
**STEVENS INSTITUTE OF TECHNOLOGY**
**DEPARTMENT OF MECHANICAL ENGINEERING**

**Wednesday, October 29, 2008**
**BABBIO 122, Time 1:30 pm**

# *An Energy Outlook to 2030 - An R&D Perspective*

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Manager of Leads Generation and Breakthrough
Exxon Mobil Corporation

By 2030, global energy demand will be about 30 percent higher than it is today, even with substantial efficiency gains. Like today, oil and natural gas will be called upon to meet approximately 60 percent of the world's energy requirements. Emerging technologies will help us meet the world's growing energy needs of oil and natural gas, while also reducing the impact on our environment. And they can provide solutions to address the risks posed by rising greenhouse-gas emissions.

This presentation will provide an overview of the projected global demand for all types of energy and will highlight the needs in the power generation, transportation, residential / commercial and manufacturing sectors. The talk will highlight differences in the energy demand profiles of Organization for Economic Cooperation and Development (OECD) and non-OECD countries. It will describe several of the initiatives that ExxonMobil is undertaking in its R&D programs to meet these challenges.

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**Dr. Thomas (Tom) F. Degnan Jr.** is Manager of Breakthrough and Leads Generation for Exxon Mobil Research and Development. He earned a BS degree in Chemical Engineering from the University of Notre Dame (Magna cum Laude) in 1973, a PhD from the University of Delaware in 1976, and an MBA from the University of Minnesota in 1980. He has previously worked for 3M Corporate Research (1976-1980) and the Mobil Technology Company (1980–1999). He is a member of several advisory boards, including those of the School of Chemical Engineering, Purdue University; Department of Chemical and Biochemical Engineering, John Hopkins University; and the Center for Catalytic Science and Technology at the University of Delaware. He is Vice Chairman of the Research & Development Council of New Jersey. Dr. Degnan has over 100 patents, and was awarded the American Chemical Society Hero of Chemistry Award in 2007.

## Co-sponsored by the Department of Chemical Engineering and Materials Science

*For more information, please contact Prof. Frank Fisher at ffisher@stevens.edu or 201-216-8913*