



MERCon 2023 Special Session on
‘Electric Mobility’: Embracing and Exploring the
Advances in Electric Mobility

Date - **10th November 2023: 8.30 a.m. to 12.30 p.m.**

Mode - Physical and Online (All local participants are encouraged to participate physically)

Location (Physical) - PG Room (Transportation Engineering Division) - Department of Civil Engineering, University of Moratuwa. Zoom meeting Link: <https://learn.zoom.us/j/93581990691?pwd=Qi9XR2Z4VlVHUXIESk8rYTBtNlpmdz09>

Keynote Speakers

1. **Dr. Sanjini Nanayakkara:** Project Manager for International Projects and GCAP Asia Regional Lead Accelerated Deployment and Decision Support Center, NREL
2. **Mr. Rahul Bagdia:** Chairman & Managing Director – pManifold, India

Organizers: Centre for Intelligent Transport Systems (CITS), University of Moratuwa, Sri Lanka.

Keynote 01 8.30 a.m. – 9.00 a.m. Keynote (25 min) + Discussion (5 min)

Paper 01 9.00 - 9.15 a.m. Analyzing Key Determinants Affecting Electric Vehicle Adoption in Sri Lanka: A Comprehensive Evaluation. Saranjan Pakkiyarajah, Thilakshan Thisaiveerasingam and Saman Bandara (University of Moratuwa, Sri Lanka)

Paper 02 9.15 – 9.30 a.m. Enhancing the Driving Range of a Neighbourhood EV Using EV Rooftop Mounted PV System. Tharindu Dhanushka Udagedara and Prabhath Janaka Binduhewa (University of Peradeniya, Sri Lanka)

Paper 03 9.30 – 9.45 a.m. Analyzing the Battery Thermal Behaviour Under Sri Lankan Driving and Ambient Conditions. Chamath Padmaperuma, Surath Gajanayake and Prabhath Dissanayake (General Sir John Kotelawala Defense University, Sri Lanka)

Keynote 02 11.30 – 12.00 p.m. Keynote (25 min) + Discussion (5 min)

Paper 04 12.00 – 12.15 p.m. A Conceptual Overview: Integration of Bi-Directional Electric Vehicle (EV) Chargers for Effective Peak Grid Demand Management in Sri Lanka. Ashan Induranga and V. P. Vimukthi Tharaka (Sabaragamuwa University of Sri Lanka, Sri Lanka); Kavindu Gayashan Perera (University of Moratuwa, Sri Lanka); H. V. Vimukthi Priyadarshana and Kaveenga Rasika Koswattage (Sabaragamuwa University of Sri Lanka, Sri Lanka)

Paper 05 12.15 – 12.30 p.m. Implementation of Electric Buses into an Existing Public Transit Network: A Sri Lankan Perspective. Thilakshan Thisaiveerasingam, Thusitha Sugathapala, and Saman Bandara (University of Moratuwa, Sri Lanka)

Final Comments / End of Special Session

Organizers: Centre for Intelligent Transport Systems (CITS), University of Moratuwa, Sri Lanka.

- Prof. J.M.S.J. Bandara (Senior Professor, Dept. of Civil Engineering, University of Moratuwa)
- Dr. A. G. T. Sugathapala (Senior Lecturer, Dept. of Mechanical Engineering, University of Moratuwa)

For further details, information, and interest in collaboration, please contact Mr. T. Thilakshan (Dept. of Civil Engineering, University of Moratuwa) at thilakshant.21@uom.lk | +94777527175