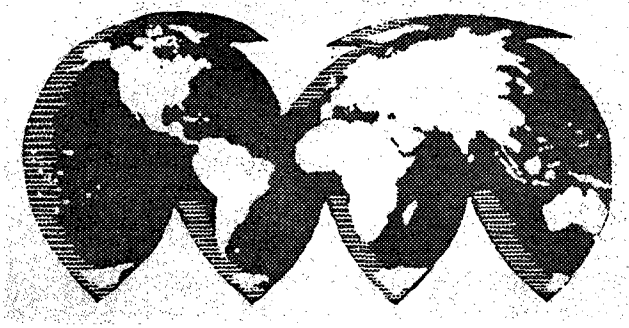
# THE FOUR CORNERS . . .



By EUGENE MARSHACK, Chairman,
International Relations Committee;

J. E. ALLAN, JACOBO FURMAN LEVY, JAN POKORNY, M. NAUDET, A. L. BOCHER, BIOVANNI JACINI, REINHARD MARCUSE and BISERKA OSTRIC-MATIJASEVIC

Corresponding Secretaries

## Australia . . . . . J. E. Allan

### Oilseed Crops

Here in Australia, where we tend to think of a crop year as being July to June, the crop year is drawing to a close and we can review the year's activity. While official figures are not yet finalized since sunflower harvesting has still to be completed, the following estimates can now be made with some confidence for the oilseed crops harvested in 1969–70:

| State | Cotton-seed | Pea-nuts | Saf-flower | Sun-flower | Lin-seed | Soya | Rape |
|---|---|---|---|---|---|---|---|
| Queensland | 5,000 | 11,000 | 1,000 | 4,000 | 5,000 | 500 | |
| New South Wales | 34,000 | | 3,000 | 10,000 | 14,000 | 800 | 500 |
| Victoria | | | | | 10,000 | | 4,000 |
| Western Australia | 5,000 | | | | 6,000 | | |
| Total | 44,000 | 11,000 | 4,000 | 14,000 | 35,000 | 1,300 | 4,500 |

Drought in Queensland again substantially reduced the acreage planted to safflower and sunflower. As a result there was a significant increase in the small scale planting of safflower in N.S.W. and the development of commercial qualities of sunflower in the same state. The acreage planted to sunflower in N.S.W. increased from around 1000 acres in 1968–69 to 50,000 acres in 69–70. However southern N.S.W. experienced the worst mice plague since the early 30's and some 8000 tons of sunflower were lost as a result.

The general oversupply of wheat on world markets has stimulated increased interest in growing oilseeds in Australia for the 1970–71 crop. It is anticipated that this will result in significant increases in tonnages of safflower, sunflower and rapeseed. However at the present time Queensland has not yet had true drought-breaking rain and this cannot now be expected before the monsoon period late 1970 or early 1971. In addition, concern is now being expressed over a prolonged dry spell in northern N.S.W. which may limit the area in which winter crops can be planted for the 70–71 season. However it is anticipated that these effects can be offset by the diversification of the growing areas throughout the Eastern States and the development of sunflower as a summer crop with significant areas being grown under irrigation.

Meanwhile, development work proceeds in the attempts to obtain a soybean variety which will yield well under Australian conditions. Trial plantings were again made this year and while initial reports were promising final yields were disappointing due to adverse wet weather at harvesting and mice plague damage.

### Margarine Legislation

As reported earlier (FOUR CORNERS, June 1969) Margarine production in Australia is restricted by legislation, but unlimited quantities can be produced provided that at least 90% of the fat is of animal origin. It was further reported that technological improvements have resulted in the production of animal fat based margarines with taste and spreadability comparable with vegetable oil margarines. It has been claimed that these products have adversely affected the sale of locally produced butter. As a result, Victoria and Tasmania have banned the use of flavors and coloring in the production of the unrestricted animal fat based margarines.

### Control of Fat Composition in Ruminants

The Commonwealth Scientific and Industrial Research Organization has recently announced the development of a technique for controlling the fatty acid composition of fats produced in ruminants. The process influences the fat composition of both milk fats and body fats. Thus it is possible to direct the fatty acid composition away from the normal high content of saturated and monounsaturated fats towards a significantly higher content of polyunsaturated fats.

Under the normal feeding conditions, polyunsaturated fats in a ruminant's diet are subjected to microbiological hydrogenation in the rumen. It has been found that suitable encapsulation of particles containing polyunsaturated oils protects the oil from such hydrogenation but allows subsequent digestion in the abomasum. This encapsulation is achieved by means of a protein coating treated with formaldehyde. This coating is insoluble in the neutral condition of the rumen but digested and absorbed in the acidic conditions of the abomasum.

Tests have demonstrated that by feeding encapsulated safflower oil to dairy cows the polyunsaturated content of milk fats can be changed from 2% to some 37% while in feeding trials on lambs the polyunsaturated fatty acid content of body fats was increased from 2–5% to 15–20%. In feeding trials on beef cattle the body fat has been increased by 30% polyunsaturated fats. It has further been shown that these changes in body fats can be achieved by special feeding for two to four weeks before slaughtering.

Work is proceeding in studying the technical and commercial aspect of such controlled feeding. Nevertheless, the implications of work so far completed are striking especially in view of the current attention directed to higher polyunsaturated oil diets to reduce the incidence of coronary heart disease.

An additional feature of the technique as yet unexplored in detail, is the observation that undesirable flavors in the oil will result in these flavors appearing in the milk and possibly the body fat. Thus desirable flavors and other fat soluble substances which would normally be degraded in the rumen (e.g., natural antioxidants, vitamins and hormones) could be deliberately introduced by encapsulation.

## Chile . . . . . Jacobo Furman

### 21st Panel Discussions on Agronomics

The 21st Panel Discussions on Agronomics took place June 22–26, 1970 in Santiago, Chile. The two topics of these discussions were: (a) oilseeds in Chile, and (b) uses of by-products of oilseeds. José Suarez, Vice President of COMARSA (Compradora de Maravilla S.A.) was the moderator at these meetings.

Under the heading of "Oilseeds in Chile," the following subjects were covered: Jorge Herrera, agronomical engineer, "Oilseeds in Chile"; Giacomo Monteverde, agronomical engineer, "Main Aspects of the ODEPA (Oficiano de Planificación Agricola) Program Concerning the Development of the Oilseeds for the Period 1965–1980"; Vital Valdivia, agronomical engineer, "Research on Productivity."

Under the heading of "Uses of the By-products of the Oilseeds," the subjects covered were divided in two categories: (a) uses of the by-products in animal feeding, and (b) uses of the by-products in human feeding. In the first category Sergio Erazo explained the many uses of the by-products in animal feeding. In the second category the subjects covered were: Mrs. Digna Ballester, assistant professor of Nutrition at the University of Chile, "Studies Concerning Rapeseed Meal"; Enrique Yañez, assistant professor of Nutrition at the University of Chile, "Studies Concerning Sunflower Meal."

### New Margarine Plants

Recently two new margarine plants started production in Chile. One of them has been installed by Indus-Lever S.A.C.I., and the other one by Coprona S. A. Both firms are located in Santiago. The margarines produced by these firms are "soft-type," and they are sold in plastic tubs.

## Czechoslovakia . . . . . Jan Pokorný

### Sixth Meeting on Soaps and Detergents

The meeting of the Detergent Section of the Czechoslovak Oil Chemists took place on December 4 and 5, 1969, in Bratislava, Slovakia. Two reviews, eight original papers and six committee reports were presented. The most interesting subjects of the original papers were the identification of polyethylene oxide condensates by thin layer chromatography, separation of mineral oils and surface active agents by column chromatography, spectrophotometric analysis of nonsulfonated residues in detergents, stability of foam of some detergents and surface activity of alkaline soaps. The detergents section has the following committees: technological, terminological, analytical and the testing of technical products.

### Ninth Meeting on Fat and Oil Technology

The meeting on Fat and Oil Technology took place in Prague on May 21 and 22, 1970. Twelve papers on oil technology and eight analytical papers were presented, e.g., on the production of fatty acids and their derivatives, utilization of highly branched fatty acids for synthetic coating, isolation of components of deodorization condensates, determination of consistency of margarine, spectral and chromatographic determination of *trans* unsaturated fatty acids and lipoperoxidation in biological material.

### Czechoslovak Committee for the Unification of Standard Methods for Lipids

The Committee for the Unification of Standard Methods for Lipids was appointed by the Research Council of the Czechoslovak Academy of Agriculture with Jan Pokorný as Chairman. The committee is now working on the determination of lipids in meat, dairy products and various other fatty foods.

### Consumption of Fats and Oils in Czechoslovakia

The consumption of fats and oils reached 49.5 lb./capita, that of lard being 15.4 lb., butter 15.5 lb. and vegetable oils 18.6 lb. The consumption of vegetable oils is slowly increasing but that of lard decreased in the last few years.

(Continued on page 414A)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## • *Four Corners . . .*

(Continued from page 413A)

Vegetable oils were mostly imported, e.g., the import of peanuts was 32,000 metric tons in 1968 (mostly from Great Britain and Sudan), that of soybeans 22,000 tons (mostly from the United States), and that of sunflower seed was 86,000 tons (from USSR). The only domestic oilseed was rapeseed with the production of 73,000 metric tons in 1968 (the yield being 1410 kg/ha).

### Production of the Czechoslovak Fat and Oil Industry

The following amounts were produced in 1968 (in metric tons): margarine 49,221; shortening 33,037; edible oil 46,046; butter 86,881; lard 77,667; soap 29,986; powdered soap 14,396; and synthetic detergents 54,684. The production of margarine, shortening and edible oil is concentrated exclusively in the trust "Fat Industry," Prague.

## France . . . . . M. Naudet

### International Days of the Rapeseed

The International Days of the Rapeseed, organized by the CETIOM, was held in Paris, June 26–30, 1970. The program, essentially based on agrarian problems, included both general reports and original papers. The successive themes of the workshops included the following: cultivation techniques, genetic improvements, parasites and diseases, protection of cultivation, and oil cakes. The proceedings from this meeting, which included some 300 participants of 14 different countries, will soon be published in a brochure.

### 17th Annual Days of Information

The Annual Days of Information of the Institut des Corps Gras took place June 16–19, 1970 in Paris, with a program devoted to "Toilet Soaps." The following reports were presented:

The Evolution and Perspectives of the Toilet Soap Market, by C. X. Cornu.
The Adaptation of the Animal Fat Industry to the Needs of the Toilet Soap Industry. Technical and Economical Aspects, by A. Moulin.
The Treatment of Fat Materials for Soap Manufacturing, by M. Rigot.
Fatty Acids as Raw Materials for the Production of Soap, by H. Debrus.
The Structure of Soaps, by M. Naudett.
The Mechanical, Chemical and Bacteriological Defects of Toilet Soaps, by A. Prevot.
Analytical Control of Toilet Soaps Properties, by J. P. Wolff.
The Current and Future Situation of Bar Detergents and Compound Toilet Products, by A. Uzzan.
Pharmaceutical Soaps, by C. Bourgeois.
Dermatology and Toilet Soaps, by M. Hincky.
Packing and Presentation of Toilet Soaps, by M. Massus.

Two round tables, respectively animated by Mr. Poldrugovaz and Mr. Bergeron, were devoted to recent developments in the processing of toilet soaps, and to additives for toilet soaps: perfumes, coloring, antioxygens, deodorants and sequestrants.

During the course of these days which brought together some 200 people, the Chevreul Medal, presented annually by the Association Francaise des Techniciens des Corps Gras, was awarded to two persons for 1970. The recipients are Roger Francois, honorary director general of the Institut des Corps Gras, and W. O. Lundberg of the Hormel Institute, practicing president of ISF and past president of AOCS. In Dr. Lundberg's absence, detained in the United States with the preparation of the AOCS-ISF World Congress, E. Piret, scientific adviser of the U.S. Embassy in Paris accepted the medal and accompanying diploma presented by Mr. Feron, president of the A.F.T.C.G.

## Germany . . . . . A. L. Bocher

### G. Hopf Celebrates 70th Year

Professor G. Hopf, president of the Deutschen Gesellschaft Für Fettevissenschaft E. V. celebrated his 70th birthday on May 5th, 1970. He is well known outside the boundaries of his homeland as the "Father of Scientific Cosmetics." The son of a Hamburg Salesman, he directed the beginning of his studies toward National Economy, and after the First World War toward Medicine. He studied in Marburg, Kiel and Hamburg where in 1924 he passed the states exam and in 1925 took his degree as an M.D. His interest in those days was already directed toward the fields of Dermatology and Psychiatry. After being an intern in Jena and Hamburg, in 1929 be became the head physician of P. Malzer in Eppendorf, and advanced himself to the appointment of professor in 1939.

During and after the Second World War, he was head of the Skin Clinic in Eppendorf. In 1946 he became head physician of the Dermatology Department in the Hamburg General Hospital Heidberg. Since the early 1950's Professor Hopf has headed the specialty group of "Scientific Cosmetics" in the German Society of Fat Research.

In 1969 Professor Hopf succeeded Professor H. P. Kaufmann as president of the Deutschen Gesellschaft für Fellevissenschaft. Professor Hopf became well known to the public through popular scientific explanations and basic publications on perspiration restriction, deodorization and disinfection of the skin, using powder and the effect of mild soaps and synthetics on the skin. In 1965 he was awarded from DGF the Normann Medal for his efforts on scientific cosmetics. In the same year he received the Ernest Bergmann Plaque. Professor Hopf is the president of the Doctors Society of the Leading Hospitals in Germany. Besides research work he participated in numerous wide range specialties. Since 1950 he has headed the Doctors' Specialist Board of Hamburg. He is a member of the German Health Council and also the Hamburg Doctors' Board. In 1965 he was elected as an Honorary Member of the Hamburg Dermatology Society. Professor Hopf has unceasingly supported the views of cosmetics and the mediation between medicine and its neighboring disciplines—chemistry, pharmacology, psychology and sociology.

## Italy . . . . . Giovanni Jacini

### Merger of Oil Industries

Italian oil industry has attained an important evolution in these last years, moving from discontinuous processing systems of limited capacity of rather artisan level to continuous highly automated and high yield systems. The oil industry today can be considered a part of the great chemical industry. With vacuum, heat-exchange, regulation, internal transport equipment, etc., it lacks none of the similar installations used, for instance, in the petrochemical industry.

The oil industry has produced and continues to produce unitary price reductions; however, it does not fail to bring about negative consequences for the small and middle-size oilmills. We are continuously faced with the development of very large plants while the small ones are disappearing. The latter unite to form large cooperatives, become a part of new complexes or merge with others. This situation is clearly illustrated by some figures: the amount of oil plants in Italy was over 200 until a few years ago; since then the number has decreased to below 80, although the

(Continued on page 416A)

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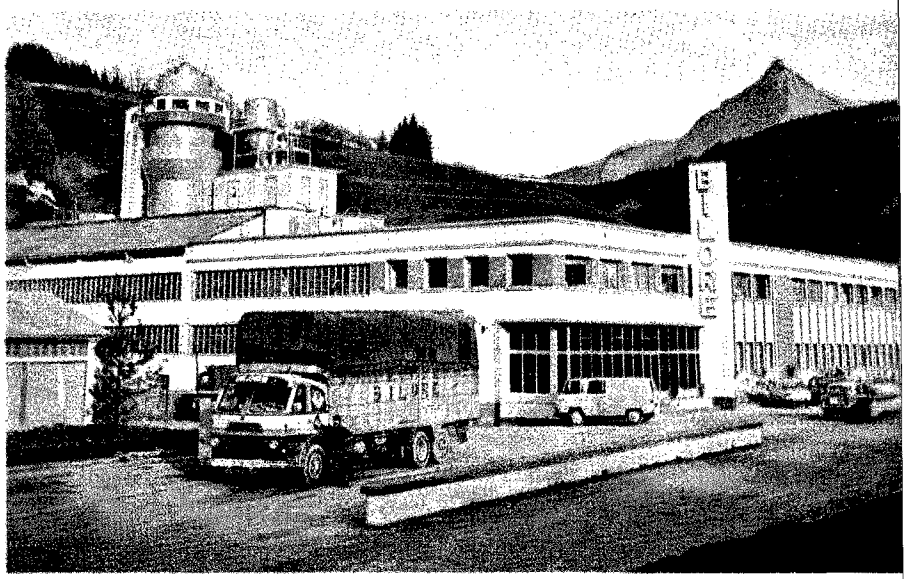

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# Pollution Committee of Shortening Institute Issues First Report

The establishment of the newly formed Pollution Committee by the Shortening Institute gives clear recognition to an imposing challenge. A challenge which goes far beyond our industry as it relates to ourselves as individuals and our responsibilities as management, but looks instead to the future of our country and our total future as a surviving entity called the human race.

As background, in November of 1969 the Institute membership, recognized ecology as a major problem on the horizon for our industry, and recommended that the Institute's Technical Committee study the problems associated with environmental factors. In January 1970, the Technical Committee members met and a free and open discussion of the nature, scope and the approaches to the question took place. It became quite apparent that the broad nature and scope and wide variety of approaches to the question of pollution should be studied under a total separate committee, and not as a sub-committee or within the framework of the Institute's Technical Committee.

It was suggested that the initial functions for the proposed Pollution Committee would include such efforts as (a) making known capable consultants and engineering firms to those who need such assistance, (b) exchanging information with respect to municipality requirements, and the resolution of questions and problems with such municipalities, (c) informing pollution control officials of our views on such matters as reasonable standards, and (d) exchanging techniques used to lessen sewage loads being fed into municipal and other local government systems.

It was further suggested that the responsibility of the Pollution Committee might be enlarged in the future to include such functions as the preparation of briefs, the giving of testimony, the promotion of "share the cost" approach for the handling of plant effluents by municipal sewage disposal plants, and other efforts.

The Technical Committee also concluded that the Pollution Committee should report to the President of the Institute.

Peter Hutt, Institute Counsel, has informed us that the committee can be comprised entirely of representatives from Institute members.

At the Institute membership meeting in Florida in March 1970 W.H. Meyers, Chairman of the Institute's Technical Committee, reported on the preliminary Chicago meeting and recommended that a separate committee on pollution problems be established. This committee would initially have limited functions but with the possibility of expanded activities in the future. It was agreed that the initial thrust of this new committee should be in the area of water pollution, as the main problem is the water effluent from plant operations, but there are also some problems of solids and air pollution caused by our industry.

Our President, Malcolm Stephens, in March of this year requested each membership company of the Institute to nominate an individual as a member of this new committee.

The following individuals were nominated and appointed:

Roy Carr, Anderson Clayton Foods
F.M. Bloomberg, Arkansas Grain Corp.
Ivan Banfield, Brookside Div., Safeway Stores
J.F. Bourner, Capital City Products, Division of Stokley-Van Camp
Jules Brunner, Glidden-Durkee Division, SCM Corp.
Curt Meierhoefer, Humko Products, Division of Kraftco Corp.
G.N. McDermott, The Procter & Gamble Co.
F.G. Shea, C.F. Simonin's & Sons, Inc.
G.M. Kreutzer, Swift Edible Oil Co.

In May, as a result of a mailed ballot, G.M. Kreutzer of Swift Edible Oil Co. was elected by the committee members to serve as their first chairman.

# NRA—Japan Tallow Team Tours U.S. Rendering, Soap Manufacturing Facilities

The 13-man NRA-Japan Tallow Team which recently completed an 18-day study tour of U.S. rendering and soap manufacturing facilities, under the joint sponsorship of The National Renderers Association and the Japan Oils and Fats Processing Industry Association, have now returned to Japan and their respective firms in the Japanese soap and related processing industries.

The orientation tour extended from June 14 to July 4. The members of the group represented the 11 top-producing companies which use over 80% of Japan's total annual tallow imports. For the most part, the tour team was composed of Assistant Chiefs of tallow purchasing departments, or raw materials sections, of these major "soapers" and other tallow-using firms in Japan.

During their 18-day tour, the visitors were escorted and guided by Ben Inouye, Executive Assistant of the NRA Far East Office in Tokyo. The group traveled from coast to coast, and return, inspecting rendering, soap manufacturing and processing facilities in various cities and marketing areas across the country.

The team members included: Takashi Nakano (Team Leader), President of Minasama Soap Co., Ltd., Osaka; Nobuyuki Ishibashi (Assistant Team Leader), Executive Assistant of Japan Oils and Fats Processing Industry Association, Tokyo; Yuzo Gamo, Mioshi Fats and Oils Co., Ltd., Tokyo; Yukinobu Iwamoto, Mitsuwa Soap Co., Ltd., Tokyo; Hideo Kirii, Cow Brand Soap Kyoshinsha Co., Ltd., Osaka; Setsuo Maruyama, Nihon Fats and Oils Co., Ltd., Tokyo; Toshikazu Murata, Asahi Electro-Chemical Co., Ltd., Tokyo; Shiro Naruse, Kao Soap Co., Ltd., Tokyo; Shuzo Nomura, Shin Nihon Rika Co., Ltd., Osaka; Hideki Nonaka, Sister Soap Co., Ltd., Osaka; Yasuo Uematsu, Lion Fats and Oils Co., Ltd., Tokyo; Itaro Watanabe, Shiseido Soap Co., Ltd., Tokyo.

Tallow imports into Japan, largest importer of U.S. tallow in the world, hit a new high in 1969. More than 85% of the 267,000 metric tons imported last year was from the United States. Since 1948, U.S. tallow has become the major raw material used by Japan's fat and oil processing industry for making soap, hydrogenated oil, fatty acids and related products.

Spokesmen for the participants in the recently-completed tour were generally agreed that this orientation trip provided a comprehensive picture of how U.S. rendering products are produced and used, and (indicated) the vital role these products will play in the years ahead in increasing economic and trade benefits for both Japan and the United States.

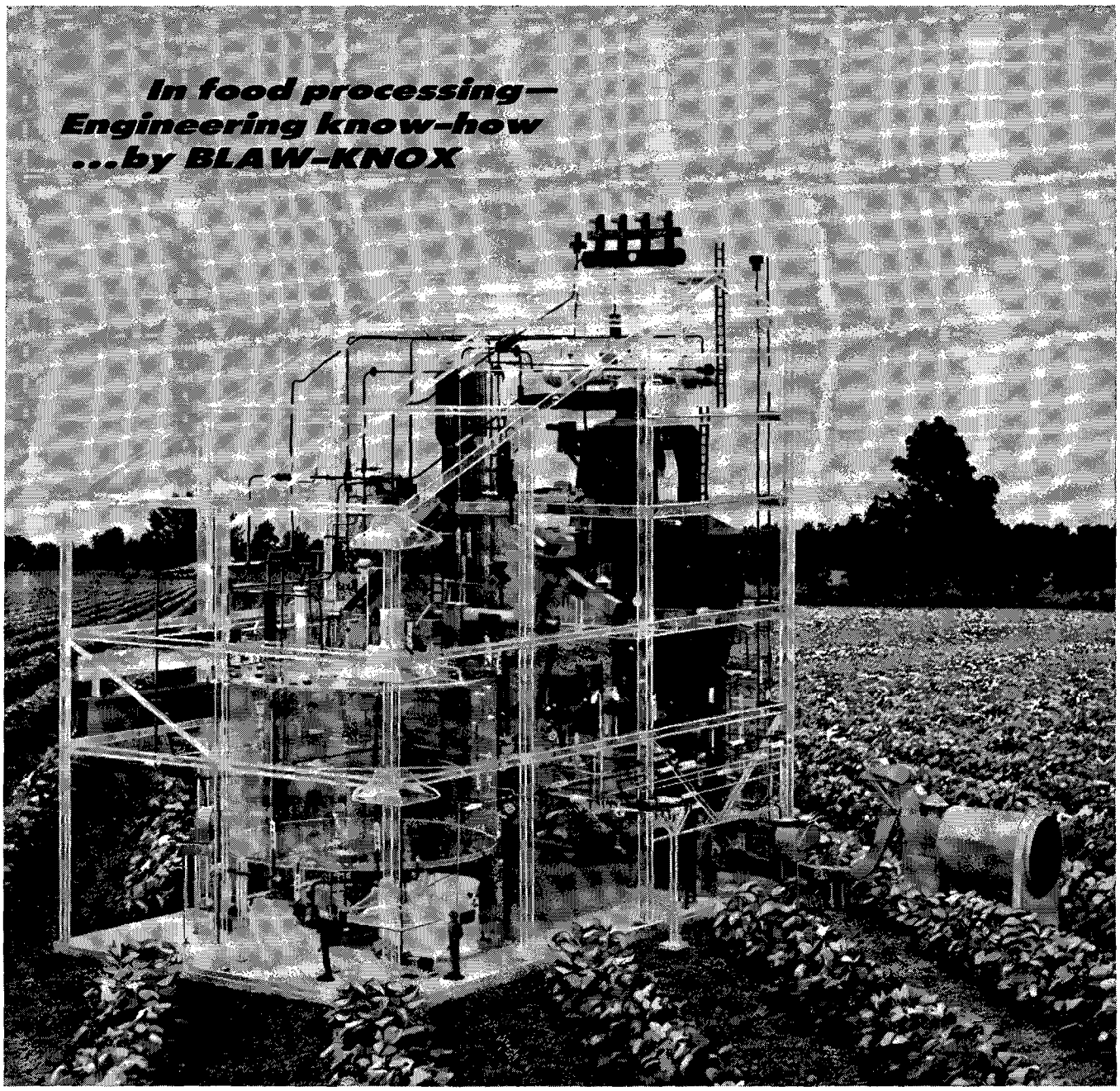
# Society for Applied Spectroscopy 10th National Meeting

The 10th National Meeting of the Society for Applied Spectroscopy (Also the XXII Mid-America Symposium on Spectroscopy) will be held at Stouffer's Riverfront Inn in St. Louis, Missouri, Monday through Friday, October 18-22, 1971.

Original papers are invited for general sessions on spectroscopy (Including x-ray, emission, atomic absorption, flame emission, atomic fluoresence, absorption, electron, resonance, mass and nuclear) and gas chromatography.

Papers are also invited for symposia on use of computers and new frontiers in spectroscopy, literature and data retrieval, and spectroscopy in environmental control, biomedicine, space and oceanography.

Titles and abstracts should be sent to E.F. Kaelble, program chairman, Monsanto Company, Inorganic Research Department, 800 North Lindbergh Blvd., St. Louis, Missouri 63166, by April 15, 1971.

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(Continued from page 414A)

production capacity is presently superior. Another factor for increased production capacity is that the Italian Government has recently sponsored national oil plants.

According to the above considerations, the State selected the most updated plants: two olive oilmills in Calabria, each one projected on two processing chains, with a continuous neutralization system, based on Alfa Laval short mix separators and/or on high vacuum distillation of free fatty acids (Physitron system from Gianazza Company), followed by continuous decolorization and deodorization; one of the two plants is also equipped with a final "winterization" stage. The operating capacity is 30–50 tons in a 24 hr period. The plants operation is so highly automated that two shift workers are sufficient.

## 10th Italian Congress of Study on Fats

From June 3–6, 1970 the 10th Italian Congress of study on fatty substances was held at Pescara, sponsored by the Italian Oil Chemists' Society. According to the Congress, the number of attendants was some 200 persons who came from leading research institutes and from the industry. There were also numerous participants from foreign countries including Professor Gunstone from Great Britain, Professor Paquot from France and others from Switzerland, Yugoslavia, etc. During the Congress Professor Paquot of the Centre National de la Recherche Scientifique, Thiais, France was honored with the Fachini Award for his outstanding merits in the field of lipids.

The list of speakers and of lecturers follows:

### Lectures

G. Porcellati (Biochemistry Institute, Pavia University) "Some Aspects of Phospholipids Metabolism"

F. A. Manzoli (Institute of Histology and General Embryology, University of Bologna) "Lipides of Biologic Membranes"

U. Pallotta, M. Piretti and P. Capella (Institute of Agriculture Industries, University of Bologna) "On Lipids Autoxidation. New Methodologies in the Study of Reaction Mechanisms"

A. Montefredine and M. Luise (Provincial Chemical Lab., Pescara) "Present State of Knowledge About Oil Alterations Through Heating"

P. Viola and M. Audisio (International Federation of Oilculture, Biochemistry and Phycology Direction; Dept. of General Physiology, Institute of Pharmacology, University of Rome) "Physiopathology of Polyunsaturated Fatty Acids"

C. Paquot (Centre National de la Recherche Scientifique, Thiais) "Bioactive Fatty Acids and Derivatives"

G. Vanlerberghe (L'Oreal, Paris) "Utilization of Fatty Materials in Cosmetic and Toiletry Products Industry"

C. Cantarelli and C. Peri (Institute of Food Technologies, University of Milan; Institute of Agricultural Industries, University of Perugia) "Modern Trends in Fats Technology; Inspection of Extraction Operations"

F. D. Gunstone (Chemistry Dept., University of St. Andrews, Scotland)

### Communications

G. Losi and M. Piretti (Institute of Agricultural Industries, University of Bologna) "Determination of Tocopherols in Oils and Application to Genuineness Control"

E. Fedeli and F. Camurati (National Center for Lipochemistry of the NRC, Milan) "Determination of Tocopherols in Vegetable Oils"

G. B. Martinenghi (l.d. by the University of Milan) "On Pre-refining in Presence and Absence of Solvents. Effects thereof"

E. Fedeli, G. Favini and G. Jacini (National Center for Lipochemistry of the NRC, Milan) "Husk Oil Dewaxing in Acetone Solution"

A. Cucurachi (Experimental Institute for Elaiotechnique, Pescara) "Solvent Purification of Husk Oils"

O. Schettino (Institute of Pharmaceutical and Toxicological Chemistry, University of Naples) "Organic Acids Fractionation by Varying-Composition Thin Layer Chromatography"

I. Cescon, A. Allegranza and R. Carnevali (A. Verga Institute, P. Pini I.O.P., Milan; Fatebenefratelli Hospital, Milan) "Screening of Tissue Lipids by Thin Layer Chromatography"

E. Santelli, R. Vitali (Tecnolearia Company, Milan; Gas Integrale, Milan) "Hydrogen in Oil Industry"

U. Armonioso (Alfa Laval Company, Milan) "Modern Technique in Vegetable and Animal Fats Processing (Interesterification, Fusing, Fractionation, Continuous Refining and Decolorization)"

E. Bernardini (C.M.B. Bernardini, Pomezia, Rome) "Oil Extraction From Oil Seeds Also With High Oil Content, With No Continuous Press Use"

A. Chelazzi (Florence) "Balanced Pressure Injection System for the Formation of Olive Virgin Paste Layers During Composition of the Expression Tower"

F. Tateo (Customs Regional Lab., Milan) "Determination of Milk Fat in Confectionery Products"

A. Lanzani and G. Jacini (Oil and Fat Experimental Station, Milan) "Contribution to the Knowledge of Peanut and Colza Soluble Proteins"

G. Amelotti, A. Daghetta, D. Grieco and L. Repetto (Institute of Agricultural Chemistry, University of Milan) "Lipids of Turkey Meat: Analytical Characterization According to Type, Sex, Weight and Breeding System"

U. Bracco and R. Viani (Prodotti Nestlé Research Lab., La Tour de Peilz, Switzerland) "Lipidic Fractions of Yeasts and Bacteria"

C. M. Zorzut and C. O. Chichester (Institute of Agricultural Chemistry, University of Bologna) "Volatile Matters Developing in Industrial Operations for Chocolate Production"

Metallurgica Luso Italiana (Lisbon) "Contribution to the Knowledge of the Caju Almond Oil"

G. Saracco and M. Gay (Institute of Industrial Chemistry, Polytechnic, Turin) "Separation of a Mono- Di- and Triglyceride Mix by TLC and Densitometric Quantitative Determination of Components"

A. Paleni and S. Curri (Milan, Correggio Emilia) "Ecological Environment and the Works of Art (Lipids in Degradation Products)"

G. Taponeco and V. Giacomi (Provincial Chemical Lab., Pisa) "Natural Glyceridic Structure of Olive Oils and Variations Thereof During Refining"

E. Tiscornia and G. C. Bertni (Institute of Toxicological and Pharmaceutical Chemistry, University of Genoa; G. Costa Company Research and Control Lab., Genoa) "Limits of Percent Variability of Saturated Fatty Acids in 2 Position of Glycerol, in Vegetable Oils for Edible Use"

E. Fedeli, G. Favini, N. Cortesi, F. Camurati, V. Verri and G. Jacini (National Center for Lipochemistry of NRC, Milan) "Studies on Fats Technology: Modifications Undergone by Various Oils in Classical Neutralization Processes"

Biserka Ostric-Matijasevic, P. Vranjkovic, Jturkulov, Olesja Timko (Institute of Technology, University of Novi Sad, Yugoslavia) "Changes in Tocopherol Content in Sunflower Oil During Refining"

P. Capella and U. Pallotta (Institute of Agricultural Industries, University of Bologna) "Comparison Between the Unsaponifiable Composition of Some Colza and Mustard Oil Varieties"

M. Catalano (Institute of Agricultural Industries, Bari University) "On Fats Rancidity. Note I. Influence of Free Fatty Acids"

Pascucci, Paolini (Customs Central Chemical Lab., Rome) "Crude Husk Oils"

A. Amati, F. Carraro Zanirato (Institute of Agricultural Industries, University of Bologna) "Sterols Determination in Italian Virgin Olive Oils. Application to Genuineness Control"

V. Sciancalepore (Institute of Agricultural Industries, University of Bari) "Remarks on the Determination of Olive Oil Rancidity. Preliminary Note"

### 4th Symposium on Detergents

The 4th Italian Symposium on detergents will take place at Sorrento, November 20 and 21, 1970, organized by the Società Italiana per lo Studio delle Sostanze Grasse (Italian Oil Chemists' Society), in conjunction with the National Chemical Industry Association Detergent Section and with the National Soap and Related Products Industry Association.

The Symposium will be held in the "Circolo dei Forestieri," Via Luigi de Maio, 35, Sorrento.

The subject of the Symposium is "Use and Development Prospects of Enzymatic Detergents." The theme is deemed to be of great interest either for enzyme and enzyme-containing detergent manufacturers, or for control laboratories and for consumers. It is the first time in Europe that this topic is dealt with in an expressly organized Symposium. The two days of works will be devoted to the following subjects: Proteolytic enzymes; Polyvalent action of enzymes in the tanning industry; Enzymes manufacture; Production of enzyme-containing detergents; Uses of enzyme-containing detergents; Patents; Compatibility of enzyme-containing detergents with optical bleaches; and Evaluation of enzymatic detergents.

### Normalization in the Olive Oil Field

Meetings are being held by the Oil and Fat Experiment Station in Milan, aiming at the stipulation of a codex of olive oil characteristics, to be used in trade negotiations and in control operations. The subject is an extremely complex one, either for the difficulties implicit in the matter itself or for the considerable concerns involved. Technical experts from industries and state control Labs. participate at the gatherings. An agreement has first been reached regarding the division of the characteristics into three categories: genuineness, quality and allowed foreign substances. In regard to genuineness, for instance, the following have been selected, among others: gaschromatographic determination of fatty acids; determination of sterols and triterpene alcohols; and determination of fatty acid distribution in glycerides (pancreatic lipase method). Collective analyses are under way, and a document is expected to be ready for publication by next fall.

## Sweden . . . . . .Reinhard Marcuse

### Lipidforum

The Scandinavian Forum for Lipid Research and Technology (LIPIDFORUM) which has recently been established (FOUR CORNERS, June 1970) has been accepted with great interest by Scandinavian lipid chemists and technologists and other people interested in lipids in the Scandinavian countries. "Informations from Lipidforum" are sent to the members at least twice a year. Foreign organizations in the lipid field are welcome to send information—e.g., concerning changes or forthcoming events—to Lipidforum, (mailing address: R. Marcuse, Lipidforum, c/o SIK, Fack, S-400 21 Göteborg 16, Sweden) for distribution.

### TBA-Seminar in Göteborg, November 1970

Lipidforum is planning a seminar on the TBA-test for determination of fat oxidation presumably in November this year. The seminar is mainly intended for persons speaking a Scandinavian language actively involved in research or application of the test. Interested colleagues are kindly requested to contact Lipidforum (mailing address: same as above).

### Sixth Scandinavian Symposium on Lipids at Grenaa, Denmark, June 1971

The organizing committee with Ole Tolboe Eng. as Chairman, has met in Copenhagen on June 10 with rep-

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