

# SDA discusses industry topics

New developments in fluorescent whitening agents, an update on attempts to domesticate cuphea, a new environmental testing facility in Ohio, and a report on linear alkylbenzene sulfonate were among technical topics at The Soap and Detergent Association's 61st Annual Convention.

More than 1,100 persons, a new attendance record, traveled to Boca Raton, Florida, at the end of January for the event. The increasingly international character of the meeting was shown by attendance of persons from Canada, Japan, Spain, Belgium, Denmark, France, West Germany, The Netherlands, England and the Philippines.

Although the meeting sessions focused primarily on general economic and sociological developments, technical presentations occupied a significant portion of the program.

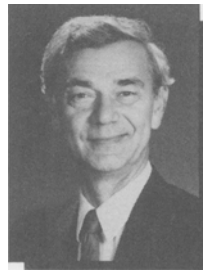
Research on new fluorescent whitening agents (FWA) has been revitalized in recent years by the sudden emergence of a range of new laundry cleaning products, registrants were told by William Findley, manager of technical development and services for specialty chemicals at Ciba-Geigy's Dye-stuffs and Chemical Division.

Five years ago, there was little research into new FWA, Findley said, but consumer acceptance of heavy-duty liquid detergents, combination products, convenience products and bleaching products has spurred activity that may lead to a new generation of FWA that can be used in those types of products.

Whereas powdered FWA were standard through the 1970s and agglomerated granular products are generally accepted now, researchers are working to develop FWA compatible to liquid products, Findley said. Slurries are used in the United Kingdom to mix with liquid detergents, but are not yet suitable for use in the U.S., where greater stability is needed because of the longer distances involved in transportation from the manufacturing point to the detergent packaging plant. In the U.S., a dry FWA



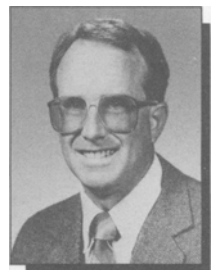
Findley



Sivak



Bishop



Knapp

is shipped to the packaging plant for incorporation into liquid products.

One problem encountered is that many liquid detergent manufacturers encourage consumers to use some of the detergent at full strength as a prewash treatment for spots and stains. Depending on the type of FWA used in the product, this can lead to spotting on light-colored fabrics, Findley said, adding that some new FWA show promise of reducing or eliminating this problem.

Developing FWA that will be compatible with bleach products is another challenge, Findley noted. As with virtually all new chemical products, new FWA must undergo extensive safety testing, Findley said. The FWA manufacturers will be seeking guidance and support of industry in developing products because safety testing costs too much to be done for a whole range of speculative products.

Meanwhile, cuphea researchers are using mutagenesis of seeds and embryo cultures in efforts to develop non-shedding varieties of cuphea, a potential source of lauric fatty acid for the oleochemical industry. Stephen Knapp of Oregon State University told SDA registrants that cuphea "crop domestication is practical, immediate and relatively inexpensive."

Effective herbicides have been developed to minimize weeds in cuphea acreage, he said. Methods have been developed to use combine harvesting for shedding cuphea, he added. As cuphea seed pods shatter at irregular intervals, one step in domesticating the crop is to de-

velop varieties with a common maturation time. Knapp said economic viability with shedding cuphea is conceivable, and economic viability with non-shedding varieties virtually is certain. Harvest potential is 2,600 kilograms per hectare, he said.

This year marks the 25th anniversary of the introduction of linear alkylbenzene sulfonate (LAS) as a surfactant. The previous workhorse surfactant, alkylbenzene sulfonate (ABS), biodegraded much slower and was implicated as the cause of foaming in water-treatment plants and surface waters. The U.S. detergent industry voluntarily shifted to LAS. Andrew Sivak of Arthur D. Little Co. reviewed current knowledge of the environmental effects of LAS. Sivak said current studies show LAS is rapidly and thoroughly biodegraded, with typical environmental concentration far below levels found to be toxic. LAS does not accumulate in the environment or build up in the food chain. Sivak said activated sludge treatment plants usually remove 85% to 100% of influent LAS, with any remaining LAS degrading in receiving waterways.

Procter & Gamble's (P&G) William E. Bishop discussed new test methodology to measure biodegradation of surfactants. While static laboratory studies permit biodegradability studies for a variety of environmental conditions, it does not permit testing of more than one environmental factor at a time, Bishop said. Therefore, laboratories have developed continuous-flow experiments, including estab-

lishing model streams in a laboratory. Field studies are even more realistic, he noted, but costs limit their use.

One of P&G's latest effort is to build an experimental stream facility adjacent to a sewage treatment plant near Milford, Ohio. The facility's eight 36-foot stream channels will be fed by water from the Little Miami River, with natural sand and gravel materials and natural organisms. "Different types of wastewaters can be added to the stream channels to simulate the conditions that exist in natural rivers receiving treated municipal sewage effluents," Bishop said.

"Research conducted at the facility will combine the best aspects of both laboratory tests and field experiments including (a) the use of aquatic plants and animals representative of organisms living in healthy rivers and streams; (b) experimentally controlled, yet realistic, environmental conditions of lighting, temperature and flow rates; (c) year-round testing; (d) simultaneous access to various wastewater treatment types and effluents; and (e) replication for data reliability."

In the non-technical presentations, Michael W. Keran, chief economist for the Prudential Insurance Co. of America, said the consensus of economic forecasters for 1988 is that the U.S. gross national product (GNP) should rise 1.5% to 2%, rather than the 2.5% to 3% ex-

pected before the Oct. 19, 1987, market crash. Keran said he does not foresee a recession in 1988, but perhaps in 1989. An overvalued American dollar during the past several years spurred U.S. consumer buying, he said. The swing to an undervalued dollar will reduce U.S. consumer spending, particularly on imports, but should encourage foreign consumers to buy more. Reduced consumer spending should mean lower domestic sales for consumer-oriented U.S. companies, he forecast. Business investment thus will become a proportionately larger portion of the domestic GNP.

ABC television reporter Bettina Gregory said no major regulatory action should be anticipated during the final year of the Reagan Administration. She noted that any proposed regulatory actions are subject to evaluation by the White House Office of Management and Budget for their potential impact on the federal budget. The net result has been that many regulatory proposals have been delayed.

Washington, D.C., business consultant Horace Busby forecast a Republican victory in the 1988 presidential election regardless of which of the major Democratic and Republican contenders win their parties' nominations. Busby, a former aide to President Lyndon B. Johnson, said the current Republican dominance is too strong for the Democrats to win a majority of elec-

toral college votes in the popular voting.

## SDA officers

AOCS member Donald D. Farinella was one of eight new members elected to The Soap and Detergent Association's board of directors during the group's annual convention earlier this year.

Farinella is vice president for Capital City Products Co. in Harrison, New Jersey. He has been an AOCS member since 1980.

John W. Johnstone Jr. was re-elected chairman of the SDA board, and Stephen P. Donovan re-elected vice chairman. Johnstone is president, chief executive officer and a director of Olin Corp. Donovan is a group vice president of Procter & Gamble. Other newly elected directors include Andrew S. Patti, The Dial Corp.; Russell R. Keast, DuBois Chemicals; A. Carter Fergusson, Alex. C. Fergusson Co.; William F. Beck, FMC Corp.; David F. Webb, Lever Brothers Co.; Arthur F. Fitzgerald, Monsanto Co.; and Edwin R. Vath of Stepan Co.

## Marketing dish liquids

Reports in *Chemical Marketing Reporter* indicate that producers of automatic dishwashing liquids are using pan-European marketing strategies to promote their products. Rather than changing product names and advertising in each country, companies such as Colgate-Palmolive and Benckiser-Knapsack GmbH are introducing products

with uniform names and packages across Europe.

*Chemical Marketing Reporter* said Colgate has been successful in using this approach with its automatic dishwashing liquid "Galaxy." The product was first introduced in France in the fall 1986. Since then, it has moved into Belgium, Denmark, France, Italy, The Netherlands, Norway, Spain, Sweden, Switzerland and the United Kingdom. The product's market share ranges from 15% in France to as low as 8% in other countries.

Benckiser uses two brand names for all of Europe. "Calgonit Liquid" appears in France, The Netherlands, Spain, Switzerland and West Germany; "Finish" liquid is sold in Belgium, Denmark, Italy, Norway and Sweden.

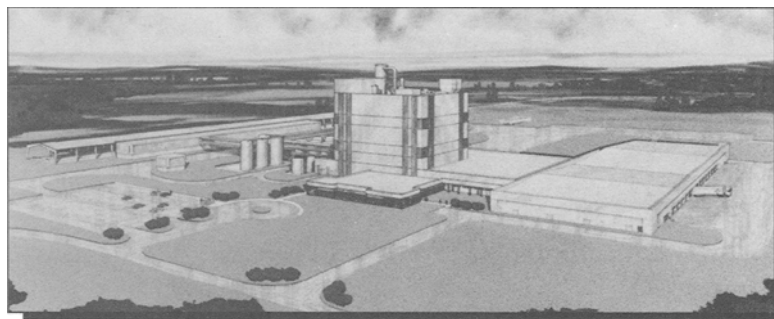
So far, Unilever and Henkel have introduced automatic dishwashing liquids in their respective nations, the United Kingdom and West Germany. Procter & Gamble has not entered the market yet.

# Lever builds Georgia facility

Lever Brothers Co. Inc. has begun construction of an \$80 million detergent manufacturing plant in Cartersville, Georgia. The plant, scheduled to be operational by late 1989, is the first major soap and detergent facility to be built by the company since 1951. The plant will feature automation and computerized technology and will employ about 120 people, according to Bert Hochman, a spokesman for Lever Brothers.

The new facility will include four buildings—processing, packaging, warehouse and multi-function units—totaling more than 200,000 square feet and covering 30 acres.

The company also has soap and detergent manufacturing plants in Baltimore, Maryland; Los Angeles, California; St. Louis, Missouri, and Hammond, Indiana. David Webb, president of Lever's Household Products Division, said that Lever had long sought a southern manu-



An artist's rendering shows Lever Brothers' planned \$80 million detergent manufacturing plant, now under construction in Cartersville, Georgia.

facturing base for its growing detergent business.

Lever Brothers, a member of the Unilever group, registered \$2.475 billion in sales for 1986, mostly in the U.S. Unilever's sales for 1986 were \$25.368 billion, according to the company.

The company manufactures Wisk, and liquid "all" and Surf laundry detergents. Lever's detergent powder line includes Surf, Concen-

trated "all" and Rinso. Snuggle liquid and dryer sheets and Final Touch liquid fabric softener also are part of the laundry product line. Sunlight, Dove and Lux make up the company's liquid dishwashing line; its automatic dishwashing products are liquid and powder Sunlight and dishwasher "all". The company also manufactures Dove, Caress, Lever 2000, Shield, Lifebuoy and Lux bar soaps.

## Testing program

Akzo Chemie, a unit of Akzo NV, has joined 12 other international companies to develop and test suitable alternatives to fully halogenated chlorofluorocarbons (CFC). The program will test and develop toxicity profiles on CFC substitutes that will not affect the ozone layer and that have the physical and chemical properties and commercial viability to replace selected fully halogenated CFCs suspected of interfering with the earth's protective ozone layer.

The Alternative Fluorocarbons Cooperative Testing Program was formed to avoid duplication of safety tests required for any new compound. The tests, which already have begun, are expected to be completed within five to seven years.

Other members of the program include Du Pont, Allied, Racon

(USA), Atochem (France), Hoechst, Kalichem (West Germany), ICI, ISC (United Kingdom), Montefluos (Italy), Asahi Glass, Daikin and Showa Denko (Japan).

Meanwhile, in West Germany, a trade association umbrella group representing the interests of detergent and cleanser manufacturers has said it voluntarily will reduce and eventually replace chlorinated hydrocarbons in a variety of industrial and retail products.

According to a report in the Jan. 4, 1988, issue of *Chemical Marketing Reporter*, approximately 10,000 metric tons of products are expected to be affected by the decision. Products include household cleaners, floor polishes, automotive maintenance and cleaning products. The trade group said substitutes for certain applications, such as cleansers for textiles and leathers and for applications in the paper and pulp industry, may be more difficult to find and use.

The group said chlorinated hy-

drocarbons are deemed indispensable in open surface treatments in the automotive and refining industries.

## S&D talks at annual meeting

The 1988 AOCS Annual Meeting May 8-12, 1988, in Phoenix, Arizona, will include six symposia devoted to surfactant and detergent topics.

Session A, slated for Monday morning, May 9, will be on fat-based surfactants. Chairing the session will be Eric Jungermann of Jungermann Associates Inc. There will be six talks featured.

Session H, to be held Monday afternoon, will be on specialty surfactants. Arno Cahn of Arno Cahn Consulting Services will chair this session, which will include eight talks.

## Surfactants & Detergents News

On Tuesday morning, May 10, Session O will feature a panel discussion on detergency testing. Ted P. Matson of Vista Chemical Co. will chair this session. Experts on the panel will discuss Terg-O-Tometer testing, the Launder-Ometer, radiotracer detergency, soiled test cloths, bundle testing, in-home testing, laboratory methods for predicting visual preferences, on-site institutional laundry and large industrial laundry.

On Tuesday afternoon, Session V will focus on surface chemistry of mixed active systems. Jesse L. Lynn of Lever Brothers will chair the session. Preliminary plans are to offer eight talks.

Session CC on Wednesday morning, May 11, will be on performance and evaluation of surfactants and detergents. K. Lee Matheson of Vista Chemical Co. will chair the session, which will include nine talks.

On Wednesday afternoon, Session JJ will focus on additions, builders and analysis. John Roheim of Dial Corp. will chair the session.

Those wishing to attend the AOCs 1988 annual meeting may fill out the registration and housing reservation forms included in this issue of *JAOCs*. Additional copies may be obtained from Joan Dixon, Meetings Manager, AOCs, PO Box 3489, Champaign, IL 61821-0489, USA. For more information, contact Arno Cahn, Arno Cahn Consulting Services, 72 E. Allison Ave., Pearl River, NY 10965, or the AOCs Headquarters, PO Box 3489, Champaign, IL 61821-0489, USA, telephone 217-359-2344.

## Vista option

Vista Chemical Co. has acquired an option to buy up to a 25% share in an alcohols manufacturing project to be built by Sinar Mas Inti Group of Indonesia. The option can be used within one year from the plant's start of commercial operation.

Plans call for the new plant near Medan, Northern Sumatra, to be onstream in late 1990. The plant

will use palm kernel oil feedstocks; it is expected to produce 30,000 metric tons of alcohols per year. Sinar Mas Inti Group has selected Lurgi technology for the alcohol plant.

Vista and Sinar Mas Inti Group previously announced the formation of IndoVista, a 50/50 joint venture marketing company that will market the products from the new plant. Until the plant comes onstream, IndoVista will market products from other sources, including Vista's alcohol unit in Lake Charles, Louisiana.

## ASTM award



AOCs member George T. Battaglini, research associate for the Stepan Co., Northfield, Illinois, was named a 1987 recipient of the ASTM Award of Merit.

In receiving the award, Battaglini was cited for 15 years of active participation on ASTM Committee D-12 on Soaps and Other Detergents, including work in numerous task groups, development and writing of standards and chairmanship of the Subcommittee on Analysis of Soaps and Synthetic Detergents. He has played an important role in the development of over a dozen standards.

The committee is one of 140 ASTM technical standards-writing committees.

## News briefs

Kanebo Corp., a Japanese toiletry manufacturer, and Kathai Ltd. of Thailand have announced plans for Kathai to receive Kanebo's technical support to produce and market Kanebo brand products in Thailand. Kanebo brands previously have been available only in Japan.

Bruce Larsen has been named vice president of marketing for Vista Chemical Co. The company's three

international subsidiaries—Vista Chemical Far East, Vista Chemical Europe and Vista Chemical Latin America will report to Larsen.

Huish Chemical Co. of Salt Lake City, Utah, has purchased three product lines from the Los Angeles Soap Co.: "Sol," "Sun" and "White King" brands.

John T. Marvel has been named vice president of research and development for Ethyl Corp.

Chevron Chemical Co. has announced it is assuming management responsibility for Orogil S.A. (Paris), a subsidiary held jointly with Rhône-Poulenc. Also, Chevron has acquired Rhône-Poulenc's 30% interest in Petrosynthese S.A. (Paris), a related joint company, increasing Chevron's share to 65%. The third owner is Total Chimie S.A. (Paris). Orogil manufactures fuel and lubricating additives and Petrosynthese manufactures branched alkylbenzene, a raw material for detergents.

Hoechst Chemical UK, the British subsidiary of Hoechst AG of West Germany, has begun expansion of its surfactant capacity at its Stainland facility outside Halifax, England. The expansion is part of an overall remake of the plant, for which Hoechst has said it will invest £3 million (approximately \$5.5 million).

Hanson Industries, the U.S. arm of Hanson PLC, has sold its Brazilian paint operations, Tintas Ypiranga, to Akzo NV for \$22.3 million.

Sherex Polymers Inc., a subsidiary of Sherex Chemical Inc., has purchased AZS Corp., formerly a subsidiary of Toyo Soda (America).

## New book

**Encyclopedia of Conditioning Rinse Ingredients**, by Anthony L.L. Hunting, Micelle Press Inc., PO Box 653, Cranford, NJ 07016, 1987, 492 pp., \$89.