

Status and Technological Challenges for Renewable and Sustainable Energy Options

Robert McGrath

Friday, November 20th

Lecture at 2:30 PM

Light refreshments follow

Room E19-319

400 Main Street



Abstract

Achieving dramatic reductions in fossil fuel utilization and associated greenhouse gas emissions will require major transformations of our electricity generation and transportation infrastructures. While there is great enthusiasm and promise for renewable energy options, at present renewable sources account for only 2% of our nation's total energy and less than 4% of the nation's non-hydro electricity production. Researchers at the National Renewable Energy Laboratory are advancing Wind, Solar, Biofuels, Building Efficiency and other technologies required to enable generation of 20-40% of the nation's electricity and 15 - 20% of our transportation fuels from renewable sources over the next two decades.

About the Speaker

Dr. Robert McGrath presently serves as Deputy Laboratory Director for Science & Technology at the National Renewable Energy Laboratory (NREL) in Golden, Colorado. In this role, he oversees NREL's research and development portfolio which includes the National Center for Photovoltaics (NCPV), the National Wind Technology Center (NWTTC) and the National Bioenergy Center (NBC), along with extensive programs in Renewable Transportation, Renewable Electricity, Building Efficiency, Smart Grid, and supporting basic chemical, biological and material sciences for energy applications.