# SCDT – FlexE Centre Webinar Series

*The webinars aim to bring together researchers in Flexible Electronics and allied areas from across India (and other countries) on a single platform to promote professional interaction.*

**Inaugural Webinar** by


**Prof. Ananth Dodabalapur**
Department of Electrical and Computer Engineering, The University of Texas at Austin, Austin, TX, U.S.A.


On **"Thin-Film Transistors and Their Applications in Flexible Electronics"**

**Date**: 12th January, 2021
**Time**: 7:30 PM to 8:30 PM

Visit www.iitk.ac.in/scdt/webinars.html to access the zoom link to join the webinar.

The event will be chaired by
Prof. Madhusudan Singh from IIT Delhi

## Abstract of the Webinar


Thin-film transistors (TFTs) were invented almost a century ago, and before the first demonstration of the point-contact transistor in Bell Laboratories. They are the enablers of flat-panel displays and x-ray imagers and are being considered for several future applications in flexible electronics. We will examine how TFTs operate and what makes them so well suited for flexible and printable electronics. The talk will include a history of TFTs, how charges move in TFTs, materials and device structures, and applications in flat panel displays. The later part of the talk will look forward to the future flexible systems including back end of the line and hybrid systems with silicon and how TFTs will find use in novel applications.


## Information about the speaker

Ananth Dodabalapur received his B. Tech. degree from the Indian Institute of Technology, Madras (Chennai) in 1985, and M.S. and Ph.D. degrees in Electrical Engineering from The University of Texas at Austin in 1987 and 1990 respectively. Between 1990 and 2001 he was with Bell Laboratories, Murray Hill, NJ. Since 1992 he has investigated various aspects of the physics and technology of organic and polymer semiconductor devices. He has published more than 200 articles in refereed journals which have resulted in an H Index of more than 90 (Google Scholar), and has 27 issued US patents, which have been cited nearly 2000 times. He is a co-recipient of the 2002 National award for team innovation of the American Chemical Society. Since September 2001, he is with The University of Texas at Austin and holds the Motorola Regents Chair in Engineering. His present research includes organic and inorganic thin-film transistors and optoelectronic devices, 2D materials device physics and device chemistry, and flexible thin-film electronics. In 2003, he co-founded OrganicID, a company that is investigating using printable polymer electronics to fabricate low-cost RFID tags for the 13.56 MHz frequency. He was the founding Editor-in-Chief of *Flexible and Printed Electronics*.

Samtel Centre for Display Technologies (SCDT) and the National Centre for Flexible Electronics (FlexE Centre) of IIT Kanpur are dedicated to flexible electronics research and commercial deployment respectively


For more information
Contact: scdt@iitk.ac.in
Phone: +91-512-2596622