
Industry News



Dr. Otto Wurzburg, right, of National Starch and Chemical Corporation, presents a check for \$3,000 to Dr. Stephen S. Chang, chairman of the Food Science Department at Rutgers University, as an unrestricted grant. The firm made two such grants during 1979.

New Durkee plant

Durkee Foods division of SCM Corp. has begun construction of a new food emulsifier plant at Joliet, Illinois with PSI-Process Systems Inc. of Memphis providing engineering and other services. □

Armak capacity expanded

Armak Company has modified its process technology at its Morris, Illinois, fatty amine plant to increase nitrile produc-

tion capability by 30 million pounds, with the possibility of a further increase. Further work is planned to capture the increased capacity as hydrogenated amine derivatives.

CPC, Texaco begin study

CPC International Inc. and Texaco have begun a study as to whether the firms should be cooperative in a venture to produce 60 million gallons a year of fuel grade ethanol from corn at CPC's corn wet milling plant in Pekin, Illinois. □

Dominican firm expands

Sociedad Industrial Dominicana in Santo Domingo has purchased a hydrogenation plant with a capacity of 80 to 100 metric tons per day from Neumunz Inc. of Leonia, New Jersey. It is the second installation Neumunz has provided to the firm, the leading vegetable oil producer in the Dominican Republic. □

AAAS media fellowships available

The American Association for the Advancement of Science is seeking applicants for up to 20 fellowships available for the summer of 1980 in the AAAS Mass Media Science Fellow Program.

Fellows spend 10 summer weeks working as reporters, researchers or production assistants for electronic and print news media throughout the United States. Graduate students in the natural and social sciences receive the chance to learn about news media operations and to develop their skills in providing the public with a better understanding and appreciation of science and technology. Outstanding undergraduates and postdoctoral students also will be considered.

Application materials are available from the Mass Media Science Fellows Program, AAAS, 8th Floor, 1776 Massachusetts Ave. N.W., Washington, DC 20036. Deadline for submission of completed applications is Feb. 15, 1980. □

International

ARGENTINA: RECORD PRODUCTION

Argentina is forecast to have its second consecutive year of record oilseed production, 7.8 million tons, in a report from Joseph F. Somers, the U.S. acting agricultural attache in Buenos Aires. The 1979 production is estimated at 6.7 million tons.

Increased soybean plantings are the major factor in the increase, Somers said, with farmers "encouraged by good soybean yields (2.1 tons per hectare) and the profitability of double-cropping soybeans and wheat."

Increases in sunflowerseed acreage reflect farmer's discontent with relatively poor cotton yields this past year, as well as a shift of some acreage from sorghum. Flaxseed prices at planting time were approximately 2½ times above

year-ago levels, prompting more flaxseed acreage, Somers said, and soybeans displaced peanuts in some areas.

Argentine oilseed exports also should reach record levels, Somers said in his report on the 1980/81 marketing year, which includes crops harvested starting this spring.

Total oilseed exports for 1980/81 are forecast at 3.7 million tons, compared to an estimated 2.94 million tons for 1979/80. Vegetable oil 1980/81 exports are forecast at 654,000 tons compared to the 1979/80 estimate of 612,000 tons. Oilseed meal exports for the same periods are 1.7 million tons and 1.4 million tons, respectively.

While soybeans should pace the export increase, sunflowerseed and flaxseed exports should rise with the elimination of a 10% export tax. Vegetable oil exports will be

TABLE I

Oilseeds, fats and oils statistics for Argentina

Crop	Area planted (1,000 Hectares)		Estimated production		Imports and stocks		Exports		Crush		Oil				Meal			
	1980/81	1979/80	80/81	79/80	80/81	79/80	80/81	79/80	80/81	79/80	exports	domestic use	exports	domestic use	exports	domestic use		
1,000 metric tons																		
Soybeans	2250	1800	4750	3800	41	56	3500	2850	1000	750	100	70	60	55	475	325	300	250
Sunflower	2000	1766	1450	1350	230	220	100	10	1680	1570	225	190	250	240	520	470	85	75
Peanut ¹	340	400	300	470	17	8	35	60	230	360	80	130	11	10	110	175	31	31
Cottonseed	570	690	345	330	14	35			325	325	20	26	30	30	140	130	9	9
Tung	50	50	65	75					65	75	9	11	1	1				
Flaxseed	995	893	850	630	41	47	100	20	700	550	220	185	5	5	450	330		

¹Shelled basis. Figures are for the Marketing Year, with crop harvested in first of split years.

stimulated by a 10% rebate, Somers said.

The elimination of the oilseed export tax is on a staggered basis. The tax was eliminated late last year on flaxseed; it will end Feb. 1 on sunflowerseed, March 1 on cottonseed, and April 1 on peanut. There was no export tax on soybeans. The 10% rebate on vegetable oil exports took effect late last year for linseed, soybean and certain other vegetable oils; it will take effect Feb. 1 for sunflowerseed; March 1 for cottonseed, and April 1 for peanut. □

NIGERIA REMAINS NET IMPORTER

Despite government attempts to improve domestic fats and oils production by introducing improved seed and improved varieties, Nigeria remains a net importer of fats and oils, especially peanut oil, according to W. Garth Thorburn, U.S. agricultural attache in Lagos.

The most recent reliable import figures, for January-July 1978, show the United States supplying about 20% of Nigerian fats and oils imports, primarily tallow. The Netherlands and West Germany each account for slightly larger shares of the Nigerian fats and oils market.

Most peanuts produced in Nigeria are consumed locally. Thorburn said that of the 1978/79 total peanut crop of 315,000 metric tons, only 20,000 tons became the commercial crop. For 1979/80, he estimated the total crop at 430,000 tons, including a commercial crop of 150,000 tons. □

DUTCH CRUSHERS AT FULL CAPACITY

Dutch oilseed crushers should be operating at close to capacity during 1980, U.S. agricultural counselor James Hutchins said in a recent report.

Trends in soy complex prices and demand indicate soy-processing mills will be near total capacity of 2.9 million metric tons, Hutchins said, while crushing capacity for other oilseed is estimated between 200,000 and 250,000 metric tons. A 250,000 MT sunflowerseed plant being built by Cargill will not be operational until the end of 1980 or early 1981, Hutchins said.

While Dutch exports of oilseeds, fats and oils set a record at 750,500 metric tons in 1979, Hutchins said it appears "at least rather doubtful whether the Dutch export success of 1979 can be repeated in 1980."

U.S. exports of oilseeds, fats and oils to the Netherlands were about 390,400 metric tons for 1979, up about 9% from the previous year. The U.S. share of total Dutch imports declined, however, from 35.1% in 1978 to 34.2% in 1979, mainly due to a drop in imports of U.S. animal fats and greases. □

BRAZIL PEANUT CROP MAY INCREASE

Brazil's 1980 peanut crop may show an increase to 470,000 metric tons from the 1979 estimated crop of 450,000

metric tons, U.S. agricultural officer Lyle Sebranek reports from Sao Paulo.

Increased producer prices and adequate quantities of good seed should prompt planting of 290,000 hectares, compared to 275,000 hectares in 1979, Sebranek forecast.

One Brazilian trade source believes there may be a decline in peanut production, Sebranek said, because while small farmers may increase peanut acreage, large mechanized farmers could stay with soybeans.

Sebranek's export forecasts for 1980, with 1979 estimates in parentheses, are peanuts, 30,000 metric tons (25,000); peanut oil, 80,000 (77,000); and peanut meal, 70,000 (70,000).

Domestic peanut oil consumption in 1980 will depend on soy oil availability. Peanut oil is mixed with soy when soy oil is in short supply. Increased swine and poultry numbers are expected to increase domestic peanut meal consumption. □

MALAYSIA..... T.K. Tin

100 attend Oil Palm Conference

Approximately 100 persons attended an Oil Palm Industries Conference held April 27-28, 1979, in Kuala Lumpur, organized by a Malaysian management services firm.

The 11 speakers covered seven topics: Investment and Project Developments; Research Needs and Facilities; Development in Processing of Palm Fruits; Treatment and Utilization of Waste and Effluent in an Oil Palm Mill; Agronomical Aspects and Planting Materials; Development of Herbicides; and Functions of The Palm Oil Registration and Licensing Authority (PORLA).

Palm Oil Research Institute opens

The Palm Oil Research Institute of Malaysia (PORIM) formally opened on May 15, 1979. The institute whose resident liaison manager is AOCS member Kurt G. Berger, was created by the government to improve palm oil's competitive position in world markets through improved marketing and production.

The institute is to do research on development of new edible and nonedible products from palm oil, as well as provide a technical advisory service on market development. Other research areas will include plant breeding, vegetative propagation and fundamental aspects of palm oil chemistry. □

India oilseeds production: 12.9 million metric tons

India's 1979-80 production of major oilseeds is forecast at 12.9 million metric tons compared to 13.46 million and 12.47 million tons in 1978-79 and 1977-78, respectively, in

Continued on next page.

International

a report by John Davenport, U.S. agricultural officer. Production of peanuts, India's major oilseed, is forecast at 6.0 million tons, compared to 6.4 million for the past year and the record 6.8 million in 1975-76 (Table 1).

Fats and oils production, including butter and ghee, is estimated at 3.39 million metric tons, compared to 3.43 the previous year. Imports of edible oils for 1979-80 are forecast by Davenport at 1.1 million metric tons. The 1.25 million metric tons imported during 1977-78 was a record for India. Davenport notes that some commercial trade sources say edible oil imports may total 1.5 million metric tons for 1979-80.

India plans to increase village production of edible oil by establishing 22,000 small village oil crushing units that could raise total value of village output to 2,000 million rupees from the present 400 million rupees. The village industry now employs about 35,000 workers; the new plan calls for 200,000 rural workers by 1982-83.

"Large scale imports of refined, bleached and deodorized palm oil and palm olein were planned by the Government of India during the 1978-79 season and will be made during this season for direct distribution to the consumers through the public distribution systems," Davenport said.

He estimated peanut exports during 1979-80 would be limited to 25,000 to 50,000 metric tons. Peanut meal exports have been slowed by congestion at ports, Davenport said, with the calendar year 1979 quota having been 900,000 metric tons, of which about 550,000 tons actually were exported.

SOUTH AFRICA A.A. Spark

The Fishing Industry Research Institute (FIRI) is situated on the campus of the University of Cape Town. It is funded half by the combined Fishing Industry and half by the Council for Scientific and Industrial Research (CSIR). Founded in 1946, under the directorship of G.M. Dreosti, it has built an international reputation in fish technology and research.

Industry is served directly by investigations into improved handling, processing and storage of fish and its products, and many field investigations into local and industry problems. At the same time FIRI supports a number of more basic studies. The lipid chemistry section has handled a number of problems related to fish oils, including oxidation in the residual oil in fish meals and the use of antioxidants, analytical methods for determination

of fat in fish meal and feeds, recovery of antioxidants and behavior of antioxidants.

Recent research involving fractionation of fatty acids in South African fish oil by a number of methods including spinning band distillation and preparative gas chromatography led to the isolation of natural cetoleic acid ($\Delta 11$ docosenoic acid) as part of an international study of the so-called toxic effect of docosenoic acids in rats, particularly erucic acid (the $\Delta 13$ isomer). This product was made available to other researchers for analytical purposes. For animal studies, some 250 g of cetoleic acid was synthesized at FIRI, this being the only world source.

FIRI is presently concerning itself in the lipid field with seasonal variations in the lipids of various fish species in collaboration with the Division of Sea Fisheries. Possible substitutes for sperm oil as a source of wax esters are also being studied. The possession of an extremely well-equipped gas chromatography laboratory, with staff well acquainted with the latest in techniques, has given FIRI a very good reputation for excellence in gas chromatography, particularly in fatty acid and amino acid analysis on both packed and open tubular columns.

A new industry in South Africa has just started — 'sea run' trout, preferred for their flavor and more rapid growth. The market for these is highly dependent, however, on the pigmentation of the flesh. This pigment is the same as that found in shells of rock lobster and crab, and cannot be synthesized by the trout. FIRI is actively engaged in methods of extraction and feeding these pigments to trout to obtain the necessary pink flesh. □

SPAIN E. Vioque

Professor Jose Manuel Martinez Suarez, New Director of the "Instituto de la Grasa y sus Derivados" of Sevilla

Soon after entering the Instituto de la Grasa y sus Derivados, Dr. Martinez Suarez established an experimental mill where the results of laboratory research on olive oil extraction could be studied on an industrial scale, permitting several systems to be compared, and showing to industrial people that olive oil can be elaborated with "white coat." The experimental mill of the Instituto de la Grasa has been qualified as the first one in the world.

Dr. Martinez Suarez has collaborated with the International Olive Oil Council (C.O.I.) for many years and has advised cooperatives and industrial firms involved in olive oil extraction in many occasions.

In 1968 he became the technical secretary of the

TABLE 1
Oilseeds, fats and oils statistics for India

	1,000 Metric tons																	
	Area harvested 1000 HA		Est. production		Imports and stocks		Exports		Crush and domestic consumption		oil							
											Domestic production		Imports		Domestic consumption		Exports	
78/79	79/80	78/79	79/80	78/79	79/80	78/79	79/80	78/79	79/80	78/79	79/80	78/79	79/80	78/79	79/80	78/79	79/80	
Peanuts	7318	7178	6365	5980	200	200	36		6329	5980	1477	1419			1462	1416	15	3
Sesame	2290	2275	425	450			10		415	450	126	138			126	138		
Rape/mustard	3550	3600	2000	2000					2000	2000	600	600	180	200	780	800		
Flaxseed ¹	2100	2120	520	530	50	80			490	510	141	147			141	147		
Castorseed	540	550	275	280	30	50			255	280	94	104			49	54	45	50
Coconut	1086	1090	850	860	30	10			880	870	225	215			225	215		
Cottonseed	7984	7985	2800	2600					2800	2600	200	200			200	200		
Safflower	700	670	225	200					225	200	48	43			48	43		
Grand total	25568	25468	13460	12900	310	340	46		13394	12890	2911	2866	1050 ¹	1100 ¹	3091 ²	3013 ²	60	53

¹Includes estimated imports of 870,000 tons in 1978-79 for 900,000 tons imports forecast for 1979-80, to include 550,000 tons soybean oil, 340,000 tons palm oil and palm olein.

²Does not include butter, ghee or imported oils.

1978-79 figures are preliminary estimates; 1979-80 figures are forecasts.

Institute and has performed his new job with a singular efficiency and special talent as organizer and manager.

The research of Dr. Martinez Suarez has been highly recognized, especially in the olive tree growing countries. He is the author of more than sixty scientific papers, has attended many national and international meetings, and has been a consultant in Europe and America on olive oil extraction process. He holds the "Civil Order of Agricultural Merit" of Spain and the "Chevalier de l'Olivade de Provence" of France.

He has been instructor for the "National Commission of Industrial Productivity," director of the group of "Olive Oil Extraction" of the short course in specialization in fats imparted by the Instituto de la Grasa, professor of courses organized by the FAO delivered at the "Center of Improvement of Oil Techniques" of Cordoba, and professor in charge of the intensive courses for the training of managers of experimental mills.

XI meeting of the Spanish Committee on Surface Active Agents

The meeting is organized by the Asociación de Investigación de la Industria Española de Detergentes, Tensioactivos y Afines (A.I.D.) y C.E.D., with the collaboration of the Technical Chemistry Department of Sevilla University, and the Instituto de la Grasa y sus Derivados in Sevilla.

Inauguration and General Lecture:

The opening session of the meeting will take place at the hall of the University of Sevilla, March 5, at 6:30 p.m.

The plenary lecture will be "Crucial factors of Ecological Equilibrium in Marine Systems," by Dr. Antonio Ballester, professor of the High Council of Scientific Research in Barcelona, Spain.

Specific topics:

A. Biodegradability and Legislation

- Legal and Technical Status of Biodegradability, J. Bergeron, Colgate Palmolive, Courbevoie, France.
- The Surface Tension of Water from the Cadiz Bay as a Measure of the Contaminant Effects, V. Flores, et al., Department of Technical Chemistry, Cadiz University, Spain.
- Biodegradability: New Concepts and Legal Dispositions, P. Laboureur, Produits Chimiques Ugine-Kuhlmann, Levallois, France.
- L.A.S. Biodegradability. Fate of Aromatic Ring and Alkyl Side Chain Carbons, R.L. Huddleston, Conoco, Ponca City, Oklahoma, USA.

B. Physico-Chemistry of Surfactant Solutions

- Effect of Surface Active Agents on the Measurement of Interfacial Tension by the Drop Volume Methods, S. Harland, Eidgenössische Technische Hochschule, Zurich, Switzerland.
- Influence of Surfactant on the Efficacy of a Packing Column, A. Rosell, Department of Technical Chemistry, University of Sevilla, Spain.
- Surfactants: From Chemistry Via the Chemistry of Colloids to Practical Application, H. Stache and K. Koswig, Chemische Werke Hüls AG, Marl, Germany.
- Physico-Chemical Properties of Solutions of Block-Copolymers of Ethylene-propylene Oxide, J. Pereda et al., Department of Technical Chemistry, University of Sevilla, Spain.
- Relations between Constitution and Properties of Cationic Softening Agents, H. Hein, Rewo Chemische Werke GmbH, Steinau an der Strasse, Germany.
- Actual Situation of the Spanish and International

Normalization on the Analysis of Surfactants, Detergents and Related Products, C. Gomez Herrarg, Fat's Institute and Derivatives, Seville, Spain.

C. New Surfactant Structures and Applications

- Special precipitated Silica with Cleaning Properties for Use in Machine Dish Washing Detergents, M. Michel and M. Joubert, Rhone-Poulenc Chimie Minérale, Courbevoie, France.
- Synthesis of Surfactants: 1-n-Alkylamin-2-desoxycetoses; 2-n-Alkylamin-2-desoxi-D-Glucose and Derivatives, J. Fernandez-Bolaños et al., Fat's Institute and Derivatives, Sevilla, and Department of Organic Chemistry, University of Sevilla, Spain.
- Properties of Chlorated Surface Active Agents, R. Perron, CNRS, Thiais, France.
- Phosphoric Esters as Components in Disinfectant Products, M. Nielen and G. Sorbe, Hoechst AG., Knapsack, Germany.
- Degreaser Effect and Its Evaluation, M. Muller, et al., Hoechst AG, Barcelona, Spain.
- Analysis and Characterization of Surfactants and Other Compounds Used in Shampoo Formulations by HPLC, E. Fernandez and C. Israelien, Waters Española, SA, Barcelona, Spain.
- Recent Studies in Hair Lacquers, C. Fearnly and S. Gati, Ciba-Geigy, Basel, Switzerland.
- Surfactants with Quelating Effect, J. Novak et al., VUTP, Rakovnik, Czechoslovakia.
- Analytical Investigations of the Chelating Surfactant, J. Zeman, VUTP, Rakovnik, Czechoslovakia.
- Characteristics and Application of an Improved Olefin Sulfonate Made by Falling Film Sulfonation in A.T.O. Reactor, W.E. Adam, Akzo Chemie GmbH, Dueren, Germany.
- Technical Aspects of Perfume Composition for Several Fields of Applications, U. Harder, Haarmann & Reimer, Holzminden, Germany.
- Appraisal Methods for Detergents, R.A.C. Bretland, Unilever Research, Port Sunlight, U.K.
- New Developments on the After-Washing Treatments for Improving Finishing, R. Puchta, Henkel & Cie. GmbH, Susseldorf, Germany.
- Changes on the Physico-Chemical Behavior of a Sodium-Lauryl-Ether-Sulphate Caused by Several Diethanolamides, F.J. Domingo and R.M. Druguet, Tensia-Surfac, SA, Barcelona, Spain.
- Mathematical Study of a Ternary System: Sodium-Lauryl-Ether-Sulphate, Alkyl-Amidobetaine and Diethanoldiamide, F.J. Domingo and R.M. Druguet, Tensia-Surfac SA, Barcelona.
- On Surfactant/Surfactant Systems in Aqueous Media, R. Despotovic, Ruder Boskovic Institute, Zagreb, Yugoslavia.

Sponsored by the C.E.D.-A.I.D., the A.S.P.A. Group (France) and some French scientists are studying the possible celebration of a half-a-day seminar on "Amphiphilic Products" within the XI Meeting of the C.E.D. The content of the Seminar will be communicated on the final program.

The Secretariat of the Meeting has its offices in the Instituto de Tecnologia Quimica y Textil, C.S.I.C., c/Jorge Girona Salgado, s/n., Barcelona-34.

The proceedings of the meeting will appear during the month of September 1980. They include all the communications and discussions. Price: 4000 pts (approximately US \$60). □