fresno, California.

While in Vienna, Embree had a meeting with Mr. Louay Katkhouda, the only member of the AOCS listed in Austria by last year's directory. Mr. Katkhouda is not really an Austrian chemist but an "International" chemist. His job at the Vienna headquarters of the United Nations Industrial Development organization includes furnishing technical knowledge to new commercial projects in developing countries. He is always happy to meet AOCS members and likes to discuss ways that can accumulate information for the processing of fat-bearing nuts and seeds. He is especially interested in encouraging new companies to adopt research programs to improve their products, processes and profits. Mr. Katkhouda hopes that he can arrange for an experienced scientist to give lectures covering the detailed history of a successful chemical research program from conception of the idea to "de-bugging" the new factory. If any of the readers of this article think that they can help, please write directly to Louray Katkhouda, UNIDO, Rathausplatz 2, A 1010 Vienna.

## Chile . . . . . Jacobo L. Furman

### Visit of Burton M. Craig

On a UNDP Special Fund Project, suscribed by FAO of the United Nations and the Institute of Food Science and Technology of the University of Chile, Burton M. Craig visited Chile from June 1 to July 31 of 1968.

Dr. Craig's major objective was to give advice on methods of analysis for rapeseed oil and other locally produced edible oils and by-products, and on the detoxification of rapeseed meal for animal feeds. Samples of rapeseed oil, sunflower seed oil, fish oil, hydrogenated fish oil, etc., obtained locally, were analyzed according to modern techniques. Methods of processing rapeseed in relation to thioglucosides' content were also discussed. Special attention was given to the control of cooking the ground rapeseed prior to oil extraction to destroy the myrosinase enzyme, which hydrolyses the thioglucosides in the presence of water. Commercial rapeseed meal samples were analyzed. The analysis showed that the Chilean plant operations are similar to those of Canadian counterparts and that these meal samples should not present problems for livestock feeding.

The interest demonstrated during discussions with oil technologists in Chile has suggested the following research areas for investigation: (a) Further studies on plant

processing of rapeseed to establish operating limits for cooking operation. (b) Surveys of rapeseed production in Chile, to study the effect of climate and soil conditions on the thioglucoside content of domestically produced rapeseed. (c) Studies on varieties of rapeseed grown in Chile and on potential varieties obtained from other countries. In relation to the last area it was mentioned that agronomists in Canada are investigating the possibility of removing the thioglucosides in rapeseed by plant breeding and selection.

Among other activities, Dr. Craig held meetings with nutritional researchers and technologists from several oil processing plants. A series of six lectures were given by Dr. Craig on: "Fatty Acid Composition of Oil and Fats, and Effects on Production of Edible Food Products"; "The Glyceride Composition of Fats and Oils and Effects on Production and Usage of Food Products"; "Determination of Glyceride Composition and Physical Measurements and Effect on Food Products"; "Autoxidation of Fats and Oils and Relations to Stability and Use of Food Products"; "Thioglucosides in Rapeseed"; and "Nutrition of Fats and Oils."

Dr. Craig's visit to Chile was highly appreciated by the graduate students, nutritionists, agronomists and oil and fat technologists.

### New Installations

Last year, Compania Industrial S. A. (Indus) in the city of Temuco, put in operation a new screw pre-pressing plant for rapeseed. The capacity of the plant is 270 metric tons in 24 hours. A new continuous solvent extraction plant, for processing 15% oil content cake produced by the above plant, was also inaugurated.

Compania Productora Nacional de Aceites S. A. (Coprona) and Fabrica Nacional De Aceites S. A. (Fanac), both located in Santiago put in operation last year continuous deodorizing plants with an approximate capacity of 5,000-6,000 pounds per hour.

## India . . . . . K. S. Krishnan

### Refresher Course in Oils & Fats Organized by OTAI

A refresher course in Oils and Fats was recently conducted by the Oil Technologists' Association of India, Western Zone at Bombay. The course was supported by the Soybean Council of America. This is the second course of this type to be run by the Oil Technologists' Association, the first having been conducted in January, 1968.

The course was residential in nature and lasted for two weeks from October 6 to 18, 1968, and was attended by 20 participants from all over the country. The venue of the course was Gulita, Hindustan Lever Training Centre at Worli Sea Face.

Inaugurating the course, V. G. Rajadyaksha, Chairman of Vanaspati Manufacturers' Association and also of Hindustan Lever Limited, emphasized the importance of using modern tools of science for understanding the behavior of Oils and Fats. Twenty-nine other speakers from different Industries, Teaching and Research Institutions and Associations delivered lectures on different aspects

## • Four Corners . . . .

of Oils and Fats. W. J. Lehmann of the Soybean Council of America will come to India especially to deliver lectures at the course. The program also included practicals at the University Department of Chemical Technology, Matunga, and Hindustan Lever Research Centre, Andheri. At the conclusion of the two weeks' course, certificates were awarded to the participants by J. G. Kane, President, Oil Technologists' Association of India, Western Zone.

## Spain . . . . . Eduardo Vioque

### Fourth Meeting of Members of the Instituto de la Grasa

During the 16th to the 18th of May, 1968, the Fourth Meeting of Members of the Instituto de la Grasa took place in Spain, with an attendance of approximately 100 scientists and technicians.

The first Session of the Meeting was devoted to the study of Agronomy of the Olive Tree. Topics discussed during this Session were: Fundamental Labor in Olive Tree Fields; Nutrition of the Olive Tree; Situation Created by the Traditional Systems of Pruning and Intensive Planting.

The second Session, on The Harvesting of Olives, dealt with Mechanical Systems of Collecting Olives, and The Use of Spraying for the Collection of Olives.

In the third Session, The Evaluation of the Industrial Yield of Olive Oil in Olives was studied.

Solvent Extraction of the Olive Press Cake (Sulfur Olive Oil) was discussed in the fourth Session, and a free discussion was held in the last session.

The problem of Industrial Process of Refining Edible Oil was studied at a round table session with 34 representatives of several industries.

The next Meeting of the Institute will be held in May 1969. Sessions are being programmed to deal with the subjects of Agronomy of the Olive Tree Field (irrigation, mechanization of labor, and phytopatology); Oil Seeds (the culture of oil producing plants and oil seed extraction); and Quality Control in the Fatty Food Industries.

### The First Marques de Acapulco Medal

During a special session of the Fourth Meeting of Members of the Instituto de la Grasa, the first Marques de Acapulco Medal was awarded to E. F. Buendia Castellanos for important contribution to scientific and technical knowledge on fats and derivatives. Mr. Buendia designed the Alfin machine for the extraction of olive oil. This machine does not use pressure nor disc of esparto (in Spanish "capacho").

Mr. Buendia was born in Riopar (Albaceta, Spain) in 1888. He belonged to a humble family of metallurgists and started his professional training in the factories of St. John, at Riopar. By 1920 he established a workshop in order to attend the necessary repairs in that agricultural zone. He noticed that the work being done at the oil mills was rather primitive and elementary. Trying to develop a more industrial and rational method for the extraction of olive oil, he designed a machine, the Alfin, to produce olive oil of a very high quality and with good yields. This machine has been patented and its use has been extended not only throughout Spain but some foreign countries as well, especially Italy.

## Yugoslavia . . . . . Biserka Matijašević

### Meeting of the Meat Industry Devoted to the Technology and Analysis of Animal Fats

The Yugoslavian Institute of Meat Technology, in Belgrade, has been closely associated with the meat industry. Among other activities, the Institute organizes meetings devoted to particular problems related to this field.

A meeting was held in Sremska Mitrovica November 8 and 9, which brought together a large number of experts from factories, universities and institutes dealing with animal fat problems. Nineteen papers were presented on the technology and analysis of fatty tissue, fats and oils. The papers and the discussion showed that, in spite of remarkable achievements obtained in this field in the last few years, there is still a large number of problems to be solved. Since the utilization of fat in raw material processed in Yugoslavian meat packaging plants is about 30%, it is certain that investigations and investments necessary to the development of this field will be economically justified.

A large number of new data was presented at the Meeting on the quality of fatty tissues dependent on the kind of animal and the spot from which the tissue was taken. Papers showing that the quality of individual meat products, largely depends on the content and quality of fat deserved special attention. Among the papers dealing with analysis of fat, a significant paper on the stability of lard determined by the Swift Test, the Stability Test at 98 C (rapid and simple method used at factory laboratories) and the Oven Test was presented. Results of experiment show that there are correlations among the values of individual methods and that it is possible to calculate, approximately, the values of one method from the values of another.

The field of animal fat technology was also treated in a few papers. A paper dealing with obtaining and examining fat emulsions presented several concrete solutions for the practical application of the best methods used in the analysis of fat emulsions. A technologist of the Alfa Laval Company presented the latest technical solutions of the Centriflow fat rendering plant. Since several factories in Yugoslavia have this plant, these news were significant, especially the device enabling the control of fat turbidity and consequently the control of water content in lard. Improvement of tallow by fractionation was the theme of one paper and improvement of tallow by heat treatment of another.

All papers delivered at the Meeting will be published in *Tehnologija mesa*—journal of the Yugoslavian meat industry—starting with the December 1968 issue.

## AOCS-AACS Short Course . . . .

(Continued from page 132A)

the future of the oilseed industry. Emphasis will be centered on the protein aspects of the industry. It will begin with a session on the basic chemistry of proteins and techniques for their isolation and characterization. This will be followed by discussions on oilseed protein technology—the current processes and products of the industry. The role of oilseed proteins in animal and human nutrition will be reviewed in a series of papers. The present status of and the future possibilities and probabilities for oilseed proteins in human foods will be outlined in one session. Finally, a study of the economics and marketing of oilseed proteins will include a case study of the soybean industry today and a projection of the competitive marketing of oilseed and other protein sources.

The final program, speakers, and abstracts will be announced in succeeding JAOCS issues. The speakers are being asked to attend the entire course to be available for informal discussions as well as for the more formal question and answer sessions after each paper. An afternoon will be kept open in the program schedule to provide the options of further technical exploration or recreational activity. This will be our first short course to be held at the French Lick Sheraton Hotel in French Lick, Indiana. This old but modern hotel will offer air conditioned meeting and sleeping rooms, numerous, excellent recreational facilities and gourmet style food—American Plan.

Total cost for the short course is \$160 per student. Families are invited to come along—they will find as much or as little to keep busy as they wish.