Chemicals, Cincinnati, Ohio (Kinsman, Zilch)
Kenneth B. White, Unichema Chemicals Inc., Chicago, Illinois
Melody A. Wilk, The Lubrizol Corp., Wickliffe, Ohio
Marianne Winning, Danochemo A/S, Ballerup, Denmark
Charlie Wolf, S&W/Microbac, Louisville, Kentucky
Stan Wright, Chemol, Greensboro, North Carolina (Wellons)

**Corporate members**
Oscar E. Moreno, representing United Oil, Miami, Florida
Ric J. Oeters, representing Nord Sil-Flo Corp., Dayton, Ohio (Passalaqua)

## Methodology

# Method development update

**Harmonization meeting**
The IUPAC Workshop on the Harmonization of Collaborative Analytical Studies met at the ISO (International Organization for Standardization) Central Secretariat, Geneva, Switzerland, May 4–5, 1987. Twenty-seven representatives of organizations with an interest in collaborative studies participated. In all, 10 European countries and the U.S. were represented.

Agreement was reached on 11 recommendations as minimum requirements for collaborative chemical analytical studies. When following these recommendations, organizations may superimpose any additional requirements for their specific needs. The recommendations include guidelines to be met before beginning a full-scale collaborative study, standardization of the symbols and terms for designating the parameters developed by a collaborative study (repeatability, reproducibility, variances, etc.) and protocols for dealing with outlyers. The necessity of analyzing collaborative studies by the one-way analysis of variance (ANOVA) was noted. While more complex analyses were not precluded, the fundamental one-way ANOVA is compulsory to estimate the components of variance.

Participants expressed the need to continue a program of harmonization of other aspects of the practice of analytical chemistry. Participants requested that the recommendations be transmitted to ISO/TC 69 Secretariat (Application of Statistical Methods), to the parent organizations for adoption and implementation and to IUPAC (International Union of Pure and Applied Chemistry) for continuation of the program of harmonization.

Some of the more general aspects noted in the harmonization recommendations appear in AOCS Procedure M 4-86, Collaborative Study Procedures. The more specific recommendations, as they relate to the symbols and terms for designating the parameters developed by a collaborative study, will be used as a basis for updating AOCS Procedure M 1-59, Determination of Precision of Analytical Methods.

**Tanker contamination**
At a recent meeting with FOSFA (Federation of Oils, Seeds and Fats Associations Ltd.) International representatives, serious concerns were raised about potential contamination of cargo shipments of edible oils with pesticide residues, petroleum products and lead-containing materials. These concerns have led FOSFA to initiate a research program to develop rapid screening methods, methods for final determination and methods for edible and non-edible products that are applicable to the determination of potential contaminants.

The research program will need support at both technical and financial levels. Anyone interested in participating should contact the AOCS technical director.

Dave Berner
AOCS Technical Director