

GEORGE W. CRABTREE

Distinguished Fellow and Division Director, Argonne National Laboratory



2009 Vaden W. Miles Memorial Lecturer

Thursday, March 26, 2009
Spencer M. Partrich Law School Auditorium
471 W. Palmer Street
Wayne State University
Detroit, Michigan 48202

Refreshments served at 3:00 pm; Lecture from 4:00-5:00 pm

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The Sustainable Energy Challenge

The global dependence on fossil fuel is among the greatest challenges facing our economic, social and political future. The uncertainty of imported oil threatens global energy security, the pollution of fossil combustion threatens human health, and the emission of greenhouse gases threatens global climate. Meeting the demand for double the current global energy use in the next 50 years without damaging security, environment or climate requires finding alternative sources of energy that are clean, abundant, accessible and sustainable. Electricity and hydrogen, once produced, meet these criteria and are among the most versatile of energy carriers. Dr. Crabtree, one of the top energy experts in the United States, will discuss current challenges that would enable the production, storage, and use of electricity and hydrogen as sustainable alternatives to fossil fuel.

Dr. GEORGE CRABTREE is a member of the National Academy of Sciences, one of the highest honors given to a scientist/engineer in the United States. He is also a Fellow of the American Physical Society (APS), and has served as Chairman of the APS Division of Condensed Matter Physics. As an esteemed expert in energy research and policy, Dr. Crabtree has chaired or served in many scientific committees or advisory/oversight boards, most recently a member for the 2008 APS Energy Future Report, Co-Chair and editor for the 2008 Energy Challenges report of U.S. Department of Energy, an organizer and spokesperson for the Department of Energy's Workshops on Basic Research Needs for the Hydrogen Economy and for Solar Energy, among many others. Dr. Crabtree has also served as a Congressional Witness for energy issues in the Hearing of the House Science Committee, Subcommittees on Energy and Research.

Dr. Crabtree received his B.S. degree from Northwestern University and his Ph.D. in Physics from University of Illinois at Chicago. He is now a Distinguished Fellow of Argonne National Laboratory, the laboratory's highest scientific and engineering rank, and former director of Argonne's Materials Science Division. Dr. Crabtree has received numerous awards for his scientific accomplishment, including the Kamerlingh Onnes Prize, U.S. Department of Energy Awards for Outstanding Scientific Accomplishment in Solid State Physics (four times), University of Chicago Award for Distinguished Performance at Argonne (twice), R&D 100 Award, Federal Laboratory Consortium Award for Technology Transfer, ISI Highly Cited Researcher in Physics, etc.