



Prof. C. V. Seshadri Memorial Distinguished Lecture

Department of Chemical Engineering
Indian Institute of Technology Kanpur

Speaker : Dr. Dipankar Bandyopadhyay
Title : Chemical Engineering at Mesoscale (Pedagogical Talk)
Day & Date : Friday, February 14, 2020
Venue & Time : L-16 5:00PM

Abstract

One starts the journey of inquisitiveness, perhaps, when the senses are born. Some claim that the queries are eternally! Yet, with time (?), one manages to answer some while most remain unanswered. With the ever-increasing hullaballos of life involving relatives-friends-foes, conferences-rallies, classes-exams-jobs-responsibilities-liabilities, successes-failures-deadlines, or ecstasies-disappointments, the quests become dormant if not shelved. One very interesting question can be the role of research in reincarnating them.

In this talk, you may come-across some absurd research examples, which may incinerate the inherent scientific-intuitive urges before harnessing the knowledge-information extracted from the same to address some of the burning issues of modern life. The talk shall start with a birds-eye view before delving into magnified details to connect the ends. In the joyride, we shall come across some silly details of mesoscale science and technology to harness the emerging face of Chemical Engineering Research.

About Prof. C. V. Seshadri



The late Prof. C. V. Seshadri (CVS) was a distinguished Chemical Engineer. He did his Ph.D. with Professor Herbert L. Toor of Carnegie Mellon University, Pittsburgh, followed by a Research Associateship at MIT. He joined IIT Kanpur as an Assistant Professor in 1965, and later became a Professor and Head of the Chemical Engineering Department. Finally he became the Dean of Students Affairs, IITK.

While here, he wrote the famous best selling textbook: C. V. Seshadri and S. V. Patankar, *Elements of Fluid Mechanics*, Prentice Hall of India, New Delhi, 1971. CVS left IITK in 1974 to join Kasturi Paper Food and Chemicals Ltd., Bangalore, where he set up India's first fodder-yeast plant. In 1976, he joined the Shri A. M. M. Murugappa Chettiar Research Center in Chennai as its founder Director, an institute emphasizing appropriate technology, the forte of CVS. It was here that CVS really blossomed and helped develop several appropriate technologies, including Spirulina Algae. For his efforts in this direction, CVS received the prestigious *Jamnalal Bajaj award for S & T for rural development* (1981). As Rajni Bakshi sums up¹ "CVS's youthful zest and enormous energy made it easy to forget the linear dimension of this mortal frame. Yet this is all the sea snatched away. The man's bequest remains, awaiting the nurturing care of fellow travellers in this and other times." CVS received enormous support and encouragement for his efforts from Mr. M. V. Murugappan, with whose vision the Research Center was set up.

¹C. V. Seshadri: Gandhi as the Century's Greatest Inventor, chapter in *Bapu Kuti*, Rajni Bakshi, Penguin India, New Delhi, 1998.

About the Speaker



Dr. Dipankar Bandyopadhyay completed a B.Sc in Chemistry and B.Tech in Chemical Engineering from Calcutta University, M.Tech and PhD from IIT Kanpur. Presently, he is a Professor in the Department of Chemical Engineering, Head, Centre for Nanotechnology and is the PI of the upcoming "Centre for Excellence on the Research and Development of Nanoelectronic Theranostic Devices" at IIT Guwahati. He has served as a visiting faculty at Yeungnam University at South Korea under the WCU Program, and KTH Sweden under the Erasmus Mundus program. His research encompasses many areas at the forefront of Chemical Engineering. He has authored ~100 research publications in the international journals and has filed 17 Indian and 7 international patents so far. He is the recipient of NCL's Prof. K Venkataraman CHEMCON Award, Gandhian Young Technology award 2016 and 2019, and BIRAC-SRISTI Appreciation Award 2017. He is a nominated member of ACS, RSC, and IChE.

Previous Speakers

- ◆ Dr. Rochish Thaokar, IIT Bombay, 2018
- ◆ Dr. Amol A. Kulkarni, NCL Pune, 2017
- ◆ Dr. Naendra M. Dixit, IISc Bangalore, 2016
- ◆ Dr. Ganesh Subramaniam, JNCASR Bangalore, 2015
- ◆ Dr. Guruswamy Kumaraswamy, NCL Pune, 2014
- ◆ Dr. Mahesh S Tirumkudulu, IIT Bombay, 2013
- ◆ Dr. Sirshendu De, IIT Kharagpur, 2012

About the Donors

The corpus of the Professor C. V. Seshadri (CVS) Memorial Distinguished Lecture in the Department of Chemical Engineering, IITK has been set up by several students, family members and friends of CVS. This lecture is to be delivered by a promising young Chemical Engineering researcher (below about 45 years) working in India.

All are Welcome