



PhD, Assoc. Prof. Eng. Vasile RACHIER

Dr. Vasile Rachier graduated from the **Technical University of Moldova**, Faculty of Power and Electrical Engineering, specializing in **Electromechanics**. He obtained his **PhD in Engineering** at the same university, with research focused on *Energy Conversion Technologies and Renewable Resources*.

Dr. Rachier is the **author of over 45 scientific publications**, including **three books and monographs**, covering topics in advanced energy systems, electromechanical processes, and sustainable power technologies. He also serves as a **PhD supervisor** in the field of *Energy Conversion Technologies and Renewable Resources*.

Currently, he is an **Associate Professor** at the Technical University of Moldova and an **active member of several national and international research consortia**, contributing to projects that promote innovation and sustainability in modern energy engineering.



PhD, Lecturer. Eng. Octavian MANGOS

Dr. Octavian Mangos graduated from the **Technical University of Moldova**, Faculty of Power and Electrical Engineering, specializing in **Engineering and Quality Management**. He obtained his **PhD in Engineering** at the same university, with research focused on *Energy Conversion Technologies and Renewable Resources*.

Dr. Mangos is the **author of over 20 scientific publications**, including **one book**, addressing topics related to energy systems optimization, quality management in engineering processes, and renewable energy integration.

He currently serves as a **Lecturer** at the Technical University of Moldova and is an **active member of several national and international research teams**, contributing to interdisciplinary projects in the field of sustainable energy and technological innovation.

Title: Web Platform for Wind Potential Assessment in the Republic of Moldova

Abstract of presentation:

In the context of the energy transition and the growing interest in renewable sources, accurate and accessible assessment of wind potential in the Republic of Moldova represents a key step in supporting investment decisions and energy planning. This paper presents the development of a web platform dedicated to wind potential assessment in the Republic of Moldova, designed as an interactive and informative tool intended for both specialists and institutional or private users. The platform integrates historical meteorological data, statistical models based on the Weibull distribution, and algorithms for estimating electricity production, offering functionalities such as local wind resource analysis, selection of a suitable wind turbine, and automatic generation of a report on estimated electricity production. The proposed technical solution features a modular architecture with a clear separation between frontend and backend components, ensuring flexibility, scalability, and performance. Through this approach, the paper contributes to the digitalization of wind resource assessment processes and provides a regionally adapted alternative tailored to the territory of the Republic of Moldova.