Salvatore Marzo, Quaker, Chiari & Forti, Silea, Italy (Cantafora)
Brian G. Mathews, San Jose State University, San Jose, California (Flider)
Mario Mikula, Beatrice Grocery Group, Fullerton, California
David E. Mills, University of Waterloo, Waterloo, Canada (Beare-Rogers)
Choon Hian Neo, Devon Industries Sdn. Bhd., Singapore
Purnomo Mulyadi Ngatio, Federal Co., Pematang Siantar, Indonesia
Viggo Creemers Norn, Palsgaard A/S, Juelsminde, Denmark
Ralph L. Price, University of Arizona, Tucson, Arizona (Jones)
P. Jagadeswara Rao, V.R.S. & Y.R.N. College of Technology, Prakasam, India
James K. Reeves, Spencer Kellogg Products/NL Chemicals, Minneapolis, Minnesota (Severson)
David D. Rosekrans, Procter & Gamble, Cincinnati, Ohio (Lowrey)
Timothy A. Scavone, Procter & Gamble, Cincinnati, Ohio (Braun)
Richard W. Schoenfeld, SVO Enterprises Corp., Columbus, Ohio (Hein)
Gopichand V. Sirur, Kanego Ruris Associates, Bombay, India (Berner)
James H. Thompson, Procter & Gamble, Cincinnati, Ohio (Schleutker)
David Tresser, United Biscuits, Bedford, England (Berner)
Yew-Min Tzeng, University of Toronto, Toronto, Canada (Hsu)
Juan Carlos Vilanova, Aceitera Chabas S.A., Chabas, Argentina (Berner)
Lynnette S. Walsh-Hentges, University of Georgia, Athens, Georgia (Richard)
Herbert Wessels, Bundesanstalt für Fettforschung, Münster, West Germany (Beare-Rogers and Firestone)
Karl Weingartner, International Institute of Education/IITA, New York City, New York
Stephen S. Williams, Louisiana State University, Baton Rouge, Louisiana
Ted R. Ziegert, CPC International-Best Foods, Union, New Jersey (Meiners)

Methodology

Analytical Q&A

(The following column is based on questions sent to AOCS' technical director. If you have a question concerning analytical methodology of fats and oils or related products, please send your question to AOCS Technical Director, 508 S. Sixth St., Champaign, IL 61820.)

Q. Is the AOCS developing an automated color in oils method?

An automated color in oils method has been studied for several years. In individual studies, correlation between manual methods and an automated method is good in some cases, poor in others. It is not possible to justify a full-scale collaborative test until consistent correlations are found. There is some resistance to change, because the current color methods have been used for a long time to establish trading and pricing in the fats and oils industry. Because there appears to be high interest in having an automated method, we are trying to identify laboratories interested in participating in studies and collaboratives.

Q. Can you send me a copy of the "Iodine Color Value" method?

The AOCS does not have such a method. You may be referring to a color in oils test method based on potassium iodide solutions. The method is that of the DGF (Deutschen Gesellschaft für Fettwissenschaft). A reference to this method was made by Mehlenbacher in *The Analysis of Fats and Oils,* p. 442, but there are no details of the test.

Under the OSHA ruling on hazard communication (effective May 25, 1986), are material safety data sheets (MSDS) required for food products and ingredients, e.g., edible lard?

Labels (safety data sheets) are not required for any food, food additive, color additive, drug or cosmetic, including materials intended for use as ingredients (e.g., flavors and fragrances), as such terms are defined in the Federal Food Drug and Cosmetic Act. See *Federal Register,* Vol. 48, No. 228, pp. 53349-53347, Nov. 25, 1983 (amendment to Subpart 2 of Part 1910, Title 29 CFR).

What are the smoke points of olive, peanut, corn, sunflower, soybean and cottonseed oils?

The smoke point of a vegetable oil is dependent on the free fatty acid content, rather than the nature, of the oil. Most RB&D oils would have a smoke point in the range of 410-425 F (free fatty acid content of 0.05%). Edible olive oil normally has a higher free fatty acid content (ca. 2.0%) so the smoke point is lower—280-300 F. See *Oil and Soap* 19:193 (1942).

Q. The Villavecchia test is an AOCS official method for detecting sesame oil. What is the historical evolution of the test?

Camoin in 1850 observed the formation of a red color when sesame oil was shaken with concentrated hydrochloric acid and a small amount of cane sugar. In 1878, Baudouin investigated the test further, but made no changes in the reagent. The test then came to be called the Baudouin Test. In 1893, Villavecchia and Fabris replaced the cane sugar with furfural. A more appropriate name for the test would appear to be either the Villavecchia-Fabris Test or the Modified Baudouin Test. See *JAOCS* 30:382 (1953).