



In memory of Mildred Dresselhaus

ICFO salutes the life and work of the "queen of carbon science"

February 22, 2017

Mildred Dresselhaus, Professor Emerita at MIT who is known throughout the scientific community for her pioneering work on the electronic properties of materials, died at the age of 86. In addition to an exemplary scientific career marked by numerous awards including the Presidential Medal of Freedom, the National Medal of Science, the Enrico Fermi Award, and the Kavli Prize, among many others, she was known for her efforts to promote increased participation of women in STEM.

Dresselhaus's research made fundamental discoveries in the electronic structure of semi-metals. She was particularly well known for her work on nanomaterials and other nanostructural systems based on layered materials, like graphene, and more recently beyond graphene, like transition metal dichalcogenides and phosphorene. Her work on using quantum structures to improve thermoelectric energy conversion reignited this research field.

As a member of the MIT faculty for over 50 years, Dresselhaus became the first female Institute Professor in 1985, an honor bestowed by the MIT faculty and administration for distinguished accomplishments in scholarship, education, service, and leadership.

Through her pioneering contributions to research, dedication to mentorship and teaching, and scientific leadership roles, Mildred Dresselhaus will be remembered for her enormous impact on the international scientific community.