

SPRING 2024 SEMINAR SERIES

**CLIMATE CHANGE, SUSTAINABILITY AND ENERGY
TRANSITION; ONE PERSPECTIVE FROM INDIA**

MAR 1 | 10:15 AM | 102 COLBURN LAB

AJIT SAPRERELIANCE INDUSTRIES, INDIA
Group President R&DAttend virtually: <https://udel.zoom.us/j/91386404306>

Global energy demand is expected to rise about 25% by 2040, mainly driven by developing countries. Emphasis on renewable energy is growing to meet some of this demand. All large economies have pledged reduction in use of fossil fuels to meet their Net Zero goals to avoid severe impact of climate change. Government of India is aggressively promoting renewable energy, biofuels, green hydrogen, EV's and other initiatives to decarbonize Indian economy.

This talk will give a perspective on this complex issue. It will describe some novel technologies being developed and commercialized by Reliance Industries (RIL) to help meet RIL's Net Zero goals. These technologies include advances in the areas of biofuels, chemicals, synthetic biology, advanced materials, novel catalysts, and reactors. Plastics circularity and biodegradable plastics will also be discussed.

The need for large scale long duration (LSLD) energy storage will become critical with greater penetration of intermittent renewable energy sources. Current options are expensive and there is a need to reduce entire supply chain costs. Some innovative options will be presented.

ABOUT THE SPEAKER

Ajit has more than 40 years of industrial experience in oil & gas, refining, petrochemicals, renewable energy, sustainability, biotechnology, etc., working for Reliance Industries, ExxonMobil and Mobil. He has contributed to several innovative technology developments and commercialization. He has broad experience in varied technical areas, manufacturing, business, and corporate strategy.

He received his PhD in Chemical engineering from the University of Delaware, MBA from Cornell University. He has published more than 100 technical papers, one book, 3 book chapters and has more than 200 International patents and more than 50 U.S. patents to his credit. He has won numerous national and international awards. Most recent being, 2023 ASM International's "Medal for Advancement of Research."



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