

2013 - 2014 CEI INTERDISCIPLINARY SEMINAR SERIES

Perspectives on Our Energy Future: Inaugural CEI Interdisciplinary Seminar Presented by Mildred Dresselhaus

Perspectives on Our Energy Future

Providing clean energy to the inhabitants of our planet is a major challenge to future generations. This talk will give my perspectives on this challenge in general terms and on how nanoscience and new nano-materials may contribute to addressing this challenge. The University of Washington is to be congratulated for establishing an Institute where faculty and students can work together to tackle the difficult global challenge of energy sustainability. Inaugural Lecture Thursday, November 7 4:00 PM – 5:00 PM HUB Lyceum

Reception and drinks to follow





Mildred Dresselhaus, PhD Professor of Physics and Electrical Engineering, Emerita, Massachusetts Institute of Technology

Professor Mildred Dresselhaus is currently one of twenty-three Institute Professors at the Massachusetts Institute of Technology, with appointments in the Department of Electrical Engineering and Computer Science and the Department of Physics. Her research has covered a wide range of problems in the physics

of solids with special attention to nanoscience and its relevance to energyrelated applications. Professor Dresselhaus has published over 1600 papers and has also made numerous influential contributions to graphite, graphite intercalation compounds, fullerenes, carbon nanotubes, and nanostructured thermoelectrics.

Professor Dresselhaus was presented numerous awards over the years, including the National Medal of Science in 1990 in recognition of her work on electronic properties of materials as well as expanding the opportunities of women in science and engineering; the 11th Annual Heinz Award in 2005 in the category of Technology, the Economy and Employment; the Oersted Medal in 2008; the Enrico Fermi Award in 2012 (along with Burton Richter); and the Kavli Prize in 2012 "for her pioneering contributions to the study of phonons, electron-phonon interactions, and thermal transport in nanostructures;" and the 2013 International Thermoelectric Society Outstanding Achievement Award.

Professor Dresselhaus has been a prominent leader in promoting science and technology. She has served as President of the American Physical Society, President of the American Association for the Advancement of Science, and treasurer of the National Academy of Sciences. Professor Dresselhaus was the Director of the Office of Science at the U.S. Department of Energy between 2000 and 2001, and the Chair of the governing board of the American Institute of Physics between 2003 and 2008. Professor Dresselhaus has also devoted a lifetime effort to promote increased participation of women in science and engineering. In 2010, Professor Dresselhaus won the ACS Award for Encouraging Women into Careers in the Chemical Sciences.