

THE UNIVERSITY OF MICHIGAN
Regents Communication

ACTION REQUEST

Subject: Report of Faculty Death

Action Requested: Adoption of Memorial Statement

The Regents of the University of Michigan acknowledge with profound sadness the death of **Emmett Leith**, Schlumberger Professor of Engineering and professor of electrical engineering and computer science. Professor Leith, a revered College of Engineering faculty member for 52 years and one of the early innovators of holography in the 1960s, died on December 23, 2005, at the age of 78.

Professor Leith received B.S. and M.S. degrees in physics and a Ph.D. degree in electrical engineering, all from Wayne State University. He also received an honorary Doctor of Science degree from University of Aberdeen. His research touched areas such as synthetic aperture radar, optical processing, and holography.

At the Optical Society's 1964 spring conference, Professor Leith and other College of Engineering researchers displayed a revolutionary laser-transmission hologram that proved to be a dramatic first step in developments that made life easier, safer, and more efficient. Double-exposed holograms, for example, provided data that improved the design of containers for the transport and storage of nuclear materials. Aircraft engineers used holography to visualize shockwaves and pinpoint the areas of greatest stress on wings and turbine blades. Forensic scientists have used holograms to uncover mysteries in the body. Optical computers use holography to store data. And today's everyday credit cards use holograms to record and store information. Through the development of holography, Professor Leith changed the world.

Professor Leith authored or coauthored about 200 papers. He is listed in various publications, including *Who's Who in America*. He is a fellow of IEEE, the Optical Society of America, and the SPIE, and he is an honorary member of the Engineering Society of Detroit. He received numerous awards, including the Liebmann Award of IEEE, the Herbert Ives Medal of OSA, the Gold Medal of SPIE, the Progress Medal of the Royal Photographic Society of Britain, and the National Medal of Science. He was a member of the National Academy of Engineering.

Professor Leith is survived by June, his wife of 49 years, their two daughters, Pam Wilder of San Jose, California, and Kim Leith of Baltimore, Maryland, and three grandchildren.

Requested by:



Sally J. Churchill
Vice President and Secretary of the University

January 2006