Marianna Jacyna

Professor Marianna Jacyna is the Dean of the Faculty of Transport, Warsaw University of Technology. She specializes in: modeling and multi-objective optimization of transport and logistics systems, ecological and low emission transport, sustainable development of transport systems, infrastructure and vehicles exploitation, solving complex decision problems with multi-criteria optimization tools within transport and logistics. Scientific activity of Professor Marianna Jacyna is characterized by combining theory and practice. She participated, consulted or coordinated significant scientific research projects and several projects realized for industry. She is an author and co-author of many publications in the field of sustainable development, eco-mobility, adaptation of transport infrastructure to the tasks, material flow distribution on the transport network, designing transport systems and logistics facilities. Professor Marianna Jacyna headed a large development projects: "The model of Logistics System of Poland as a way to co-modality of transport in European Union" and "Proecological transport system designing". She is Editor-in-chief of Archives of Transport journal and associate editor in many international journals. Marianna Jacyna organizes cyclic international conference: Logistics Systems – Theory and Practice and is a member of Scientific Committees of several other conferences. Furthermore, she was the Vice President of Polish Academy of Sciences, Committee on Transport and she was the President of Scientific Council of Railway Institute.

Invited lecture: **Innovations Towards Greener and Smarter Mobility for urban areas - contribution of the Faculty of Transport, WUT**

Abstract: Reducing pollutant emissions from urban and suburban areas and improving mobility are key for sustainable development. Congestion, noise and emissions hinder delay competitive and resource-efficient transport systems woven into the urban tissue. Clean and smart mobility has become an important factor for economic and social commonwealth of societies and high quality of life of people with different needs living in cities. The transition towards greener and smarter mobility is built on six assumptions. The first is adaption of existing infrastructure to new complex transport and mobility needs. The second is the low- and zero-emission transport embracing whole lifecycle of vehicles. Third is the safety of people and the environment. Fourth is the multimodality of passenger and freight transport. Fifth is new business models and services for transport, especially in cities, and sixth is reliable information for ongoing planning and for crisis and risk management. Research and innovation play a key role in developing and implementing the next-generation solutions in these areas onto the market. Warsaw University of Technology, Faculty of Transport follows these trends by tracking transport innovations and trends. The offer of study programs, research and teaching laboratories as well as research projects of the Faculty aims at training of skilled and aware engineers capable of building not only effective, but also sustainable urban transport systems.