IEEE CPE -POWERENG 2024 Conference Participation Report

Andrey Vulfovich

In June 2024 I had the opportunity to speak about my research at the IEEE CPE-POWERENG 2024 conference which took place in Gdynia, a charming city in Poland with the Gdynia Maritime University kindly serving as the conference host. My travel expenses and participation in the conference were fully funded by the Israeli Smart Transportation Research Center (ISTRC) to whom I am very grateful for their support.

The CPE-POWERENG conference is dedicated to experts carrying out research focused on power electronics, renewable energy integration and electromechanical system conversion with an increasing number of talks covering the topic of electrical vehicles (EVs) and smart transportation solutions. The objectives of the conference are to provide high quality research and professional interactions between industry and academia for the advancement of science, technology and fellowship. As such, it provides an opportunity to scientists, professional engineers and engineering students to present their work, publish their results, exchange ideas and network for future scientific and industrial collaborations.

This has been my second time participating in the CPE-POWERENG conference and I wholeheartedly believe that it is a very important annual event. During the conference, I had the honor of presenting my work in front of my peers and attending many

interesting talks and keynote speeches. A number of them stood out to me because they were relevant to both my research and the goals of ISTRC. I would like to mention three such presentations:

- S. Bayhan, "Charging the future: integrating electrical vehicles in hot climate transportation systems".
- O. Olagbegi, *et. al*., "Standardizing the energy storage architecture for battery electric vehicles".
- A. Chinnusamy, *et. al*., "Intelligent battery protection system for electric vehicle applications".

These three presentations were very enlightening and helpful for me as they were very relevant to my research. The first one addressed the future of EVs and their charging in hot climates, which is a very important topic considering the Israeli climate. The second one spoke about standardization of EV storage architecture which is a critical point that must be considered in battery charging applications. The third presentation addressed the issue of battery protection systems in EVs which are necessary to prevent potential hazards.

From my personal experience, I would highly recommend the CPE-POWERENG conference to anyone who has interests in the field of power electronics for smart electrical vehicle applications. Finally, I would like to once again thank the ISTRC for funding my participation in these important proceedings and hope for many more collaborations in the future.