



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.

Abstract of the Webinar

Although silicon-based electronics is driving the evolution of modern technology towards fast computational power and high performances, new fields of application, such as wearables and the Internet-of-Things (IoT), call for devices and systems with unconventional properties, including mechanical flexibility, conformability to any surface, transparency and sustainability. The aim of this webinar is to go through the most recent outcomes in the field of thin-film electronics. First, a comprehensive analysis of the state-of-the-art will be presented, to support an overview of materials, design techniques and fabrication methods. Next, a broad plethora of sensors, circuits and systems, with bespoke mechanical and optical properties, will be demonstrated. Finally, green, sustainable and recyclable devices will be also explored.

Webinar by



Dr. Giuseppe Cantarella

Department of Physics, Informatics and Mathematics
University of Modena and Reggio Emilia,
Modena, Italy

on

“Unconventional Electronic Devices: from Flexible to Circular Devices and Circuits”

Date: 11th April, 2023

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

Dr. Shree Prakash Tiwari

Indian Institute of Technology Jodhpur



Figure. Flexible Electronics with different functionalities (from left to right): transparency, mechanical flexibility and biocompatibility.

Information about the speaker

Dr. Giuseppe Cantarella received his B.Sc. in Information and Communication Technologies Engineering from Politecnico di Torino (Italy) and Politecnico di Milano (Italy) in 2011, and M.Sc. in Nanotechnologies for ICTs from Politecnico di Torino (Italy), INP Grenoble (France) and Ecole Polytechnique Federale de Lausanne EPFL (Switzerland) in 2013. He obtained his Ph.D. in Electrical Engineering from ETH Zurich (Switzerland) in 2018 with a thesis entitled “Stretchable Oxide Semiconductor Transistors and Circuits”. He was Postdoctoral Fellow at ETH Zurich (Switzerland), at the Nanomaterials Engineering Research Group, and at the Free University of Bozen-Bolzano (Italy), at the Sensing Technologies Laboratory. Until October 2022, he was an Assistant Professor (RTD-A) at the Free University of Bozen-Bolzano (Italy). In November 2022, he joined the University of Modena and Reggio Emilia (Italy), as Tenure-Track Professor. His main activities include design, fabrication and characterization of flexible and sustainable sensors and devices, for wearables and green electronics.