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# *IEEE ENERGYCON 2022 Conference*

## *Participation Report*

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In may 2022 I had the pleasure of presenting my research at the IEEE ENERGYCON 2022 conference which took place in Riga, the capital of Latvia and an extraordinarily beautiful metropolis with Riga Technical University (RTU) kindly serving as the conference venue. My participation in the conference was fully funded by the Israeli Smart Transportation Research Center (ISTRC) to whom I am grateful for this opportunity.

The ENERGYCON conference is dedicated to experts carrying out research focused on energy and power systems with increasing coverage of topics in the field of electrical vehicles (EVs) and smart transportation solutions. It is one of the central events for discussion on the integration of electronics, instrumentation, information and communication technologies in energy-based applications. 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.

The past couple of years have seen many conferences being held virtually due to COVID and it was refreshing to finally be able to attend an event with the vast majority of participants physically present at the conference venue. During the event, I had the honor



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of sharing my research and attending many engaging presentations. 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:

- A. Andreaou, “Energy conservation by using the integration of distributed energy system in smart vehicles”.
- J. Vujasinovic, “Architecture and sizing of system for remote control of renewable energy sources powered station for electrical vehicles charging”.
- H. B. Sonder, “Estimation of cable and transformer loading with electrical vehicles and battery energy storage units”.

These three presentations can be seen as a summary of the smart electrical vehicle energy problems and possible solutions. The first one addressed how energy consumption of a smart vehicle may be lowered. The second one addressed the practical topic of utilizing renewable energy and smart charging stations for electrical vehicles. The third presentation demonstrated the detrimental effect of smart electrical vehicles on the electrical grid as a whole and provided an interesting solution.

In summary I would highly recommend the ENERGYCON 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.