



INDIAN INSTITUTE OF TECHNOLOGY DELHI
DEPARTMENT OF BIOCHEMICAL ENGINEERING &
BIOTECHNOLOGY
2019-20 Seminar Series

Monday, 6th May, 2019

Prof. K.T. Shanmugam
University of Florida

**Title: Metabolic Engineering of Microbial
Biocatalysts for Production of Fuels and
Chemicals: Principles and Practice**

The finite nature of fossil fuels and the environmental impact of its use have raised interest in alternate energy sources. Specifically, non-food carbohydrates, such as lignocellulosic biomass, is being targeted as feedstocks to produce next generation biofuels, including cellulosic ethanol and other non-ethanol fuels, such as butanols. However, currently there is no microorganism that can ferment all lignocellulosic sugars to liquid fuels. Thus, research is focused on engineering improved microbial biocatalysts that produce fuel at high productivity, titer and yield. The basic principles of microbial physiology and biochemistry are crucial to achieve this goal. I am planning on discussing the construction of microbial biocatalysts that integrate these principles.

All are welcome

Seminar will be held in DBEB Seminar room at **Block I, Room 223** at **3 pm**

For additional information, contact Seminar coordinator Dr. Preeti Srivastava at preeti@dbeb.iitd.ac.in or Dr. D. Sundar at sundar@dbeb.iitd.ac.in