# Report on the ISO meeting

The International Standards Organization (ISO) held the seventh meeting of the Animal and Vegetable Fats and Oils Commission (TC 34/SC 11) in London, England, July 1-4, 1986.

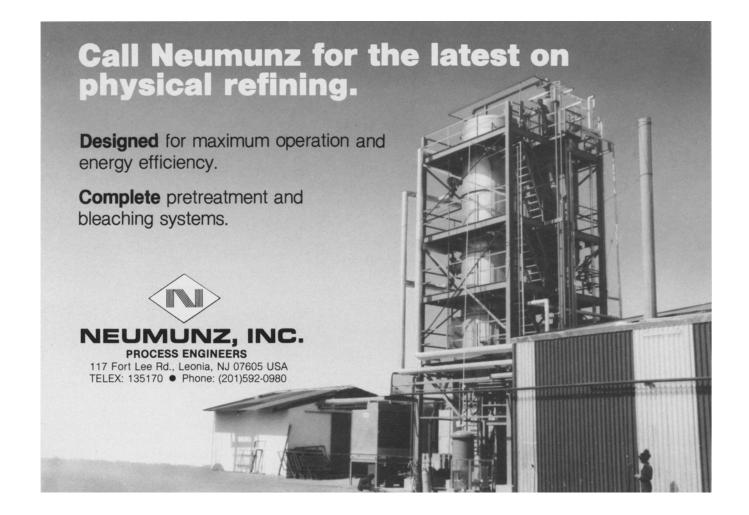
Countries represented at the meeting were France, West Germany, Hungary, the Netherlands, the United Kingdom, Yugoslavia and Poland. Other organizations represented by observers were the Association of Official Analytical Chemists (AOAC), CODEX, the Federation of Oils, Seeds and Fats Associations Ltd. (FOSFA) and the International Union of Pure and Applied Chemistry (IUPAC). Arthur Fenlon of the United Kingdom, officially representing IUPAC, was elected chairman of the meeting.

Since the previous meeting held in London in December 1984, six standards have been adopted and five standards have reached the international drafting stage. The main items on the agenda for the July 1986 meeting were a discussion of the previous meeting, consideration of revisions to published standards, review of draft proposals, consideration of drafts of proposed work items and consideration of items for future work.

From the previous meeting, the main item reviewed was Resolution 91, dealing with guidelines for international collaborative tests. There was considerable discussion on this subject, with emphasis on the importance of publishing statistics and precision and reproducibility clauses for each standard

method. Dennis Pocklington noted that in a collaborative study, there should be the maximum number of laboratories performing duplicate analyses rather than fewer laboratories performing more analyses—triplicate, quadruplicate, etc.

Revisions of published standards for Animal Fats and Oils were approved or clarified for methods dealing with Preparation of Test Samples, Determination of Boemer Value, Determination of Ultraviolet Absorbance and Determination of Composition of the Sterol Fraction by GLC. It was decided that additional studies need to be performed to obtain satisfactory statistics for the Determination of Moisture and Volatile Matter (comparing the oven and hot plate methods) and to determine column



#### Methodology

efficiency in the method for the Analysis of Methylesters of Fatty Acids by GLC.

Additions and revisions to drafts for standards were made and approved for Determination of Slip Point in Open Capillary Tubes; Frying Fats—Determination of Polar Compounds; Determination of Water by Karl Fischer Method; and Determination of Copper, Iron and Nickel by Atomic Absorption Spectroscopy. A decision on the Accelerated Oxidation Test could not be made, because collaborative results were not received in time to prepare a draft of the method. This method will be circulated at a later date.

Drafts of proposed standards for study were reviewed. Regarding a method for tocopherol content in oils, Pocklington noted the satisfactory results achieved in the IUPAC collaborative study using HPLC and indicated he was going to recommend the adoption of this method by IUPAC. ISO plans to compare the results of the German collaborative study (using a less polar solvent than the IUPAC method) with the IUPAC results.

For the determination of alkalinity, it was decided to combine the three current methods into one standard method. A proposal was pending to establish specifications for animal and vegetable fats and oils. The general consensus was that ISO should proceed with this project, contacting trade organizations to determine what specifications should be made.

The draft of the proposal to establish a method for residual solvents in oils was amended to require the use of freshly refined and deodorized oil. This would give an oil which would be free of oxidation products that could decompose to give hexane-like artifacts in the study.

The proposal to establish a standardized bleach test was not approved, and it appears that no further work will be done on the project. The major concerns were that it would be difficult to develop a method that would be suitable on an international basis, and that there was no mutually acceptable method for color determination.

Items considered for future work included: revisions of the methods for peroxide value and iodine value; development of methods to determine the absolute contents of sterols, to determine fat stability at ambient temperature (resistance to rancidity), and to determine the phosphorus content of oils.

Dave Berner AOCS Technical Director

#### New Publications

### **New books**

Analysis of Fats and Oils, edited by R.J. Hamilton and B.A. Rossell, Elsevier Science Publishing Co. Inc., PO Box 1663, Grand Central Station, New York, NY, and Elsevier Applied Science Publishers, Crown House, Linton Road, Barking, Essex IG11 8JU, England, 1986, 456 pp., US \$86, £52.

The Physical Chemistry of Lipids from Alkanes to Phospholipids: Handbook of Lipid Research, by Donald M. Small, Plenum Publishing Co., 233 Spring St., New York, NY 10013, 1986, 672 pp., \$89.50.

Solubility and Related Properties, by Kenneth C. James, Marcel Dekker Inc., 270 Madison Ave., New York, NY 10016, 1986, 432 pp., \$69.75 US & Canada, \$83.50 elsewhere.

Flavor Chemistry and Technology, by Henry Heath and Gary A. Reineccius, AVI Publishing Co., PO Box 831, Westport, CT 06881, 1986, 442 pp., \$55.

Doctoral Dissertations in Food Science and Other Food Related Areas, edited by Manfred Kroger, Technomic Publishing Co. Inc., 851 New Holland Ave., Lancaster, PA 17604, 1986, 193 pp., \$35.

From Lipidforum, Lipidforum Secretariat, Box 5401, S-402 29,

Göteborg, Sweden:

Proceedings, Lipidoxidation Symposium, 24 papers totaling 206 pp., SEK 230 (approximately US \$33).

Proceedings, 13th Scandinavian Symposium on Lipids, 35 papers totaling 229 pp., SEK 135 (approximately US \$20).

## **New journal**

Solvent Extraction and Ion Exchange, edited by E. Philip Horwitz and James D. Navratil, Marcel Dekker Inc., 270 Madison Ave., New York, NY 10016, six issues per year, \$171.50 institutional rate, \$116 individual rate.