ASA Outlook:
Focus on trade, farm subsidies

Unresolved trade problems provided the backdrop for "Outlook 86," the American Soybean Association's (ASA) annual European oilseed conference, held this past October in London.

From the European viewpoint, a key problem is the financial burden of European Economic Community (EEC) agricultural subsidies.

From the United States' viewpoint, a key problem is defending its markets and retaining duty-free entry for U.S. soybeans and soybean meal to European markets.

The two viewpoints may clash in several arenas during 1987. A new round of General Agreement on Tariffs and Trade (GATT) negotiations is to be held, and while there has been quick agreement to include agricultural commodities in the discussions, G. Schiratti, head of the EEC fats and oils division, told the approximately 100 attendees it would be "a long, difficult negotiation."

Schiratti's office is expected to unveil the EEC staff's latest proposal on fats and oils in January or February. A hint of what it may say was revealed by ASA's chief executive officer Kenneth L. Bader, who obviously was perturbed by a letter he had received from EEC offices. The portion of the letter read by Bader at the conference implied EEC officials might try to preserve duty-free entry for soybean imports up to specified historical levels, but seek some type of duty or tax on imports above that level. Bader said he had read the letter many times trying to determine the precise meaning of the ambiguous wording. Schiratti told the conference he had not drafted the letter and that the commission had been considering proposals "that we believed were confidential."

Bader also said the ASA is considering filing a formal complaint concerning internal subsidies to soybean growers in Italy, who are receiving the equivalent of $14 a bushel to grow soybeans, nearly three times world prices. From 1980 to 1985, Italian growers harvested about 35,000 metric tons (MT) a year, but that has grown steadily to more than 500,000 MT this year, making Italy the leading soybean-producing nation in Europe, surpassing even the Soviet Union's anticipated 480,000-MT crop. The ASA has done extensive market development in Italy to woo consumers to soybean products, but now is seeing locally grown soybeans supplant the American imports.

The ASA recently received U.S. government aid for an $8.5-million market development campaign in Europe (see "From Washington" in this issue). Bader said ASA officials will be deciding soon how to allocate the funds to promote soy oil products directly to potential consumers; the programs will be administered by ASA European offices in Brussels, Hamburg and Madrid.

Schiratti, meanwhile, presented the EEC's view of the situation. EEC grower subsidies constitute the bulk of the EEC budget, and that budget is at the limit of EEC revenues (which come from tariffs and a 1.4% value-added tax from member-nations). Growers usually receive more than world market prices for their crops. Grains and dairy products are in greater surplus than oilseeds, but Schiratti focused on oilseeds at the Outlook meeting. Schiratti noted that from 1976 through 1984, EEC oilseed production grew from 1.2 million metric tons (MT) to 5.0 million MT, a fourfold increase. At the same time, the cost of support payments to oilseed growers increased sixfold—from 104 million ECU (European Current Units, roughly equivalent to the U.S. dollar) in 1976 to 655 million ECU in 1984. During the past two years, oilseed output has risen to 7.6 million MT, but support costs have risen to 1.7 billion ECU, he said, adding, "The EEC lacks the income to afford such a policy."

Compounding the problem has been a drop in world oilseed prices, widening the gap between the support payment the farmer receives and the lower price received when the commodity or its products are sold in world markets. A further complicating factor has been the decline in the U.S. dollar—which reduces EEC income from tariffs, meaning the EEC has less funds to meet greater costs.

"It [EEC's budget crunch] may become worse in 1987," Schiratti said. "The CAP [Common Agricultural Policy] must be changed. The risk is that in the next few years, policy may be determined not by ourselves, but by world markets . . . . We would have to change to meet financial status or duress, not solely on the basis of whether the change is good or not."

U.S. farmers also have faced declining income in recent years as government aid programs often are tied to world prices. While soybeans are not part of a major farm aid program (Bader commented that soybean support accounts for one-tenth of 1% of total U.S. farm aid), most soybeans growers produce other crops that are covered. But, Bader said, ways must be found to unlink farmer support from commodity prices. "The old ways will not work in these new days of trade," he said. "We must search for new ways—ways to provide farmer income support without furnishing price support, ways to stem the madness of subsidies, ways to stem the tide of protectionism."

While a temporary agreement on U.S.-EEC trade disputes involving the entry of Spain and Portugal into the EEC was achieved earlier this year, negotiators in Geneva were working to fashion a permanent settlement by a December 1986 deadline.

Quentin Peel, EEC correspondent for the *Financial Times,* noted that EEC attention is focused on that organization's budget. In 1986, the

EEC budget was 33.3 billion ECU and may top 37 billion ECU in 1987. Schiratti reported the 1986 CAP expenditures were expected to be 22.1 billion ECU (compared to 4.7 billion in 1976) and are expected to go higher, perhaps to 23 billion ECU, in 1987. Peel said many in Brussels felt there would be no substantial change in CAP as long as the member-nations' agricultural ministers were solely responsible for the program. Peel said he doubts the EEC will run out of funds. "They can transfer funds from one account to another, or postpone some payments until after the end of the fiscal year."

Other speakers at the conference discussed the EEC cereal tax system, agribusiness in Hungary, world trade in grain, U.S. government agricultural policies and farm land values in the United Kingdom. An accompanying article discusses the paper on world trade in oilseeds given at the two-day meeting.

Record world crush forecast

World oilseed crush should be a record 157 million metric tons (MT) during 1986-87, K.D. Schumacher of Alfred C. Toepfer International GmbH told the Outlook 86 conference in London earlier this year. The annual outlook meeting, sponsored by the American Soybean Association, was held in London during October.

Those crushings will produce close to 99.9 million MT of oilmeal; 1986-87 oilmeal consumption was estimated at 100.3 million MT by Schumacher. His figures showed close agreement with U.S. Department of Agriculture estimates, but Schumacher did not include fish meal in his totals, whereas USDA estimates 1986-87 oilmeal production at 106.11 million MT, including 6.11 million MT of fish meal. Schumacher said the continuous rise in international trade in sunflowerseed meal and rapeseed meal virtually will stop in 1986-87.

With regard to oilseed production, Schumacher expects 198 million MT for 1986-87, including 98 million MT of soybeans, 22 million MT of peanuts and a record 20 million MT of rapeseed. Cottonseed production is expected to continue a downward trend, dropping another million metric tons to 29 million MT, he said. Sunflowerseed is expected to be nearly the same, about 19 million MT.

"World production of the major vegetable oils will be expanded by 2.6% in 1986-87," Schumacher said. "Production is projected at 47.3 million tons against 46.2 million tons in 1985-86. The increase is much below the growth rates of the two previous years (about 10%)."

Palm oil production increases appear to have slowed, he said, predicting there may be a 6% increase for 1986-87 to 8.7 million tons. Growth rates were 17% in 1985-86 and 12% in 1984-85, Schumacher noted.

In a country-by-country analysis, Schumacher said the prime concern in the U.S. has been uncertainty over what government programs might be implemented with relation to soybeans. The effective loan rate of $4.56 a bushel may create political pressure for a marketing loan, "but due to the high costs of a marketing loan, implementation for the 1986-87 crop year seems unlikely," he said.

U.S. crush may pick up in the second or third quarter of 1987 to provide meal for higher numbers of hogs and cattles on feedlots, he said.

"Soybean oil production is likely to increase 1.5% to 5.4 million tons in 1986-87," he said. "Due to the further increasing competition from palm oil, U.S. soybean oil exports are expected to decrease again to only 520,000 tons, down 50,000 tons from the previous year. Although consumption is going to grow by 2.5%, ending stocks are projected to climb to 820,000 tons in September 1987."

Brazil's 1987 soybean crop should be between 16.5 and 17.0 million MT, he predicted. Increasing economic growth may lead to increased domestic soybean oil consumption, limiting oil exports to the 500,000 tons of this season.

Argentina's soybean crop may be 7.8 million MT, up 500,000 from this past season, he said. New export tax schedules will boost meal exports as much as 20%, to 3.4 million MT, and soy oil to 700,000 MT, Schumacher forecast.

TABLE 1
World Market Figures for Major Vegetable Oils (Million Metric Tons)

	Production		Trade (exports)		Consumption	
	1986-87	1985-86	1986-87	1985-86	1986-87	1985-86
Soybean	13.93	13.61	3.44	3.20	13.56	13.10
Cottonseed	3.44	3.49	.35	.34	3.51	3.48
Groundnut	3.50	3.15	.30	.31	3.51	3.15
Sunflower	6.43	6.36	2.01	2.00	6.34	6.26
Rapeseed	6.33	6.21	1.30	1.35	6.21	6.14
Palm	8.68	8.22	5.65	5.34	8.57	7.96
Coconut	3.14	3.31	1.35	1.59	3.10	3.06
Palm kernel	1.19	1.13	.86	.82	1.12	1.02
Linseed	.17	.69	.26	.24	.65	.67
Total	47.35	46.17	15.52	15.19	46.57	44.84

TABLE 2
Oilseed Production in the European Community of Twelve Countries (Million Metric Tons)

	1986-87	1986-85	1984-85	1983-84	1979-82[a]
Rapeseed	3.45	3.76	3.43	2.45	1.95
Sunflowerseed	2.89	2.76	2.30	1.76	1.05
Soybeans	.80	.38	.15	.90	.05
Other	.48	.47	.39	.30	.28
Total	7.62	7.37	6.27	5.41	3.33

[a]Average.

In China, the 1986-87 oilseed production was estimated at a record 34.3 million MT by Schumacher. China should export about one million MT of oil meal, but domestic goals for compound feeds may mean a leveling off of meal exports in future years. But "whenever there is a chance to earn some foreign currency through selling [its] own oilseeds or products and offset the reduction in supply by importing these commodities at lower prices, some Chinese exports will occur," he said.

India, which has been striving to increase oilseed crush capacity, now has more than 300 solvent extraction units in operation, with a processing capacity of 10 million MT of oilmeals; however, he said, they are operating at only 30% of capacity. Despite efforts to reach self-sufficiency in oilseeds and oils, "India is going to remain the world's largest importer of vegetable oils," he said.

Increasing palm oil stocks have led the Malaysian government to become more involved in marketing oil, Schumacher noted. Joint ventures to process and refine crude palm oil have been or are being established in Egypt, Pakistan and the United States.

"Talks about a substantial reduction of palm oil production in Malaysia from the end of this year onward occurred during the last weeks," Schumacher said in his Oct. 8 talk. "It seems to be true that some trees are showing signs of stress due to the high production up to October 1986. In addition, fertilizer application has been below normal due to the current low returns in palm oil production. Usually there are three fertilizer applications per year. So far very little or no fertilizer has been used in April and August. This will result in more male flowers in relation to female flowers and cause up to 10% lower yield.

"On the other side, new trees coming into production stages are of higher-yielding varieties. Therefore, the lower yields due to the lack of fertilizer will be partly offset. However, palm oil production in calendar year 1987 could drop to 4.5 [million tons] against 4.7 [million tons] in 1986. But due to the high stocks, no significant drop in palm oil exports can be expected. And if palm oil export availability in Malaysia is really reduced, Indonesia is waiting to fill the gap."

Schumacher said EEC oilseed production should set a record in 1986-87 of 7.6 million tons, up 3% from 1986.

"Planting intentions for the 1987 crop show further drastic increase in oilseed production in the EEC," he said. "Prices for oilseeds are still considerably more favorable for farmers than prices for grains. As a further decline, especially in barley prices, has to be anticipated, additional shifts in acreage from barley to rapeseed production have to be expected.

"The area sown to rapeseed will be increased by between 10% and 15% for the 1987 harvest. Surprisingly high is the area sown to the so-called double-zero varieties (low erucic acid, low glucosinolate content). Approximately 40% of West Germany's rapeseed area has been sown to these varieties, 20% in France and nearly 100 % in Denmark this fall."

Argentine taxes

The Argentine government has announced it will lower the export tax on soybeans to 15% from 27% and those on soybean oil and soybean meal to 3% from 15%, effective the beginning of 1987.

According to the American Soybean Association newsletter *Soybean Update,* this may result in a 10-12% increase in Argentine soybean acreage in 1987. *Oil World* also predicted soybean plantings are likely to increase by about 10%.

Palm refining

Fuji Oil Co. and C. Ito Co. of Japan have jointly established a palm oil refining company, the Palmaju Edible Oil Co., at Pasir Gudang industrial district in Malaysia.

Plans are to construct a palm oil refinery with 137,000-metric-tons-a-year capacity. Construction was set to begin this month, with completion targeted for early 1988. When the plant is on line, refined palm oil will be exported to Fuji Oil Singapore Co.'s factory as a raw material for a cocoa butter substitute.

Colloquium looks at lecithin

AOCS member Bernard Szuhaj, director of research and development for Central Soya Co. and co-editor of the AOCS monograph Lecithins, *attended the 4th International Colloquium on Lecithin held in Chicago, Illinois, in September. He prepared the following report about the colloquium for* JAOCS.

The 4th International Colloquium on Lecithin, held Sept. 15–18 at the Hyatt Regency Hotel in Chicago, Illinois, was attended by over 100 scientists and medical personnel from throughout the world.

I. Hanin of Loyola University, Chicago, presented the introduction to the meeting, followed by a welcome from the City of Chicago by Richard Creek, deputy commissioner of the Chicago Department of Public Health. Hanin and G.B. Ansell of the University of Birmingham, Birmingham, United Kingdom, organized the scientific program, which covered three major areas: technology, biology and therapeutic considerations. Lectures were given by the leading scientists in their fields.

Technology

G.B. Ansell gave an outstanding overview of phospholipids, covering their chemistry from the 1800s, IUPAC-IUB nomenclature and analytical methodology from column chromatography to high performance liquid chromatography (HPLC). Of particular interest was the "second messenger system" concept for phosphatidylinositol 4,5,-biphosphate.

L.A. Horrocks of Ohio State University, Columbus, Ohio, discussed his success with a new extraction technique using hexane and 2-propanol followed by HPLC for identification of the phospholipids. There is almost no solvent background by this technique, he reported.

C. Ratledge of the University of Hull, Hull, Great Britain, presented an extensive overview of phospholipid-containing microorganisms that may be good practical sources of commercial phospholipids. Of the microorganisms, yeasts, algae, bacteria and molds, those used in citric acid production manufacture reasonable (1.5–2.5%) amounts of phospholipids in their biomass. Phosphatidylcholine can be as high as 54%.

F. Paltauf of the Technical University of Graz, Austria, detailed the partial synthesis of glycerophospholipids in a 14-step reaction but recommended a semisynthetic

procedure using available p-lipid substrates.

J. Hayward of the State University of New York at Stony Brook, New York, substituting for D. Chapman of the Royal Free Hospital School of Medicine, London, Great Britain, covered work on phospholipids as mnmetic membrane materials. Phosphatidylserine is important for clotting time improvement, Hayward reported.

F.J. Martin of Liposome Technology Inc., Menlo Park, California, reported on the cost, quality, purity and stability requirements for lipid raw materials used in the manufacture of liposomes. According to Martin, hydrogenated phospholipids perform the best for liposomal membranes.

K.H. Schmidt of University of Tuebingen, Tuebingen, West Germany, showed why phospholipids follow well-established biological models for drug entrapment that assist in drug adsorption and tolerance.

Biology

B. Akesson of the University of Lund, Lund, Sweden, investigated p-lipid adsorption. The major pathway is through deacylation of the beta fatty acid and reacylation of the adsorbed lysolecithin. Phospholipids provide an excellent method for transport of linoleic and arachidonic acid.

D.E. Vance, University of British Columbia, Vancouver, Canada, gave a thorough historical perspective on the control of lecithin metabolism via the cytidine diphosphocholine pathway.

J.K. Blusztajn of the Massachusetts Institute of Technology, Cambridge, Massachusetts, discussed phospholipids in cellular survival and growth. Proportions of p-lipids were important for cellular growth rather than actual amounts. In cholenergic cells, phosphatidylcholine may be utilized from the cell membrane, resulting in cell degeneration.

W. Feldheim, University of Kiel, Keil, West Germany, elaborated on the nutritional considerations of lecithin administration. Even though lecithin can be manufactured by the body and is present in food, adequate supplies may not be available and so supplementation may be beneficial.

G. Dutot of Laboratories Cernep-Synthelabo, Meudon-la-Forêt, France, explained the use of soybean lecithin in artificial nutrition. Soybean lecithin must be purified to be used in total parenteral nutrition, he said.

Therapeutic Considerations

S.H. Zeisel of Boston University, Boston, Massachusetts, showed how phospholipids are natural precursors of choline in the brain. Endogenous supply of choline may be insufficient in the elderly, and p-lipids may be considered a conditional essential nutrient in geriatric patients.

J.H. Growdon of Massachusetts General Hospital, Boston, Massachusetts, gave an overview of the use of phosphatidylcholine (PC) in brain diseases. Pharmacological amounts of PC provide an exogenous source of choline that enhances biosynthesis of the neurotransmitter acetylcholine. Also, animal experiments suggest that diets rich in choline may preserve neuronal architecture and retard age-related decrements in passive avoidance test performance.

G. Toffano of Fidia Neurobiological Research Laboratories, Abano Terme, Italy, reported on the therapeutic value of phosphatidylserine and other phospholipids. In young adult animals, this phospholipid affects glucose utilization, stimulates phospholipid metabolism and activates neurotransmitter function, particularly the dopaminergic and cholinergic systems.

H. Sorgatz of Technische Hochschule Darmstadt, Darmstadt, West Germany, presented his research on the effects of lecithin on memory and learning. The impairment of mnestic performance associated with age-dependent memory performance was significantly improved with a month's treatment with lecithin.

M. Shinitzky of the Weizmann Institute of Science, Rehovot, Israel, discussed his work on lecithin as a membrane recuperator of aged tissue. He said lecithin may assist in reducing membrane rigidity when combined with a special lipid mixture.

T.R. Watkins of the City University of New York, New York, examined the effects of dietary phospholipids on gall bladder bile composition. He reported that dihydroxy fatty acid conjugates increased in lecithin diets by 30%.

The final day of the colloquium was devoted to panel discussions in four areas: nomenclature, quality control and standardization of commercial products, chaired by M. Schneider; therapeutic and nutritional relevance of phospholipid administration, chaired by I. Hanin; future directions and phospholipid research, chaired by G.B. Ansell; and new drug preparations involving phospholipids, chaired by G. Pepeu. As a result of the discussions, several areas are to be considered for review at the next colloquium. These include the following:

- An international study group will establish standards for commercial lecithin products.
- Upper level doses for studies will be 10 grams of phosphatidylcholine and 50 grams of deoiled commercial lecithin.
- New pathways for p-lipid synthesis and the possible function in second messenger system will be reviewed.
- Phospholipids as active drug carriers in liposomes or emulsions will be explored.

The colloquium, sponsored in part and supported by Lucas Meyer GmbH & Co., Hamburg, West Germany, and its staff, was a great success in bringing together professionals from the scientific and medical communities to actively and openly discuss their research on lecithin. The next meeting will be held sometime during 1988.

Palm ventures

Malaysia is marketing palm oil by encouraging the establishment of joint ventures to process and refine the commodity in consumer countries.

The U.S. agricultural attache in Kuala Lumpur reports that Malaysia has entered into joint partner-

ships for palm oil refineries in Egypt, Pakistan and the United States. In the U.S., a former Hunt-Wesson refinery in Chicago, Illinois, has been purchased by the Malaysian firm of Nalin Industries. USDA reported that the Malaysian palm oil marketing agency also plans to develop new markets in China, Iran, Turkey, Bangladesh and Taiwan and countries in Africa, Eastern Europe and the Mediterranean region.

Meanwhile, Malaysian officials, in a New York seminar in late September, announced that Malaysia had revised its rules on foreign ownership of firms there. For instance, companies that export 50% or more of their output from Malaysia can be totally foreign-owned; also, foreign countries that employ 350 or more Malaysian workers can hold whatever level of equity they desire. Other economic changes have been made to encourage foreign investment in Malaysia.

Details are available from the Malaysian Industrial Development Authority, 630 Third Ave., New York, NY 10017.

Italy's soybeans

More than 60,000 Italian farmers reportedly harvested nearly 25,000 hectares of soybeans this year; five years ago, there was virtually no commercial soybean acreage in Italy.

Anticipated production is 750,000 metric tons, according to Italian sources. Others predict a harvest between 500,000 and 600,000 metric tons. The Ferruzzi Group was the leading promoter for increased soybean acreage.

Safflower crop

U.S. safflower production for 1986 was forecast at 197,300 tons by the newsletter *OILscoop,* published by Oilseeds International Ltd. in mid-September.

OILscoop predicted the following acreages and yields: Arizona, 1,850 acres and 2,500 tons; California, 100,200 and 116,500; Montana/Dakotas, 219,000 and 77,000; and other areas, 3,300 and 1,300. About 26,000 tons was expected to be exported despite a predicted 2,000-ton decline in Japanese purchases.

Antioxidants

The United Kingdom Department of Health and Social Services' Committee on Toxicity of Chemicals in Food, Consumer Products and the Environment has issued a statement on the status of five types of antioxidants used with fats and oils products.

The committee has recommended Group B status (temporarily acceptable but further studies required) for butylated hydroxyanisole (BHA), butylated hydroxytolene (BHT) and the gallates (propyl, octyl and dodecyl); Group A status (safe) for tocopherol; and Group E status (data inadequate to assess suitability for use in food) for tert-butyl hydroxyquinone (TBHQ).

The committee said it would not request studies for BHA other than those currently under way, but would review the results of the existing studies when they are available. For BHT, the committee said it would like to review a detailed evaluation of mutagenicity studies and further studies relevant to the development and significance of neoplastic changes. For gallates, the committee said that due to their close structural similarity to BHA and BHT, questions on mutagenicity should be resolved before any other classification is made.

The committee noted that it previously had classified TBHQ, which is not a permitted additive in the United Kingdom, under Group B but that further studies including mutagenicity have become available, leading the committee to desire further studies, especially on mutagenicity, carcinogenicity and hematological effects.

The committee's full statement was published in the FOSFA (Federation of Oils, Seeds and Fats Associations Ltd.) International September 1986 newsletter.

Indian support

The Indian government has raised the 1986-87 support prices for yellow and black soybeans, sunflowerseed and in-shell peanuts 2% to 5.7%, depending on the crop. A U.S. Department of Agriculture (USDA) report said the National Agriculture Cooperative Marketing Federation (NAFED) has been authorized to operate the price support system for the kharif (autumn-harvested) crops.

USDA said the Indian government hopes to increase production by offering price incentives. However, Indian farmers in recent years have been receiving prices above the support levels because demand exceeds supply. This is due partially to the fact that India's processing capacity has grown faster than production.

Canola market

Cargill Inc. this fall began marketing a new low erucic acid winter rapeseed (canola) variety for U.S. farmers to plant for harvest next spring. It also announced it would buy and process low erucic acid content rapeseed.

According to Cargill, its multiseed processing plant at Riverside, North Dakota, was available to purchase and process low erucic acid content rapeseed sold to Cargill elevators in Minnesota. Those elevators also began offering Glacier, a new low erucic acid winter rapeseed variety from Peterson Seeds, for planting in the fall. This gave producers an option to plant canola in place of flaxseed, sunflowerseed, soybeans or other crops. However, according to a Cargill spokesman, farmers did not plant a significant amount of this variety as prices "went through the floor."

Togo industry

The West African Republic of Togo in October announced investment opportunities in its state-owned palm kernel and cottonseed oil

facility in Lome, Togo.

The Togolese government said it would consider all reasonable bids for purchasing or leasing the facility and that successful operation would require an investment of approximately $5 million to improve the plant's performance. The government estimated that another $3 million would finance the purchase and addition of an edible cottonseed refinery for domestic consumption.

Currently, the facility has the capacity to process 20,000 metric tons of domestically produced palm kernels and cottonseed. Cottonseed oil produced at the plant is half refined, with a final product acidity of .05%. Additional refining, decoloration and deodorizing are necessary for export to developed countries. Palm and cottonseed oil are shipped directly to the nearby Lome port via pipeline. During the six-month off-season, the plant produces unrefined palm kernel oil with less than 6% acidity for use in soaps and cosmetics.

For more information, contact the Togo Information Service, 1625 K St. NW, Suite 102, Washington, DC 20006, telephone 202-659-4330.

Corn oil plant

PSI Process Systems Inc. of Memphis, Tennessee, has been awarded the detailed engineering contract for Cargill Inc.'s $10-million solvent extraction plant being built to supplement its corn processing facilities in Memphis, Tennessee.

The plant, designed to extract crude corn oil from corn germ, will have a capacity of 620 tons per day of corn germ. While Cargill has a number of extraction facilities for soybeans, the Memphis plant will be the only one devoted to corn oil. It will process germ from Cargill's corn processing plants in Cedar Rapids, Iowa; Dayton, Ohio; and Memphis.

The facility is scheduled to begin operations by the end of the first quarter of 1987.

PORIM course

The Palm Oil Research Institute of Malaysia (PORIM) is organizing the 4th Chemistry of Fatty Acids and Lipids Course, slated for March 23–April 4, 1987. The purpose is to provide basic information on chemistry and biochemistry of fatty acids and lipids, and on different aspects, from processing and refining to quality control and uses, of palm and palm kernel oils.

The course will be presented in English. It will include a week of lectures with plant tour and a week of laboratory demonstrations. Lecturers will include F.D. Gunstone of St. Andrews University, P.K. Stumpf of the University of California and Malaysian experts on palm and palm kernel oils.

For further information, contact Hamirin Kifli, PORIM, PO Box 10620, 50720 Kuala Lumpur, Malaysia.

Talks available

The American Soybean Association has published a booklet containing four talks presented at the 28th International Symposium on Crop Protection at the University of Ghent, Belgium.

Included are a review of the use of soybean oil with pesticides in Western Europe, by J. Mumford; applied research with crop oil in spraying techniques, by L. Lumkes; the use of soybean oil as a pesticide carrier in ULV applications against the pine processionary caterpillar, by F. Robredo; and the use of seed oils with herbicides, by J. Nalewaja. Free copies are available from the Brussels office of ASA, International Rogier Centre, Box 521, 1210 Brussels, Belgium, telephone 02/217-20-75, telex 26128.

Meanwhile, abstracts of presentations made at the Tenth International Symposium on Near Infrared Reflectance Spectroscopy (NIRS), held Sept. 9–10, 1986, at the Technicon Science Center, are available by writing to Mary Testani, Technicon Instruments Corp., Industrial Systems Division, 511 Benedict Ave., Tarrytown, NY 10591. Sessions highlighted recent advances and future directions in NIRS technology for food applications, as well as for agricultural and industrial process applications.

Profile: Norman H. Witte

Norman H. Witte will retire Dec. 31, 1986, three-and-a-half months after celebrating his 40th anniversary with Central Soya, Fort Wayne, Indiana.

Witte, an AOCS member 1952, was born December 29, 1921, in Fort Wayne. In 1939, he entered a cooperative engineering program offered by Valparaiso and Purdue universities.

"I decided to be a chemical engineer as the result of a super high school chemistry teacher. Without his guidance, I probably would be in the electronic field today, because I had been hacking around with ham radio and radio tubes since I was ten years old. I still recall his advice: be a chemical engineer and then you'll still have a hobby."

Norm Witte and his wife, Aileen, shown enjoying the festivities at the international party held in conjunction with the AOCS 1986 annual meeting in Honolulu, Hawaii, last May.

After graduating from Purdue, he worked a year and a half for Solvay Process Co., part of Allied Chemical, then joined the Navy in the summer of 1944 as an ensign. He ended up on a destroyer and saw the Okinawa campaign, doing "a lot of steaming around the Pacific war zone."

After leaving the Navy in 1946, he was hired by Central Soya for an opening in the technical department, under the direction of Norm Kruse. He has remained in the technical department for his entire career with Central Soya. Kruse helped establish the technical department in 1936; this year, the department celebrated its 50th anniversary.

Witte recalls, "When I joined the company, we had one extraction plant and three expeller plants, and, I think, four feed mills. Today we have nine extraction plants, all but one of which can each process more beans than the total company crush in 1946. Back then, Central Soya had no oil refineries. The first one came in 1962 when we acquired the industrial oil refinery at Bellevue, Ohio, from Spencer Kellogg Company. Our first entry into the edible oil business was in 1970 in Decatur, Illinois. We now operate four refineries, are one of the world's largest lecithin producers and a dominant producer of soybean protein concentrate."

One of his favorite projects at Central Soya was his association with the commercialization and further development of the desolventizer toaster (DT) invented by Kruse, based on work in the late 1940s and commercialized with the first unit in the Decatur extraction plant in 1950. "This machine really revolutionized the solvent extraction industry and was the foundation for Heinz Schumacher's current development of the DTDC [desolventizer-toaster-dryer-cooler]."

Also "in on the ground floor" when Central Soya went into the edible oil business, Witte designed and built the company's first grass roots plant, which started up in 1970.

He considers himself lucky to have worked under Kruse for 15 years. "He was an outstanding leader, driver (red-haired) and innovator, and he surely got me going on the right track."

Witte became a member of the National Soybean Processors Association (NSPA) Technical Committee in the late 1950s and later served as its chairman for 10 years. "Much of the activity during those years was to guide the U.S. Environmental Protection Agency in the direction of meaningful and manageable regulations to improve the environment on both the air and water side." He also was a member of the Institute of Shortening and Edible Oils Ecology Committee, which spent much of its time on the same kind of problems. He is a long-time member of AIChE and has a Tau Beta Pi key from college.

He joined AOCS in 1952 and has served as a member of the technical safety and engineering and environmental control committees, a session chairman for the 1976 World Conference on Oilseed and Vegetable Oil Processing Technology, program chairman for the 1982 World Conference on Edible Oil Processing, a speaker at the 1985 World Conference on Emerging Technologies in the Fats and Oils Industries and a governing board member-at-large during 1982. Currently he is on the AOCS Building Committee.

Witte is a long-time electronics hacker, but, he explains, "Things have gotten so complicated these days that I don't do much soldering any more." When the microcomputer came on the scene in the mid-1970s, he says he "drifted in that direction." He recalls, "A science-teacher friend at our local Concordia High School and I put together a kit computer, and he used it to introduce one of the first high school computer classes in Fort Wayne. After that, I got my own computer—I now have my third one, and according to my wife, that's been my only hobby since."

Witte and his wife, Aileen, were married in 1947. They have six children, all of whom have left the nest to start their own careers; their children, in turn, have provided the Wittes with eight grandchildren."

Witte has been active on church boards and committees for most of his life. For the past two years, he has been working on computerizing church records at the large church he attends, and, he confesses, "I have been learning lots of ways not to do it and maybe some ways it ought to be done. With hardware as

cheap as it is becoming, I think a lot of churches are going to want to look at this possibility for improving their operations." That leads to what he is contemplating as part of retirement. "I would enjoy the opportunity to help a few more of them get started. I am not going to hang out any shingle, but if some of them ask, I think I'll be able to help. Beyond that, I hope Central Soya will ask me to come back occasionally; at least I know better than anyone else where all the old files are."

As he approaches retirement, Witte says, "My major reflection is that I couldn't have stumbled on a better company to spend my career with. There have been a lot of people here over the years to whom I owe very much for their help and guidance and for the opportunity to participate in many professional activities outside the company, both in the U.S. and internationally. I have met and had the opportunity to work with a whole lot of fine people."

AOAC award

AOCS member Robert D. Stubblefield, research chemist at the U.S. Department of Agriculture's Northern Regional Research Center, has been awarded the Collaborative Study of the Year Award from the Association of Official Analytical Chemists (AOAC). He also was named Associate Referee Awardee of the Year from AOAC's Methods Committee on Foods I.

Stubblefield received the awards at AOAC's 100th annual meeting Sept. 15-18, 1986, in Scottsdale, Arizona. As a result of studies by Stubblefield and statistician William F. Kwolek, a method for determining aflatoxin M, a carcinogen in milk, was adopted by the AOAC.

Stubblefield is a member of AOCS' mycotoxin committee.

Biotech task group

The American Society for Testing and Materials (ASTM) Committee E-48 on Biotechnology has formed a task group to investigate the problems of filtering biochemicals, such as proteins and polysaccharides, using ultrafiltration membranes.

The goal of the group is to specify standard materials to be filtered and to write standard tests for evaluating membrane performance. For details, contact Subhas Sidkar, Group Leader—Transport Processes, Division 773.10, National Bureau of Standards, Boulder, CO 80303, telephone 303-497-5232.

Addendum

In the 1986 AOCS survey of fats and oils training published in the September issue of *JAOCS* (pp. 1131,1143), one university was inadvertently omitted. The Department of Nutritional Sciences, University of Connecticut, Storrs, Connecticut, offers a masters and doctoral program in nutritional biochemistry, with a lipid concentration. Lipid biochemistry topics are covered as part of an advanced nutrition class.

News briefs

Alfa-Laval Fats & Oils Division has appointed **Mario Carreño** regional manager for Latin America. He is stationed at Alfa-Laval's office in Santiago, Chile.

Kraft Inc. in October announced it had acquired Pollio Dairy Products Corp., a New York producer of mozzarella and ricotta cheeses. Also in October, Kraft and McMahon Food Co. Inc. of Nobelsville, Indiana, signed a letter of intent for Kraft to acquire McMahon.

Jose Eleazar has been appointed chairman of the **United Coconut Association of the Philippines (UCAP)** for 1986-87. Other elected officers are William Shotwell, president of the Philippine Coconut Oil Producers Association, UCAP vice-chairman; Manuel Igual Jr., president of the Philippine Brokers, UCAP secretary/director; and Jesus Chua, president of the Coconut Oil Refiners Association, UCAP treasurer.

Allied Analytical Systems has changed its company name to **Thermo Jarrell Ash Inc.**

Novo has begun operating a new enzyme fermentation plant on the Japanese island of Hokkaido.

Quaker Oats Co. has acquired **Anderson Clayton & Co.** with an $805-million ($66 per share) offer.

DNA Plant Technology Corp., Cinnaminson, New Jersey, and **E.I. DuPont de Nemours & Co.** have agreed to cooperate on the development of new value-added plant varieties to benefit the food industry. Meanwhile, **Agrigenetics Corp.** of Boulder, Colorado, a subsidiary of the Lubrizol Corp., and **Helizea International SpA** of Ferarra, Italy, have formed a joint effort in plant breeding and biotechnological research to develop field crop seeds important to the Italian agricultural market.

PVO Foods Inc. of St. Louis in September began producing a line of shortenings, fats, oils and margarines for institutional and industrial markets at an 80,000-square-foot manufacturing plant in Fresno, California. PVO Foods purchased the facility, previously used to produce margarine for retail sale, from Allied Vegetable Oil.

Dwayne Andreas, chairman of **Archer Daniels Midland Co.**, has been named by U.S. President Ronald Reagan to head the Foundation for the Commemoration of the United States Constitution.

The Spanish oilseed crushing and refining industry has established a national federation, **FEMYR** (the

federation of crushing and refining enterprises in the Kingdom of Spain), according to a U.S. Department of Agriculture report from Belgium. Meanwhile, **Angel Villin**, director of Aceiturías Reunidas de Levante S.A., has been elected chairman of the **Spanish Soybean Crushers' Association** and the **Spanish Soybean Oil Exporters' Association.**

Errata

In the world fats and oils report published in the August issue of *JAOCS*, it was erroneously reported that "large-scale adoption of low erucic acid varieties of rapeseed has not occurred in France." It should have said that since 1978, all rapeseed production in France has been rapeseed without erucic acid; however, double low varieties, without erucic acid and glucosinolates, only represent approximately 5–10% of production.

Winter rapeseed double low varieties are not yet widely used, according to Emile Chone, director of the Centre Technique Interprofessionnel des Oleagineux Metropolitains (CETIOM), who adds, however, that France is probably the country that has most promoted this type of winter rapeseed variety.

We thank E. Chone and J.-B. Chazan, general manager of the Institut des Corps Gras (ITERG) for pointing out this error.

Obituaries

ROLF BLOMSTRAND

AOCS member Rolf Blomstrand of Sweden died Sept. 28, 1986, after suffering a stroke. He was 60 years old.

Professor Blomstrand joined AOCS in 1980. He was a professor in the Department of Clinical Chemistry, Huddinge University Hospital, Karolinska Institutet, Huddinge, Sweden. He earned his medical degree from the University of Lund, Sweden, in 1955. His major field was clinical chemistry, with research in lipids.

STANLEY G. BROOKER

AOCS emeritus member Stanley G. Brooker, 76, who in 1937 became AOCS' first member in New Zealand, died Oct. 22, 1986, at Auckland Hospital, Auckland, New Zealand, after a brief illness.

Brooker was appointed chemist at Abels Ltd.'s margarine plant in 1936 and worked 50 years in the oils and fats industry. He officially retired in 1976, but remained active, doing consultant work, serving as honorary university lecturer at the Chemistry Department, University of Auckland, and as an active participant in the Oils and Fats Group of the New Zealand Institute of Chemistry in Auckland. Earlier this year, he had organized a packaging seminar at Auckland University that involved a number of participants from overseas.

According to colleagues, he is perhaps best remembered for initiating a successful international conference on oils, fats and waxes at Auckland in February 1983.

Earlier in his career, Brooker was instrumental in establishing the New Zealand Institute of Food Science and Technology, of which he was a past president and honorary fellow. He also was a past president and honorary fellow of the New Zealand Institute of Chemistry.

Expressions of sympathy can be directed to his wife, Nancy, and their family, at 6 Koraha St., Remurera, Auckland 5, New Zealand.

BERNARD T. ROCCA

Bernard Thompson (Barney) Rocca, 94, founder of the National Institute of Oilseed Products (NIOP) and NIOP president from 1934 to 1944, died Oct. 3, 1986, in Berkeley, California.

According to NIOP's *Washington Correspondence* newsletter, Rocca's firm, the Pacific Vegetable Oil Corp., was a major factor in the world trading of copra and coconut oil from the Philippines in the period immediately following World War II, led the upsurge in safflower oil and was active in handling other edible oils and tallow.

He was the author of three books—*Fitting In The Pieces* (1962), *Fact, Faith and Reason* (1965) and *Oil and Troubled Waters, the PVO Story* (1986). He is survived by his wife, of Berkeley, California, and three children.

CHARLES H. STRUBLE

Charles H. Struble, an AOCS member since 1947, died Sept. 9, 1986, in Plantation, Florida.

Struble, since retiring in 1978, had spent time on consulting assignments as a volunteer executive with the International Executive Service Corps, using his expertise in the margarine field to give advice to companies served by the program. In 1984, for example, he lent his talents to the Copra Manufacturers Ltd. in Soufriere, St. Lucia, and to the Coconut Growers Association Ltd. in Port of Spain, Trinidad. In previous years, he and his wife had traveled to Guatemala, Peru and Turkey on other assignments with the International Executive Service Corps.

Before he retired, Struble was technical director for the Miami Margarine Company in Cincinnati, Ohio. He had served on the AOCS National Meeting Committee.

He is survived by his wife, Rosetta; a daughter, Sandra; two sons, Charles Jr. and John; one granddaughter and three grandsons.

From Washington

USDA promotes soy oil exports

The U.S. Department of Agriculture (USDA) September 30 announced plans for an $8.5-million program to expand exports of U.S. soybeans to the European Economic Community by stepping up promotions for soybean oil.

Program funds will be used to increase European consumers' awareness of the benefits of soybean oil and to provide technical assistance to processors to insure that a quality product is produced.

"We want to increase soybean oil consumption in the European Community and thereby increase the demand for U.S. soybeans," according to Under Secretary of Agriculture Daniel G. Amstutz.

Promotional activities were to be carried out cooperatively through an agreement between USDA's Foreign Agricultural Service and the American Soybean Association (ASA), with ASA coordinating the activity on behalf of U.S. soybean growers. USDA will reimburse ASA with generic marketing certificates for commodities owned by the Commodity Credit Corporation.

Meanwhile, USDA has announced plans for a $4.5-million program to expand exports of edible peanuts to Western Europe. USDA will work with the National Peanut Council to help promote U.S. brands to increase consumer awareness. USDA said the object is "to offset the adverse effects of Japan's restrictive import quota."

Program reduces cotton acreage

The U.S. Department of Agriculture (USDA) announced a 25% upland cotton acreage reduction as part of its 1987 upland cotton program.

Other provisions include an established target price of 79.4 cents per pound and a minimum loan level of 52.25 cents per pound for the base quality. Details: Robert Feist (telephone 202-447-6789).

Meanwhile, USDA's National Economics Division, Economic Research Service, this fall estimated U.S. cottonseed production will be 4.27 million tons in 1986-87. This, coupled with carryover stocks of 300,000 tons, would bring 1986-87 supplies to 4.57 million tons, down 20% from 1985-86. USDA estimated world cottonseed production at 28.7 million tons.

USDA to drop container limit

The U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS) has proposed removing the restriction limiting the packaging of artificially flavored and colored meat fat shortening to three-pound containers.

The proposal would allow producers to market their product in institutional and other size containers. It also would make USDA policy consistent with that of the U.S. Food and Drug Administration (FDA), which does not restrict the container size for vegetable shortening. Ed Miniat Inc. of Chicago, Illinois, which supplies animal fat shortening to fast-food restaurants, had petitioned for the change. Details: *Federal Register*, Oct. 2, 1986, pp. 35239-35240.

In other action, FSIS has amended federal meat inspection regulations to permit the surface application of d- and dl-alpha-tocopherol in pump-cured bacon. FSIS, making the ruling in response to a petition, cited FDA's determination that alpha-tocopherols are generally recognized as safe (GRAS) for use in or on pump-cured bacon as inhibitors of nitrosamine for-