





## Bose Colloquium

S. N. Bose National Centre for Basic Sciences

(An Autonomous Research Institute established under DST, GOI)



## Powering the New World: The Pursuit of Sustainable and Affordable Solutions

## Abstract:

The world has been evolving very rapidly on its path of development for many decades and the pace of development is also increasing by the day. The irony is that these very developments aimed at elevating the quality of our lives and happiness have led to a very serious fallout, namely the disastrous effects on our environment; the air we breathe, the food we eat, the water we drink. It has challenged the very sustainability of life on earth. Waking up to this realization has led everyone to take a pause, rethink and reprogram our R & D strategies, whereby "sustainability" has taken the centre stage of our planning. In this talk, I will outline this scenario by reflecting upon some statistics and scale of the issues, and argue that materials innovations could perhaps provide the answers that we need to resolve the attendant gigantic interconnected complex problems. I will present a few examples of own research along the way to take the discussion further. Needless to mention that this could not be accomplished without a synergistic effort by and cooperation between the academia, industry, society and government; and we need to be aware that time is not on our side.

**Speaker:** Prof. Satishchandra B. Ogale Director at Research Institute for Sustainable Energy, The Chatterjee Group's Centres for Research and Education in Science and Technology (TCG-CREST), Kolkata

## Short Biography of the Speaker:

Prof. Satishchandra B. Ogale was earlier a Faculty at Pune University (1979-96, Full Professor (1988-96) and Chair of Physics (1992-95)) followed by Visiting Professor and Senior Research Scientist at the Department of Physics and Centre for Superconductivity Research, University of Maryland at College Park (1996-2006). He returned to India in 2006 as the first Ramanujan Fellow of DST at the National Chemical Laboratory (CSIR-NCL) and went on to become Chief Scientist at NCL till 2015. He won the Scientist of the year award of CSIR-NCL in 2010. During 2015-2018 he was full Professor of Physics at IISER Pune and now he is an Emeritus Professor at IISER. In 2019, Prof. Ogale was also selected for the coveted Raja Ramanna Fellowship of the Department of Atomic Energy. He has won several National awards such as INSA Young Scientist medal, C. V. Raman Prize (UGC), B. M. Birla Prize, N. S. Satyamurthy Prize (DAE), MRSI medal and MRSI special silver jubilee medal and more recently as one of the UK-India team leaders, the international Newton Prize for solar energy research. He is the elected fellow of the Indian Academy of Science (F.A.Sc.) and the National Academy of Science (F.N.A.Sc.).





4.00 PM







**Webinar Link** 

