



## 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. Amol A. Kulkarni

Scientist, National Chemical Laboratory,  
Pune

On “**Electronic chemicals: Reality, Complexity and A Case Study of Silver Nanowires**”

**Date:** 13<sup>th</sup> July, 2021

**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. Brijesh Kumar**

Indian Institute of Technology Roorkee

### Abstract of the Webinar

In India, our willingness to purchase anything as is available has no comparison. Besides certain well known exceptions, we never ask and don't want to be asked why we cannot make technologically advanced systems/products/machines indigenously. It is not common to find a new complex multifunctional integrated system built for the first time ever within the country. This has caused us to miss several scientific and technological opportunities. One such area is that of manufacturing advanced electronics and electronic chemicals. In my talk I will give a brief overview of our status in the domain of electronic chemicals and try to ask a few questions that do not necessarily have an answer at this moment or even if we have an answer, its probably too late to enter in certain fields. And yet, there are lots of opportunities out there, if we think big, think deep and willing to work hard. I will also present some recent work on continuous process production of silver nanowires, its market and applications. The talk will also bring out a few research and business opportunities in related areas.

### Information about the speaker

Dr. Amol A. Kulkarni is a Scientist in the Chemical Engineering & Process Development Division at the CSIR-National Chemical Laboratory (NCL), Pune (Since 2005). He is a chemical engineer by training - B. Chem. Eng. 1998, M.Chem.Eng. 2000, and Ph.D. in chemical engineering 2003, all from the Institute of Chemical Technology ICT-Mumbai. He did his post doctorate at the Max Planck Institute-Magdeburg (Germany) as a Humboldt Fellow (2004) and was an IUSSTF Research Fellow at Massachusetts Institute of Technology (MIT), USA in 2010.

He works in the area of design and development of continuous flow reactors and explores their applications for continuous syntheses of pharmaceutical intermediates, dyes, perfumery chemicals and nanomaterials. He has established the first of its kind microreactor laboratory in India. He has published over 100 papers and filed more than 35 patents.

Dr. Kulkarni is a recipient of the Shanti Swaroop Bhatnagar award (2020) in Engineering Sciences; VASVIK Award by VASVIK Foundation for Excellence in Industrial Research (2016) and the Swarnajayanti Fellowship (2015). He currently holds the CSIR-Dr. A.V. Ramarao Chair Professorship (2020). Earlier, he has won 'Young Scientist' awards from Indian National Science Academy INSA (2009), Indian National Academy of Engineering INAE (2009), CSIR (2011), Indian Academy of Sciences (2011) and Organization of Pharmaceutical Producers of India (2015).