

Algae Biofuels

BY: Alessandro Faldi, Ph.D.

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ABSTRACT

Meeting the world's future energy demands will require a multitude of technologies, and ExxonMobil is contributing to many of these through its ongoing and wide-ranging research efforts. One promising technology is algae-based biofuels, which we believe could be a meaningful part of the energy mix in the future. Algae biofuels have potential to be an economically viable, low-net carbon transportation fuel. They also are likely to result in lower impacts on land, water and other important resources compared to other renewable biofuels. This presentation provides background on ExxonMobil's Algae Biofuels Research and Development Program, including an overview of where we expect algae biofuels to fit into the overall energy mix. It discusses the advantages of algae relative to various other biofuels, as well as the technical and biological challenges that must be overcome for algae biofuels to become commercially viable. It provides an overview of the alliance with leading biotech firm Synthetic Genomics Inc. and gives highlights of the progress we have made since the program was announced in mid-2009. Finally it discusses the next steps in this long-term research program.

BIOGRAPHY

Alessandro Faldi is Emerging Energy Sciences Section Head at Corporate Strategic Research, ExxonMobil Research and Engineering Company. In this position, he is responsible for building science capabilities in biosciences, environmental sciences and emerging energy systems analysis, managing a group of research scientists and interfacing with the external science community.

Alessandro has a Laurea in Chemical Engineering from the Polytechnic of Milan, Italy, and a Ph.D. in Chemical Engineering from the University of Minnesota. He joined Exxon Chemical Company in 1994 as a research engineer at the Baytown Polymers Center, Exxon Chemical Technology, where he held technical positions in materials characterization, advanced characterization and product development.

In 2000, he moved to ExxonMobil Chemical Company's headquarters in Houston, Texas where he held market planner and market development positions in the Polypropylene business.

In 2005, Alessandro returned to Chemical's Technology in Baytown, Texas to become Program Leader of a breakthrough team that developed advantaged technology for ExxonMobil Chemical's specialty business.

In 2007, he was appointed Corporate Programs Portfolio Manager in Corporate Strategic Research, ExxonMobil Research Engineering Company where he was responsible for managing R&D programs supporting ExxonMobil Corporation's long-term strategic interests.

In 2010, he was appointed to his current role.



EVENT DETAILS

DATE:

Wednesday, February 29, 2012

TIME:

2:00pm-3:00pm

Refreshments will be served

LOCATION:

Babbio 320

Stevens Institute of Technology

ATTENDANCE:

This event is open to all.
Stevens' Faculty, Students,
Staff and Invited Guests

CONTACT:

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