

---

**TECHNICAL**


---

(Continued from page 1187)

**SURFACTANTS & DETERGENTS TECHNICAL**

- 1381 Liquid Detergents from Cationic, Anionic and Nonionic Surfactants. Adsorption, Detergency and Antistatic Properties**  
K. Martin, E. Hellsten, Anders W. Klingberg and B.T. Gunvor Karlsson
- 1386 An In Vitro Method for Evaluation of the Irritancy of Anionic Surfactants**  
A.S. Anavkar and C.V. Natraj

---

**CALENDAR**


---

**AOCS National Meetings**

Annual Meeting, April 22-25, 1990,  
Baltimore Convention Center, Baltimore, Maryland.

**AOCS World Conferences**

World Conference on Edible Oils and Fats Processing: Basic Principles and Modern Practices, Oct. 1-6,

1989, Maastricht, The Netherlands.  
World Conference on Oleochemicals, Oct. 7-12, 1990, Kuala Lumpur Hilton Hotel, Kuala Lumpur, Malaysia.

9th International Conference on Jojoba and Its Uses, October 1992, Palm Springs, California; sponsored by the American Oil Chemists' Society and the Jojoba Growers Association.

**Information: Education Department, AOCS, PO Box 3489, Champaign, IL 61826-3489, USA.**

**AOCS Short Courses**

AOCS/CSMA Surfactants and Detergents Industry Conference, Hotel Hershey, Hershey, Pennsylvania, Oct. 29-Nov. 1, 1989.

(Continued on page 1284)

---

**JAOCS**


---

**JOURNAL OF THE AMERICAN OIL CHEMISTS' SOCIETY** (ISSN: 0003-021X), formerly *OIL & SOAP*, is published monthly by the AMERICAN OIL CHEMISTS' SOCIETY, 1608 Broadmoor Dr., Champaign, IL 61826-3489, USA. Phone (217) 359-2344. Telex: 4938651 AOCS UI. Telefax: 217-351-8091 Second class postage paid at Champaign, Illinois, and additional mailing offices. POSTMASTER: Send address changes to Journal of the American Oil Chemists' Society, P.O. Box 3489, Champaign, IL 61826-3489, USA.

**SUBSCRIPTIONS** for individuals are \$90 a year; library/institutional subscription rate is \$125 a year. There is also an additional postal charge of \$15 per year for subscriptions from foreign countries.

**COPYRIGHT** 1989 by the American Oil Chemists' Society. Formerly published as Chemists' Section, Cotton Oil Press, 1917 to 1924; Journal of the Oil and Fat Industries, 1924 to 1931; Oil & Soap, 1932 to 1947. The American Oil Chemists' Society assumes no responsibility for statements or opinions of contributors to its columns. The Journal is indexed in the Applied Science and Technology Index of the H.S. Wilson Company, New York.

**CLAIMS** for copies lost in the mails must be received within 30 days (90 days for-

eign) of the date of issue. Notice of change of address must be received two weeks before date of issue.

**ADVERTISING INSTRUCTIONS AND DEADLINES.** Closing date 3rd of month preceding date of issue. Insertion orders received after closing will be accepted by the production manager at advertisers' risk. AOCS cannot guarantee positioning of proofs for ads received after closing. Cancellation date 3rd of preceding month. Send insertion orders and mechanical materials to advertising offices at 1608 Broadmoor, P.O. Box 3489, Champaign, IL 61826-3489, USA. Phone: (217) 359-8028. FAX: 217-351-8091 Telex: 4938651 AOCS UI. *Advertising Sales and Production:* Arleen Ward, Jennifer Nelson-Dowdy.

**MANUSCRIPT PUBLICATION:** Submit to the Journal of the American Oil Chemists' Society, P.O. Box 3489, Champaign, IL 61826-3489, USA.

**AOCS OFFICERS:** *President,* Roy A. Carr, president, POS Pilot Plant Corporation, Saskatoon, Saskatchewan, Canada; *Vice President,* David R. Erickson, director of technical services for international marketing, American Soybean Association, St. Louis, Missouri; *Secretary,* M.D. Meiners, food technologist, Best

Foods Division of CPC International, Union, New Jersey; *Treasurer,* J.G. Endres, director of corporate research projects, Central Soya Co. Inc., Fort Wayne, Indiana; *Executive Director,* James C. Lyon, AOCS, Champaign, Illinois.

**JOURNAL STAFF:** *Editor:* T.H. Applewhite; *Associate Editors:* A. Beynen, P.R. Bross, T.A. Foglia, T.J. Jacks, Raymond Mackay, D.B. Min, T.L. Mounts, E.G. Perkins, L.H. Princen, M.J. Rosen, J.F. Scamehorn, J.D. Scott, Edward A. Sedor, G.F. Spencer, W.J. Stancel, M.E. Tuvell, P.J. Wan, D.L. Wharry; *Associate Editors for News:* Reginald E. Bacchus, Wolfgang J. Baumann (advisor), Arno Cahn, Kenneth F. Carlson, Kenneth K. Carroll, Janice Douglass, Marcia Hardin, J. Edward Hunter, George U. Liepa, William J. McShane, W. David Nes, Frank T. Orthoefer, James B.M. Rattray, Harold J. Sandvig, Vijai K.S. Shukla and Helmut Traitler. *Publications Director:* Paul O'Dea; *Production Manager:* Susan Wilmoth; *Graphic layout:* Charles Musto; *Senior Editor/Writer:* Barbara Fitch Haumann; *Circulation Manager:* Sandy Burr; *Advertising Chairman:* K.T. Zilch; *Book Review Editor:* E.G. Perkins; *Index Editor:* E.G. Perkins; *Technical Correspondent:* E.G. Perkins.

## CALENDAR

(Continued from 1188)

Short Courses on Analysis of Fats, Oils and Lipoproteins, Nov. 26-30, 1989, Ramada Hotel O'Hare, Rosemont, Illinois.

### 1989

#### October

Third International Conference on Leaf Protein Research, Oct. 1-7, 1989, Pisa, Italy. Contact: Leafpro-89 Secretariat, c/o Istituto Industrie Agrarie Università, Via S., Michele 4, 56100 Pisa, Italy.

The Association for the Advancement of Industrial Crops annual conference, Oct. 2-6, 1989, Peoria, Illinois. Contact: G. Earle Hamerstrand, Conference Chairman, USDA's Northern Regional Research Center, 1815 N. University, Peoria, IL 61604.

Annual meeting, Canadian Section of AOCS, Oct. 14-17, 1989, Nova Scotian Hilton International Hotel, Halifax, Nova Scotia, Canada. Contact: AOCS Canadian Section, c/o R.G. Ackman, Canadian Institute of Fisheries Technology, Technical University of Nova Scotia, Box 1000, Halifax, Nova Scotia, Canada B3J 2X4.

Canadian Manufacturers of Chemical Specialties' annual meeting, Oct. 15-17, 1989, Hilton International Quebec, Quebec City, Canada. Information: Telephone 613-232-6616.

International Federation of Societies of Cosmetic Chemists (IFSCS) 1989 Conference "Sun and the Skin" and the Latin American-Iberian Congress, Oct. 15-21, 1989, Sheraton San Cristobal Hotel, Santiago, Chile. Contact: IFSCS, Delaport House, 57 Guildford St., Luton, Beds LU1 2NL, England.

Canola Oilseed and Oil Processing Short Course, Oct. 16-19, 1989, POS Pilot Plant, Saskatoon, Saskatchewan, Canada. Contact: Paul Fedec, POS Pilot Plant, 118 Veterinary Rd., Saskatoon,

Saskatchewan, Canada, S7N 2R4, telephone 306-975-7066.

Outlook '89 Conference, Oct. 17-18, 1989, Heathrow Penta Hotel, London Heathrow Airport, United Kingdom. Contact: American Soybean Association, Centre International Rogier, Box 521, 1210 Brussels, Belgium.

Australian Oilseed Federation Annual General Meeting, Oct. 27, 1989, Sydney, Australia. Contact: Australian Oilseed Federation, Suite 2, 6A Post Office St., Pymble, New South Wales, Australia 2073.

10th Annual Meeting of the Society of Environmental Toxicology and Chemistry (SETAC), Oct. 28-Nov. 2, 1989, Royal York Hotel, Toronto, Ontario, Canada. Contact: SETAC, 1133 15th St. NW, Suite 1000, Washington, DC 20005.

Cosmetic, Toiletry and Fragrance Association (CTFA) scientific conference, Oct. 29-Nov. 1, 1989, Wyndham Franklin Plaza Hotel, Philadelphia, Pennsylvania. Contact: CTFA, Suite 800, 1110 Vermont Ave., NW, Washington, DC 20005.

American Association of Cereal Chemists (AACC) annual meeting, Oct. 29-Nov. 2, 1989, Sheraton Washington Hotel, Washington, DC. Contact: AACC, 3340 Pilot Knob Rd., St. Paul, MN 55121.

#### November

Latin American Congress on Oil Processing, organized by the Latin American Section of AOCS, Nov. 5-8, 1989, Casa Grande Hotel, Guarujá, Sao Paulo, Brazil. Contact: Gerardo Feldhaus, Química Sumex S.A. de C.V., PO Box 19-201, 03910 Mexico City 19, Mexico.

9th International Symposium on HPLC of Proteins, Peptides and Polynucleotides, Nov. 6-8, 1989, Wyndham Franklin Plaza Hotel, Philadelphia, Pennsylvania. Contact: Barr Enterprises, PO Box 279, Walkersville, MD 21793.

National Renderers Association's (NRA) 56th annual convention, Nov. 7-11, 1989, Royal York Hotel, Toronto, Canada. Contact: NRA, E. Devon Ave., Des Plaines, IL 60018.

## Errata

On Page 746 of the June 1989 *JAOCS*, the name of International Bio-Synthetics (IBIS) Inc.'s vice president of business development for U.S. operations was incorrect. The correct name is Jim Reed.

Some lines were misaligned in Table 4 in a Technical News Feature (Page 775, June 1989 *JAOCS*). The table is printed correctly below:

TABLE 4

#### Potential Annual Recoveries from Palm Minor Components

Item	Annual amounts (tons)	Major isomers
Vitamin Es		
PFAD <sup>a,b</sup>	800	$\gamma$ T3, $\alpha$ T3, $\alpha$ T1 <sup>a</sup>
Pruning	26,000	$\alpha$ T1
Replanting	380	$\alpha$ T1
Carotenoids		
CPO <sup>a,b</sup>	4,450	$\beta$ - and $\alpha$ -carotene
Pruning <sup>c</sup>	9,800	$\beta$ -carotene
Replanting <sup>c</sup>	150	$\beta$ -carotene

<sup>a</sup>See Table 2 and Figure 3 for explanation of abbreviations.

<sup>b</sup>The  $\delta$ T3 is of intermediate amount. The  $\beta$ - and  $\alpha$ -carotene ratio is about 2:1.

<sup>c</sup>Rigorous analyses were not given (see ref. 35);  $\beta$ -carotene was the presumed major isomer.