

Physics Colloquium

UNIVERSITY OF MISSOURI-KANSAS CITY
DEPARTMENT OF PHYSICS

Dr. Paul McClernon **McClernon Technical Consulting**

Emerging Technologies from a Rapidly Changing Global Energy Market: Three Key Technology Challenges

Global interest and investment in renewable energy has increased significantly over the last five years. The result of this global shift towards clean energy is the emerging of relatively new technologies that are drawing economic and political attention. This study first provides an *apolitical* overview of key emerging markets associated with electricity, transportation and heating; pointing out the leading technologies and how resources are being allocated. The focus then turns to three key technologies: photovoltaics, wind, hydrogen fuel. We take a more detailed look at some of the more critical research and development behind each of these technologies. Finally, some projections are made as to future growth of renewable energy technologies.

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Coffee at 3:10, Colloquium at 3:30 in Room 310