Philippine coconut update

For the Philippines, coconuts and coconut products are the largest single commodity in terms of export earnings. That importance was emphasized in Coconuts Today, *Vol. 3, No. 2, a 160-page publication, with about half those pages providing data on coconut and coconut products trade. The following article is based on material from that issue and from correspondence with the United Coconut Association of the Philippines. It is used with permission of the United Coconut Association of The Philippines Inc., publishers of* Coconuts Today.

Traditional coconut products account for more of the Philippines' export earnings (totaling 4.6 billion U.S. dollars during 1985) than any other commodity group.

While the traditional coconut product exports of copra, coconut oil, copra meal/cake and desiccated coconut are the largest dollar earners, nontraditional products such as whole coconuts, coconut-derived foods and oleochemicals are rising in value, accounting for more than $58 million in exports in 1986 (up from $27 million in 1980).

A major problem for the economies of the Philippines and other coconut-producing nations has been the slide in world prices from the peak of mid-1984 when coconut oil was priced at more than 60 cents a pound. In December 1986, the price was 20 cents a pound. Thus, maintaining export volume does not necessarily maintain export earnings. For example, in 1985, the Philippines exported approximately 650,000 metric tons (MT) of coconut oil that sold for a total of $349 million. In 1986, the volume of exports rose to 1.05 million MT of oil, but earnings declined to $335 million. The average international trading price for coconut oil fell from approximately $538/MT in 1985 to $270/MT in 1986.

Coconut oil has been the Philippines' leading dollar earner, accounting for about 75% of the value received for traditional coconut products. From 1980 through 1984, desiccated coconut, at 13%, was next in value among the traditional exports, with copra meal at 10%. The Philippines recently removed limitations on copra exports, however, and copra's share of export earnings is on the rise; export volume in 1986 was 136,045 MT, valued at $18.96 million.

The United States, the major importer of Philippine traditional

(continued on page 483)

TABLE 1

Philippine Selected Coconut Exports, Volume and Value (Metric Tons, $000)

	1965		1975		1983		1985		1986[a]	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Copra										
USA	260,982	51,340	—	—	—	—	—	—	—	—
Europe	531,643	101,012	734,168	171,921	2,000	520	—	—	39,033	4,989
USSR	—	—	22,288	7,274	10,325	2,943	—	—	—	—
Others	66,596	12,533	67,156	16,162	—	—	—	—	82,995	10,934
Total	859,221	164,885	823,612	195,357	12,325	3,463	—	—	122,028	15,923
Coconut oil										
USA	199,616	57,742	460,149	174,982	426,612	225,925	354,835	188,423	473,683	130,521
Europe	40,024	11,807	54,809	20,762	442,339	204,963	216,690	107,839	531,349	143,668
USSR	—	—	7,226	2,998	67,399	38,961	41,000	31,692	44,400	13,683
China (People's Republic)	—	—	16,256	6,897	18,612	10,467	10,773	5,801	14,307	3,851
Japan	—	—	—	—	42,610	22,927	16,196	9,786	13,863	4,601
Others	1,774	515	53,160	20,728	42,104	25,068	16,005	8,493	64,559	14,709
Total	241,414	70,064	591,600	226,367	1,039,676	528,311	655,499	352,034	1,142,161	311,033
Dessicated coconut										
USA and Canada	59,842	17,530	42,441	18,521	43,924	42,845	39,566	49,670	31,986	23,081
Europe	6,539	2,171	8,289	3,922	25,014	24,793	11,461	11,379	17,211	10,302
Others	7,479	2,478	15,550	8,046	16,026	16,144	9,891	11,029	13,082	7,176
Total	73,860	22,179	66,280	30,489	84,964	83,782	60,918	72,078	62,279	40,559
Grand total	1,174,495	257,128	1,481,492	452,213	1,136,965	615,556	716,417	424,112	1,326,468	367,515

[a]January through November.

coconut products in 1985, slipped to second place last year behind Western Europe (primarily the European Economic Community). In 1986, Western Europe imported 1.01 million MT (in terms of copra equivalent) of coconut products, nearly three times more than the year before. That market accounted for about 43% of total Philippine coconut exports. The United States, which accounted for 51.1% (copra equivalent) of the Philippines' exports in 1985, accounted for 39% in 1986, importing 923,690 MT (copra equivalent).

In 1985, Japan, at 7.7%, was the third largest buyer of Philippine coconut products. The Soviet Union's 5.2% trade share consisted solely of coconut oil; China, also buying solely coconut oil, accounted for 1.4% of Philippine coconut trade. Australia imported desiccated coconut almost exclusively, accounting for 0.7% of total trade.

Japan is the major market for what the Philippines hopes will be

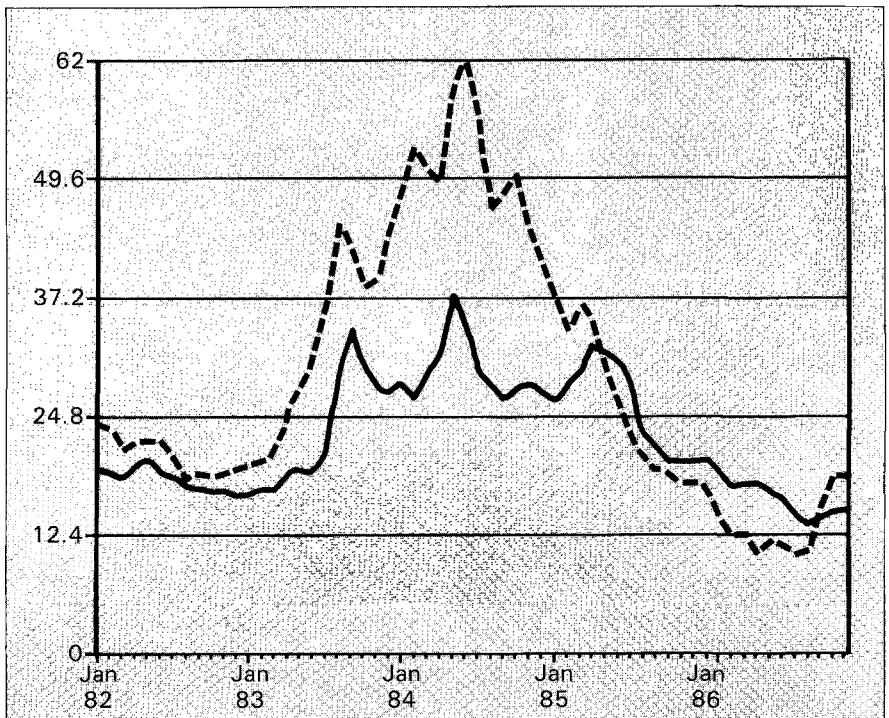


FIG. 1. Price trends of selected oils (U.S. cents/pound). ——, Soybean oil; – – –, coconut oil.

TABLE 2
Exports of Selected Nontraditional By-Products (Volume in Metric Tons, Value in US$)

	1980		1983		1985		1986[a]	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Coconuts	763	240,657	2,334	383,710	6,121	815,091	6,996	1,057,264
Crude glycerine	830	641,800	3,241	2,119,975	6,792	7,711,508	7,798	8,345,455
Refined glycerine	—	—	1,309	1,422,248	3,509	4,991,894	6,572	7,297,837
Coco methyl ester	3,570	2,293,432	16,653	9,301,027	12,227	8,156,086	10,467	3,520,690
Fatty alcohol	1,195	1,569,785	14,814	16,104,773	25,847	26,839,181	41,410	32,429,890
Coco fatty acid	—	—	—	—	32,660	19,659,402	24,862	6,137,186
Total	6,358	4,745,674	38,351	29,331,733	87,336	68,173,162	98,105	58,788,322

[a]January through November.

TABLE 3
World Coconut Production (000 Metric Tons Copra Terms)

	1975	1979	1984
The Philippines	2199	1912	1435
Indonesia	1390	1622	1731
India	800	855	876
Sri Lanka	525	486	394
Papua New Guinea	207	230	220
Malaysia	196	210	263
Thailand	108	141	184
Vanàtu	39	59	64
Solomon Islands	37	45	45
West Somoa	35	40	38
Others	1099	985	1095
Totals	6635	6585	6345

an increasing export of oleochemicals from coconut. Japan imported more than 10,000 MT of coco methyl esters in 1985, more than 90% of total coco methyl ester exports. Japan accounted for about 25% of the 45,000 MT of coco fatty acids exported by the Philippines in 1984 and 1985 combined. Oleochemical products that have risen in export volume and value include crude glycerine, refined glycerine, methyl esters and fatty alcohols.

As export controls are eased, more firms are expected to enter the export business. In 1985, there were 71 export firms, the highest number since the 91 registered in 1980. There were at least 27 firms exporting coconut oil in 1985; there were four in 1984. International Copra Export Co. was the largest exporter of coconut oil in 1985, followed by Lu Do & Lu Ym Corp., Legaspi Oil Co., Philippine International Development Corp., Southern Island Oil Mills, San Miguel Corp. - COMRO and others. The top three exporters accounted for about 61.5% of total coconut oil exports.

The United Coconut Association of The Philippines produces several publications that may be of use to persons involved in the coconut industry. UCAP Weekly Bulletin *costs US$180; the annual* Coconut Statistics *is $65 hardbound, $60 softbound. The semiannual* Coconuts Today *is $70 to the U.S. and Europe; $60 to Asia and the Pacific area; $80 to South America and Africa; $65 to others. Subscription orders should be sent with a bank draft in U.S. dollars to UCAP, 941 Josefa Llanes Escoda St., Manila, The Philippines.*

EEC to vote on fats & oils tax

The European Economic Community (EEC) Council of Ministers was expected to vote on a proposed EEC tax on fats and oils in March.

The proposed oils and fats consumption tax was approved by the EEC Commission in February and became a part of the commission's overall 1987-1988 farm price package. It then was slated to proceed to the EEC Council of Ministers, comprised of one agricultural minister from each of the 12 member-nations of the EEC. If the council approves the tax, it would go into effect July 1, 1987.

The proposed EEC fats and oils tax rate for 1987 and 1988 would be 330 European Currency Units (ECUs) annually, or approximately $375 per metric ton (MT). The proposed tax would apply to all vegetable and marine oils consumed within the EEC but not to tallow, lard or butter. The EEC Commission has predicted the tax would raise about $2.3 billion annually to support its internal oilseed subsidy programs.

Proceeds from the tax would be assigned to FEOGA, the EEC's farm income and price support agency, and used solely for supporting EEC oilseed production. Currently, the EEC supports oilseed production by guaranteeing its farmers high prices for production and paying processors a subsidy equal to slightly more than the difference between the EEC prices and lower world prices. The processor subsidy makes it more profitable for EEC processors to crush the more expensive EEC oilseeds than imported soybeans.

According to the Washington office of the American Soybean

Association (ASA), approval of the tax would adversely affect the U.S. soybean industry. ASA said the price of soybean oil produced from imported soybeans would virtually double, making soybean oil-based margarine more expensive and relatively less competitive with EEC-origin butter and tallow-based margarine. The overall result, ASA predicted, would be a decline in EEC soybean imports.

In addition, ASA said, the estimated $2.3 billion collected from the tax would enable the EEC to further expand domestic oilseed production and increase oilseed self-sufficiency at the expense of U.S. soybean exports. The EEC increased its soybean production from 34,000 MT in 1982 to over 820,000 MT in 1986. ASA estimated the EEC will grow 1,100,000 MT of soybeans in 1987, while overall EEC oilseed production, including soybeans, rapeseed and sunflowerseed, is estimated to reach over 10 million MT, up over 100% in just three years.

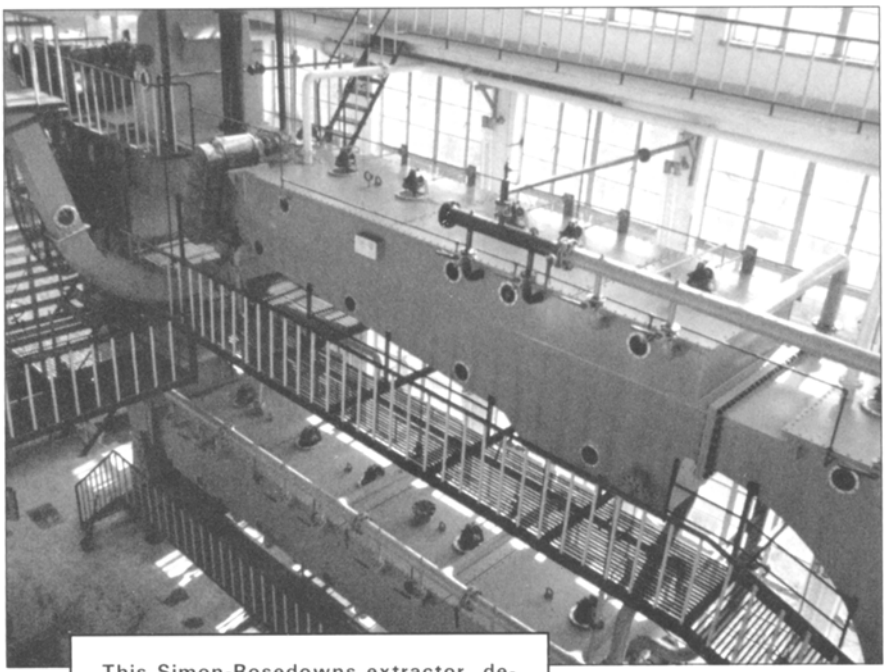
ASA said that by taxing the oil derived from imported soybeans, the EEC will make U.S. soybean farmers pay the price for EEC oilseed production expansion. The EEC in 1985-86 was the market for almost half of U.S. soybean exports, or about one-fourth of total U.S. soybean production.

Chinese plant

Simon-Rosedowns Ltd. of Hull, England, is building a rice bran oil refinery for the Changsha Fat and Oil Chemical Factory in Hunan Province, China.

The plant, designed to caustically refine 50 tons of oil per day for use in food products, is scheduled to be shipped to China at the end of 1987. Cost of the plant is estimated at 1 million British pounds.

Simon-Rosedowns already has installed a soybean processing plant near Beijing, a new extractor at Shenyang and a solvent extraction plant at Xinzhou. In addition, Simon-Rosedowns and China have a technology transfer agreement allowing the Chinese to manufacture small-scale Rosedowns screw presses to extract oil from oilseeds.



This Simon-Rosedowns extractor, designed to process 400 metric tons of sunflowerseed or rapeseed presscake per day, has been installed in Shenyang, China.

Plant closing

Archer Daniels Midland Co. (ADM) closed its soybean processing plant north of Champaign, Illinois, in February but said it would continue to operate the location as a grain elevator.

ADM said the crushing operation had become uneconomical. In January 1985, a group of ADM investors, organized as the Independent Soy Processors Co., purchased the soybean crushing plant from A.E. Staley Co. after Staley decided to close the plant. When operating at capacity, the plant could crush approximately 40,000 bushels of soybeans a day.

Palm oil duty

The government of Malaysia more than tripled the export duty on processed palm oil, effective Jan. 1, 1987. The duty was raised to 29.78 ringgit per ton, from 8.47 ringgit, according to *The Cocomunity* newsletter.

No duty was imposed on crude palm oil, however, the newsletter reported.

Tissue culturing

Central Plantation Crop Research Institute of Kasaragod, India, has developed technology for producing clonal plantlets from tender leaves of oil palms in less than a year, according to *The Cocomunity* newsletter.

The process developed eliminates the elaborate callus phase. Embryoids produced were very similar to the sexual embryos in the germination pattern, the newsletter reported. The institute also noted that there seems to be no need for a separate treatment to induce rooting, as the plants survived when transferred to soil.

New federation

The Italian, German and French professional oil chemists' organizations have announced plans to form a federation starting in 1987.

The Societa Italiana per lo Studio delle Sostanze Grasse, L'Association Française pour L'Étude des Corps Gras and the Deutsche Gesellschaft für Fettwissenschaft are forming the federation to exchange information and to organize joint meetings, according to Enzo Fedeli in Italy. Fedeli noted that in past years the groups have held three joint meetings.

The federation is tentatively planning a joint meeting for May or June 1989 in Angers, France, to mark the 100th anniversary of the death of Eugene Chevreul, the pioneer fats and oils researcher.

Mill explosion

Three persons were killed and many others injured in an explosion earlier this year at Italso's oil extraction facility in Livorno, Italy.

The explosion, followed by a violent fire, severely damaged the facility. Investigators are seeking the cause of the explosion and fire at what had been considered one of the best-equipped facilities in Italy.

Italy update

Olio Sasso Co., which holds 12% of the Italian olive oil market, has become part of the Buitoni group, one of the largest food industry firms in Italy.

Sasso has an annual income of about 100 billion lira annually, while Buitoni has an annual income of 1,600 billion lira. Slightly more than a third of Buitoni's income is from sales in Italy, 30% from sales to France, 21% from sales to England and 5% from sales to the U.S.

Unilever shift

Unilever has announced it will move its major-brands margarine manufacturing works, Van den Burghs and Jurgens, from Bromborough to Purfleet, near London, England.

The Bromborough facility, Europe's largest margarine factory, currently makes 5,000 metric tons (MT) of products a week, with a work force of 1,000. The shift is expected to mean a loss of 500 jobs at the Bromborough facility, according to a report in the *Wirral Globe.* The newspaper said Unilever will move production of its Stork, Flora, Delight and Blue Band brands to Purfleet. The company's five-year plan recommends concentrating retail production, including all hardening of oils, at Purfleet. Catering, bakery, confectionary and bulk oil production will remain at Bromborough.

Unilever blamed "fierce foreign competition" for the shift. A company spokesman said margarines from Holland, Belgium and Denmark are heavily subsidized, making them much cheaper than its products.

Fish oil plant

Capsule Technology International Ltd. of Canada, Productura de Capsulas de Gelatina S.A. of Colombia and Century Laboratories of the U.S. have agreed to a joint venture to finance a fish oil plant in either the U.S. or Canada.

Terrence Kominski, vice-president of finance for Capsule Technology International Ltd., based in Windsor, Ontario, said the companies would have an operational plant by the end of 1987. The plant is slated to produce 300 metric tons of eicosapentaenoic acid/docohexaenoic acid concentrates from fish oils. These products will be aimed at the therapeutic market, Kominski said.

Productura de Capsulas de Gelatina S.A. is based in Barranquilla, Colombia, while Century Laboratories is in Port Washington, New York.

Sale cancelled

Bunge Corp. and Central Soya Co. Inc. in February broke off negotiations for Central Soya to buy seven Bunge soybean processing facilities because Central Soya was unable to obtain the necessary consents for financing the transaction.

The two companies in December had reached an agreement under which Central Soya was to purchase Bunge's soybean processing facilities in Cairo, Illinois; Decatur, Alabama; Emporia, Kansas; Logansport, Indiana; and Jackson, Marks and Vicksburg, Mississippi. Bunge also has soybean processing facilities at Destrehan, Louisiana, and Danville, Illinois.

Both companies said negotiations concerning the properties had been terminated.

Cholesterol-free

Researchers at the University of Wisconsin at Madison and Phasex Corp., Lawrence, Massachusetts, hope to have a marketable cholesterol-free butter in two years.

According to Robert Bradley, professor of food science at Madison, researchers have proven that most of the cholesterol can be removed from milk fat through supercritical extraction. The extraction is carried out by using liquid CO_2 at the appropriate pressures and temperatures. "With some fine-tuning we'll be able to get better than 90% removal of cholesterol," he said.

"The scope of cholesterol-free milk products is tremendous. Once you remove the cholesterol, the milk can be used to produce low-cholesterol cheese, butter and ice cream," Bradley said.

Bradley's collaborators at Phasex are led by Val Krukonis. The project is funded by the Wisconsin Milk Marketing Board.

Novo purchase

Novo Industri A/A has announced it has purchased 19.9% of the share capital of Idetek Inc., a privately held California company based in San Bruno.

Idetek specializes in quality control tests based on biological markers used in the meat inspection and food processing industries. Under the acquisition agreement, Novo obtains production and marketing rights for present and future tests worldwide, except in the U.S.

Peanut venture

Archer Daniels Midland Co. (ADM) and Gold Kist Inc. have formed a partnership known as Golden Peanut Co., a buying, shelling and marketing firm based in Atlanta, Georgia.

The company, which will deal exclusively in peanuts and peanut products, will have a shelling capacity of over 500,000 tons a year. Ten shelling plants are now part of Golden Peanut Co.

French buy-out

A bid by the French sugar group, St. Louis Bouchon, for Lesieur S.A., the French edible oil and food firm, has been successful, according to an article in the Jan. 31, 1987, *Public Ledger* of London, England.

St. Louis Bouchon reportedly owned 24% of Lesieur capital prior to the takeover bid, in which it offered two St. Louis Bouchon shares for each Lesieur share, according to the newspaper.

Joint venture

Q.P. Corporation, Japan's largest mayonnaise manufacturer, and Saha Pathana Interholding Co. Ltd. of Thailand have agreed to form Thai Q.P. Company Ltd. The joint venture company will produce mayonnaise, vinegar, ketchup, salad dressings and similar products.

Initial production is estimated at 695 tons annually; after five years, it is expected to reach 1,700 tons annually. Capital investment for the project is estimated at $750,000. Saha Pathana Interholding Co. Ltd. will hold 51% control.

Fuji activity

Fuji Oil Co. has formed Fuji Oil USA, based in New York. The subsidiary was slated to begin importing Malaysian palm oil for confectionary use in March. Eventually, the firm plans to expand its palm oil activities to include refining and finished product formulation.

Meanwhile, Fuji Oil Co. and Nisshin Oil Mills in Japan have announced two new textured-vegetable-protein products. "Apex," by Fuji, is produced from a double-screw type extruder and can be used for fried chicken- and meat-like foods. Nisshin Oil Mills' "Espro" is described as more fibrous in structure than conventional soy protein and is designed for use in meat-type products and new vegetable protein foods with meat-like chewiness.

Japanese crush

Oilseeds processed in Japan during 1986 totaled 6,434,000 tons, 99.6% of the 1985 volume. Soybeans accounted for 3,899,000 tons and rapeseed for 1,471,000 tons, representing a decline of 0.7% for soybeans and an increase of 0.4% for rapeseed.

Releasing the 1986 data, the Ministry of Agriculture, Forestries and Fisheries of Japan also estimated that 1987 imports of oilseeds (on an oil basis) and fats and oils will total 1,943,000 tons. Protein meal imports, including the protein portion of oilseed imports, are forecast at 2,242,000 tons.

Pakistan milestone

Pakistani oil consumption broke the one-million-metric-ton (MT) mark in 1985-86, according to preliminary figures from the U.S. Department of Agriculture (USDA).

Figures indicate consumption

was 1.167 million MT. The forecast for 1986-87 is 1.219 million MT. About three-fourths of the oil consumed in Pakistan is imported.

Soviet update

The Soviet Union's official economic report for 1986 showed gains in production over past years, according to a report in *Oil World.*

Russian sunflowerseed production was listed at 5.3 million metric tons (MT), equal to the 1985 crop but higher than the 1981-1985 average of 5.0 million MT. Production of vegetable oils for 1986 totaled 2.9 million MT, compared to 2.5 million in 1985 and an average of 2.7 million for 1981-1985.

Sales in 1986 of food products and soap by state and cooperative retail shops, compared to 1985 figures, included vegetable oils, 108% of 1985 figures; margarine, 103% of 1985 figures; and soap and synthetic detergents, 107% of 1985 figures.

Oil World also noted that while Soviet production of oils and fats increased sharply during 1986, its imports declined more sharply, leading to a prediction that Russia would need to step up import purchases during 1987. This prediction was followed by reported Soviet action in February to purchase 250,000 MT of rapeseed, including some from the European Economic Community, Sweden and Poland.

According to *Oil World,* the rapeseed purchase represented a change in the Soviet oilseed import policy, which historically has been to import only soybeans.

Meal analysis

Cottonseed meal samples from cottonseed oil mills are being analyzed for protein, oil, fiber, free fatty acid, moisture and gossypol under a program with the U.S. Department of Agriculture's Southern Regional Research Center (SRRC) in New Orleans.

Mills are being encouraged to send a sample of their meal to the SRRC, which will use them in calibrating a new infrared system for meal, according to the National Cottonseed Products Association. Wet chemistry analyses using current methods then will be used for comparisons.

The data from this project will be available to the cottonseed industry for updating composition tables. The technology should provide the industry with a simple, economical quality control tool, the National Cottonseed Products Association said.

Oil extraction

The Asian and Pacific Coconut Community (APCC) has announced a project to develop small-scale coconut oil extraction units for rural coconut-producing areas. According to ACPP, the traditional method of extracting oil from coconut meat leaves approximately 40% of the oil in the residue.

APCC, based in Indonesia, first will conduct a survey of existing small-scale extraction and refining equipment. It then plans to research and develop improved equipment, particularly a portable low-cost, high-yield coconut oil extraction unit suitable for rural areas.

Mayonnaise talk

How to make mayonnaise and the chemical reactions involved were the focus of the Society of Chemical Industry's Surface and Colloid Chemistry Group meeting Feb. 19 at the School of Chemistry, University of Bristol, Bristol, England. Alex L. Smith, a research manager in the basics division at Unilever, was the featured speaker.

Making culinary sauces is the science of small particles, Smith said. When making starch sauces, one uses the "rules of flour." Mayonnaise, however, is an emulsion sauce, requiring the principles of emulsion, the dispersion of liquid into liquid. Sauces can be categorized as (a) espagnole, (b) velouté, (c) béchamel and (d) emulsion—hollandaise (warm emulsion) and mayonnaise (cold emulsion). Each of these sauces has variations. Starch and roux sauces are the easiest to make, while emulsion sauces are harder, with warm emulsions being the most difficult.

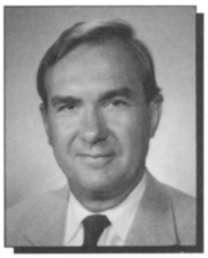
Smith noted that researchers are not sure of the nature of the stabilization mechanism for mayonnaise. If it is not an electrical mechanism (lecithin is not electrically charged), what is the force causing the repulsion in the mixture? Hydrated material coats the emulsion particles, causing repulsion, but why? There are two current views, Smith said. One theory is that the force of crosswater causes continued hydrations, leading to repulsion. A second theory is that hydrated groups overlap, causing repulsion. Smith alluded to different applications of these ideas and principles, such as insulation and filters, but did not elaborate.

To make mayonnaise, Smith said, start with eggs, which must be at room temperature for proper emulsification, and fresh, because as eggs age, the proportion of lecithin to cholesterol decreases. Only the yolks are used, especially in béarnaise sauce, because egg white denatures the protein. Salt now can be added without risk of destabilization, contrary to an earlier theory. The mixture must be stirred with a fork, Smith said, explaining that a blender would break the mixture into too many small particles too quickly and create too much surface area. Next, add mustard grains for flavor and slowly stir in olive oil, little by little, to prevent the mixture from separating.

Smith explained that mayonnaise is an oil-in-water emulsion, with water being the continuous phase, but can also be done in reverse. A glass beaker is used in an oil-and-water emulsion, but a water-in-oil emulsion requires a plastic beaker and stirrer to provide a hydrophobic wall.

When the mixture reaches 74% oil, the oil particles are no longer spherical because they are pressed so close together. However, Smith said, mayonnaise can be 80% oil successfully. The most an emulsion

can possibly contain is 97–98%, but only if there is a suitable stabilizing agent.



Guy Posschelle

Crown agent

Crown Iron Works Co. has appointed G.A. Expertise Inc. as an exclusive agent for Crown engineering and equipment for the oilseed processing industry.

G.A. Expertise's president, Guy Posschelle, will represent Crown in Mexico, Central America, the Caribbean and the Andean Pack countries. As Crown Iron Works' agent, he will coordinate the importation of equipment to the Mexican, Caribbean and Latin American markets and local fabrication for complete plants and individual pieces of equipment.

Posschelle, a member of AOCS and the International Oil Mill Superintendents Association, previously worked for Extraction De Smet of Belgium, De Smet Mexico S.A. de C.V. and De Smet USA Inc. In 1983, he formed G.A. Expertise, based in Miami, Florida. His telephone number is 305-665-4404; telex is 293818.

News briefs

Chemap Inc. has moved its U.S. headquarters from Woodbury, New York, to a new, larger facility in South Plainfield, New Jersey. Chemap's current address is 901 Hadley Rd., South Plainfield, NJ 07080 USA.

Tomsun Foods International Inc., a soy foods manufacturer in Greenfield, Massachusetts, has gone public with its stock. The company markets soy foods and related products to supermarkets, health food stores and institutions in northeastern U.S. and eastern Canada.

The Soyfoods Association of America is now managed by **Judith Walker**, executive director of the management firm Smith, Bucklin and Associates. The association's current address is Suite 700, 1101 Connecticut Ave. NW, Washington, DC 20036, telephone 202-857-1133.

SVO Enterprises has named five new area agents: AOCS member **Manny Eijadi**, Chemicals International Co., West Caldwell, New Jersey, to cover New England, New York, New Jersey, Delaware, Maryland and Pennsylvania; Joe Brudnak, Mak-Wood Inc., Thionville, Wisconsin, agent for Illinois, western Michigan, Indiana and Wisconsin; **Anthony J. DelVecchio**, The DelVecchio Co. Inc., Golden Valley, Minnesota, agent for Minnesota, North Dakota and South Dakota; **Jack K. Krum**, Ingredient Techniques Inc., Leawood, Kansas, agent for Missouri, Kansas, Iowa, Oklahoma, Colorado and Nebraska,; and **Michael Sandor**, Chemicals International Co., Alamo, California, agent for Washington, Oregon, California, Idaho and Arizona.

Shedd's Food Products' margarine manufacturing plant in Omaha, Nebraska, will close this year. Production will be shifted to the Olathe, Kansas, facility.

Cargill Inc. in February announced plans to increase capacity at its Wichita, Kansas, edible oil refinery by April 1987. The refinery, which went on line in 1982, originally was designed to produce 700,000 pounds of refined edible oil daily.

Bunge Corp. has promoted **Tom Crosby** to manager of its research and development department. Crosby previously was an associate director

Tom Crosby

Dan O'Connell

of food service research and development for Bunge. In addition, Bunge has named **Dan O'Connell** as its marketing manager.

The National Cottonseed Products Association (NCPA) has elected **Allen Ater** as association executive vice-president, effective Aug. 1, 1987. He will replace **Kenneth Lewis**, who will retire July 31. Ater will join the association staff on June 1. Ater has been employed by **Anderson Clayton** since 1948 and has held the position of corporate vice-president for commodity trading since 1975. He has been a director of NCPA since 1974 and served as its president in 1984–1985.

Vanmark Corp. has announced a sales agreement with **Flo-Mech** of the United Kingdom under which the Iowa-based company will sell, install and service Flo-Therm's pollution control frying oil heat exchangers in North America.

Obituary

NOBURO MATSUO

JAOCS has been informed of the death of Noburo Matsuo, professor emeritus of Seikei University, Tokyo, Japan, who died of pneumonia last April.

Matsuo joined AOCS in 1970 when he was a professor of oil and nutrition chemistry at Seikei University. He worked for many years in the Department of Industrial Chemistry, College of Technology, at Seikei University. He earned both his doctorate and M.D. degrees at Seikei University.