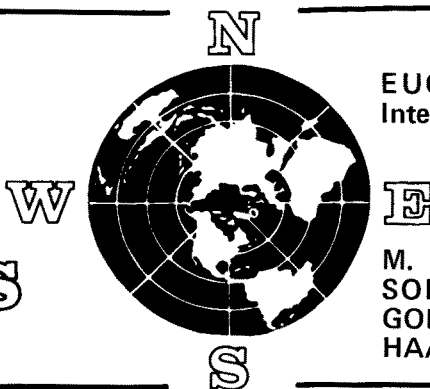


# Four

# Corners



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## Argentina . . . . . M. Bergel

### Brusco's paper on atherosclerosis

O.J. Brusco from Argentina, who is studying the alterations of lipidic metabolism on atherosclerosis, sums up the data referring to the alterations of concentration of lipoproteins on plasma, which is a frequent finding but not constant for atherosclerosis. The author makes comments regarding the importance of this fact and the standardization of various types of hyperlipoproteinemia as Frederickson made it. Afterwards, the author refers to the ischemic cardiac disease that he studied with 50 patients (3 women), providing the author with statistical data which correspond to the types of hyperlipoproteinemia.

Finally, the author points out the manner by which an atherosclerotic patient should be treated, presumptively thought to be as a carrier of a hyperlipidemia.

### Atherogenic levels of sanguineous lipids caused by fugacious and prolonged stress

To know the action of different determinant stimuli of conditions of stress concerning the levels of sanguineous lipids, A.E. Arguelles, J. Muniagurria, U. Poggi, Lugea Fernandez, Maria C. Volmer, and J. Cassini, are performing the following studies: (A) Short sensorial stimuli (audiogenic stress) that have been induced in a group of 23 persons for 20 min. They do not show significant elevations of total lipids, cholesterol, and free fatty acids, having some basal values of observable levels in atherosclerosis. (B) In a second group, they determine at the beginning and at the end of a 7 month period, in a group of professionals whose final position in the studies depended upon their promotion or retirement. They give evidence of significant elevations of sanguineous lipids at their own levels in patients with coronaropathies. They note the intervention of emotional and sensorial stress in the possible genesis of atherosclerosis. They consider the intervention of audiogenic and psychogenic stress in the genesis of atherosclerosis.

### Vitamin E and fibrocystic disease of pancreas

C.N. Macri and P. Goldmann determined the concentration of vitamin E in 20 healthy adults and in 27 patients with fibrocystic disease of the pancreas (FQP) with basal conditions. They carried out overstress tests in 3 normal boys and in 26 with FQP, correlating the same with the degree of hepatic and pancreatic alteration of these last ones. They discuss the results and the suitability of incorporating this vitamin to the treatment of patients with FQP.

## Belgium . . . . . M. Loncin

### Refining of palm oil

It is known that during the conventional "heat bleach-

ing" at 220-240 C in vacuum, the carotenoid pigments of palm oil are converted into polycyclic nonvolatile compounds which remain in the refined oil.

During two recent meetings (Strasbourg, Oct. 25, and London, Dec. 2-3), concern was expressed about the presence of these highly suspicious chemicals which, for instance, would never be allowed as food additives. The occurrence of these compounds could, perhaps, be tolerated 10 years ago when palm oil was used at the extent of 5% in margarine and cooking fats but not if the proportion is increasing above 50%.

A new process recently has been patented by: Granimar A.G., 37 Rue Notre Dame, Luxembourg City. This process involves three steps described below.

*First step:* After filtration or degumming by conventional methods, the crude oil is mixed with ca. half its volume of a low mol wt alcohol (LMA), such as ethanol, and an acid catalyst; the mixture is heated to esterify the free fatty acids (FFA) partially, so as to reduce their content below 0.5% by wt, based upon the oil.

*Second step:* The second step involves a transesterification of the product resulting from the first step, by means of an LMA, in the presence of an alkaline catalyst, such as sodium hydroxide. The same LMA can be used both in the first and in the second step, the acid catalyst being neutralized by the alkaline catalyst which is used in slight excess.

The excess LMA is recovered by distillation under atmospheric pressure after inactivation of the catalyst; the glycerol is recovered by washing with water. The esters of fatty acids and LMA are distilled under vacuum.

The residue of the distillation consists of ca. 2% by wt of the initial glyceridic oil or fat and can be processed to separate and to recover the constituents of the unsaponifiable fraction.

The vacuum distillation is not expensive when the esters of fatty acids and LMA have been freed from volatile products (particularly from LMA), all esters being condensed at temperatures well above the temperature of normal cooling water.

*Third step:* The distilled esters of fatty acids and LMA are mixed with slightly less than the stoichiometric amount of glycerol and with a catalyst, and the mixture is heated to transesterify it and to distill and recover the LMA.

The catalyst used in this third step is an alkaline metal or an eutectic mixture thereof.

After the transesterification reaction, the catalyst is removed by water or steam injection and centrifugation, the fatty phase then being deodorized by a conventional method, which causes the removal of the slight excess of esters.

The Granimar process has many advantages when compared to the conventional refining methods: (A) the total yield of refined oil is independent of the initial FFA content; (B) the unsaponifiable fraction is removed completely and recovered; (C) this process does not need high power or heat consuming steps, nor does it require the use of any

reagent, except for the small amount of catalysts; (D) this process avoids the use of bleaching earth and can be carried out continuously; (E) in the second step, the esters of fatty acids and LMA can be subjected easily to a fractional distillation (for example, in the case of palm oil, a fractional distillation gives ca. 40% of more volatile fraction containing nearly completely saturated fatty acids and 60% less volatile fraction from which a liquid oil can be obtained after transesterification with glycerol); and (F) the refined product is equivalent to a randomly interesterified fat which is very suitable for the manufacture of margarines or cooking fats (natural or synthetic antioxidants can be added to improve its stability).

## Chile . . . . . L. Masson

### Safflower in Chile

Since 1944, attempts have been made to introduce safflower (*Carthamus tinctorius L.*) commercially in Chile. In 1964, the Catholic University of Chile, through its Crop Science Department, started a safflower program, at the present under the direction of Waldo Ceron-Diaz, professor of agronomy (Casilla 114-D, Santiago, Chile).

Between 1964 and 1968, studies were undertaken with different varieties yield tests at different areas of the Central Valley of Chile, and different agronomic studies on the date and rate of planting, herbicides, fertilizers, and competitive yield tests with other oilseeds were carried on at the Experimental Station in Pirque, Santiago.

In 1968, the results showed that the crop was not competitive enough with sunflower both in yield and oil percentage. In 1970, a new germplasm consisting of new varieties, lines, and six female lines, to produce safflower hybrids, was introduced from Arizona.

The experimental results in the 1971-92 and 1972-73 seasons under irrigation showed that the best hybrid yielded 5.2 ton/ha, 35% higher than cultivar Gila (3.8 ton/ha) with 41.9% oil. Nevertheless, under dry land conditions, the hybrids yielded less than lines and varieties which yielded between 1.6 and 2.0 ton/ha.

Safflower now has possibilities to be grown in the Central Valley, especially in areas where irrigation is scarce in the summer time and where corn and other spring crops cannot grow. We have now cultivars and hybrids that can compete with rapeseed and sunflower seed both in yield and oil percentage. In the 1940s it was a safflower seed with 28% of oil, in 1964 with 34%, now with 42%, and in the near future one with more than 45% is expected.

## Czechoslovakia . . . . . J. Pokorny

### Meeting on detergents

The subject of the Fall Meeting of the Fats, Oils, and Detergents Section, Czechoslovak Chemical Society, held Dec. 17-18 in Konopiste near Prague, was the chemistry, technology, and analysis of surface-active agents and detergents. Among the 16 papers and several reports, the most interesting papers were presented on the technology and analysis of nonionic detergents, especially on condensation products of alkylene oxides with fatty acids and alcohols, e.g. on the GPC and GLC analyses of alkylene oxide condensates (Bleha, Bares, Coupek, Zajic, Stekla, and others). Mr. Kaufman reported on new methods of analysis of mineral additives in detergents, Dr. Vele discussed the micellar catalysis of various reactions by surface-active agents.

### Committee of Ecology

A new Committee of Ecology was founded in the Detergent Section of the Czechoslovak Chemical Society. The

chairman is P. Pitter from the Prague Institute of Chemical Technology. The committee will collaborate with the Ecology Committee of CID International Society of Surface-Active Agents. The main program will be the study of biodegradability of detergents.

### National Congress of Chemistry

The 30th National Congress of Chemistry, organized by the Czechoslovak Chemical Society and the Czechoslovak Society of Chemical Industry, took place in Brno, Aug. 19-26, 1974, with more than 1800 participants and more than 600 papers presented in 26 sections. Seventeen papers were presented in the Section of Fats and Detergents. The autoxidation of fats and oils was discussed in several papers. Lipids protected with a thin layer of proteins or carbohydrates are oxidized much more slowly than lipids exposed to air. Phospholipids are autoxidized to brown products which are destroyed by the reaction with hydroperoxides. The lipid polymerization takes place in the course of high temperature deodorization and deep-fat frying, except in the base of frying foods rich in protein. A new method of the determination of p-anisidine value, significantly more sensitive than the official method, was proposed. Synthetic phospholipids were the most interesting subject of the papers in the section of surface-active agents.

### Fats and oils from the hygienist's point-of-view

Several papers on fats and oils were presented at the International Congress of Food Hygiene, Brno, Oct. 15-17, 1974. The problem of mycotoxins in food, oilseeds, and other products attracted attention. Changes of lipo-soluble vitamins during food processing are important for fat chemists, as vitamins added to edible fats are destroyed in various degrees according to the processing conditions. Lipids oxidized during storage of fatty foods react with proteins, thus decreasing the nutrition value, especially the content of available lysine. Essential fatty acids are destroyed and protein-lipid interaction products are formed in fried foods; fat adsorbed in fried food is oxidized in a much higher degree than frying fat remaining the pan.

### Detergents in household products

At the Third International Meeting on Household Chemistry, Piestany, Slovakia, June 26-27, 1974, 15 papers were presented in the Section of Detergents and 13 papers in the Section on Cosmetic Chemistry. New types of detergents produced in Czechoslovakia, the USSR, Bulgaria, Hungary, and Poland and their applications were discussed. A group of papers concerned enzymic preparations for the manufacturing of detergents, e.g. papers on the evaluation of alkaline proteases in detergents, the comparison of detergents containing alkaline proteases and those containing sodium tripolyphosphate, and methods of drying enzymic preparations.

## Germany . . . . . H.K. Mangold

### New research facilities at Cologne

One of the leading pharmaceutical companies in Germany, A. Nattermann & Cie, GmbH., has taken a decisive step in the concentration of its research efforts by the inauguration of a new research institute in Bocklemünd, a district of the city of Cologne. This new building has cost ca. DM 15 million (ca. \$6 million) and is the seat of three research branches of the Nattermann group: the departments of chemistry and biochemistry, clinical chemistry, and pharmacy and phytochemistry. The long pursued activities in these fields will be intensified in the future. Ca. 150 chemists, pharmacists, physician, and technical assistants now are working in the new institute at Cologne-Bocklemünd.



The Nattermann Research Institute at Cologne-Bocklemünd.

The laboratories are equipped with all modern facilities. Physicochemical instrumentation ranges from vapor phase and liquid-liquid chromatographs to NMR, IR, UV, and mass spectrographs. Radiochemical laboratories are devoted to the synthesis of labeled compounds. One of the main activities is centered on fundamental research in the lipid field. These efforts have culminated in the industrial production of different soybean phospholipid fractions rich in phosphatidyl choline and chemically pure phosphatidyl choline with a particularly high content in polyunsaturated fatty acids, especially linoleic acid. These substances constitute the essential component of pharmaceutical preparations which are being used successfully in the treatment of atherosclerosis, hyperlipidemia, and certain liver diseases.

Besides the work in the field of analysis and synthesis of lipids, a prominent place at the Nattermann research institute is occupied by studies on the metabolic fate of phospholipids using radioactively labeled substances.

#### A. Seher new president of Society for Fat Science

A. Seher, executive director of the Institute for General and Analytical Chemistry at the Federal Center for Lipid Research, Münster, has been elected president of the German Society for Fat Science (DGF). He succeeds J. Baltes who had been president of the society for three years. A. Seher is well known in the lipid field, especially for his contributions to the analysis and characterization of sterols and other lipids.

#### Society for Fat Science meeting in Hamburg

The 1975 convention of the German Society for Fat Science (DGF) will be held at Hamburg from October 6-9, 1975. Further details regarding this meeting can be obtained from D.G.F. Geschäftsstelle, Gallitzinstr. 13, D-44 Münster (Westf.), Germany.

#### Italy . . . . . G. Jacini

##### XII International Society for Fat Research

Ca. 500 participants convened in Milan, Sept. 2-7, 1974, for the 12th Congress sponsored by the International Society for Fat Research (ISF). During the previous Congress, held in Göteborg, Sweden, in 1972, it was decided to hold the Congress in Milan with the Italian Oil Chemists' Society as the organizing agency.

The Congress attendants came from 25 different Countries, including Western and Eastern Europe, United States, Canada, Japan, Israel, Argentina, India, Malaysia, etc.

The opening section was held in one of the halls of the ancient, historical Sforza Castle, with a day of plenary lectures, the first of which was on the "Regulation of Fatty Acids Synthesis" by K. Bloch, Nobel Prize winner. Before

the city's leading authorities, R. Paoletti, chairman of the Italian Oil Chemists' Society, awarded the Society "Fachini" biennial prize to AOCs President R.T. Holman of the Hormel Institute and to *Rivista Italiana delle Sostanze Grasse* as an acknowledgement for the journal's 50 years of activity and publications devoted to the chemistry and technology of fats.

Immediately afterward, the seventh "Tensiochimica" prize offered by Italy's Tensiochimica Company for the best work published on surfactant chemistry in 1973-1974 was awarded by a Committee appointed by the Italian Oil Chemists' Society, whose members had examined 28 papers. The prize (\$5000 and a certificate) was given for the paper: "Thermodynamic Group Contribution from Ion Pair Extraction Equilibria for Use in the Prediction of Partition Coefficients" by J. Howard Rytting, Marie Joan Harris, and Takeru Higuchi.

The Tensiochimica Company Chairmen presented the prize to Sister Marie Joan Harris, who had come from the U.S. for the occasion.

Eight symposiums and five round tables were held during the meeting on the following subjects: New Trends in the Technology of Edible Fats; Chemistry and Biochemistry of Molecular Species of Lipids; Lipase, Phospholipase, Lipoperoxidase, and Lipoxxygenase; Membranes: Physical Properties and Lipid Composition; New Developments in Analytical Methods; Olive Oil; Lipids in Foodstuffs; Topics in Surface Active Agents; Newly Discovered Lipids; Flavors; Lipids in Cosmetics and Drugs; New Trends in Margarine and Hydrogenated Fats; and Economic Trends in Edible Fats.

Free communications had been classified into 16 sections: Oils and Fats Technology; Drugs Affecting Lipids; Lipid Biochemistry and Physiology; Human Pathology; Lipids and Nutrition; Analytical and Clinical Chemistry; Lipids and Works of Art; Surface Chemistry I; Surface Agents II; Olive Oil; Natural Lipids; Chemistry and Physics of Lipids; Hydrogenated Fats, Margarine Shortenings; Autoxidation and Antioxidants; Lipoxxygenase; Lipase and Lipoxydase; and Membranes.

The sections had been organized and were chaired by individuals appointed by the organizing committee (as a rule, one Italian and one foreign researcher for each section).

As a whole, 280 free communications were submitted, so that, taking the lectures into account, as well as the interventions during the symposiums and round tables, as many as 299 scientific contributions were submitted at the Congress.

The plenary lectures, the symposia, and round table works will be published in a volume form by the Raven Press (New York), thanks to R. Paoletti, chairmen of the Italian Oil Chemists' Society. Several of the free communications have been sent to *Rivista Italiana delle Sostanze Grasse* Milan, for publication and will appear in their original language and text.

As usual, a few social events (a concert, a ballet "soirée" at the Scala Theatre, and a final dinner) were offered to the Congress participants.

An ISF meeting held while the Congress was in progress resolved that the 13th Congress will be held in Marseilles in 1976. M. Naudet, director of Marseilles' Laboratoire National des Matières Grasses, will be the ISF chairman for 1975-1976.

The annual meeting of the European Club of Lipid Research Centers also was held the last day of the 12th Congress.

#### New board members

Elections were held to appoint new members of the Italian Oil Chemists' Society Board for 1975-1976. New members are: D. De Leonardis (member of Parliament),

chairman; G. Porcellati (Perugia University); F. Paolini (Rome), deputy chairman; E. Bernardini (C.M.B.—Rome); C. Carola (Stazione Sperimentale Oli e Grassi-Milan); E. Fedeli (C.N.R.—Milan); S. Gazzera (Procter & Gamble—Rome); R. Paoletti (Milan University); E. Tiscornia (Genoa University); G. Jacini (Stazione Sperimentale Oli e Grassi—Milan), secretary; and G. Luft (Unil-It—Milan), treasurer.

South Africa . . . . . S.R. Hill-Haas

#### Vegetable oilseed production and utilization in the Republic of South Africa

A rough outline of the history of the production of vegetable oilseeds and their administration was published in the *Journal* in February 1970. This present article is intended to show how the oilseed crops, peanut, and sunflower seed, are controlled and regulated to improve the quality and yield and to safeguard the producer, consumer, and user.

The Oilseed Control Board is empowered to act as sole buyer of these oilseeds, and the producers are prohibited from selling oilseeds to anyone but the Oilseed Control Board. The provisions of the scheme apply to persons in the Republic of South Africa who are concerned with the production of, or who deal in, peanut and sunflower seeds (1).

Soybeans also are covered by the same scheme, but the prohibition on selling by producers does not apply, and, when required, the Board sets a floor price. Soybeans are grown on a rather small scale and therefore, at present, not of major importance. However, steps are being taken to increase the production, and indications are that this will be successful in the not too distant future.

The board is composed of representatives of the producers, oil crushers, merchants, roasters, consumers, and processors of peanuts and other oilseeds and a representative of the Department of Agricultural Economics and Marketing. The members are appointed by the state president for a period of 2 years.

The main functions of the board are to ensure reasonable price stability and equitable distribution inland and to export the surplus.

The Board appoints agents for grading, handling, storing, and delivering seeds; it determines the price to producers and buyers, imposes levies, establishes reserve funds, and supports research. The board advises the minister for agriculture about all matters concerning oilseeds and also about all matters relating to importation and exportation.

The administration of the board is in the hands of a professional manager and his staff, who implement the decisions of the board.

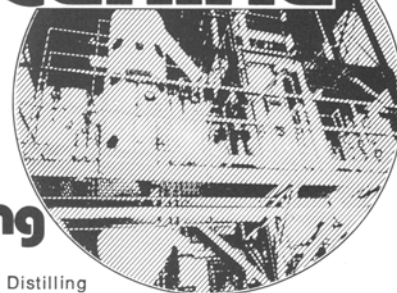
Oilseeds are handled in the growing areas on behalf of the board by agents appointed by the board. The agents suitable for this function must have sufficient storage space under cover, have certified, qualified graders trained and tested by the Department of Agriculture, and machinery for cleaning and shelling peanuts. Sunflower seeds are delivered to buyers unshelled.

Advance prices to growers for peanut and sunflower seeds are determined by the board at the beginning of the season and remain constant for the crop year.

The producers are paid by the agents a part of the price as an advance payment, which is prescribed by the board and based upon grade and wt delivered. The agents receive a handling remuneration which is more or less constant through the years and was calculated on accumulated cost analysis information. Besides storage remuneration, which

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TABLE I

Disposal of Crops<sup>a</sup>

	Peanuts			Sunflower seed		
	1972-3	1973-4	1974-5 <sup>b</sup>	1972-3	1974-3	1974-5 <sup>b</sup>
Total sales	248.767	126.00	360.000	149.200	247.000	250.000 <sup>c</sup>
Losses	2.262	600 <sup>b</sup>	3.400	69	100 <sup>c</sup>	100 <sup>c</sup>
Carried over	28.041	786	---	2.241	3000 <sup>c</sup>	3000 <sup>c</sup>
Total	279.070	127.386	---	151.510	250.100	253.100 <sup>c</sup>
Less br forw.	6.736	28.041	---	---	---	---
Production	272.334	99.345	363.400	151.510	250.100	253.100

<sup>a</sup>Figures in tons.<sup>b</sup>Estimates.<sup>c</sup>Approximate figures.

is fixed annually in collaboration with the National Marketing Council, losses of wt through drying, insect damage, etc., are taken into account.

Cooperative societies acting as agents and financing the producer through loans from the Land and Agricultural Bank of South Africa are helped by the board which guarantees 10% of the loans.

Agents which select hand-picked edible peanuts for export are remunerated separately based upon average cost, as presented by the agents participating in this operation.

The board keeps separate pool accounts for peanut and sunflower seed. As soon as all seeds, accepted by the board through their agents, have been sold, the board determines the net proceeds. The net proceeds are paid to the contributing producers, according to quantity and grade delivered. As the final result of the pools depends upon variables, like size of crop, export prices, etc., the board makes use of advance and deferred payments.

Ca. half of the peanut crop is taken into stores unshelled, because nuts in the shell have better keeping qualities and, thereby, guarantee to local and overseas buyers, fresh nuts throughout the season. Nuts are shelled only a short time before delivery. The quality of the peanuts remains fairly constant, taking grading results as a guide to quality, whereas the oil content of sunflower seeds is increasing.

During 1967-68, 7.5% of the total crop was sunflower seeds with high oil content, whereas, in 1974-75, 75-80% of seeds with high oil content was produced.

At the beginning of the season, when the first estimates about size of crops are available, the seeds are allocated according to estimated local demand and export expectations.

Based upon estimated realization values, advance prices to the processors are fixed and financial arrangements with the Land and Agricultural Bank of South Africa concluded. When the bulk of the crop is sold and prices realized permit this, further interim payments are made to the producer. At the end of the year, if surplus funds are available, producers receive a further deferred payment.

The board is not concerned with the price structure of processed oilseeds, i.e. vegetable oil and oil cake.

In 1952, when the board started to function on lines described above, the selling price to South African processors of peanut and sunflower seeds was rather high, but the board succeeded in reducing the price gradually until 1965 but subsequently was forced to increase the price due to increased production costs and to encourage larger production.

When fixing the selling price of various grades of seeds to oil crushers, prices are correlated with the expected oil yield for the grades.

Since 1970, the selling price of sunflower seeds to the crushing industry has been based upon the oil content determined in the board's laboratory. The sunflower seed delivered to the crushers are debited according to grade values which are based upon a standard oil content and

subsequently adjusted when the laboratory analysis is available. Adjustments are made for every .5% deviation below or above the standard oil content.

To compensate the board for costs of storage and losses, the local selling price of oilseeds is increased from month to month. Buyers are encouraged to take their requirements as soon as seeds are available by deferring the monthly increase by ca. 2 months after new seeds are available. The price increase at the end of the season is substantial (12 months), but it is not applicable to the new crop. To encourage the users to keep reasonable stocks at the end of the season and so ensure a continuous flow of products to the consumers, refunds are paid to the stock holders to compensate for the price difference of the old stock and the new crop. The quantity of stock considered for refund is limited to one-fourth of the total quantity purchased over 12 months.

The total local consumption increases steadily, while the exportable surplus varies with the crop size. The increase in local consumption is due to the increase of population and to the considerable increase of income and, therefore, buying power. Disposal of the crops is shown in Table I.

On the local market, peanut and sunflower seeds sold to the seed crushers are sold in conjunction with one another, and the ratio depends upon the size of the sunflower crop.

Calculated on oil yields and price and considering usage, seed crushers prefer to purchase sunflower seeds, and, consequently, the whole crop is sold locally. However, sunflower oil produced is insufficient to satisfy the local demand for vegetable oil and as raw material for margarine and other products. Therefore, peanuts have to be purchased to fill the gap. The ratio of peanuts and sunflower seeds offered to the industry is determined by the board, based upon the requirements of the crushers over a 12 month period.

The volume of trade in edible nuts is second in importance to the nuts used for crushing. By 1972, the consumption of edible nuts, peanut butter, etc. had doubled since 1957, and consumption is increasing due to increase of population and purchasing power.

The quality of all edible products is very strictly controlled through the Food, Drugs, and Disinfectants Act administered by the minister of Health. Inspectors take samples at the distribution points, and these are analyzed by the department's laboratories.

Local consumption of edible nuts is as follows: 22,390 tons (1972-73), 22,000 tons (1973-74), and an estimated 25,000 tons (1974-75).

Edible peanuts are exported by the board through a sole selling agent in the United Kingdom, whereas other markets are supplied through South African export houses.

Handpicked, selected edible kernels are offered in four grades: 50-60, 60-70, 70-80, and 80-100 kernels/oz.

Crushing peanuts for export are sold by private treaty under FOSFA Contract No. 30 on CIF terms against documents on arrival of goods directly to crushers or through brokers.

Edible peanuts are exported through Durban where the nuts ultimately are inspected before shipment. No foreign matter or unsound, soiled, or stained nuts are allowed. Modern electronic equipment is used to select edible nuts, and this is followed by manual, visual inspection to detect concealed mold infestation. All sales are concluded in South African currency.

Export of edible nuts increased from 38,737 tons in 1971-72 to 52,189 tons in 1972-73. The figure for 1973-74 is 24,800 tons and the estimate for 1974-75 is 55,000 tons (2).

No unshelled peanuts are exported by the board, because of the difficulty in detecting mold infestation in the pod.

Sunflower seeds usually are not exported, except for a small quantity for seed purposes and as parrot food.

The Board regularly sends its own trade missions overseas to contact interested parties and to discuss requirements and any other relevant topics.

All seeds produced are levied and the proceeds paid into a fund from which expenses are met.

#### REFERENCES

1. Oilseed Control Board, "Annual Report of the Oilseed Control Board of South Africa.
2. Board of Trade and Industries, "Report of the Board of Trade and Industries of South Africa.

## CALL FOR NOMINATIONS: Award in Lipid Chemistry

Sponsored by Applied Science Laboratories

In April 1964, the Governing Board of the American Oil Chemists' Society established an Award in Lipid Chemistry under the sponsorship of the Applied Science Laboratories, Inc., State College, Pa. Previous awards were presented as follows: Erich Baer, August 1964; Ernest Klenk, October 1965; H.E. Carter, October 1966; Sune Bergstrom, October 1967; Daniel Swern, October 1968; H.J. Dutton, October 1969; E.P. Kennedy, September 1970; E.S. Lutton, October 1971; A.T. James, September 1972; F.D. Gunstone, September 1973; and P.K. Stumpf, September 1974.

The award consists of \$2500 accompanied by an appropriate certificate. It is planned that the twelfth award will be presented at the AOCS Fall Meeting in Cincinnati, September 28-October 1, 1975.

#### Canvassing Committee Appointees

Policies and procedures governing the selection of award winners have been set by the AOCS Governing Board. An Award Nomination Canvassing Committee has been appointed. Members are: David L. Berner, chairman; Harold P. Dupuy; Earl G. Hammond; Donald C. Johnson; and Frank T. Lindgren. The function of this committee is to solicit nominations for the twelfth award. Selection of the award winner will be made by the Award Committee whose membership will remain anonymous.

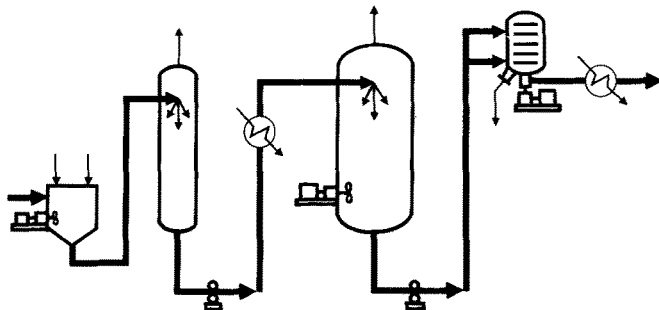
#### Rules

The rules prescribe that nominees will have been responsible for the accomplishment of original research in lipid chemistry and must have presented the results thereof through publication of technical papers of high quality. Preference will be given to individuals who are actively associated with research in lipid chemistry and who have made fundamental discoveries that affect a large segment of the lipid field. For award purposes, the term "lipid chemistry" is considered to embrace all aspects of the chemistry and biochemistry of fatty acids, of naturally occurring and synthetic compounds and derivatives of fatty acids, and of compounds that are related to fatty acids metabolically or occur naturally in close association with fatty acids or derivatives thereof. The award will be made without regard for national origin, race, color, creed, or sex.

Letters of nomination together with supporting documents must be submitted in octuplicate to: David L. Berner, Campbell Institute for Food Research, Campbell Place, Camden, N.J. 08101 before the deadline of April 1, 1975. The supporting documents will consist of professional biographical data, including a summary of the nominee's research accomplishments, a list of his publications, the degrees he holds, together with the names of the granting institutions, and the positions held during his professional career. There is no requirement that either the nominator or the nominee be a member of the American Oil Chemists' Society. In addition, letters from at least three other scientists supporting the nomination must be submitted in octuplicate.

Remember the DEADLINE, April 1, 1975

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