



PUNE KNOWLEDGE CLUSTER AND INDIAN ACADEMY OF SCIENCES PRESENT
INDIA S&T @ 75 LECTURE SERIES

LECTURE 5

THE INDIAN MONSOON AND ITS VARIABILITY

The monsoon governs the very pulse of life in our country. The monsoon visits us, without fail, year after year, but not always with the same gusto. So, every summer as the heat scorches the landscape around us, scientists, farmers, as well as economists start wondering how the monsoon is going to behave.

Over centuries, the monsoon has captured the imagination of the finest minds and great advances in our understanding the meteorology of the tropics and the monsoon have been made particularly in the last few decades. Yet the problem of forecasting whether the monsoon will be 'normal' as in 2020 or a drought as in 2015 still remains a challenge.

What makes the problem of prediction of the monsoon difficult is that the rain-giving clouds and the system that gives us the monsoon rains are all a culmination of instabilities and arise from multi-scale, nonlinear interactions between the land, the tropical atmosphere, and the oceans. Thus, understanding and predicting the vagaries of the monsoon is perhaps the most challenging problem in atmospheric science today. In this lecture, the Speaker shall introduce the physics of this fascinating phenomenon, share the present understanding of some facets of monsoon variability, and the challenges ahead for better predictions.

DETAILS

SATURDAY | 9TH OCTOBER 2021 | 11.00 A. M.

LIVE STREAM ON  zoom &  YouTube



About the Speaker

Prof. Sulochana Gadgil

Fellow, Indian Academy of Sciences

Sulochana Gadgil, one of the world's leading monsoon meteorologists, has made significant contributions to our understanding of the Indian monsoon and its variability, its links with atmospheric convection over tropical oceans and the relationship of such convection with the sea surface temperature. Sulochana Gadgil was trained at Harvard, with a PhD. in Applied Mathematics, a post-doctoral fellow at MIT, and later joined the Indian Institute of Science in 1973. She played a key role in the establishment and nurturing of the Centre for Atmospheric and Oceanic Sciences at the Indian Institute of Science and spearheaded the efforts to formulate the Indian Climate Research Program (ICRP). She is a recipient of several awards including Norman Borlaug Award and Lifetime excellence award in Earth Sciences of 2016 from the Ministry of Earth Sciences 2016.



As a part of the "India S&T @75" events during the countdown to the 75th year of India's independence, the Pune Knowledge Cluster will be organising a number of lectures on scientific topics. These lectures will be delivered by Fellows and Associates of the Indian Academy of Sciences, who are based in Pune, and will be organised in association with the Academy. The lectures will cover a wide variety of topics, ranging from cutting edge science and technology to developments in these areas in the country over the 75 years since independence.