



## **Seminar Announcement**

Friday April 29<sup>th</sup>, 2022. Time 10:30 – 12:30 Università degli Studi di Napoli Federico II - Aula T5, via Claudio 21, Napoli

## DRIVE CONVERTERS AS ULTRA-FAST CHARGERS IN AN INDUSTRIAL SCENARIO OF HEAVY-DUTY EV MOBILITY DEVELOPMENT

## Prof. Jerzy Szymanski

Kazimierz Pulaski University of Technology and Humanities in Radom

## Abstract

Important topics in the seminar:

- 1. Prediction of electric development of heavy-duty electric vehicle in nearest years,
- 2. Development of low voltage dives of big power motors in worldwide economy,
- 3. Drive PWM frequency converter as EV charger
- 4. Model and computer simulations of drives frequency converter as EV charger.
- 5. Battery charging stations and integration with the industry power system and RES (V2G, G2V).



**Prof. Jerzy Szymanski** is working as a scientist and academic lecturer at Technology and Humanities University in Radom Poland with Professor position in Transportation, Electrical and Computer Sciences Faculty in Electric Drives and Power Electronics Devices Division. Prof. Jerzy Szymanski has over 30 years of teaching and research experience in the diverse fields of Power Electronic Engineering. His areas of interest include: Power Electronics Converters in Drive Applications, Application of High Frequency Converter in PV and EV Systems, Electromagnetic Compatibility in Power Converters Systems, Hybrid power systems, Exploitation Safety of Electrical Equipment. He is actively involved in various research projects and international activities. He has

published over 100 research articles in reputed National/International journals. He is a member of the Reviewers and Editorial Board of reputed Journals like MDPI group, Springer, Elsevier. He has authored and coauthored books in reputed editors like Springer, Wiley.

He is a Member of Organizing Committees of International Conferences in Poland and India. The scientific interest includes among others electrical drive systems, electromobility, renewable energy, power electronic converters for electromobility and Renewable Energy Sources (RES), minimization of electromagnetic disturbances generated by power electronic converters, artificial intelligence tools in smart power distribution. At present he is working on the innovative solution related to the usage of electronic drive converters as battery chargers also. He participates as board staff in many national and international conferences and seminars.