

26th October 2012 - 14:00
 CFEL bldg. 99, seminar rooms I, II, III

Mildred Dresselhaus
 Massachusetts Institute of Technology

My 50-year adventure with graphene

Graphene has been known to the science community since the pioneering work of Wallace in 1947. In this talk I share my over-fifty-year adventure in carbon science. My adventure began in 1960, tracing the evolution of graphene, from graphite, to the early work of Boehm in 1962 on graphene synthesis and characterization, through influences on graphene coming from graphite intercalation compounds in the 1970s and 1980s where single layers of graphite could be found and studied. This led to studies on fullerenes where the first large carbon molecule was achieved in 1985 by Kroto, Smalley, and Curl. From fullerenes I moved to carbon nanotubes in the 1990s, and then back to graphene in the last few years where the carbon nanotube saga started. I end with comments on the remarkable growth of this research field and on its present status, and look to the future of graphene research and to potential applications.

