

# George F. Scheele

*May 23, 1935 — February 13, 1993*

George Scheele was a prominent chemical engineer, a successful educator, a valued colleague, and, most of all, a much-loved friend and advisor to hundreds of undergraduate chemical engineers at Cornell. With his untimely death, Cornell lost one of its most beloved and effective professors. Although he had a recurring liver condition which became pronounced at the beginning of 1992, we had expected to see him recover as he had done before. Indeed, he had taught with his usual enthusiasm in both the 1992 summer session and the fall term. It was only at the end of 1992 that the prospect of a liver transplant seemed to become an urgent necessity. Our elation over an apparently successful transplant early in 1993 was turned to sorrow when he succumbed to complications. He is survived by his wife, Carol Teaman Scheele of Ithaca; his mother; one sister; and two nieces.

George came to Cornell in January of 1962 having just completed his Ph.D. thesis at the University of Illinois. There he had studied the effects of heat transfer on fluid flow instabilities under the direction of T.J. Hanratty. During a leave spent with the Dow Chemical Company in Midland, Michigan, he expanded his research interest to include the stability of jets and the general area of drop coalescence. Much of the work he directed in subsequent years grew out of these experiences. He spent other leaves at Exxon Research and Engineering and DuPont's Engineering Department. The latter contact led to his consulting for DuPont over a period of years. He also consulted for Union Carbide and IBM at various times. All of his exposure to industrial practice was incorporated into his teaching and made the subjects of transport phenomena and computer-aided design come alive for his students. Adding to his diverse background, one sabbatical leave was spent as a visiting professor in the Department of Chemical Engineering at the University of California Berkeley campus.

Growing up in Yonkers made George, naturally, into a New York baseball fan. He had a vivid memory of the Yankee's glory days from the 1940s on and could recall most lineups and batting averages with remarkable accuracy. He had numerous part-time jobs including a post as a doorman at Radio City Music Hall. He was certain that it was his height that got him that job although most of us would guess that his outgoing attitude was the key. As a Phi Beta Kappa student at Princeton majoring in chemical engineering, George found time to be on the crew. Through all his life he enjoyed many sports as a spectator as well as a participant. From Princeton he went on to graduate school as a National Science Foundation fellow at the University of Illinois. When he had completed his studies, he interviewed at several universities, then selected Cornell.

At Cornell, George directed research in the field of fluid mechanics. For example, a series of four papers with his student B.J. Meister appeared in the *American Institute of Chemical Engineers Journal* on the subject of drop formation from jets. These papers treated both experimental and theoretical aspects of the problem and had a major impact on research in this area. In addition to its influence on other academic research, insights from this work influenced practical industrial processes such as polymer formation. Other important papers appeared in quality journals such as *Chemical Engineering Science* and *Industrial and Engineering Fundamentals*.

In his teaching career, George taught courses ranging from a sophomore course in Material and Energy Balances to graduate courses in Numerical Methods and Computer-Aided Design. The latter course was introduced by George in 1980. On many occasions he taught the “meat-and-potatoes” courses of chemical engineering—heat and mass transfer, separations, and, of course, his first love, fluid dynamics. When chemical engineering first offered summer courses in the Engineering Cooperative Program in 1977, it was George who taught the fluid dynamics course. He continued to teach it almost every summer for the next 15 years.

Early in his teaching career, George established an easy rapport with students which made him an excellent teacher and advisor. Even when he was teaching a rigorous course in fluid dynamics, students recognized his combination of ability and conscientiousness. One result was his receiving the “Excellence in Teaching Award” sponsored by the Cornell Society of Engineers and Tau Beta Pi in 1970. Another kind of recognition came from students who were selected as Presidential Scholars (a campus-wide award). On several occasions George was named by awardees as the teacher and mentor who most influenced them. The summer Coop students in chemical engineering always had a team that competed in Cornell’s summer Softball league. George was an integral part of that effort which helped knit the Coop students into a kind of mutual support group.

Another aspect of George Scheele’s career was that of the “good citizen.” He served as member or chairman of numerous committees. He became associate director of the School of Chemical Engineering starting in 1982. In that post he ran most of the day-to-day operations at a time when administration was becoming quite complex. The undergraduate program became his primary responsibility. At the University level, he served several terms on the Faculty Council of Representatives including some key committees (Chairman of the Executive Committee, for example). In the Engineering College, he served at one time or another on almost every committee including those that established and administered the freshman and sophomore requirements. This gave him a superb knowledge of the life and governance of the University. George’s rapport with students and his common sense, along with

his knowledge of the University were called into action from time to time. On one occasion, the President of the University chose George to moderate discussions with student activists who had taken over a campus building. President Rhodes recalls that George successfully completed his mission with “fairness, strength, and grace/”

As a proud member of the chemical engineering profession, George was active in the American Institute of Chemical Engineers. Besides publishing in the AIChE Journal, he was Cornell’s main representative in the group that established the Twin Tiers Local Section. He was the faculty advisor for the Student Chapter several times and always took a great interest in their activities. At national meetings of AIChE, George (and his wife Carol) often supervised the reception which was an important link to our alumni throughout the United States. Recognition for his activity came in 1985 when he was honored as a Fellow of the AIChE. This signified “professional attainment and significant accomplishment in engineering.” In the endorsements accompanying his nomination, the admiration and esteem of his colleagues and students was very evident.

George was a sensitive and perceptive counselor to many students over the years. In addition to his formal duties as an assigned advisor, he listened to the problems of those who found him to be the most approachable and sympathetic person on the faculty even when he was not their official advisor. He was a good listener. His faculty colleagues also found him to be understanding and responsive. We miss his insight, humor, and genuine concern for the students.

*Michael L. Shuler, Julian C. Smith, Ferdinand Rodriguez*