

# Herbert H. Johnson

*July 16, 1931 — October 1, 1989*

Herbert H. Johnson came to Cornell in 1960 after earning B.S., M.S., and Ph.D. degrees from Case Institute of Technology, and teaching for three years at Lehigh University. He joined the then Department of Mechanics and Materials as an assistant professor of materials. The “Materials” portion of this department was combined with the Department of Engineering Physics in 1962, and finally the Department of Materials Science and Engineering was formed in 1965. He was a member of this department until his death. Materials science was born and flourished during the Herb Johnson period, and he played a major part in its development.

During his career at Cornell, he served as department head from 1970 to 1974, and then as director of the Materials Science Center until 1984. His honors included membership in the National Academy of Engineering. He was also a fellow of the American Society for Metals (ASM), a Case Scholar, a Campbell Lecturer for the ASM, and a councillor of the Materials Research Society.

Johnson maintained an active research program in the mechanical behavior of solids; in recent years he was concerned mainly with hydrogen embrittlement of steel and the influence of hydrogen on metal fatigue. The symposium volume, “Fourth International Conference on the Effects of Hydrogen on Material Behavior,” held in Jackson Lake Lodge, Moran, Wyoming, September 12-16, 1989, has been dedicated to him. He was a consultant to a number of industrial, government and academic organizations.

He was active on national committees related to materials science. He served on the Council of Materials Science of the Department of Energy. As chairman of the Solid State Sciences Committee of the National Research Council he guided the recently completed study “Mankind’s Science and Engineering for the 1990s”.

Herb enjoyed teaching and working with young people. His carefully prepared lectures contained many anecdotes of applications of materials in industry. He cared deeply for the students. When one of his students suffered a broken leg in athletics and was on crutches, Herb drove to his house every morning and brought him to school. Again, when one of his students had to take Herb’s class and another class was scheduled at the same time, and passing both classes was required for graduation, he arranged two special tutorial sessions for her weekly so she could make it through on schedule. Even when his illness was severe, he still met regularly with his students until hospitalization made that impossible.

William B. Streett, Dean of the College of Engineering, had remarked that “Herb was one of those special people who excelled in everything he did. He was often called upon to conduct special studies, to serve on committees, and to apply his talents to the solution of problems in the college and the university, and he always said yes. His death is a severe loss for Cornell.”

As faculty members we found Herb always ready for scientific discussion and always helpful with any kind of problem we had.

Herb had an enjoyable family life with his wife, Marguerite, and his five children (two sons and three daughters). He is survived by them, his mother and brother, and a granddaughter.

After his family and materials science, Herb loved football. He was a dedicated fan of the Cleveland Browns.

Herbert Johnson made profound contributions to the study of hydrogen embrittlement of steel, to the field of materials science in general, and to the people around him. He was a true friend and colleague, and is greatly missed.

*Harry D. Conway, Che-Yu Li, Arthur L. Ruoff*