Roger Loran Geer

June 10, 1906 — April 11, 1979

Roger Geer served the Sibley School of Mechanical and Aerospace Engineering zealously for over thirty years. His discipline, materials processing, altered very markedly in direction and emphasis during that time but he never failed in thoroughly and cheerfully adjusting his teaching and technical involvement to the extensive curricular changes that were occasioned.

Professor Geer was a "nearby" boy if not exactly a local one, being born in Marathon, New York, and graduating from the town high school in 1924. He entered Cornell and was awarded his Master of Engineering degree in 1930, having studied industrial engineering within the mechanical engineering program. For a number of years following graduation, he worked in Cleveland and Chicago in the areas of production control and methods engineering until in 1939 he returned to Cornell with the post of instructor in engineering drawing. During the war years he created a gage laboratory and organized and taught courses in workshop procedure and inspection methods for trainees. He became assistant professor in 1943 and was promoted to associate professor in 1946. In the years immediately following the war, he continued his development of inspection and gaging techniques, and presented several papers to national societies. In addition he contributed a chapter on these topics to a handbook on measurement organized by the Instrument Society of America.

The 1950s saw a drastic change take place in the concept of materials processing in the engineering curriculum. Complete automation and numerical control of machine tools became commonplace in industry and the necessity for the engineer to have a detailed and practical knowledge of metal-forming techniques gave way to a requirement for a deeper knowledge of the basic mechanisms of processing materials of all kinds and the application of atomic and molecular physics and chemistry to the whole field. Professor Geer was kept busy in what seemed to be a continuous reforming of curricula, laboratories, and experimental techniques, and these he handled in his customary meticulous and painstaking manner.

During the later years of his career, Roger Geer was in demand by industry as a consultant. He developed and taught courses given to such nearby plants as those of the General Electric Company in Johnson City, the Universal Instruments Corporation in Binghamton, and the Ingersoll Rand Corporation in Painted Post. He designed, built, and tested several novel machines and devices, notably a machine for testing mineral artifacts for cutting capabilities, a milling dynamometer for use in torque-thrust drilling and tapping experiments, a numerical

simulator for use as a teaching aid, and a mechanical dynamometer for planer-type cutting. In 1968 he was made professor of mechanical engineering.

Professor Geer was very active in technical societies within his professional field: the Instrument Society of America (ISA) of which he was national chairman of the Inspection and Gaging Committee from 1946 to 1950; the American Society of Mechanical Engineers (ASME), which he joined as a student and later as a member of the Southern Tier Section when he returned to Cornell; and the American Society of Tool and Manufacturing Engineers (ASTME). His membership in this last-named organization demonstrates very clearly his dedication to unselfish service in his participation for more than twenty years in promulgating and promoting the objectives of the society, particularly its educational aspects through publications and advice to student chapters in New York State. He joined the Elmira chapter in 1949 and was a charter member of the Ithaca chapter and instrumental in its formation in 1959. He served as chairman of the chapter in 1961. From 1962 to 1964 he was a member of the national education committee and field editor of the ASTME journal. He served as chairman of the Technical Publications Committee and as editor and publisher of a monthly newsletter for thirty chapters of Region II of the society. This by no means exhausts a list of his services to the society, and he was recognized for his efforts with a National Award of Merit in promoting manufacturing engineering; with his name on a plaque at society headquarters for his personal contributions; and at the end of his career in the year of his retirement, with the 1971 Education Award.

One of his special professional interests was in the program for materials processing at Hampton Institute, where over a period of three years in the late 1960s he acted as consultant in organizing curricula in manufacturing and materials and lectured to students and to faculty. His outside interests were in environmental concerns such as conservation, reforestation, and ornithology, but most particularly in mineralogy (especially in locating rocks and gems which he worked and polished into a variety of delightful pieces of jewelry and ornamentation). He was active in the Tompkins County Gem and Mineral Club and the local Paleontological Research Institution, particularly in devoting much time and effort in encouraging and helping young people in getting started in rock collecting.

Roger Geer was characterized by his meticulous manner of carrying out his duties and by his lifelong willingness to help people in any way he could, either through his professional knowledge or simple goodwill. After his retirement in 1971, he was occupied by a multitude of volunteer activities, varying from using his engineering

ability to aid handicapped people and advising on courses in the local vocational schools to simple telephone-sitting and transportation of the elderly.

Roger Geer will be missed by a great many people both within and without the Cornell community.

George R. Hanselman, Kuo K. Wang, Dennis G. Shepherd