

Four Corners



Chairman, International Relations Committee—EUGENE MARSHACK • Corresponding Secretaries—Meny Bergel, A. Uzzan, A. Letan, Eduardo Vioque

Argentina Dr. Meny Bergel

Drs. Tanno, Palazzi, Fay, and Roncoroni are continuing work with a lipoprotein of cholestasia (LP-X). It was found present in 95 percent of biliary routes obstructed by cancer and in 87 percent of those with litiasic obstruction. It was observed that LP-X disappeared in those operated upon after two weeks time and in many within one week following surgery. In some patients with biliary obstruction, LP-X on serum was found absent in bile. A study has been started concerning this lipoprotein during the third month of pregnancy.

Dr. Bergel has found that nordihydroguaiaretic acid, a powerful antioxidant known as NDGA, injected intramuscularly at a 100 mg dose daily produces a remarkable antihistaminic and antipruriginous effect.

Dr. Abitbol has done experimental studies with dogs that have proved that the aminic antioxygen 4-4'-diaminodifenilsulfone evidently has an antibradiquinine and anti-inflammatory activity.

France A. Uzzan

Fats and Oils Symposium to be March 11-13

The Association Francaise pour l'Etude des Corps Gras, Paris, (AFECG) and the Societa Italiana per lo Studio delle Sostanze Grasse, Milan (SISSG), have organized a scientific symposium to be held March 11-13 in Monte Carlo on "New Orientations in Edible and Industrial Fats and Oils."

The symposium will include three plenary lectures: Outlooks in Olive Oil Research; New Aspects in the Production of Edible Oils; and New Trends in Fats and Oils Analysis. There will be two simultaneous working sessions with a total of 20 scientific papers.

During a special plenary session the AFECG's Medailles Chevreul for 1976 will be presented to Professor Umberto Pallotta of Bologna, Italy, and to Francois Pouillaude of Paris, France. Further information on the meeting is available from AFECG, 5 Boulevard de Latour-Maubourg, 75007, Paris.

Jean Klere new AFECG chairman

Jean Klere, of Astra-Calve, Paris, has been elected chairman of AFECG by the association's board of directors. He previously had served as vice-chairman. Joining Mr. Klere on the executive committee for 1977-78 will be M. Naudet, vice-chairman; M.T. Huillet, general secretary; and J. Pore, treasurer.

ITERG's Information Days

The annual meeting of Institut des Corps Gras (ITERG) will be held June 14-16, 1977, in Paris. Preparation of the program is in progress, but topics to be discussed will include up-to-date analytical and control techniques, fats and health, and new solvent extraction. Roundtable discussions will be held on heated fats (chemical, biochemical, nutritional, and technological aspects), packaging and conditioning of fats and oils, and environmental problems (wastewater purification and odor problems in oil factories, refining and rendering operations).

A total of 25 lectures and papers will be presented by French specialists from industry, universities, and technical research centers. Information and copies of the final program will be available from the Organizing Committee, 5 boulevard de Latour Maubourg, 75007, Paris.

Israel A. Letan

A New Plant for Fractionation of Palm Oil through Transesterification

In a previous correspondence [*JAOCs* 52:512A (1975)], a method was described which had been developed by the HLS Industrial Engineering Company, Petah Tikva, Israel, for continuous chemical fractionation of palm oil. Redistribution of fatty acid radicals in the palm oil is achieved through processes of transesterification in which oleic and palmitic alkyl esters are used as carriers of fatty acid radicals.

From the processed palm oil, a relatively large fraction (65%) liquid oil of low chilled stability, and a hard fraction (35%) are obtained.

A short description of the method is given below: Crude palm oil is physically deacidified. Following this, two kinds of transesterifications are performed continuously, in parallel: (a) that of the deacidified oil with alkyl monoesters of unsaturated fatty acids (mainly oleates), and (b) that of the deacidified oil with alkyl monoesters of saturated fatty acids (mainly palmitates). Alkyl monoesters of mainly saturated fatty acids are created in the process (a), and alkyl monoesters of mainly unsaturated fatty acids are created in the process (b). All are distilled off in vacuo from the triglycerides, and subsequently separated through fractional distillation into saturated and unsaturated fatty monoesters (mainly palmitic and oleic, respectively).

After a period of experiments on a pilot plant scale, and when the results of market research became available, the Koor concern decided to build in Eilat (on the shores of the Red Sea) an industrial plant capable of fractionating 50 tons palm oil per 24 hr.

The plant is now in the initial stages of erection. The planning and running in is done by the H.L.S. Ltd. Industrial Engineering Company, and the equipment is supplied by Koor subsidiaries. The planners and builders of the plant will have to overcome many ecological restrictions of the local authorities, due to location of the plant near the marine nature preserve of the Red Sea.

The plant will process palm oil from the Far East and Africa, and the softened oil will be marketed mainly to Europe. Having chilled stability of 8 C, iodine value of 80-83, an approximate fatty acid composition of 15% palmitic, 3% stearic, 67% oleic, and 15% linoleic acid, and below 0.4% of trisaturated triglycerides, the soft oil makes an excellent salad oil. It was found that nutritionally it is as good as soybean oil, and better than cottonseed oil.

The hard fraction (iodine value of 5, melting point of 62 C, contains over 90% palmitic acid) will be utilized locally in production of margarines, shortenings, coatings, cosmetics, etc.

Seminar on Rapeseeds and Rapeseed Oil and Meal

On October 18 and 19, 1976, a seminar on rapeseed

took place at the Accadia Hotel in Herzliya. The seminar was sponsored by the Canadian Embassy in Israel, in cooperation with the Association of Israeli Feed Mills. Three Canadian experts (Dr. N. Hussar of Oglivie Mills Ltd., Dr. A.R. Robblee of the University of Alberta, and S.J. Sigal of the Canadian Grain Marketing Office) addressed themselves to rapeseed's potential in production of edible oils and its application, and also to nutritional aspects in the manufacture of high protein meals for supplementary animal diet. The following topics were covered: (a) rapeseed composition and quality standards, (b) rapeseed meal in poultry and ruminant feedings, (c) nutritional aspects of rapeseed oil, (d) practical results from field work in Canada, (e) rapeseed production and trade, (f) rapeseed crushing technology and oil processing.

The audience of about 50, which consisted of Israeli industrialists, technologists, chemists, nutritionists, and government officials, took active part in the discussions.

Spain Dr. Eduardo Vioque

The 12th plenary meeting of the Fat Institute and Derivatives members was held May 12-14, 1976, in Seville with Dr. J.M. Pinar presiding together with Dr. J.M. Martinez Moreno, director of the institute, and Dr. Munoz Rojas, a member of the Administrative Technical Council.

The topic for the first session, chaired by A. Vallin, was "Problems in the Technology of Seed Oils in Spain." Papers presented were: "The Latest Progress in the Development of Seed Oils in Spain" by Dr. J. Cejudo; "Vegetable Proteins in Human Nutrition" by Dr. V. Diaz; "Sunflower Oil Refining on the Depuration and Degumming" by Dr. F. Ramos, and "Composition of the Sunflower Seed from Spain" by Dr. J. Huesa.

Dr. M.J. Fernandez was chairman of the second session which included papers on black olives, "Assays for the Fermentation of Black Olives in Used Brines" by A. Garrido and M.C. Duran, and "Consideration on the Fish-Eyes Problem in Black Olives in Brine" by Garrido, Duran, and F. Gonzalez.

Third session topic was "Wastewater Depuration in the Olive and Olive Oil Industries" with Dr. J.A. Fiestas as chairman. Papers presented were: "The Pollution of Guadalquivir River, the Causes" by D. Fidalgo; "Report on the Withdrawing of Olive Oil Wastewater in Evaporation Tanks" by F. Troyano and T. Echegoyen; "Potassium Percolation of the Olive Oil Industry Wastewater Drained into the Fields" by A. Escolano; and "Withdrawing of Olive Wastewater" by A. de Prado.

The main paper during the fourth session was "Report on the Experimental Mill During the 1975-76 Season" by J.M. Martinez, E. Munoz, J. Alba, and A. Luzon.

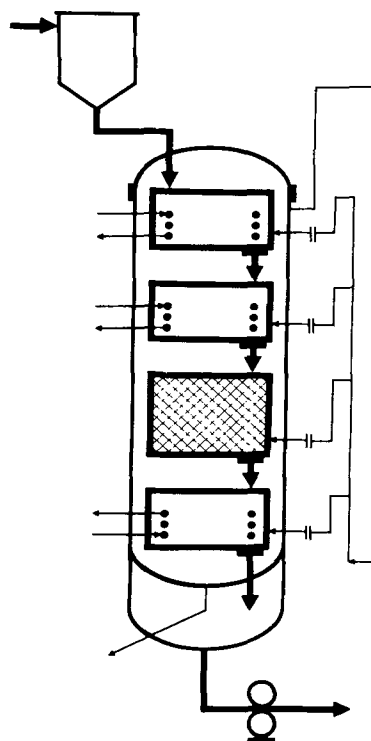
Topics chosen for the 1977 plenary assembly were: "Enzymatic Changes in Black Table Olives," "Mechanization of Pickling and Stuffing of Table Olives," and "Depuration of Wastewaters in the Olive Industry."

The Marques de Acapulco Medal was presented to Prof. G. Jacini, director of the Stanzione Sperimentale Oli a Grassi in Milan, whose research work on olive oil has meant much not only in Italy but also in all the olive oil producing countries. Prof. Jacini delivered a lecture on the "Organoleptic Characteristics of Olive Oil."

Proteins from Alcohol for Human Nutrition

The Institute of Industrial Fermentation of the High Council of Scientific Research, Madrid, investigating production of proteins from synthetic ethanol, has developed a pilot plant producing ten kilograms of dry yeast, to be used for biological studies on the use of this protein material in human and animal nutrition. With the knowledge obtained through this pilot plant, the first in Spain with a Spanish patent, it is expected that a plant may be constructed capable of producing a ton of dry yeast a day. ●

VOTATOR Improved Semi-Continuous Deodorizer



For the deodorization of edible fats and oils

Featuring all of Votator's original advantages:

Easy feedstock change.
Controlled steam-oil contact.
Plug flow.
No air leak.
No reflux.
Efficient utility usage.
Automatic control.

Plus:

Improved oil quality and stability.
Lower plant investment costs.
Flexible deodorizing conditions.
Increased by-product value.

Write to: V. L. Zehnder
Food Equipment Division
Chemetron Corporation
P. O. Box 43
Louisville, Kentucky 40201

CHEMETRON

Food Equipment
Division of Chemetron Corporation

C.W. Hoerr
retires to Tucson



Charles W. Hoerr, President of AOCS in 1966-67, has announced his retirement from the position of assistant to the director, research and development, Durkee Foods Division, SCM Corporation. He held several research positions with Armour and Co. and Swift and Co. prior to joining Durkee in 1960.

A graduate of the University of Chicago, Mr. Hoerr's early interest in fundamental properties of radioactive isotopes evolved into what was to be a life-long career in the chemistry of lipids, their derivatives and related compounds. His contributions are recounted in numerous publications. Of particular note is his pioneering work in the application of x-ray diffraction to studies of the crystallography of long chain compounds which earned for him a preeminent and international reputation.

He joined AOCS in 1943, was elected secretary in 1963, vice president and president-elect in 1965. Through the years of his membership he served on many society committees and gave AOCS-sponsored courses in both the U.S. and elsewhere. He holds fellowships and/or memberships in several other scientific societies.

He now resides at Devon Gables, Lodge 24, 6250 East Grant Road, Tucson, AZ 85712 (tele: 602-298-5754). ●