



Mechanical Engineering  
Academy of Distinguished Alumni

**H. Grady Rylander, Jr., Ph.D., P.E.**  
*Charter Member*

BSME, The University of Texas at Austin, 1943  
MSME, The University of Texas at Austin, 1952  
Ph.D., Georgia Institute of Technology, 1965

*Professor Emeritus, College of Engineering*  
The University of Texas at Austin

Grady Rylander, as he was known to friends and colleagues, was born August 23, 1921, on a farm in Frio County, Texas. He graduated in 1939 from Pearsall High School, where he lettered in football, tennis and track, and played guitar. He entered the University of San Antonio in 1939 and transferred in 1941 to The University of Texas at Austin, earning a BSME in June 1943.

Following graduation, he was employed by Westinghouse Electric Corp. in Pennsylvania, where he conducted fatigue tests of gas turbine blades and designed bearings and lubrication systems for aircraft gas turbines. On September 24, 1943, he married his college sweetheart and classmate, Grace Elizabeth (Betty) Zirkel.

In September 1947, Grady joined the faculty at UT Austin as an assistant professor. He taught courses in heat/power engineering, machine design, and tribology (the science of bearings and lubrication), while at the same time working on his MS degree, which he received in 1952. Between 1949 and 1956, Grady held summer positions with Fargo Engineering Corp (designing heavy machinery for the hydroelectric dams on the Lower Colorado River), UT's Defense Research Laboratory, and Magnolia Petroleum Company.

Grady was granted a leave of absence from UT in 1961 to pursue a Ph.D. degree at Georgia Tech, where he carried out his dissertation research on characteristics of multiphase lubricants. He returned to full-time teaching and research at UT in 1963 and earned his Ph.D. in 1965. In 1968, he was promoted to professor.

In 1970, Grady began a research collaboration on the design of homopolar generators. These flywheel-type devices store large amounts of energy and discharge

high-powered short duration pulses of electricity. This initiative culminated in the founding of the Center for Electromechanics (CEM) in 1977, which Grady directed until 1985. During this period, CEM grew into a world-class research unit focusing on the development of pulsed electric power and inertial energy storage machines and their military, scientific, and industrial applications.

Grady served as associate chair of the ME department from 1974-76, and was appointed chair in 1976. He served as chair for ten years, during which time ME saw many positive changes, including the move into the ETC II building and major growth and diversification of the faculty. During this period undergraduate enrollment grew from 577 to 1,108, graduate enrollment grew from 146 to 257, and research funding increased from \$1.35 million to \$5.24 million. Under his leadership, the ME department achieved the highest ratings in its history for the quality and effectiveness of its doctoral program.

Grady held several honorary professorships, including the Joe J. King Professorship (1983-85). In 1985, he received the Leonardo da Vinci Award from ASME's Design Division. During the course of his 63-year career at UT Austin, Grady supervised 61 masters and 13 Ph.D. students, published 120 technical papers, edited or co-edited 8 books, and was inventor or co-inventor on 4 patents.

Although he was professionally accomplished, his greatest passion was his beloved Betty, their four children, and twelve grandchildren. He was also known for his outdoor interests including fishing, hunting, and ranching. Grady was also very active in both the Methodist and Baptist Churches.