TOPIC: Shale Gas Emissions w/David Allen, Energy Institute

**HOST:** Jeff Tester and Todd Cowen

**DATE:** November 20<sup>th</sup>, 12:00 -1:00pm, 300 Rice Hall

## **Atmospheric Impacts of Expanded Natural Gas Use**

Hydraulic fracturing of shale formations (shale gas) is projected by the Energy Information Administration to become the dominant source of domestic natural gas supply over the next several decades, potentially transforming the nation's energy landscape. However, the environmental impacts associated with "fracking" for shale gas have made it controversial. This presentation will focus on air quality impacts associated with hydraulic fracturing. Data and modeling on emissions and impacts of photochemically active air pollutants and greenhouse gas emissions will be described.

## Bio:

Dr. David Allen is the Gertz Regents Professor of Chemical Engineering, and the Director of the Center for Energy and Environmental Resources, at the University of Texas at Austin. He is the author of seven books and over 200 papers. His recent work has focused primarily on urban air quality, the engineering of sustainable systems, and the development of materials for environmental and engineering education. Dr. Allen has been a lead investigator for multiple air quality measurement studies, which have had a substantial impact on the direction of air quality policies in Texas. He has developed environmental educational materials for engineering curricula and for the University's core curriculum, as well as engineering education materials for high school students. He has served on a variety of governmental advisory panels and currently chairs the Environmental Protection Agency's Science Advisory Board. He has won teaching awards at the University of Texas and UCLA and the Lewis Award in Chemical Engineering Education from the American Institute of Chemical Engineers.

Dr. Allen received his B.S. degree in Chemical Engineering, with distinction, from Cornell University in 1979. His M.S. and Ph.D. degrees in Chemical Engineering were awarded by the California Institute of Technology in 1981 and 1983. He has held visiting faculty appointments at the California Institute of Technology, the University of California, Santa Barbara, and the Department of Energy.