



# FlexE

National Centre for Flexible Electronics

## 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.*

### Webinar by



### Dr. Mohammad Yusuf Mulla

Dept. Smart Hardware  
Bio & Organic, Printed Electronics Unit  
RISE Research Institutes of Sweden

on  
“EMERGE'ing sustainable printed  
electronics “

**Date:** 11<sup>th</sup> February, 2025

**Time:** 7:30 PM to 8:30 PM

Visit [www.iitk.ac.in/scdt/webinars.html](http://www.iitk.ac.in/scdt/webinars.html)  
to access the zoom link to join the webinar

The event will be chaired by

**Dr. Akshay Moudgil**

Indian Institute of Technology Jodhpur

### Abstract of the Webinar

The expeditious digitalization of society has strained the natural resources and amplified the environmental challenges. Rising demand for electronics with the advent of low power electronics and fast communications is increasing carbon emissions, e-waste and health hazards. Millions of tons of e-waste with toxic materials and plastics are generated from consumer gadgets to IoT systems. There is need to address these challenges by developing sustainable and "green electronics" by 'using' and 'On' sustainable materials and processes. RISE is actively working on developing innovative materials, design and production of electronics with minimal environmental impact by utilizing highly multidisciplinary research involving sustainable additive manufacturing and energy harvesting; paving way forward towards 'Best from Waste'. Moreover, by offering FREE state of the art infrastructure and sharing know-how and knowledge to the global community through European project EMERGE; we are helping the community in addressing these societal challenges. This talk will briefly provide overview of our activities in the domain of 'Green electronics' and 'Sharing research infrastructure' and how by collaborating on international level we can build greener and equitable future for our next generations.

### Information about the speaker

Since 2018 Dr. Mohammad Yusuf Mulla is working at Research Institutes of Sweden (RISE), Sweden; in the field of sensors and sustainable printed electronics. Currently, he is a senior scientist and project manager handling research infrastructure project EMERGE [www.emerge-infrastructure.eu](http://www.emerge-infrastructure.eu) and other national and international EU projects in the domain of sustainable printed electronics. He received his Bachelor's degree in Instrumentation Engineering (BE) from Shivaji University (India), and M.Sc. in Scientific Instrumentation from the University of Applied Sciences, Jena (Germany). He graduated with PhD in Chemical and molecular sciences from the University of Bari (Italy) with Marie Curie PhD fellowship in EU project FlexSMELL. He is alumnus post-doc of University of Rome Tor Vergata (Italy) and Linköping University (Sweden) at Laboratory of Organic Electronics (LOE), e-plants team. He is engaged with national and international EU projects related to graphene-based sensor technology, wearable electronics and sustainable printed electronics. Yusuf brings with him experience in biosensors, organic electronic devices (OFETs, OECTs); wearable electronics; graphene-based transistors and sensor technology; Screen, inkjet, aerosol jet & 3D printing techniques, plant-human electrophysiology.