In Memoriam

Frank N. Edmonds, Jr.

Frank N. Edmonds, Jr., Professor Emeritus of astronomy at The University of Texas at Austin, died at his home on September 3, 1986, one day after he turned 67. He had retired because of ill health on August 2, 1984, after 32 years of dedicated service to the University, during which he is credited with being one of the original members of the present Department of Astronomy. He is survived by his wife Joan Mary (nee McKinney), a son Christopher Norman, and a daughter Cynthia Ann Torkelsen. A scholarship fund in memory of Professor Edmonds has been established.

His interest in science began at an early age inspired by his mother, the first female physics major to graduate from the University of Minnesota. Professor Edmonds graduated cum laude from Princeton University in 1941 with a B.S. in physics. After five years of military service, part of it in England in World War II, he resumed his studies at the University of Chicago. There he received his graduate training in astronomy and astrophysics under two of the leading astrophysicists of the century: Otto Struve, the founder of McDonald Observatory, and Subramayan Chandrasekhar, later named a Nobel Prize winner. He earned both a M.A. and Ph.D. in astronomy, with his Ph.D. dissertation on *Two Problems in Radiative Transfer Theory,* which led to a series of papers on Compton scattering in stellar atmospheres and planetary nebulae, published in the ***Astrophysical Journal*** during the early 1950's.

He taught briefly at the University of Missouri (1950-1952) before receiving an invitation to teach at The University of Texas at Austin from U.T. President Theophilus Painter. Dr. Edmonds came to Austin in 1952 as Assistant Professor of Mathematics and Astronomy. He was the only observational astronomer at the University for most of the decade, although some astronomy courses were taught by a fellow mathematics professor.

In 1958, he became an Associate Professor in the newly-formed, separate Department of Astronomy headed by the late Gerard P. Kuiper. The department was initially formed as a joint astronomy department with Professor Edmonds' alma mater, the University of Chicago. Its purpose was to provide the groundwork for U.T. astronomers to share in running McDonald Observatory, which had been built in 1938 with a bequest from West Texas banker W. J. McDonald and had been run by University of Chicago astronomers under the direction of Otto Struve. In the new department, Professor Edmonds served as Associate Chairman in 1959-1961, when the late Harold L. Johnson was Chairman, and as Associate Director of McDonald

Observatory in 1960-1962. During this time, Edmonds helped firm up the agreement for a joint astronomy department, and it was his insistence in strong Texas input at the Observatory and in having a graduate adviser at the Austin campus that eventually gave Texas the strength to become independent of Chicago astronomers. Professor Edmonds himself took the role of Graduate Adviser at that time and continued in the position during most of his career at U.T. The Texas-Chicago connection was terminated in 1963 with the expiration of the original 30-year contract for operating McDonald Observatory. Harlan J. Smith became Chairman of the Department of Astronomy and Director of the Observatory in 1964.

In 1965, Dr. Edmonds became a full professor, a position he held until his deteriorating health forced him to retire in 1984. He was Chairman of Graduate Studies for more than 20 years, "almost an illegal number of years," he once said. As Graduate Adviser, he saw the graduate program in astronomy grow dramatically, corresponding to explosive interest in astronomy resulting from the nation's space program and technological advances. When Edmonds finally stepped down from the Graduate Adviser post, U.T. had the largest astronomy graduate program in the nation.

Professor Edmonds was described by his students as a quiet, caring teacher. For many years, he taught most of the basic astrophysics courses, as well as introductory and advanced courses in astronomical physics and astrophysics. He was a pillar of strength and good advice during the turbulent early years of the Texas astronomy program and was known for his careful and impartial examination of both sides of an argument or proposal, his patience, gentleness and perfect civility.

Using different and continually more sophisticated techniques over the years, Professor Edmonds focused his research on the study of stellar atmospheres, high-dispersion stellar spectroscopy, statistical analyses of solar photospheric inhomogeneities, the theory of line broadening, radiative transfer, line blanketing and hydromagnetic stability. Perhaps his most important contributions are his series of papers in the ***Astrophysical Journal*** and in ***Solar Physics*** on solar granulation and the quantitative analysis of the spectrum of Procyon, subjects to which devoted the majority of his more than 50 papers.

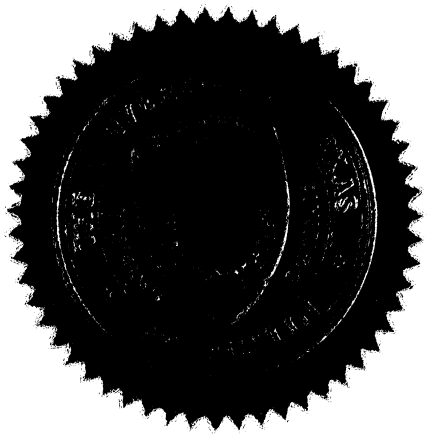
Professor Edmonds was a member of three commissions of the International Astronomical Union: Commission 12, Radiation and Structure of the Solar Atmosphere; Commission 29, Stellar Spectroscopy; and Commission 36, Theory of Stellar Atmospheres. He was a member of the American Astronomical Society, the Astronomical Society of the Pacific, and, since 1951, a Fellow of the Royal Astronomical Society. He also served as President (1960-1961) and Vice President (1971-1972) of the U.T. Chapter of Sigma Xi and was a member of Sigma Pi Sigma.

He spent a year in France as a Guggenheim Fellow at the Paris-Meudon Observatory working on solar problems in 1962-1963. He also served as a member of the Committee on Astronomy of the National Academy of Sciences, National Research Council. As part of his service, he was advisory to the Office of Naval Research, 1958-1961, Vice Chairman, 1959-1960, and Chairman, 1960-1961.

Professor Edmonds was also active in University committees, serving on the University Research Council, the Graduate Assembly, and the University Calendar Committee. For the College of Arts and Sciences, Professor Edmonds served on the Council for Sciences and Mathematics, the Faculty Committee for Physics, Mathematics, Astronomy Building, the Academic Undergraduate Advising Policy Committee, the Ad Hoc Committee for Library Problems and as Alternate Department Representative for the Faculty Commission for Reorganization of the College of Arts and Sciences.

In recognition of his research in astrophysics, his outstanding teaching contributions and his meritorious service to the Department, the Observatory and the University, the Regents of The University of Texas at Austin created the Frank N. Edmonds, Jr. Regents' Professorship in Astronomy in 1984. It was endowed by matching a $100,000 pledge of Samuel T. and Fern Yanagisawa through the Regents' Endowed Teachers and Scholars Program. Its purpose, to further excellence in astronomy teaching, is a fitting tribute to Frank N. Edmonds, Jr., who gave so much to astronomy education at The University of Texas at Austin.

Frank Edmonds will be remembered by his many close friends as a warm and loving parent, as an involved and active citizen very concerned about his government and his social responsibilities, and, especially during his last few years, as an uncomplaining and courageous man. His family, friends, colleagues and students are richer for having known Frank Edmonds, and he will be greatly missed.



William H. Cunningham, President of
The University of Texas at Austin

H. Paul Kelley, Secretary
The General Faculty

This Memorial Resolution was prepared by a special committee consisting of Professors Gerard de Vaucouleurs, (Chairman), Frank N. Bash, and Ira Iscoe.

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Frank N. Edmonds, Jr.

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