

LEHIGH UNIVERSITY
DEPARTMENT OF MECHANICAL ENGINEERING & MECHANICS

Memorial Resolution in Remembrance of Professor Eric Varley
September 03, 2019

The students, faculty, and administration of Lehigh University note with deep sadness the passing of Eric Varley, Emeritus Professor of Mechanical Engineering & Mechanics, on February 5, 2019, at the age of 84.

Born in Derbyshire, England, on May 29, 1934, Eric was a son of the late Cecil and Edith M. Varley. He is survived by his wife Sheila; daughter Ann Herbst and her children Jessica, Tyler & Katie; daughter Sue Osborne, wife of Michael Osborne, and their children Natalie and Jack. Sheila and Eric were married for over 61 years.

He joined Lehigh as a member of the Center for the Application of Mathematics, and subsequently was invited to join the Department of Mechanical Engineering & Mechanics in 1981. Eric's initial college education was at the University of Manchester, England, where he obtained a B.Sc. (Hons.) in Mathematics (1955) and an M.Sc. in Mathematics (1957). He completed his graduate studies at Brown University in 1961 with a Ph.D. in Applied Mathematics. After leaving Brown, he was at the Courant Institute in New York before returning to England in 1962 and serving as a Senior Research Fellow in the Mathematics Division at the National Physical Laboratory (NPL). Following NPL, he moved to the University of Nottingham as a Lecturer in the Department of Theoretical Mechanics from 1964 – 1967. At the instigation of Ronald Rivlin, he came to Lehigh in 1967 where, apart from numerous summer and sabbatical appointments, he remained for the rest of his career. He was a life member of Churchill College, Cambridge.

Eric produced a large number of technical papers ranging over fluid mechanics, continuum mechanics, applied mathematics, and solid mechanics. Much of his work was devoted to novel approaches in attacking grossly non-linear phenomena that arise in the physical sciences. Applications, and other interests, included viscometric flows, non-Newtonian fluids, multi-phase flows in porous media, finite deformations of inhomogeneous materials, non-linear wave propagation, and geophysical flows. Much of this work was published in leading journals including Proc. Roy. Soc., J. Fluid Mech., Studies in App. Math., etc.

His skills were evident in his teens when he transferred to an English Grammar School (academic high school) where, if a mathematical question arose, the Headmaster would always say “ask Varley.” As well as his technical interests, Eric was known for his love of classical and modern operas. Both his family, and colleagues in surrounding offices, can attest to the volume at which these were played and to the fact that he usually “sang along.” Many of us can also remember that, if the opportunity arose, he would enthusiastically demonstrate his tap dancing abilities. In his younger days, he was an avid, and skilled, squash player.

Wherever he and his family lived, Eric would always do his best to modify the surroundings. This ranged over extremely ambitious gardening plans, reworking drainage and sewer systems, and, in an early excursion into solar engineering, heating a swimming pool by having the water run across his slate roof tiles. Turning part of a garage into living space was another major task.

Everyone who knew him would agree that Eric was a strong and forceful character who held very firm views on many topics. If you had the temerity to disagree with him, you needed some indisputable facts to have any hope of making your case. In personal matters, he was very kind, generous, helpful, and hospitable. His family remembers him as a loving husband, father, and grandfather. His friends were glad they had him as a formidable ally who provided a large amount of technical assistance and advice. Eric was always enthusiastic about collaborating with both graduate students and colleagues; he took particular pleasure in working with many of the “fifth floor” MEM graduate students on theoretical aspects of their projects. He is missed by all of us.

Respectfully submitted

Philip A. Blythe, Ellis Cumberbatch, Jacob Y. Kazakia, Susan Osborne

Chairman Mahoney, I move that this memorial resolution be made a permanent part of the faculty record by being included in the minutes of this meeting and that copies be sent to the members of his family.