

Indian Statistical Institute

Applied Statistics Unit

SEMINAR NOTICE

Speaker: Basab Chaudhuri, Heritage Group of Institutions, Kolkata

Title: From gas cleaning to carbon dioxide sustainability: a paradigm shift

Date: 12 July, 2022

Time: 16:15 PM

Venue: ASU Seminar Room

Online Platform: Google Meet (meet.google.com/zyy-ggqe-100)

Abstract:

The realm of chemical engineering is all about toxic and corrosive chemicals. Gases, liquids and solids are processed and reprocessed to produce useful products. By-products are routinely formed as useful chemicals are produced. Even a century ago, discharge of gases and liquids into the atmosphere used to happen routinely. The pollution of the environment was not an issue at all. Sustainability or sustainable development is just half a century old. The transition from gas cleaning to sustainable development is a long journey with massive twists and turns in between.

Pollution control technologies are not market driven, they are regulation driven. If regulations are taken away, the profit motive will propel industries to cause pollution. Strict regulations have forced industries to adopt green technologies. A large chunk of technology today focuses on carbon dioxide mitigation through utilization/ conversion of carbon dioxide. Green technologies attempt to substitute raw materials so that carbon dioxide is not produced at all. In spite of all these efforts, achieving sustainable development goals becomes difficult. The reason behind this is the interconnection. When a gas is absorbed in a liquid, air pollution stops. But what will a process engineer do with the liquid? Where will the liquid be discharged? Complexities related to environmental protection start from here.

This lecture will touch upon the above issues through real-life examples.

All are invited to attend.