USC Viterbi School of Engineering

MORK FAMILY DEPARTMENT OF CHEMICAL ENGINEERING AND MATERIALS SCIENCE

Distinguished Lecture Series

Presents

Understanding the Energy Challenge: Science, Technology, Economics and Policy

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Abstract

The United States and other developed nations employ fossil fuels for their primary energy resource. Continued dependence on fossil fuels is made problematic by the effects of climate change and pollution, the dependence on uncertain imports, and the increased demand from developing and underdeveloped nations. A transition from fossil fuels to sustainable resources within the next few decades appears to be mandatory, but a clear pathway for this transition is still to be developed. Each available option -- biomass, geothermal, hydropower, nuclear, solar, and wind -- has advantages and disadvantages, risks and rewards. Some options are relatively mature, and some options may enjoy advances and even breakthroughs. Energy should be a paramount issue for all citizens, but the many interconnections of science, technology, economics, and policy, however, make energy a daunting problem. A few basic principles from each discipline, however, make it possible to begin to understand the energy challenge.

Thursday, November 20, 2014
12:45 pm, ZHS Room 159
The scientific community is cordially invited.