

# Thor Rhodin

*December 9, 1920 — February 17, 2006*

Professor Thor Rhodin died quietly in his sleep on February 17, 2006. He was an eminent scientist and educator, a dedicated Quaker and a devoted family man.

He earned his B.S. degree from Haverford in 1942 and his Ph.D. degree from Princeton in 1946. His career as an educator spanned more than 30 years beginning at the James Franck Institute of the University of Chicago and ending at the School of Applied and Engineering Physics at Cornell University during which time he taught at Cambridge University and the Massachusetts Institute of Technology as well. Professor Rhodin, widely recognized for his distinguished research in surface chemistry at DuPont and the University of Chicago, joined the Cornell faculty as an Associate Professor in 1958. Thor's enthusiastic dedication to the Engineering Physics undergraduate program throughout his long career at Cornell had a significant influence in the development of the Engineering Physics curriculum; his contributions were a major force contributing to the "first in the nation" ranking enjoyed by our Engineering Physics Department. He lectured on a wide range of subjects in the physical sciences to countless undergraduate, graduate and post-doctoral students on three continents. He is remembered by his students as an outstanding teacher and trusted and sympathetic advisor, whose office was always open. Long after his retirement in 1991, Thor continued as Professor Emeritus to be an active teacher and advisor, maintaining enthusiastic interests in graduate seminars in surface science and in introduction to engineering courses for freshman and sophomores.

Professor Rhodin is credited with pioneering work in the early days of solid-state surface sciences beginning with his research on surface analysis using Auger electron spectroscopy. He played a major role, over several decades, in shaping the development of the field from fundamental work, using the field ion microscope, on the imaging and bonding of individual atoms at surfaces to the fundamentals of surface catalysis of hydrocarbon chemistry by the transition metals. His early work at Cornell on the atomic processes that led to the formation of oriented epitaxial crystalline films on substrates is still quoted extensively in current literature. Thor had a reputation for excellent instincts in choosing the directions of research that would make the biggest impact in the fields of surface physics and surface chemistry. Author of more than 200 scientific articles over his career, Thor attracted the best students to work with him, many of whom have subsequently become recognized leaders in the field in their own right. He

received the Humboldt Senior Scientist Prize in 1986, was a fellow of the American Physical Society, and served as advisory editor on numerous scientific journals.

In his 80s, Thor actively participated in cutting-edge research in the field of atomic force microscopy (“AFM”). He enthusiastically pursued interdisciplinary initiatives involving physics, surface sciences, microbiology and genetics, culminating in the publication of several articles on the imaging of RNA polymerase II. This research illustrated the use of AFM as a direct imaging tool for large protein complexes that are being increasingly recognized to be critical for many cellular functions.

Thor worshipped with the Ithaca Society of Friends and actively supported its mission from 1958 until his health began to deteriorate. He served as its Clerk from 1976-78 and was active in its First Day School in the 1960s and the 1980s. At various times, he acted as Recording Clerk on numerous committees including the Program Committee, Ministry and Oversight, Trustees, Peace and Social Action and the Burt House Committee; in addition, he frequently served as the Meeting’s representative at Regional Meeting and the New York Yearly Meeting. As a longstanding member of the Union of Concerned Scientists, he was steadfast in his support of their work in addressing critical arms control and environmental issues. Working evenings and weekends, Thor was an active draft counselor during the Vietnam War.

He is survived by his wife of 57 years, Elspeth Lindsay Rhodin, his four children and seven grandchildren. His son, Robin, practices as an orthopedic surgeon in Beaufort, South Carolina. His daughter, Ann, is an artist living in Ithaca, New York. His son, Lindsay, is a merchant banker in London, England, and his son, Jeffrey, is a business process re-engineering expert based in Boston, Massachusetts.

*John Blakely, John Silcox, Watt Webb, Terrill Cool*