IN MEMORIUM

HARRY LOUIS LOCHTE

Professor Harry Louis Lochte died December 12, 1976 after a lengthy illness in Montgomery, Alabama. He is survived by two sons, Paul Lochte, M.D., of Montgomery, Alabama, and H.L. Lochte, Jr., M.D., of Olean, New York, and four grandchildren, Vernon Paul Lochte of Montgomery, Alabama, and Elizabeth Lochte, Susan Lochte and Jane Lochte of Olean, New York. His wife, Floy Guynes whom he married in 1922, died in 1974.

Professor Lochte was born October 18, 1892, in Fredericksburg, Texas. After completing his secondary education at the Country School in 1907, he taught in the Country School and attended Southwest Texas State Teachers College where he obtained a Permanent Teacher Certificate in 1912. He subsequently taught in the Brackettville High School (1915-16) and in the New Braunfels High School (1916-17). He completed the B.A. degree at the University of Texas in 1918 while serving as an assistant in the Department of Chemistry. His studies were interrupted by World War I and during 1918-19 he served in the U.S. Navy Hospital Corps in the clinical laboratory. His graduate work was initiated at the University of Texas in 1919-20, and he served as a graduate assistant during that year. Subsequently he became a graduate assistant and Fellow at the University of Illinois which he attended from 1920-22. Under the direction of Professor William Albert Noyes, Sr., he completed the Ph.D. degree in Organic Chemistry at the University of Illinois in 1922 and returned to the University of Texas. He served as Instructor (1922-25), Adjunct Professor (1925-27), Associate

Professor (1927-36), Professor (1936-67), and Professor Emeritus since 1967.

He was a member of the American Chemical Society and Sigma Xi, and a charter member of the Texas chapter of Phi Lambda Upsilon. He served on various committees and was Chairman of the Central Texas Section of the American Chemical Society. Beginning in 1926, he served several years as Chairman of the Department of Chemistry. For about 25 years he was chairman of the Committee for the Chemistry Library, and he was largely responsible for the very high quality of the library.

Professor Lochte was one of the devoted pioneers in research and teaching in chemistry in the Southwest and for his outstanding achievements he received the 1961 Southwest Regional Award of the American Chemical Society.

His pioneering research on the chemistry of polar components of petroleum and shale oil resulted in the isolation and identification of more than fifty compounds. He was noted for his development of new methods and techniques, particularly for fractionation of complex materials. He was the inventor of the "spinning band" distillation column. Another significant achievement was his discovery of the steric hindrance effects of β-methyl groups in organic acids and related compounds resulting in the chemical inactivity of the functional group.

In 1938 an outstanding chemist commented upon the lack of success in the isolation of a single pure compound from the napthenic acids in petroleum. From 1938 to 1960, Professor Lochte and his students isolated all of the

napthenic acids obtained in pure form during that period, and were the first to isolate a majority of these compounds, only four of which were first isolated in other laboratories. Of the thirty-five napthenic and aliphatic acids isolated from petroleum during this period, twenty-eight of these were isolated in Professor Lochte's laboratories with eighteen of these being reported for the first time in publications by Dr. Lochte and his students. In addition, an anhydride and five ketones were isolated from petroleum.

Professor Lochte also contributed significantly to our knowledge of the basic constituents of petroleum by continuing the work of the late Professor J.R. Bailey so that about 80 percent of the basic constituents of petroleum known during that period were first isolated and identified at the University of Texas. This work was extended to the isolation of a number of basic constituents of shale oil.

The isoprenoid structure of certain groups common to acidic and basic constituents gave further evidence of the origin of petroleum from plants.

His work on steric hindrance led to the first preparation of a stable aliphatic ketimine and numerous unreactive amides, ketones and other compounds.

Professor Lochte was one of five professors who were originally responsible for early development of the graduate program in chemistry at the University of Texas. He was in charge of the undergraduate course in organic chemistry for majors in chemistry and chemical engineering for over twenty years; he taught over a long period of time courses such as analytical organic chemistry, organic reactions, and stereoisomerism in the graduate

program, and served as Graduate Advisor for several years.

Professor Lochte was respected for his vast knowledge and his ability to challenge students to do their very best. Professor Lochte with exceptional regularity read new journals as they arrived in the library. His ability to recall various research works published even in fields unrelated to his own interest was remarkable.

Professor Lochte's former students recall his unusual ability to know each student even in exceptionally large classes not only by name and his grades but also in terms of an amazingly accurate judgement as to what grade the student should be making in his class. He made it apparent to both graduate and undergraduate students that he expected them to perform to the best of their ability, and his former graduate students will fondly recall his daily initial visit in their laboratories and the opening question with his German accent--"What you know?"

His skills in research and teaching are reflected not only in his original research but also in the success of his former students. On the occasion of Dr. Lochte's retirement, his former students presented an outstanding symposium on geochemistry.

Both he and his lovely wife will be long remembered for their deep concern and friendship for both colleagues and students.

Lorene L. Rogers

Lorene L. Rogers, President of
The University of Texas at Austin

Bill D. Francis

Bill D. Francis, Secretary of the
General Faculty

This Memorial Resolution was prepared by a Special Committee consisting of William Shive (Chairman), George W. Watt, Jack E. Myers and Osmond P. Breland