

Ernest Klenk Named for Second AOCS Award in Lipid Chemistry

Stillman Announces Selection at Houston

Professor Ernest Klenk of the University of Cologne, Cologne, Germany, became the second recipient of the AOCS Award in Lipid Chemistry, announced April 26, 1965, in Houston.

Sponsored by Applied Science Laboratories, State College, Pa., the award consists of a certificate and a \$2,500 honorarium, in recognition of outstanding achievement in the lipid field.



Prof. Ernst Klenk

Unfortunately, Professor Klenk was unable to attend the Houston Meeting, due to illness. The AOCS Governing Board decided to postpone the formal presentation until the Fall Meeting in Cincinnati next October.

AOCS President R. C. Stillman announced the selection of Professor Klenk at the opening session in Houston, praising Klenk for his contribution to lipid research and expressing the wish of the entire membership for his early recovery. Dr. Arthur Rose, President of Applied Science Laboratories, will be present at the October meeting to take part in the Award ceremony.

Professor Klenk is widely regarded as the "Dean of Lipid Research." Some will know him best for his work on fatty acid metabolism, for he pioneered in the general methodology in this field. He used column chromatography prior to the advent of gas-liquid chromatography before many others. He demonstrated the existence of families of fatty acids and deduced much about the metabolic interrelationships of fatty acids, particularly the polyunsaturated and essential fatty acids. His studies covered plants, higher animals, and fish, with remarkably accurate results, in spite of problems of methodology in an area which was entirely new as he began his research.

He first demonstrated the presence of inositol-containing lipids (the inositol phosphatides) in soybean lipid extracts. One of his most outstanding achievements was the discovery of the important class of brain lipids, the gangliosides. He succeeded in isolating one of the gangliosides in crystalline

form from brain lipid extracts and demonstrated that gangliosides were markedly elevated in Tay-Sachs disease (an inherited and fatal disease in infants leading to complete failure of brain development and function).

The discovery of a new class of brain lipid and its alteration in disease opened the way for many further studies. At Houston, April 25-28, 1965, a Symposium on Glycolipids and the Nervous System was organized to cover the recent advances in ganglioside structure and metabolism, as well as other glycolipids.

Professor Klenk also discovered that sphingomyelin is elevated in the brain and other organs in Niemann-Pick disease, another inherited metabolic disease of children. This demonstration brought the total of such diseases known to involve lipids to three (two were discovered by Professor Klenk and one, Gaucher's disease, had been discovered many years earlier). Only within the past four years has another disease, metachromatic leucodystrophy, been added to this list and shown to be related to faulty metabolism of sulfatides in brain and other organs. This attests to the difficulties in the field, and it is remarkable that Professor Klenk discovered the basic defect in two of the four diseases in humans known to involve lipid metabolism. This constitutes a truly remarkable achievement.

Dr. Margarete Klenk Gives Résumé of Husband's Career

Ernst Klenk was born October 14, 1896, in Pfalzengrafenweiler, a village near Freudenstadt in the Black Forest.

According to notes supplied by his wife, Dr. Med. Margarete Klenk, his outstanding abilities were noted at an early age, particularly in mathematics, and he was prepared by his family for advanced education.

After World War I, he took up residence in Tübingen and moved into the Institute of Physiological Chemistry. He received his doctorate at the University of Tübingen in 1923. From 1923-1936 he worked as a collaborator of professors Thierfelder and Knoop. In 1936 he received a personal professorship for physiological chemistry at the University of Cologne. In 1947-1948 he was dean of the medical faculty and from 1961-1962, he was rector of the University.

Professor Klenk was married to Dr. Med. Margarete Klenk in 1937. They have three sons.

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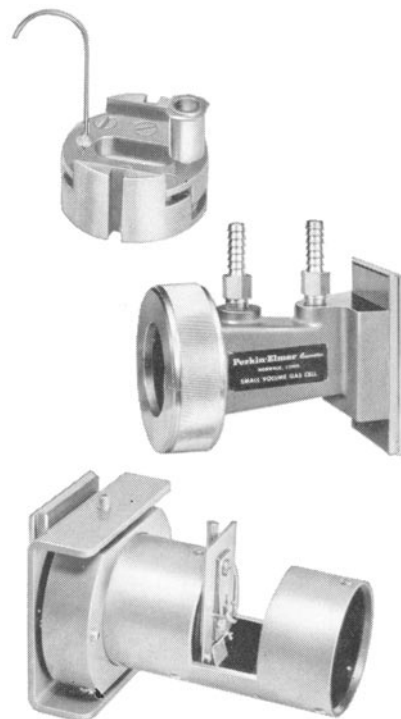
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