International

New Zealand conference on oils, fats and waxes

The following report from New Zealand was provided by AOCS Emeritus Member Stanley Brooker, an honorary lecturer in the Department of Chemistry at the University of Auckland.

Plans are going well for the International Conference on the Chemistry, Biochemistry and Technology of Oils, Fats and Waxes to be held Feb. 13-17, 1983, at the University of Auckland. Copies of the first circular are available from Stanley Brooker, Chemistry Department, University of Auckland, Private Bag, Auckland, New Zealand.

The conference will cover all aspects of the industry, from production through research to marketing. Brooker said there is particular interest in New Zealand in animal fats and fish oils as well as a developing vegetable oil industry.

Immediately preceding the conference, the 15th Pacific Science Congress is to be held in Dunedin, New Zealand from Feb. 1-11, 1983.

Centrifugal fractionation of fats: When did it begin? The March 1981 *JAOCS* (p. 174), in a paper by Hastert, noted that centrifugal fractionation recently has been applied to soybean salad oil and that it had been developed for fractionating palm oil. The Henkel Company of Germany was issued a British patent (743 166) in 1956. A similar process has been used successfully since 1964 on beef and mutton in New Zealand. It was introduced in Australia about the same time. It would be interesting to know what was the first commercial use of the process and what material was being used.

Orange roughy wax: The orange roughy is a fish caught in quantity at a depth of 900 meters off the Chatham Rise, about 800 kilometers east of the South Island of New Zealand. It contains a liquid wax, with the main constituents being monounsaturated C:18 acids and alcohols. It could be a replacement for waxes from endangered species. A three-ton batch has been successfully hydrogenated. The flesh of the fish is also very tasty. □

"Fats in Nutrition" topic of Danish lecture

The role of deep-frying fat in human nutrition was discussed by Vagn Jespersen in a lecture at the Danish Engineering Institute.

Jespersen, president of Foreningen af Premier Jus Fabrikanter i Danmark (The Association of Edible Fats Manufacturers in Denmark), cited work performed by George V. Mann, who suggested that the presence of high cholesterol levels in some humans could be related to an inability to transform cholesterol into bile acid. Noted also was A.J. Vergroesen's report that people who consume *trans* fatty acids together with ordinary quantities of cholesterol experience a hypercholesterolemic effect.

Jespersen described the testing performed by his firm to evaluate the sensory quality of various deep-frying fats. After three hours at a temperature of 200 C, groundnut oil ranked highest in sensory quality, followed by refined animal fat (lard), soybean oil, and refined hydrogenated coconut oil. Olive oil, which ranked lowest, was withdrawn from the test before completion because of its poor performance. After 24 hours of testing, quality rankings were the same, but soybean oil was removed from the test after 20 hours due to overfoaming and color change, and the coconut and olive oils were withdrawn after three hours. □