

OPPORTUNITIES and CHALLENGES

The World Conference on Oilseed and Edible Oil Processing next month occurs at a time when the edible fats and oils industry is faced with numerous opportunities and challenges.

The opportunities, perhaps, are in response to the challenges. Thus, energy conservation will be a major topic not only during papers on unit processes, but also in its own plenary session. What used to be considered waste heat is now evaluated for potential use in heat-exchange operations. Plants are engineered more compactly to reduce energy consumption. Sunflower hulls are burned at extraction plants for energy production, reducing the cost of purchased energy.

Environmental concerns are responsible, in part, for the interest in physical refining which produces less waste effluent than traditional caustic refining. Emission of volatile organic compounds has become a concern of some governmental units. While organizers decided not to provide papers that simply listed the various environmental regulations in dozens of different nations, they did instruct unit process speakers to cover environmental considerations and how they are handled.

Computers and automation are becoming more common in all phases of the fats and oils industry. Laboratory equipment manufacturers are marketing microprocessor-controlled units designed to perform analytical work in a fraction of the time required by more traditional methods. On the industrial scale, microprocessors can be incorporated into a computer system that runs an entire operation—refining oils or producing finished products with the only human involvement being through a computer control panel. The next step may be to link quality control analytical sensors directly into the production lines.

The increasing international trade in fats and oils requires generally accepted standards for product quality as well as uniform methodology to determine the quality.

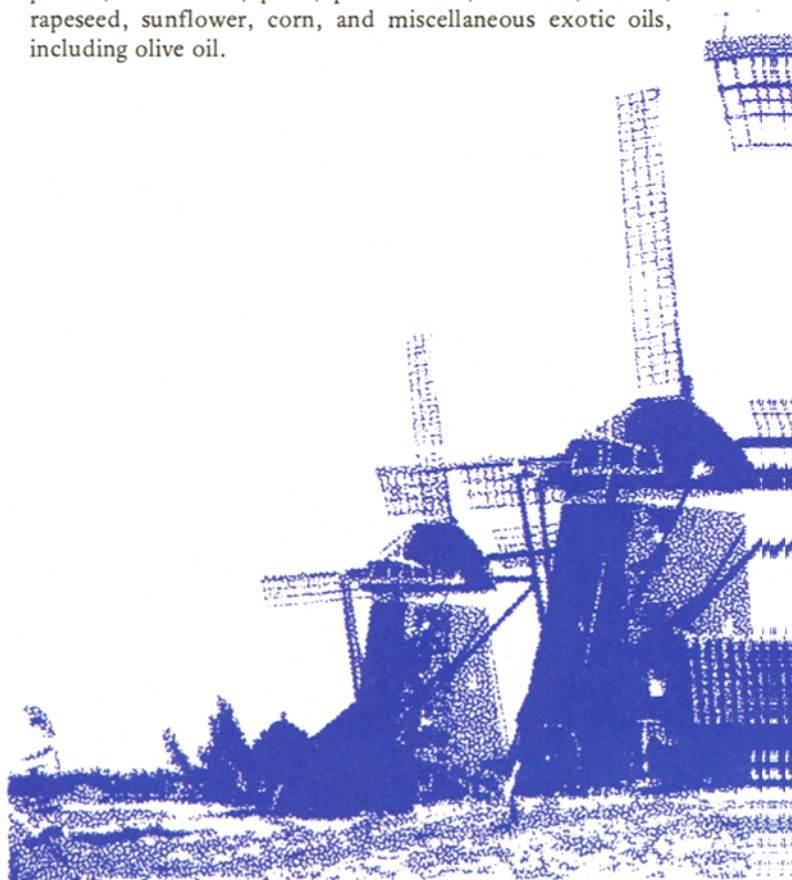
The conference's plenary sessions are designed to provide information on state-of-the-art processing with a view toward what will happen through the end of the century. Organizers have used the 1976 World Conference on Oilseed and Vegetable Oil Processing Technology as a foundation for this year's conference. Speakers have been told to concentrate on developments since 1976 and what may be adopted in the near future.

On Monday, Oct. 4, oilseed processing will be discussed. Specific topics include oilseed handling and preparation, fluidized bed technology, pretreatment for physical refining; head-end and tail-end dehulling, extraction from palm fruit, mechanical extraction, solvent extraction, meal desolventizing, solvent residuals in meals; solvent recovery; potential new solvents; safety, and a look at the future.

On Tuesday, Oct. 5, the topic is edible oil processing. Talks will be presented on degumming, dewaxing and refining; oil-solids separation; pretreatment for physical refining; physical refining; deodorization; hydrogenation theory and practice; enzymatic interesterification; finished product formulation; packaging; and the links between processes—how one process may affect what is done at a future step and the over-all quality of the final product.

On Wednesday, Oct. 6, there will be two sessions. The first will cover by-product use and topics will include lecithin, soapstock utilization, recovery of oil from spent bleaching earth, and palm oil refining by-products. In a session on international quality standards and trading, speakers will talk on quality standards for oil processing, how to determine purity of oils, economic value of internationally traded oils, and instrumental analytical methods for soybean oil processing.

On Thursday, Oct. 7, speakers will discuss how the unique characteristics of various individual oils affect processing. Among the oils to be discussed are soybean, peanut, cottonseed, palm, palm kernel, coconut, canola, rapeseed, sunflower, corn, and miscellaneous exotic oils, including olive oil.



On Friday, Oct. 8, there will be three plenary sessions. The first, on energy, will feature U.S. and European practices on energy conservation during extraction and refining of oils, as well as potential energy savings through predesolventizing of meal. The second session, on automation, will

include papers on automation in extraction plants and the use of microelectronics in automation. Finally, during the concluding session on long-term directions in the edible fats and oils industry, speakers will look at potential changes by the end of the century in fat and oil products, in processing, potential new sources for fats and oils, and in the industry's chemistry and technology.

Each day there will be discussion groups at which registrants will have an opportunity to question plenary speakers or to comment upon what they have heard. Organizers also have scheduled four social events to provide ample opportunity for informal conversation. The first event is a welcoming mixer late Sunday afternoon, Oct. 3, in the exhibit area. On Monday, Oct. 4, there will be a reception at the Knight's Hall, a historic meeting place amidst the governmental center in The Hague. On Wednesday afternoon, all conference registrants will be able to join in a boat tour of the Rotterdam harbor, one of Europe's major harbors and a key import point for oilseeds into Europe. The fourth event is an optional Tropical Dutch Evening party on Thursday in nearby Leiden.

On Tuesday and Thursday, approximately a dozen volunteer papers will be presented. These papers were volunteered by their authors and will deal either with topics not covered in the plenary program, or will provide more detailed information than organizers included in the plenary session.

All the plenary papers will be published in a conference proceedings scheduled for February 1983. Authors of volunteer papers have the option of submitting a 1,000-word abstract of their papers for inclusion in the proceedings.

In addition to the technical program, the conference includes an exposition by equipment manufacturers and suppliers to the industry. A listing of these exhibitors is published elsewhere in this issue of *JAOCs*. The exposition gives registrants a chance to view what exhibitors regard as their latest equipment or supplies for the fats and oils industry.

The world's increasing population means an increasing demand for fats and oils. The challenge to the fats and oils industry is to improve its technology to profitably get its products to those who need them at a price the consumer can afford.

LENGES



PROGRAM AT A GLANCE

Sunday, October 3

1400-1800 Registration, Congress Centre
1600-1800 Informal reception, exposition area,
Congress Centre

Monday, October 4

0800 Registration, Congress Centre
0845 Opening Ceremonies, Main Hall
0925 Session A—Oilseed Processing
1030-1100 Break
1100-1240 Oilseed Processing (continued)
1240 Lunch Break
1400 Session A—Oilseed Processing (continued)
1615-1730 Discussion groups
1900-2030 Reception at Knight's Hall

Tuesday, October 5

0800 Registration, Congress Centre
0830 Session B—Edible Oil Processing
1015-1045 Break
1045 Session B—Edible Oil Processing (continued)
1230 Lunch Break
1320 Volunteer papers
1415-1530 Session B—Edible Oil Processing (continued)
1545-1730 Discussion groups

Wednesday, October 6

0800 Registration, Congress Centre

0830-0950 Session C—Byproducts
0950-1015 Break
1015-1135 Session D—Trade and Quality
1145-1230 Discussion groups
Afternoon All-conference boat tour
of Rotterdam harbor

Thursday, October 7

0800 Registration, Congress Centre
0830 Session E—Individual Oils
1030-1100 Break
1100 Session E—Individual Oils (continued)
1230 Lunch break
1320 Volunteer papers
1415-1530 Session E—Individual Oils (continued)
1530-1730 Discussion group
2030-0030 Optional social event:
Tropical Dutch Evening, Leiden

Friday, October 8

0800 Registration, Congress Centre
0830-1020 Session F—Energy
1020-1050 Break
1050-1110 Session F—Energy (continued)
1110-1200 Session G—Automation
1200 Lunch
1330-1510 Session H—Long-Term Directions
1530-1730 Discussion groups

HOTEL ACCOMMODATIONS

Rooms have been reserved at a number of hotels in the Hague which are no more than a short bus ride away from the Congress Centre. Reservations may be made at the special group rates by use of the conference registration form. A list of hotels by general location and tariffs follows:

NEAR THE CONGRESS CENTRE:

Hotel Bel Air, Johan de Wittlaan 30, 2517 JR The Hague
Tel. 070-57 20 11, telex 31444
Single: Hfl 110
Double: Hfl 150

Promenade Hotel, Van Stolkweg 1, 2585 JL The Hague
Tel. 070-57 41 21, telex 31162
Single: Hfl 160
Double: Hfl 175
Breakfast: Hfl 15

SCHEVENINGEN (ON THE COAST):

Kurhaus Hotel, Gevers Deynootplein 30, 2586 CK The Hague
Tel. 070-52 00 52, telex 33295
Single: Hfl 115
Double: Hfl 170

Europa Hotel, Zwolsestraat 2, 2587 VJ The Hague

Tel. 070-51 26 51, telex 33138

Single: Hfl 85

Double: Hfl 140

CENTER OF THE CITY:

Hotel Babylon (next to railroad station), Koningin Juliana-
plein 35, 2595 AA The Hague

Tel. 070-81 49 01, telex 34001

Single: Hfl 150

Double: Hfl 175

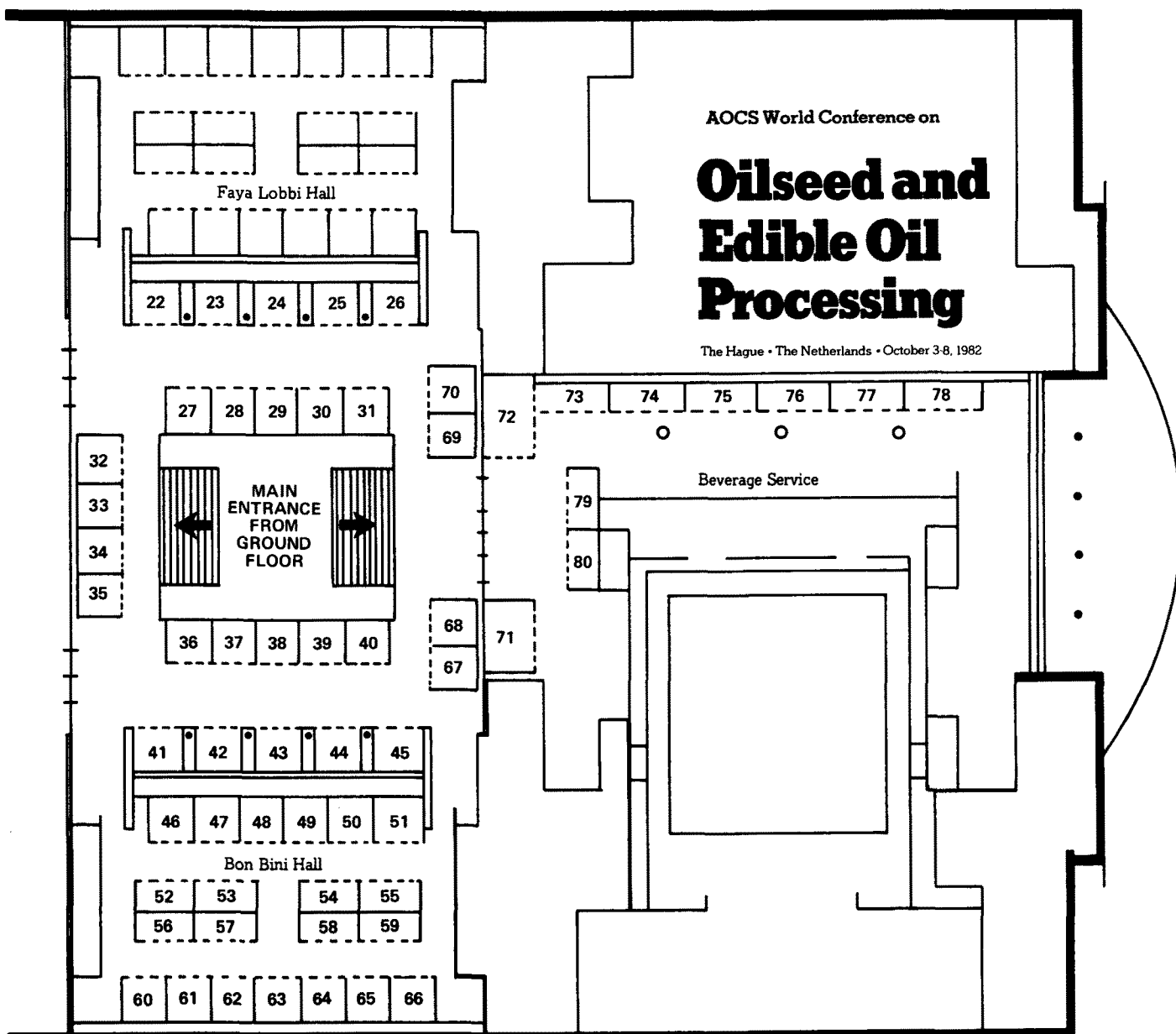
Hotel des Indes, Lange Voorhout 54-56, 2514 EG The Hague

Tel. 070-46 95 53, telex 31196

Single: Hfl 121

Double: Hfl 182

Most hotels have suites available. Tariffs include breakfast (except at Promenade Hotel), service and tax. A deposit of Hfl 200 is required with your reservation. The committee will confirm hotel reservations and will provide a voucher in the amount of the deposit. Transportation will be provided between the hotels and the Congress Centre and to social events when necessary.



Exhibits

Alfa-Laval AB (Booths 46 & 47). On display will be materials covering the complete range of Alfa-Laval processes for the edible oil industry. Address: Box 500, 147 00 Tumba, Sweden.

Alpine Aktiengesellschaft (Booth 63). Information will be available on cleaning, dehulling, premilling, milling, air-classification and system layout as offered by Alpine for the processing of oilseeds. Display charts will show applications for soybeans, rapeseed, cottonseed, sunflower, sesame and linseed. The machinery features twin-rotor stud mills (Contraplex) for specially depositing products, as well as the complete air-classifier program. Address: PO Box 10 11 09, Augsburg 1, West Germany.

Amafilter B.V. (Booth 77). Amafilter will exhibit its complete range of filters: Niagara Pressure Leaf Filters for crude oil and bleached oil filtration, and a new filter for the extraction of the bleaching clay cakes in situ; cartridge filters for polishing filtration of deodorized oils; Drum Vakuum Filters for the filtration of winterized oil. Address: PO Box 396, 1800 AJ Alkmaar, Holland.

American Soybean Association (Booth 27). Under the motto "When you process soybeans, you are not alone" the American Soybean Association is presenting the services it offers to the soybean processing industry. These range from trade information to the organization of study-trips and conferences. Address: Centre International Rogier,

25° Etage—521, Rooms 2504-2506, 1000 Brussels, Belgium.

Att - Verfahrenstechnik GmbH - Destillation - Technik (Booth 6S). Address: Ludgeristr. 9, 4400 Muenster, West Germany.

Hermann Bauermeister Maschinenfabrik GmbH (Booth 79). One corrugated roller mill VWR 251 X 500 for the crushing of oilseeds and press cakes as well as a picture representing the new flaker ZWG 702 X 1250 for the processing of oilseeds will be exhibited. Address: 44 Friedensallee, 2000 Hamburg 50, Fed. Republic of Germany.

Berico Industries Inc. (Booth 45). Information will be available about the fuel-efficient Berico Soybean/Sunflower Process Driers, featuring cleaned recycle air system, insulation, tapered column design with "Turn-Flo" column mixing action for production capacity to 320 tons per hour and outstanding process efficiency with low noise levels in 24-hour duty cycle. The driers are designed for cleanliness, safety and long life. Address: PO Box 12285, 10551 Barkley, Suite 412, Overland Park, KS 66212 USA.

Buhler Brothers Ltd. (Booth 60). The booth will serve as an information center and will be staffed with specialists. A slide show will give a survey of the firm's activity in oilseed processing (storage, drying, cleaning, crushing, hulling, conditioning, flaking of seeds and drying-cooling, sifting, grinding, tail-end dehulling, pelletizing, storage and loading of extraction meal). Leaflets and other information will be available. Address: CH-9240 Uzwil, Switzerland.

The Cambrian Engineering Group Limited (Booths 53 & 57). A model of the unique "Campro" deodorizer will be on display. The exhibit will include a presentation of the full range of services that Cambrian supplies to the oilseed and associated industries and new process technology developed by the process group. Address: 2465 Cawthra Rd., Suite 112, Mississauga, Ontario L5A 3P2 Canada.

Canola Council of Canada (Booth 48). The Canola Council display emphasizes canola oil and its major use as a quality salad oil. Materials available will focus on properties and specifications of the oil based on recent research in Canada. Material will be available in four languages. Address: 301-433 Main Street, Winnipeg, Manitoba R3B 1B3 Canada.

CMB Bernardini S.p.A. (Booths 30 & 31). Bernardini will exhibit some models of plants which have been successful with reference to "Direx," a direct solvent extraction plant for all sorts of oilseeds, even of high oil content, and to refining, including continuous bleaching, filtering, deodorizing and physical refining, and winterizing. Photographs will show factories and specializations. Literature will be available. Address: 2, Via dei Castelli Romani, 00040 (Pomezia) Rome, Italy.

CPM/Europe B.V. (Booth 52). Pellets of various oilseed

products, a laboratory pellet mill and photos of production units will be displayed. Address: Distelweg 89, 1031 HD Amsterdam, The Netherlands.

Crown Iron Works Co. (Booths 39 & 40). Crown Iron Works Co. is a leading designer and manufacturer of solvent extraction equipment. A scale model of a solvent plant will be displayed as well as photos of individual pieces of equipment. Engineering data and brochures will be available. Address: 1229 Tyler St. N.E., PO Box 1364, Minneapolis, MN 55440 USA.

Damas Maskinfabrik A/S (Booth 68). Address: Vester Aaby, DK-5600 Faaborg, Denmark.

Damman-Croes (Booth 26). On display will be literature and information on the 110-year-old firm's complete oil mill plants of up to 3,000 tons per day as well as separate machines for oil mills such as flakers and grinders, crushers, expellers, toasters, and complete materials handling lines. Address: Spanjestraat 55, B-8000 Roeselare, Belgium.

EMI Corporation (Booth 22). Video tapes and slides will illustrate EMI fats and oils processes and complete plants for oilseed extraction, edible protein, lecithin, chemical and physical edible oil refining, vacuum bleaching, dewaxing, hydrogenation, fractionation, winterizing, steam-refining deodorizer, formulation, manufacture, and packaging of salad oil, shortening and margarine. Address: 3166 Des Plaines Avenue, Des Plaines, IL 60018 USA.

Extraction De Smet N.V. (Booth 36). Illuminated flow diagrams and scale models of De Smet processes will be featured. Address: 265, Prins Boudewijnlaan, 2520 Edegem, Belgium.

Extraktionstechnik GmbH (Booth 67). The display features a survey of activities comprising the supply of complete plants and/or unit equipment for the processing of all vegetable oil-bearing materials and vegetable oils and fats. The exhibit will feature the firm's latest improvements in soybean conditioning and steam-refining. Address: Postfach 76 03 69, 2000 Hamburg 76, West Germany.

The French Oil Mill Machinery Co. (Booth 70). Model machinery will be on display showing the complete range of equipment and services offered. Representatives will be available to discuss your individual requirements in the field of oilseed processing. Address: 1035 W. Greene St., Piqua, OH 45356 USA.

Fratelli Gianazza S.p.A. (Booths 74 & 75). The exhibit will feature models of plants for the treatment of oils, fats, fatty acids, and glycerine. Panels will illustrate the "Verta" filters, continuous extraction plants, "Turnex" extractor, continuous neutralization plant, "Dovet" plant and a production curve. Address: 78/84—Viale Cadorna, Legnano (Milano) 20025, Italy.

Grindsted Products A/S (Booth 69). Grindsted Products

supply a variety of emulsifiers, stabilizers, flavors and enzymes, which will be featured. Grindsted products are available not only from the main factory in Denmark, but also from the Kansas plant as well as from subsidiaries in the UK, Germany, France and Brazil. Food scientists from the Grindsted Research & Development Laboratories will be present at the stand. Address: 38, Edwin Rahrs Vej, DK-8220 Brabrand, Denmark.

Harshaw Chemie B.V. (Booths 32, 33, 34, & 35). Catalysts for fat hydrogenation will be exhibited. Address: Strijkviertel 67, PO Box 19, De Meern 3454 ZG, The Netherlands.

H.L.S./U.S.O.P. (Booths 50 & 51). The display will feature engineering and supply of complete turnkey projects for various types of oilseeds with emphasis on processing usage and modern technology, timely deliveries, advances in specific related fields as designed by the engineering and research staff, especially in the sunflower seed processing and physical refining of vegetable oils. The exhibit will include photos, diagrams and models. Address: 4 Weizman St. — Asia House, Tel Aviv, Israel.

Franz Kirckfeld GmbH (Booth 72). A model of a Kirckfeld noncaustic precleaning and bleaching and physical refining plant will be featured. Slides of existing plants will be shown. Equipment details and pamphlets and process description will be available. Address: 17 Koenigsallee, Dusseldorf, West Germany.

Krupp Industri-und Stahlbau (Booth 42). Krupp's Harburg Works will show its development in the field of food industry equipment at the World Conference by means of color slides and photomurals. Address: Postfach 14 19 60, 4100 Duisburg 14, West Germany.

Laporte Industries Limited (Booths 55 & 59). As manufacturers of activated bleaching earths, Laporte Industries will be exhibiting a new dimension of fulmont bleaching earths. Address: Moorfield Road, Widnes, Cheshire WA8 0JU England.

L.F.C. Lochem B.V. (Booth 25). Information will be available on engineering, construction and service of pressure leaf filter equipment for the filtration of crude oil, bleached oil, winterized oil and deodorized oil, and fabricators of all kinds of filter leaves and polishing equipment. Address: 5 Havenstraat, PO Box 35, Lochem 7241 CZ, Holland.

Lurgi Gesellschaften (Booth 80). The presentation of the ALCON process will be the main item of interest. Informational material will be available, and there will be ample opportunity for discussion with specialists. Photographs and informational pamphlets will also be used to show Lurgi's work on large-scale units and interesting concepts in the extraction and refining fields of plant engineering. Address: PO Box 11 12 31, D-6000 Frankfurt am Main 11, West Germany.

McCloskey Scientific Industries, Inc. (Booth 76). On display

will be the laboratory version of the "Edible Oil Colorimeter" for the analysis of red and yellow values in international units, as well as the determination of chlorophyll and β -carotene values. The process control version for red, yellow and chlorophyll values will also be on display. Address: PO Box 69, Newfoundland, NJ 07435 USA.

Metrohm Ltd. (Booth 62). The exhibit will feature the 617 Rancimat, which measures the oxidation stability (resistance to rancification) of oils and fats rapidly, accurately and automatically. The apparatus simplifies the quality assessment of edible oils, fats and nuts, forecasting storage life, quality control of refining processes, purchasing recommendations and warehouse management. Address: CH-9100 Herisau, Switzerland.

Pacific Scientific (Booth 66). Address: 62, Norden Road, Maidenhead, England.

Palm Oil Research Institute of Malaysia (Booth 43). Wall charts illustrating palm oil characteristics, utilization and process flow diagrams will be displayed. Slides will be projected, relating to activities of PORIM, development of the Malaysian palm oil industry and other information such as palm oil applications—technical and statistical. Technical leaflets will be available and samples of palm oil products will be displayed. Address: 18th Floor, Angkasa Raya, Jalan Ampang, Kuala Lumpur, Malaysia.

Pennwalt Limited (Booth 54). An established manufacturer of edible oil refining equipment, Pennwalt will have comprehensive information available describing the recently introduced continuous first stage neutralizing centrifuge. This machine is a development of the Sharples Super-D-Canter centrifuge. Address: Doman Road, Camberley, Surrey, GU15 3DN, England.

Carl Aug. Picard GmbH & Co. KG (Booth 49). In conjunction with its affiliate, Egon Keller GmbH & Co., CAP will feature its services as manufacturers of spare parts for screw presses. Address: Hasteraue 9, 5630 Remscheid-Hasten, West Germany.

Roskamp Mfg. Inc. (Booth 58). Roskamp Mfg. will feature the 10 X 42 Cracking Mill and the 28 X 52 Flaking Mill. The firm invites registrants to stop by to discuss cracking and flaking needs. Address: 616 Grand Blvd., Cedar Falls, IA 50613 USA.

Schumacher Consultant (Booth 78). On display will be photographs and a list of field of activities. Address: 26 Hoeperfeld, 2050 Hamburg 80, West Germany.

Simon-Rosedowns Ltd. (Booths 37 & 38). A modular display system incorporating models, photographs and diagrams will feature the current design, manufacture, procurement and financial engineering package available to the world's oilseed processing industry. Particular emphasis will be placed on the diverse range of contract-

ing skills available for customers requiring complete turn-key construction of vegetable oil mills and refineries. Address: Cannon Street, Hull, N. Humberside HU2 OAD England.

Ste. Nouvelle des Ets Olier (Booth 64). Address: 12, Rue Amadeo, 63000 Clermont-Ferrand, France.

Süd-Chemie A.G. (Booth 71). TONSIL highly active bleaching earths for the adsorptive decolorization and purification of oils and fats, hydrocarbons, waxes and other liquid intermediate products, catalysts and carrier catalysts for the hydrogenation of fats, fatty acids, oils and their derivatives will be featured. Address: 6 Lenbachplatz, 8000 München 2, West Germany.

Technicon Instruments B.V. (Booth 23). Technicon will introduce the InfraAnalyzer model 400 L to the oil processing industry. Based on near infrared reflectance technology, the 400 L is designed to provide accurate analysis of iodine number, moisture, hydroxyl number, and other parameters within seconds. Address: Avelingen-West 5, 4202 MS Gorinchem, The Netherlands.

Tintometer GmbH (Booth 41). Lovibond Automatic and visual color measuring apparatus will be exhibited. Address: Westfalendamm 73, D-4600 Dortmund, West Germany.

S.A. Fractionnement Tirtiaux (Booth 44). The exhibit will display photographs, films, flow sheets and diagrams related to the Tirtiaux Fractionation Process. Apart from the equipment performance, special mention will be made of end-product qualities and analysis from various feedstocks. Address: 601, Chaussee de Charleroi, Fleurus B-6220, Belgium.

Tramco Metal Products Inc. (Booth 24). Literature on the firm's complete line of chain conveyors including the "G," "RTX," "RS," "DT," "N," "RB," and "SC," will be

available. Address: 1011 E. 19th St., Wichita, KS 67214 USA.

Unichema International (Booths 28 & 29). Unichema International supplies a range of high quality Pricat nickel catalysts for the hydrogenation of edible oils and fats. Outstanding features of the Pricat range include consistently high activity, resistance to poisoning, a high degree of selectivity and excellent filtration characteristics. Information will be available. Address: PO Box 2, 2800 AA Gouda, The Netherlands.

Wenger International Inc. (Booth 56). The exhibit will include samples of extrusion-cooked soy products such as textured soy meat extenders and meat analogs, full-fat soy and other products. Brochures and copies of publications will be available. A slide show will present Wenger extrusion-cooking technology of fat and defatted soy. Address: One Crown Center—Suite 510, 2400 Pershing Road, Kansas City, MO 64108 USA.

Wurster & Sanger (Booth 61). Technical literature, plant photographs and process flowsheets reflecting the complete capabilities of Wurster & Sanger as process engineers for the fats and oils industry will be featured. The Wurster & Sanger custom builds plants for oilseeds, glyceride fats and oils, fatty acids, glycerine and their byproducts. Catalogs will be available. Address: 222 W. Adams St., Chicago, IL 60606 USA.

Zone Devices Company (Booth 73). This company will be showing a number of products primarily involved with the sampling of bulk liquids. The best known is the Stainless Steel Liquid Zone Sampler which can be used for AOCS Method C1-47 for sampling of oils and fats. The new stainless steel Sample Mixing Pail will be displayed along with the zone thermometer, a new concept in taking temperatures. Address: PO Box 714, Mill Valley, CA 94941 USA.

Netherlands - U.S.A. Bicentennial



The World Conference on Oilseed and Edible Oil Processing is one of the official events marking the observance of 200 years of diplomatic relations between The Netherlands and the United States (actually, with the Continental Congress since the Battle of Yorktown had occurred in the fall of 1781). The official observance dates are April 19 to Oct. 8, 1982, which means this conference is one of the final events during the celebration. April 19, 1782, was when diplomatic recognition was extended by The Netherlands; Oct. 8, 1782, was when the first foreign aid agreement was concluded, with the Dutch providing help to the fledgling nation across the ocean.