



# NEWSLETTER

**OCTOBER 2023**

**THE INTERNATIONAL ASSOCIATION OF  
ELECTRICAL, ELECTRONIC AND ENERGY  
ENGINEERING**

**CEVVE 2023**

**2023 INTERNATIONAL CONFERENCE  
ON ELECTRIC VEHICLE AND VEHICLE  
ENGINEERING**

**COEEPE 2023**

**2023 3RD INTERNATIONAL JOINT  
CONFERENCE ON ENERGY,  
ELECTRICAL AND POWER  
ENGINEERING**

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## **CEVVE 2023**

**2023 International Conference on Electric Vehicle and Vehicle Engineering**

Shenzhen, China

November 10-12, 2023

[www.cevve.org](http://www.cevve.org)

[inquiry@cevve.org](mailto:inquiry@cevve.org)



## **CoEEPE 2023**

**2023 3rd International Joint Conference on Energy, Electrical and Power Engineering**

Melbourne, Australia

November 22-24, 2023

[www.coeepe.org](http://www.coeepe.org)

[contact@coeepe.org](mailto:contact@coeepe.org)



# CEVVE 2023



## 2023 International Conference on Electric Vehicle and Vehicle Engineering

The 2023 International Conference on Electric Vehicle and Vehicle Engineering (CEVVE 2023) will be held in Shenzhen, China during November 10-12, 2023. The objective of this conference is to provide a platform and opportunities for researchers, scientists, scholars and engineers to exchange their research experiences and share new ideas to promote their research progress in the field of Electric Vehicles and Vehicle Engineering with the discussion on practical issues, challenges encountered as well as solutions adopted.

The conference committee of CEVVE 2023 is excited to invite the authors and scholars from all over the world to submit research papers on the topics of Electric Vehicles and Vehicle Engineering to demonstrate their recent novel research progresses and results at the conference. The authors and scholars are encouraged to participate in this significant conference to obtain and exchange new knowledges to promote the advances in academic research in these fields.



**Pak Kin Wong**  
University of Macau  
China



**Hongming Xu**  
Tsinghua University, China  
University of Birmingham  
UK



**Zhenhai Gao**  
Jilin University  
China



**Chunhua Zheng**  
SIAT, Chinese Academy of  
Sciences  
China

# KEYNOTE SPEAKERS

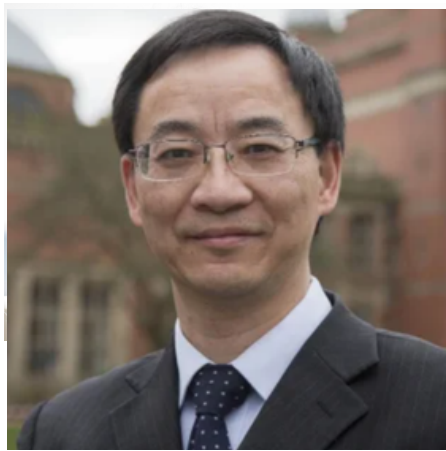
[WWW.CEVVE.ORG/SPEAKERS23](http://WWW.CEVVE.ORG/SPEAKERS23)


**Prof. Eric Cheng**  
IEEE Fellow, Director  
The Hong Kong Polytechnic University

**Speech Title:** Future Energy Storage For Electric Vehicles: Battery, Hydrogen, Ammonia or others

**Abstract:** The electric vehicle is one of the most significant technological developments of this century, driven in part by the goal of achieving carbon neutrality by 2050. However, energy storage and fuel remain major concerns for future development. While Li-ion batteries are currently the most common energy storage solution for electric vehicles, they suffer from recycling and carbon footprint issues. Hydrogen fuel shows promise, but numerous challenges must be addressed, including production, transportation, and safety concerns. Metal-oxide fuel cells are a promising alternative energy storage solution. Recently, the ammonia-powered electric vehicle has gained attention due to its potential low cost and operation under low pressure.

Power electronics form the backbone of vehicle technology, encompassing critical components such as power circuits, motor drives, chargers, and power distribution systems. In this presentation, we will explore various energy storage solutions, power conversion techniques, and fuel power processing technologies. Specifically, we will focus on our recent developments in ammonia-powered electric vehicles, which offer advanced features and zero emissions compared to hydrogen-based electric vehicles. The talk will discuss the basic technique of the ammonia power and its vehicle application.



**Prof. Hongming Xu**  
Chair in Energy and Automotive Engineering  
Head of Vehicle and Engine Technology Centre  
University of Birmingham

**Biography:** Hongming Xu is Professor of Energy and Automotive Engineering and Head of the Vehicle Technology Research Centre. He is Director of Birmingham CASE Automotive Research and Education Centre.

He has 6 years of industrial experience with Jaguar Land Rover and Premier Automotive Group of Ford. He researches synergies between fuel, propulsion and after-treatment technologies for cleaner road vehicles.

He has 450+ publications (including 200+ refereed journal papers and 200+ conference publications) in engine flow, combustion, emissions, transient operation control and hybrid electric powertrain development involving both experimental and modelling studies. His current main research area is new fuels and electrified powertrains with artificial intelligence based control and optimisation.

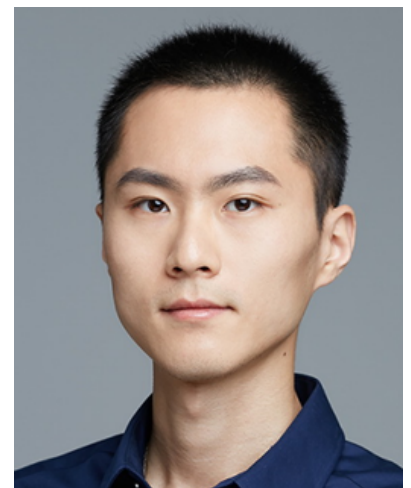
**Speech Title:** The future of automotive electric energy



**Assoc. Prof. Chen Lv**  
Nanyang Technological University

**Speech Title:** Human-Machine Hybrid Intelligence for Future Mobility

**Abstract:** The long-term goal of artificial intelligence (AI) systems is to make them learn, think and act smartly like human beings. As a typical application of AI, autonomous vehicles (AVs) become one of the most potential and ultimate ambitions in the smart mobilities. They primarily designed to replace human drivers during driving in order to enhance the performance and avoid the possible fatalities. In the near future, AVs are believed to share public roads with human-driven vehicles, which requires AVs to be smart and able to behave like human drivers, being reasonable and predictable to other road users. However, due to their limited smartness, current AVs are still lack of robust situation understanding, interaction prediction and human-like decision-making abilities when interacting with others, particularly in complex and emergency situations. Therefore, human-machine hybrid intelligence, as well as human-machine collaboration, are of great importance to ensure the safety and further improve the smartness of mobility systems, during long-term development and large-scale deployment of AVs. In this talk, the recent studies in human-like autonomy and human-machine hybrid intelligence for future mobility will be presented. First, a data-driven prediction and decision-making framework for human-like autonomous driving will be introduced. Next, a novel human-machine collaboration framework with bi-directional performance augmentation ability developed for automated vehicles and robotics will be presented in detail.



# COEEPE 2023



## 2023 3rd International Joint Conference on Energy, Electrical and Power Engineering



CoEEPE 2023 will provide an open forum for sharing and spreading the newest thoughts and research findings developed in key areas such as new and renewable energy, power electronics and electrical motor drives, distributed generation and energy storage, multi-energy systems and energy internet of things, data analytics and artificial intelligence.

The conference will be organised every year in different locations all around the world, with an aim to foster the knowledge and understanding of the recent advances across the broad field of Energy, Electrical and Power Engineering.

2023 3rd International Joint Conference on Energy, Electrical and Power Engineering (CoEEPE 2023) will be held in Melbourne, Australia on November 22-24, 2023. CoEEPE 2023 is organized by China Electrotechnical Society and The International Association of Electrical, Electronic and Energy Engineering (IAEEEE) and hosted by Anhui University, Wuhan University and Swinburne University of Technology.

Energy and power are playing an increasingly pivotal role in our modern life and are transforming the way we utilise energy and the way we live. This conference will bring together leading scientists, practitioners, researchers and delegates across the globe to present the latest innovations and knowledge in energy and power engineering and to stimulate new ideas and collaborations.







# CONFERENCE CHAIRS



**Jason But**

Swinburne University of  
Technology  
Australia



**Wenping Cao**

Anhui University  
China



**Jiaxin Yuan**

Wuhan University  
China



**Shu Yang**

University of Science  
and Technology of China  
China



**Xiaoyan Huang**

Zhejiang University  
China



**Zhonggang Yin**

Xi'an University of  
Technology  
China



**Peng Wang**

Nanyang Technological  
University  
Singapore



**Hazlie Bin Mokhlis**

University of Malaya  
Malaysia

## KEYNOTE SPEAKER

**Prof. Patrick Luk**

Cranfield University, UK

**Biography Sketch:** Patrick Chi-Kwong Luk is Full (Chair) Professor in Electrical Engineering and Head of Electric Power and Devices Group at Cranfield University, U.K. He has been the principal investigator for the successful delivery of a number of EU and UK-government funded strategic projects in grid-connected electric vehicles and electric machines. At Cranfield, he is responsible for providing academic leadership and strategic direction for More Electric Technologies across the University's different disciplines, including energy, automotive, aerospace and water. He is a member of the university's £9M 'Multi User Environment for Autonomous Vehicle Innovation' UK government funded initiative to develop green mobile technologies built on a 'smart' road across the university's campus. Most recently, he has started to lead a UK 'first' Green Airport programme, using Cranfield's own airport as the research platform.

**Speech Title:** A Pathway to Net-Zero Airports and Aviation by 2050

