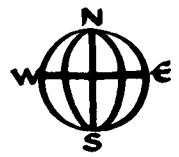


Four Corners



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Germany H.K. Mangold

New research facilities at Münster

For many years, a major section of the late H.P. Kaufmann's research group, the Institute for Industrial Fat Research, has been accommodated in a provisional wooden building. Just about three years before he passed away, H.P. Kaufmann succeeded in building a new and well-equipped institute, the "Institute for Biochemistry and Technology" which was amalgamated into the Federal Center for Lipid Research and named "H.P. Kaufmann Institute" in honor of its founder. Since that time, the Federal Center for Lipid Research consists of two units, the "Institute for General and Analytical Chemistry" and the "Institute for Biochemistry and Technology."

Recently, the old wooden structure of the former "Institute for Industrial Fat Research," which had not been in use for several years, was completely renovated with financial support by the Federal Department of Agriculture and provided with all modern facilities.

The new building has been equipped to provide facilities for nutritional studies with rats and other laboratory animals including fish. In addition, part of this building has been designated to be used in work on plant physiology. The center's library has been moved to the same building.

For the past five years, the activities of the Institute for

Biochemistry and Technology have been extended to include work on plant proteins. Processes have since been developed for the preparation of protein concentrates [K.D. Mukherjee et al., *Fette Seifen Anstrichm.* 78:306 (1976)] and protein isolates [A.S. El Nockrashy et al., *J. Agric. Food Chem.* 25:193 (1977)] from rapeseed. Earlier this year, a large laboratory of the H.P. Kaufmann Institute was especially equipped for studies on proteins.

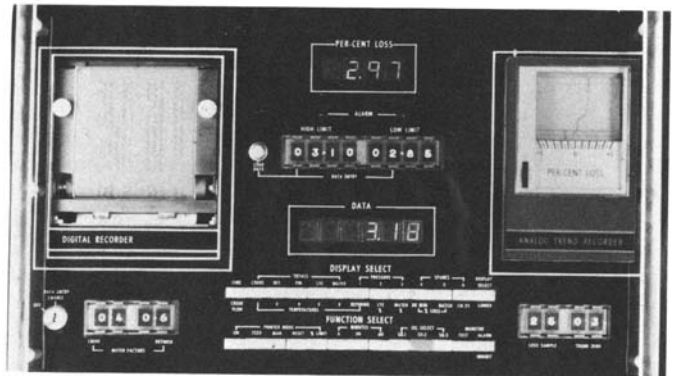
Collaborative efforts of technologists and nutritionists have been concerned with the nutritional evaluation of rapeseed proteins [A.S. El Nockrashy et al., *Nutr. Metab.* 19:145 (1975)] and the oil of new rapeseed varieties [K. Ilsemann et al., *Fette Seifen Anstrichm.* 78:181 (1976)]. These joint activities are greatly furthered by the availability of new laboratories and sophisticated equipment.

Investigations on the lipids of plant cell cultures are being continued. A review published recently provides detailed information regarding the lipid contents, the composition of lipid classes as well as their fatty acid patterns, and the various factors affecting the lipids in plant cell cultures [S.S. Radwan and H.K. Mangold, *Adv. Lipid Res.* 14:171 (1976)].

It can be expected that plant cell culture techniques will find extensive application both in fundamental studies and in applied lipid research. Plant cell cultures are of special

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value in programs that are aimed at breeding oil-bearing plants and propagating valuable varieties vegetatively. By growing cell cultures in media supplemented with radioactively labeled lipids, it is possible to study the metabolism of these compounds. As the composition of lipid classes in plant cell cultures as well as the patterns of their constituent fatty acids are affected by the environmental conditions prevailing during growth, it is possible to direct the metabolism of certain lipid compounds toward the production of valuable substances. Thus, at the Federal Center for Lipid Research, suspension cultures are being used for the preparation of labeled polyunsaturated fatty acids and of complex lipids including steryl glycolipids tagged with ^{14}C in either the steryl group, the sugar moiety or the acyl rest. This work became possible, two years ago, when a complete radioisotope laboratory was installed at the H.P. Kaufmann Institute. An integral part of a nationwide program on new technologies, the project is being supported by the Federal Department of Science and Technology, Bonn.

Also with support by the Department of Science and Technology an international symposium on plant cell cultures has been conducted in Munich, in September 1976. The proceedings of this symposium, "Plant Tissue Culture and Its Bio-Technological Application," a volume edited by W. Barz, E. Reinhard, and M.H. Zenk, has just been published by Springer-Verlag, Berlin, Heidelberg, New York.

Japan T. Asahara
16th Annual Fall Meeting of JOCS

The 16th Annual Fall Meeting of the Japan Oil Chemists' Society was held at the campus of Osaka University in Osaka on Nov. 1-2, 1977, and ninety papers including two special lectures were presented. The lectures were "Synthesis and Structural Effects on Surfactants" by T. Kuwamura of Gunma University and "NMR Analysis of Fatty acids and Their Derivatives Using Shift Reagents" by M. Noda of Kyoto Prefectural University.

Visitors from overseas

D. Swern of Temple University, in the U.S., and H.F. Eicke of Basel University, in Switzerland, visited Japan to attend the IUPAC Annual Meeting held in Tokyo on Sept. 4-10, 1977, and presented papers on "New Developments in the Oxidation of Alcohols to Carbonyls by Activated Dimethyl Sulfoxide" and "Cell-Cell vs. Micelle-Micelle Fusion: Comparative Model Considerations on the Effect of Membrane Agents," respectively. After the meeting they visited several places in Japan to give lectures and discuss mutual concerns of current topics on fat and oil chemistry with Japanese academic and industrial people.

Japan joins World Conference on Soap and Detergents

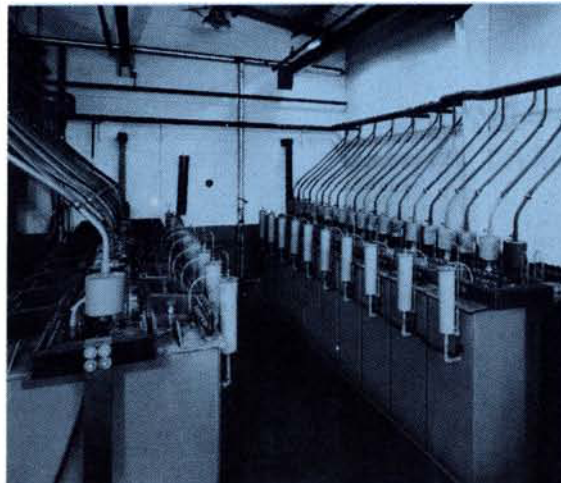
Three papers from Japan were presented at the World Conference on Soaps and Detergents held in Montreux, Switzerland on Oct. 9-14, 1977. The papers were "Trends of the Soap and Detergent Industry in Japan and Asia" by F. Tokiwa of Kao Soap Co., "Total Hardness Ions in Laundry Washing Solutions" by Y. Yamaji of Procter & Gamble Sun Home Co., and "Recent Findings and Experiences with Alpha Olefin Sulfonates" by Y. Yamane of Lion Fat and Oil Co.

JIS related to detergent

Japanese Industrial Standard (JIS) of synthetic detergents for home laundry, K3371-1972, was revised. The revised items, K3371-1976, were total phosphate: 12% maximum from 8-20%, degree of biodegradation: 90% minimum from 85% minimum, and detergency, newly added: higher than the standard detergent. ●



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