



Indian Institute of Technology Kanpur

Chandrakanta Kesavan Lecture Series



June 06, 2022(Monday)



02:30 PM

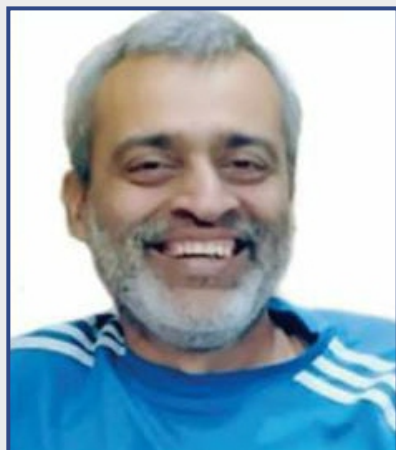


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Speaker : Atul Gopal

Ending the ICE (Internal Combustion Engine) age

About the Speaker



Atul Gopal has completed mechanical engineering from COEP and MBA from IIM Calcutta. He was involved with the first car project of Tata Motors from 1990-1992, post which he started his entrepreneurship journey. He has been an entrepreneur in the education space from 1996, where he co-founded Bulls Eye, a test prep firm. He is the co-founder and trustee of three schools, which work under the Peepal Tree umbrella.

He also serves on the board of IMocha, a skills assessment company which raised funding of Rs. 100 crore in 2021. He is also associated with 14 Trees, an NGO involved in reforestation and an evangelist for Electric Vehicles (EVs) since 2013. He works with Pluginindia as a host on their YouTube channel.

About the Talk

Fire in the battery is a serious safety concern for EVs. Generally, the plug point and charging unit of the vehicle are the most vulnerable parts concerning fire incidents. A typical battery used in EVs consists of cells which are susceptible to internal shorting between cathode and anode. This problem can be solved by designing a good battery management system. The battery management system protects the cells from malfunctioning in case of any abnormal rise in temperature. All EVs (be it two wheelers or four wheelers) should ideally incorporate cell cooling system. Four wheelers have good chilling mechanism for maintaining the cell operating temperature, while there is still no active cooling system in two wheelers due to certain constraints (weight and size of the vehicle are the major bottlenecks). Hence, original equipment manufacturer (OEMs) rely on convection and radiation to release the excess heat from cells. Right choice of cell chemistry can help in addressing the issue of cell operating temperature. In the Indian context, Lithium Ferro Phosphate (LFP) chemistry seems to be an ideal trade off to tackle this issue. Along these lines, the talk will provide a brief overview about the fast growing EV industry, challenges and the way out to deal with these issues.

Zoom Link : <https://iitk-ac-in.zoom.us/j/98701559127?pwd=Z0lCVWNEejlzTmJDNU1FQI80ekdadz09>

Meeting ID : 987 0155 9127

Passcode : 243271

Organised By

Chandrakanta Kesavan Center for Energy Policy and Climate Solutions

Department of Sustainable Energy Engineering