



**Full Name** : LOGANATHAN RAVISANKER

**Organization** : Dow Inc.

**Current Position** : Technology & Business Development Director

**Title of Presentation** : Enabling Sustainable and Low Carbon Mobility through Next Generation Materials



**Presentation Abstract :**



While the transportation sector remains one of the significant contributors to global CO<sub>2</sub> emissions, the emergence of electric vehicles has been one of the bright spots in the drive towards a low-carbon economy. In 2022, electric vehicle (EV) sales exceeded 10 MM units, sustaining robust growth momentum through the pandemic. This rapid growth has been made possible through a combination of policies, incentives, and advances in battery technology. In addition, the mobility sector is undoubtedly going through a rapid transformation; besides the electrification drive, vehicles are becoming safer, more connected, and more autonomous. This transformation has been possible through accelerated innovation in materials to address new industry challenges. In this presentation, we will discuss how a new generation of materials enables safe, high-performance batteries for future EVs but also explore the possibilities of making the vehicle more sustainable with the adoption of low-carbon, circular materials throughout the design, manufacturing of the vehicle, during its use and its end-of-life scenarios thereby further reducing the vehicle carbon footprint. This presentation aims to trigger a conversation within the industry and academia for collaboration opportunities to address new industry challenges, delivering innovative solutions to advance sustainable mobility.