

MEMORANDUM

Enclosure C

TO: MIT Faculty
RE: Recommendation of Prof. Mildred S. Dresselhaus
FROM: Killian Faculty Achievement Award Committee:
Bruno Coppi, David H. Marks, Bruce Mazlish, Edward
B. Roberts, and William L. Porter, Chairman
DATE: May 21, 1986

The committee is extremely pleased to recommend Dr. Mildred S. Dresselhaus as the Killian Faculty Achievement Awardee for 1986-87. Professor Dresselhaus has achieved distinction as scientist, teacher, administrator, and professional colleague.

Her research on the structure and electronic properties of graphite and its related intercalated compounds has gained world wide recognition. While most of this work has been concerned with the basic physics of electronic materials she is alert to possible engineering applications as evidenced by her current interest in graphite fibers and polymeric conductors.¹

Just since 1977 Dr. Dresselhaus has authored well over 100 publications on subjects within in her fields of specialization, many in collaboration with other distinguished scientists.

Her career at MIT began with her appointment to the faculty as Abby Rockefeller Mauze Visiting Professor in electrical engineering in 1967 followed by appointment to the permanent faculty in 1968. She later held appointments in physics as well as electrical engineering and computer science. This last December she was named Institute Professor, an honor reserved for a small and extremely distinguished group of MIT faculty who have demonstrated extraordinary accomplishment as scholars, educators, and leaders.

Professor Dresselhaus has been responsible for the development a number of graduate and undergraduate subjects and has brought great energy and joy to teaching, even while heavily involved in other assignments. Her major administrative activities have included being associate head for electrical engineering of the Department of Electrical Engineering and Computer Science from 1972-74, and director of the Center for Materials Science and Engineering from 1977-83. She has served on numerous Institute committees, and has championed the professional and personal development of women at MIT. Professor Dresselhaus was a founder of the MIT Women's Forum, which began as an IAP seminar to explore the roles of women in science and engineering, and which has since broadened to include issues of interest to all women at MIT.

¹Letter of nomination from Prof. David J. Epstein

...her consistent support of the women faculty group at the Institute has made a significant difference in the lives of those of us who are women faculty. She has set for us an example of excellence in teaching and research and diligence in pursuing our goals, combined with a concern that we maintain a balance between our academic and personal lives. She is serving as an excellent role model for both women and men faculty.²

For a number of years she also led a freshman seminar in engineering, which, though designed to build confidence in young women students, drew a large audience of both sexes.

Born in Brooklyn, New York, Dr. Dresselhaus received the BA degree from Hunter College and, following a year as a Fulbright Fellow at Cambridge University, England, an MA degree from Radcliffe College and the PhD from the University of Chicago in 1958. She has been a visiting professor at universities in Brazil, Israel, Japan and Venezuela, and serves on the visiting committees at The University of California, Berkeley, Harvard, and the University of Chicago. She is a Fellow of the American Physical Society and just completed a term as its president. In this capacity Dr. Dresselhaus found means to initiate a process of bringing together the variety of frequently diverging disciplines that have flourished in the society over the last twenty years and of fostering genuine communication among them.

Numerous awards have come to Dr. Dresselhaus including the Achievement Award in 1977 of the Society of Women Engineers and Hunter College's Hall of Fame Award in 1972. She has received honorary degrees from Hunter College, Worcester Polytechnic Institute, Smith College, and the New Jersey Institute of Technology.

Mrs. Dresselhaus and her husband have four children and live in Arlington; and the musician Dresselhaus, as violinist and violist, is a devoted and skilled player of chamber music.

The Killian Committee is especially pleased to recommend Professor Dresselhaus who, through her professional and her personal lives, gives distinction to MIT, but also human coherence and purpose. We look forward to hearing from Millie how she does it, in hopes that some might rub off on the rest of us!

²Letter of nomination from Prof. Karen R. Polenske