

Knowledge Exchange Symposium on E-mobility

on

28th October 2019

at

Mascot Hotel, Thiruvananthapuram

Jointly organized by



**Department of Transport and Higher Education
Govt. of Kerala.**



**BIRMINGHAM CITY
University
United Kingdom**



**APJ Abdul Kalam
Technological University
Kerala**



**Sree Chitra Thirunal
College of Engineering
Thiruvananthapuram, Kerala**

About the Symposium

The climate change is one of the biggest challenges we face, environmentally, economically and socially. The air pollution from road transport is a significant contributor to global warming. The transition to a low carbon economy, in particular the development and progressive deployment of zero emission vehicles, brings real economic, health and environmental benefits for all, and better spatial planning and strategic investments with green public procurement.

Government world over are pondering on how to implement transition from fossil fuel vehicle to E vehicles. The Government of Kerala has announced an Electric Vehicle (EV) policy for the state. One target is to procure 6,000 electric buses for the State Road Transport Corporation by 2025. Other vehicles powered by electricity are to be progressively phased in. Charging stations will be set up. Use of E-rickshaws is to be expanded through state-owned Kerala Automobiles Ltd. Subsidies and other incentives would be given, from both central and state Governments.

In this regard, Govt. of Kerala has initiated a number of steps for interactions with academia, research and industry in India and abroad, and general public to find ways for effective implementation and for finding solutions which may be most suitable for Kerala. The symposium brings together people from different organizations and Government to discuss this issue.

This symposium is jointly organized by Department of Transport and Higher Education Govt. of Kerala, APJ Abdul Kalam Technological University and Sree Chitra Thirunal College of Engineering, Thiruvananthapuram

Salient features of the symposium:

- M o U between Birmingham City University, APJ Abdul Kalam Technological University and Sree Chitra Thirunal College of Engineering
- Presentations by Govt. of Kerala officials
- Presentations by representatives of Industries/MNCs
- Presentations by faculty / research of Birmingham City University and Sree Chitra Thirunal College of Engineering faculty/researchers

Programme

- 9:00 am - 09:30 am** : Registration
- 9:30 am - 11:00 am** : Inaugural Session
- Prayer
- Welcome : **Sri. K R Jyothilal IAS**
Principal Secretary, Transport
Government of Kerala
- Presidential Address : **Dr. Usha Titus IAS**
Principal Secretary, Higher Education
Government of Kerala
- Inauguration : **Sri. A K Saseendran**
Hon'ble Minister for Transport
Government of Kerala
- Exchange of MOU : VC- KTU, VC- BCU, Principal -SCTCE
- Setting the Agenda : **Dr. K Prabhakaran Nair**
Principal, SCTCE
- Keynote Address : **Prof. Julian Beer**
Deputy Vice Chancellor, BCU
- Vote of Thanks : **Prof. M R Sarathchandradas**
Dean PG Studies SCTCE
- 11:00 am - 11:30 am** : Tea Break
- 11:30 am -11:50 am**
- Perspectives on International Collaborations : **Dr. Rajasree M S**
Hon'ble Vice Chancellor, APJ Abdul
Kalam Technological University,

Presentations by Public Sector undertakings, Govt

- 11:50-12:00 Sri. Joseph V.K, Chief Engineer, Renewable Energy Division, KSEB - Kerala Initiatives for E-Mobility
- 12:00 -12:10 Sri. A. M.Narayanan, Senior Energy Consultant, EMC - Salient features of EV
- 12:10-12:20 Col. Shaji M Varghese, MD, KEL - Industrial transition for Electro mobility
- 12:20-12:30 Smt. TR Hemalatha, MD, KELTRON - Charging infrastructure & battery
- 12:30-12:40 Sri. Chandrasekar V, Associate Director, CDAC - Power Electronics required for X-EV & fuel cell conditioners
- 12:40-12:50 Sri. Shajahan Ahamed Kunju, MD, KAL - Sustainable development for E-mobility
- 01:30-01:00 Sri. Vijayan Nandanan, Entuple E-Mobility - Advances in electrical vehicle technology & its development requirement in India
- 01:00-02:00 Lunch Break

Project Presentations by BCU, United Kingdom

- 02:00 -02:10 Dr. Panagiotis Rentzidas, BCU - Psychological and social factors influencing new technology/E-Mobility adaptation
- 02:10-02:20 Dr. Venkatesh Vijay, BCU - Engineering the Future of E-Mobility: Knowledge Based Engineering (KBE) at the Centre of E-Mobility Technologies.
- 02:20-02:30 Professor Chamkour Athwal, BCU - Academic and Associate Dean (BCU): Digital Revolution for Manufacturing
- 02:30-02:40 Professor Alison Honour, BCU - STEAM as a new methodology
- 02:40-02:50 Professor Malhan Singh - Magnesium Light Weighting

Project Presentations by SCTCE

- 03:00-03:10 Dr. K. Prabhakaran Nair
- 03:10-03:20 Dr. Mohan G, DST-NFTDC Research Project on Metal Hydride Based Hydrogen Storage and Sorption Cooling Systems
- 03:20-03:30 Dr. Prakash U, Fuel Cell two Wheeler
- 03:30-03:40 Sri. Sajith Sethu, Security Design for Vehicular Communication Applications
- 03:40-03:50 Dr. Roby Philip, Integration of renewable energy for office/workplace charging stations
- 03:50-04:00 Sri. Chitruksomar VK, Experimental Analysis of Pulsating Heat Pipe Based Thermal Management System for Motor Cooling in Electric Vehicles
- 04:00-04:10 Dr. Sheeja MK, Holographic data storage & security application
- 04:10-04:20 Dr. Ramesh Kumar R - Bamboo framed structure for Transport vehicles
- 04:20-04:45 Tea Break
- 04:45-05:45 **Meeting to identify the area of collaboration, formulate and review draft MoAs between Hon'ble Minister for Transport, Principal Secretary to Transport, Principal Secretary to Higher Education, Representatives of BCU, KTU & SCTCE**
- 06:00-07:30 Cultural Programmes
- 07:30-09:00 Dinner