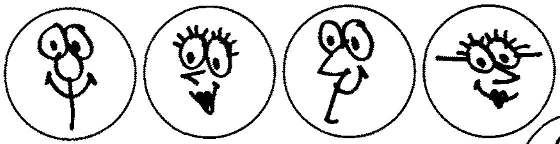
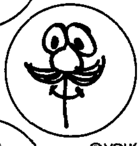
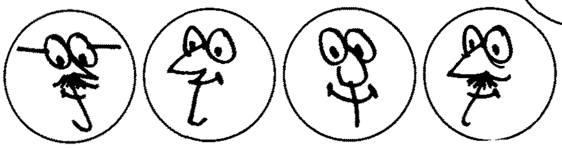


President's Club and Honor Roll





The members listed here have qualified for either the AOCS President's Club or President's Honor Roll. All current members who successfully recruit at least one new member qualify for Club membership. Successful recruitment of at least three new members is the qualification for the more prestigious Honor Roll. All Club and Honor Roll members will receive further recognition and the opportunity to participate in other special programs and activities. Special forms for use in recruiting new members are available from the AOCS headquarters.

Seven

Syamal K. Bhattacharya

Four

Ralph T. Holman

Three

Joseph P. Gatling, Jr.
James A. Laubscher

Two

Philip Bateman
Stewart T. Bauer
Stephen S. Chang
Karl W. Klein
David J. Kreige
David L. Logsdon
W.W. Nawar
Ki Park
John Ward
William Ward
F.B. White
Randall Wood

One

David Berner
James F. Berry
Edward W. Black
Howard D. Brown
Robert L. Campbell, Jr.
Ronald L. Christenson
Eugene T. Clayton
Paul D. Cretien
Bruce R. Davies
F.R. Earle
Robert L. Edwards
Richard R. Egan
Manuchehr Eijadi
David R. Erickson
Hans G. Gabriel
Louis P. Goodman
Horace P. Gormley
Maurice J.C. Harding
Robert D. Harlow
John M. Hasman
Samuel F. Herb
Thomas B. Hilton
Charles W. Hoerr
Lie Ken Jie
Jacob Katz
R.G. Krishnamurthy
Gabriel P. Lensack
William E. Link
Gary R. List
Frank Luddy
Fernando Luna
Lodric Maddox
Curtis J. Mantooth
Jack Marcas
Noboru Matsuo
William R. Morrison
Richard C. Newman
Wilbur A. Parker
Frank Passalaqua
Glenn W. Patterson
Edward G. Perkins
Robert E. Pitas
Maurice Randon
Raymond Reiser
James A. Robertson
Howard F. Robinson
Betty I. Roots
David T. Rusch
Emmett D. Russey
Eugene M. Salee
Irving R. Schmolka
John W. Schrank
Russel O. Sinnhuber
Brian Sizer
Toshimi Skiya
Vida Slawson
Lloyd M. Smith
Kah Tin Teoh
Michael D. Tomlinson
Cherry N. Villegas
Shoichiro Watanabe
James K. Weil
Lester M. Wright
Victor L. Zehnder

The individuals listed below have applied for membership in AOCS between March 1 and April 1, 1975.

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Barbara B. Ho, prod. dev. chem., The Clorox Co., 7200 Johnson Industrial Dr., Pleasanton, Calif. 94566.

Ester C. Hong, grad. stu., Department of Chemistry, University of Connecticut, Storrs, Conn. 06268.

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abstracts

EDITOR: S. KORITALA
ABSTRACTORS: N.E. Bednarcyk, J.E. Covey, J.C. Harris, F.A. Kummerow, T. Mares, B. Matijasevic, E.G. Perkins, and R.W. Walker

• Fats and Oils

A SIMPLE, SENSITIVE METHOD FOR LIPID PHOSPHOROUS. R.R. Lowry and I.J. Tinsley (Dept. of Ag. Chem., Oregon State Univ., Corvallis, Oregon 97331). *Lipids* 9, 491–2 (1974). A method is described for quantitatively determining lipid phosphorous with a linear range from 0.7–10.0 μg. The method is simple and rapid, requiring one stable reagent and a single extraction with 1-butyl acetate after the phosphorous is converted to inorganic phosphate by means of a perchlorate digestion. The stable complex is read at 310 nm.

DETERMINATION OF BROMINATED VEGETABLE OILS IN SOFT DRINKS BY A COMBINATION OF TOTAL BROMIDE ESTIMATION AND GAS-LIQUID CHROMATOGRAPHY. H.B.S. Conacher and R.K. Chadha (Food Res. Labs., Food Directorate, Health Protection Branch, Health and Welfare Canada, Ottawa, Ontario, Canada K1A0L2). *J. Assn. Off. Anal. Chem.* 57, 801–3 (1974). A procedure is presented for the determination of brominated vegetable oils in soft drinks by a combination of total bromide estimation and GLC. The method for bromide estimation involves conversion of organic bromide to inorganic bromide by potassium hydroxide fusion, followed by iodometric titration of the inorganic bromide. The bromide content of several common brominated oils ranged from 33.5% (olive) to 43.9% (soybean). Recoveries, based on bromide content, on an orange drink fortified with brominated sesame oil in the range 1–25 mgm/10 fluid ounces were 94.3–97.5%. Used alone, this technique will not provide accurate brominated oil determination unless the identity of the oil is known. The latter can be deduced from GLC. The analysis of 6 citrus-based soft drinks, using the combined procedures, showed that 5 drinks contained brominated oil in the range 3.1–5.2 mgm/10 fluid ounces; none was detected in the other drink.

DETERMINATION OF DOCOSENOIC ACIDS IN FATS AND OILS BY GAS-LIQUID CHROMATOGRAPHY. H.B.S. Conacher and R.K. Chadha (Food Res. Lab., Health Protection Branch, Health and Welfare Canada, Ottawa, Ontario, Canada K1A0L2). *J. Assn. Off. Anal. Chem.* 57, 1161–4 (1974). A rapid gas-liquid chromatographic (GLC) procedure has been developed for the determination of docosenoic acids in fats and oils. The method involves conversion of a known weight of oil to methyl esters using sodium methoxide-methanol, with a known weight of methyl tetracosanoate used as an internal standard. After acidification and extraction into hexane, esters are analyzed by GLC on a diethylene glycol succinate column. The percentage of docosenoic acids is calculated from the docosenoate and internal standard peak areas. The method is particularly suited to the determination of levels of less than 5% of docosenoic acids.

IMPROVED METHOD FOR FAT AND OIL ANALYSIS BY A NEW PROCESS OF EXTRACTION. E.L. Randall (Calif. Anal. Lab., 401 N. 16th St., Sacramento, Calif. 95814). *J. Assn. Off. Anal. Chem.* 57, 1165–8 (1974). Equipment and procedures have been designed for the rapid and accurate extraction of fats, waxes, and oils from plant and animal tissues. A 2–5 gram sample is oven-dried, immersed in hot ethyl ether for 10 min, raised out of the solvent and further extracted and rinsed with solvent condensate for 20 min. The ethyl ether is removed by evaporation and the residue is weighed. Excellent replication of results and agreement with analysts using Goldfisch and Soxhlet extractors were obtained. Intralaboratory values on feed samples ranged from 0.01 to 0.06%. Interlaboratory values for the same samples ranged from 0.03 to 0.15%. The same values for meat samples, which are less homogeneous, ranged from 0.18 to 0.72%.

DETERMINATION OF SOAP IN REFINED VEGETABLE OILS BY ATOMIC-ABSORPTION SPECTROPHOTOMETRY. D. Gegion (Res. Dept., State Chem. Labs., 16 A. Tsoha Street, Athens, Greece). *Analyst* 99, 745–8 (1974). Soap has been determined, as sodium, in alkali-refined vegetable oils by atomic-absorption spectrophotometry. The oil is treated with absolute ethanol, the mixture dissolved in ethyl methyl ketone and the solution then aspirated. Oil solutions have been compared with standards containing virgin olive oil and known amounts of sodium oleate. Concentrations of sodium oleate in the range 3 to 1,000 ppm in oil show a linear absorption. The method is rapid and accurate and can also be applied to the detection of adultration of virgin oil with refined olive or other vegetable oils.

HARD RED SPRING AND DURUM WHEAT POLAR LIPIDS. I. ISOLATION AND QUANTITATIVE DETERMINATIONS. M.J.Y. Lin (Dept. of Cereal Chem. & Technol., North Dakota State Univ., Fargo, N.D. 58102), V.L. Youngs and B.L. D'appolonia. *Cereal Chem.* 51, 17–33 (1974). Quantitative analysis of both total and individual classes of lipids extracted from hard red spring (HRS) wheat flour and durum wheat semolina was conducted. Preparative thin-layer chromatography was used to determine the distribution of nonpolar and polar lipid fractions. Of the total lipids, HRS wheat flour yielded the highest amount of polar lipids with an average of 49.0%; durum wheat semolina, 37.3%; HRS whole wheat, 29.8% and durum whole wheat, 26.4%. DEAE-cellulose column, thin-layer, gas-liquid and paper chromatography were used to determine the identity, composition, and concentration of individual components of wheat polar lipids extracted from three HRS wheat flours and two durum semolinas. Sixteen polar lipid components were studied and quantitated for each variety. Esterified monogalactosyl monoglyceride, which had not been reported previously, was tentatively identified.

HARD RED SPRING AND DURUM WHEAT POLAR LIPIDS. II. EFFECT ON QUALITY OF BREAD AND PASTA PRODUCTS. M.J.Y. Lin (Dept. of Cereal Chem. & Technol., North Dakota State Univ., Fargo, N.D. 58102), B.L. D'appolonia and V.L. Youngs. *Cereal Chem.* 51, 34–45 (1974). Extraction of wheat flour with petroleum ether resulted in bread with reduced loaf volume and poorer crumb and crust characteristics. However, when the extracted lipids were separated into 5 fractions on a silicic acid column. the baking quality was restored with addition of any one of the fractions, if shortening was present in the formulation. Without shortening, the baking properties were restored only by the fraction rich in digalactosyl diglyceride. The effects on farinogram mixing time, mixing tolerance, water absorption, etc. were also studied. Extracted durum semolina produced spaghetti pasta with higher water absorption and loss of color. Addition of nonpolar lipids restored the color and this plus monogalactosyl diglyceride improved water absorption and firmness of the spaghetti. Neither nonpolar nor polar lipids affected the cooking quality of the spaghetti to any extent.

DETERMINATION AND CONFIRMATION OF HEXACHLOROBENZENE IN FATTY SAMPLES IN THE PRESENCE OF OTHER RESIDUAL HALOGENATED HYDROCARBON PESTICIDES AND POLYCHLORINATED BIPHENYLS. M.V.H. Holdrinet (Provincial Pesticide Residue

(Continued on page 327A)

• President's Club . . . . (Continued from page 306A)

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