Enclosure C

April 20, 1988

CITATION

JAMES R. KILLIAN, JR. FACULTY ACHIEVEMENT AWARD

TO

JOHN S. WAUGH

Arthur Amos Noyes Professor of Chemistry

The James R. Killian, Jr. Faculty Achievement Award recognizes extraordinary professional accomplishments by MIT faculty members. The faculty Award Committee is pleased to announce the selection of John S. Waugh, Authur Amos Noyes Professor of Chemistry in the Department of Chemistry, for the 1988-89 award.

Recognized widely as an authority in physical chemistry, John Waugh has contributed to the intellectual life of the Massachusetts Institute of Technology in many respects. His fine mentorship qualities have enriched his many students, postdoctoral associates and faculty colleagues. He has been a role model for junior faculty at MIT and at other leading academic institutions. His infectious enthusiasm for quality science has spawned one of the finest physical chemistry programs in the world.

John Waugh was born in 1929 in Willimantic, Connecticut. He graduated summa cum laude, with highest distinction in chemistry, from Dartmouth College in 1949 and earned his Ph.D. in chemistry and physics from the California Institute of Technology in 1953. He has made his entire academic career at MIT, starting as an instructor in 1952 and becoming a professor in 1962.

John is the world's leading figure in the field of nuclear magnetic resonance. This versatile and powerful tool of investigation of molecular structure and dynamics has had an enormous impact on research in chemistry, biology, biochemistry, and in condensed matter physics, materials science, and medicine. There are few other techniques that have so effectively enlarged scientific knowledge and yielded such great practical benefits in so many diverse fields.

In the 1960s, John, with his collaborators, extended the application of nuclear magnetic resonance techniques to solids and increased their powers of resolution by several orders of magnitude. In the 1970s, further advances extended the scope of the tool to virtually the entire periodic table. He has made fundamental contributions to the theoretical foundations of nuclear magnetic resonance and to the design of the instruments. The approach that he pioneered has become the standard methodology of chemists, physicists, biologists, and radiologists.

John's judgment has been sought widely in several roles: as an editor and as the chairperson and participant in numerous steering and review committees for national laboratories and university departments. He has pioneered scientific relations with the Soviet Union and China.

His career has been honored by membership in the National Academy of Sciences, by the Irving Langmuir Award in Chemical Physics in 1976, the Pittsburgh Award in spectroscopy in 1978, and the Distinguished Alumnus Award of the California Institute of Technology in 1987.

John Waugh's career at MIT has enriched his Department, the Institute and, in a unique way, the world of science and all those who benefit from it.