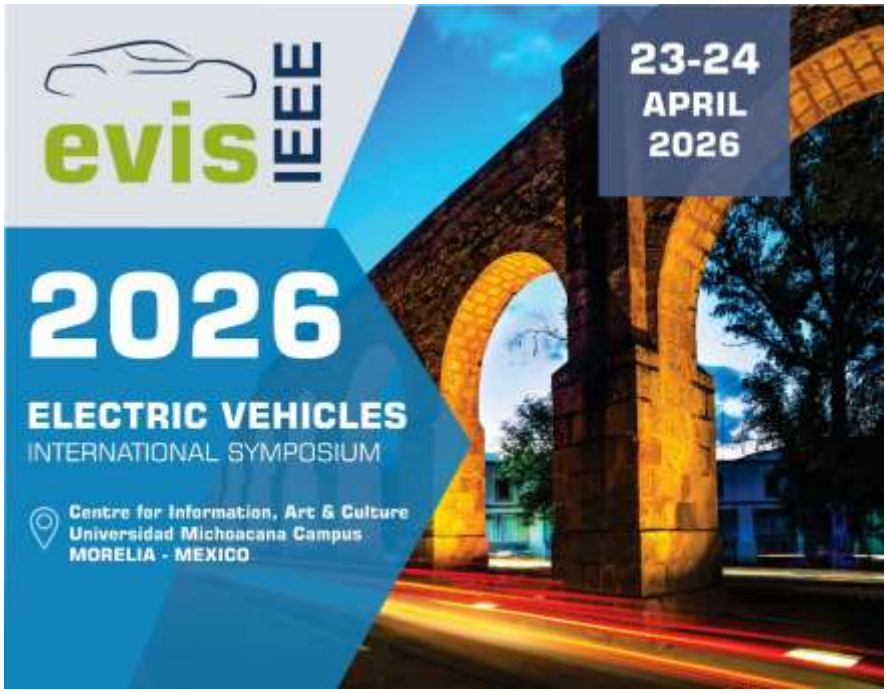
Conference Program

April 23-24, 2026



IEEE EVIS-2026
Electric Vehicles International Symposium
INTERNATIONAL CONFERENCE 2026

7th

Theme: "Advancements on shaping the future of transportation"

Days 1 and 2 (23-24 April)
International Conference

HEADQUARTERS:

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THURSDAY, 23 APRIL 2026

09:45 – 10:00 Opening Ceremony

10:00 – 11:15 Plenary Session 1

"How to invent driver assistance systems"
Lecturer: Dr. Raúl Rojas-González, Freie Universität Berlin, Germany.

Chair: Dr. Edgar Lenymirko Moreno Goytia, Instituto Tecnológico de Morelia

11:15 – 12:15 Paper Session 1

- **Electric vehicle adoption and electromobility research trends**
  Guerrero-Campanur A., Rodolfo Eleazar Pérez-Loaiza and Francisco J. Arévalo Carrasco
  División de Estudios de Posgrado e Investigación, Instituto Tecnológico Superior de Uruapan, México

- **Public policy options for promoting an electric freight corridor in Mexico**
  Edgar Sandoval-García, Madaín Pérez-Patricio and Anabel Martínez Guzmán
  Logistics Engineering, Tecnológico de Estudios Superiores de Cuautitlán Izcalli, México.

- **Market-layer detection of false reporting by EV retailers in electricity markets via a coordination-aware residual framework**
  Arash Asrari∗, M. Arbab Khan∗, Ehsan Naderi†, Mohsen Saffari∗, Poria Fajri‡
  ∗ Electrical & Computer Engineering, Purdue University Northwest, USA
  † Electrical Engineering, Arkansas State University, USA
  ‡ Electrical & Biomedical Engineering, University of Nevada, USA.

Chair: Dr. Claudio Rubén Fuerte Esquivel, Universidad Michoacana de San Nicolás de Hidalgo

12:15 – 12:30 Coffee Break

12:30 – 13:30 Paper Session 2

- **An improved AI-driven LiDAR–camera fusion for object detection, classification, and distance estimation in an autonomous electric vehicle**
  Volkan Bekir Yangin and Erdinc Altug
  Faculty of Mechanical Engineering, Istanbul Technical University, Türkiye

- **Eco-driving approach based on reinforcement learning for autonomous electric vehicles**
  Masoud Mohammadi∗, Poria Fajri∗, Arash Asrari† and Ehsan Naderi‡
  ∗ Electrical and Biomedical Engineering, University of Nevada, USA
  † Electrical and Computer Engineering, Purdue University Northwest, USA
  ‡ Electrical Engineering, Arkansas State University, USA

- **Depth estimation system for vehicular environments using multi-Camera arrays and distributed processing**
  Luis Felipe Ayala Jacobo∗, Jaqueline Cárdenas Regalado∗, Omar Morales Lira∗, Abraham Efraim Rodríguez Mata†, María Elena Montes Almanza∗, Víctor Alejandro González Huitrón∗
  ∗ Instituto Tecnológico de Querétaro, México
  † Instituto Tecnológico de Chihuahua, México

Chair: Dr. Jaime Cerda-Jacobo, Universidad Michoacana de San Nicolás de Hidalgo

13:30 – 14:30 Paper Session 3

- **Advanced modeling and PI control of lithium-ion batteries and vehicle dynamics: from BMS to speed tracking in electric vehicles**
  O.R. Zavala-Carrillo and L.E. Ugalde-Caballero
  Programa de Graduados e Investigación en Ingeniería Eléctrica, Instituto Tecnológico de Morelia, México

- **AC generation by DC/DC boost converter–full-bridge buck inverter system: modeling and simulation**
  Diego López Lagos, Víctor Hugo García Rodríguez, Roberto Carlos Ambrosio Lázaro, Salvador Tavera Mosqueda and Ernesto Cortes Pérez
  Faculty of Electronic Sciences, Meritorious Autonomous University of Puebla, Mexico

- **Parameter identification and optimal control for the trajectory tracking in a DC Motor: a real-time implementation**
  Emanuel Nolasco-Gomez and Fernando Ornelas-Tellez
  Faculty of Electrical Engineering, Universidad Michoacana de San Nicolas de Hidalgo, México.

Chair: Dr. Luis Ugalde-Caballero, Instituto Tecnológico de Morelia

FRIDAY, 24 APRIL 2026

10:00 – 11:00 Paper Session 4

- **Day-ahead solar prediction and demand response modeling with real-time error correction for peer-to-Peer transactive energy markets**
  Mohammad Zeyad∗, S.M. Masum Ahmed†, Berk Celik∗, Timothy M. Hansen‡, Manuela Sechilariu∗, Fabrice Locment∗, Joao Martins§, Enrique Romero-Cadaval†
  ∗ AVENUES, University of Technology of Compiégne, France.
  † Department of Electrical, Electronic and Control Engineering, University of Extremadura, 06006, Badajoz, Spain.
  ‡Department of Electrical and Computer Engineering, Colorado State University, USA.
  § NOVA School of Science and Technology, NOVA University Lisbon, Portugal.

- **Optimizing load frequency control strategy through the integration of electric vehicles**
  Muhammad Haris∗, Syed Ali Mashal†, Shaeer Jan†, and Kaleem Ullah‡
  ∗ Renewable Energy Engineering, U.S.-Pakistan Center for Advanced Studies in Energy, Pakistan
  † Electrical Energy System Engineering, U.S.-Pakistan Center for Advanced Studies in Energy, Pakistan
  ‡ Electrical Energy System Engineering, University of Engineering and Technology, Pakistan

- **Power quality analysis of a microgrid-based EV charging station using a Fourier approach**
  Norberto Garcia and Karen Gutierrez
  Faculty of Electrical Engineering, Universidad Michoacana de San Nicolas de Hidalgo, Mexico

Chair: Dr. Alejandro Zamora-Mendez, Universidad Michoacana de San Nicolás de Hidalgo

11:00 – 12:15 Plenary Session 2

"Technological overview of hydrogen for the decarbonization of transport in Mexico"

Lecturer: Dr. César Montiel Moctezuma, Instituto Mexicano del Transporte, México.

Chair: Dr. Norberto Garcia-Barriga, Universidad Michoacana de San Nicolás de Hidalgo

12:15 – 12:30 Coffee Break

12:30 – 13:30 Paper Session 5

- **Coil geometry analysis for wireless chargers in autonomous underwater vehicles**
  Inmaculada Casaucao, Alicia Triviño and Ruth Cueto
  Department of Electrical Engineering, University of Málaga, Spain.

- **Project methodology for installing chargers for a public fleet of electric vehicles**
  Leonardo Mariano Kunen∗, André Abelardo Tavares∗, Franciele Peruchi Ronchi∗, Breno Elias Bretas de Carvalho∗ and Glauber Teza Salvador†
  ∗ Department of Electrical Engineering, UNISATC University Center, Brazil
  † City Department of Education, Municipality of Criciúma, Brazil

- **Optimal sizing of a photovoltaic and hydrokinetic charging station for electric boats in Colombia's pacific region**
  John Barco-Jiménez, Francisco Eraso-Checa and Héctor Mora
  Ingeniería Electrónica, Universidad CESMAG, Colombia.

- **Machine-Learning assisted analysis of voltage relaxation settling time in commercial LFP and NMC cells for faster OCV-based SOC estimation**
  Athira Gireesh and Haneesh K M, Department of Electrical and Electronics Engineering CHRIST University, Bangalore, India.

Chair: Dr. Fernando Ornelas-Téllez, Universidad Michoacana de San Nicolás de Hidalgo

13:30 – 13:45 Closing Ceremony

Conference Program

April 23-24, 2026

Academic Partners

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Conference Program

April 23-24, 2026

Conference Program

23-24 April 2026

Information, Art and Culture Centre, Morelia, Mexico

It is our pleasure to announce that the 2026 IEEE Electric Vehicles International Symposium will be hosted by the Universidad Michoacana de San Nicolás de Hidalgo in the city of Morelia in México, on the 23th-24th April 2026.

With the title "Advancements on shaping the future of transportation", the IEEE EVIS-2026 will focus on electric vehicles adoption, public policies for promotion, EV retailers in electric markets, AI driven, autonomous electric vehicles, Li-ion batteries, power converters, electric traction systems, demand response modelling, load frequency control, power quality, micro-grids, hydrogen for decarbonization of transport and wireless chargers. Further, we will also welcome contributions from experts and speakers from industry.

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