



Physics & Astronomy Colloquium

Spring 2010

Prospects for Hydrogen Energy

Hydrogen has been widely proposed as a future transportation fuel, because of its potential to radically reduce oil use, air pollutant emissions and greenhouse gas (GHG) emissions. If hydrogen is made from renewable sources like biomass, wind or solar, nuclear energy, or fossil sources with capture and sequestration of carbon, it would be possible in theory to run our transportation sector with near-zero emissions and no use of oil. However, hydrogen faces significant technical, economic, infrastructure and societal challenges before it could be implemented on a large scale. This talk examines the current status of hydrogen technologies, possible paths forward and the issues associated with a transition toward large-scale use of hydrogen. We compare hydrogen to other alternative transportation fuels such as biofuels, and electricity in terms of technical readiness, timing, cost, and reductions in oil use and GHG emissions.

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4:00-5:20 PM - MND 1015

Open and free to all students, faculty, and public