## Prof. Dr. Hab. Eng. Jerzy MERKISZ, multi Dr. h.c.

Editor-in-chief of Scientific Magazine "Combustion Engines"

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Professor Jerzy Merkisz was born on 14<sup>th</sup> September 1947. He graduated from Poznan University of Technology in 1971 where he has been working ever since and where he has earned all his scientific degrees (Doctor - 1978; Habilitation - 1992). He was admitted to the title of full professor in 1997. Professor Jerzy Merkisz has held the position of head of Head of Institute of Combustion Engines and Transport since 1993.

He was awarded two Doctor honoris causa degrees at:

- University of Bielsko-Biała (2011),
- University of Technology and Humanities in Radom (2014).

Professor Merkisz is Head of the Supervisory Board and Head of the Scientific Council at BOSMAL Automotive Research & Development Institute Ltd. in Bielsko-Biała. He is also member of the scientific council of Institute of Rail Vehicles TABOR in Poznan. Professor Merkisz is President of Polish Scientific Society of Combustion Engines and vice-chairman of Transport Committee of Polish Academy of Sciences and member of Committee on Machine Building of Polish Academy of Sciences.

The core of his scientific activity is the design and operation of machines – combustion engines; particularly their ecological aspects – the problems of combustion and exhaust emissions (the effect of thermal conditions of engines on exhaust emissions, fuel effect on emissions: clean fuels, alternative fuels, biofuels, etc.). He is active in such areas as ecology of transport and vehicle on-board information systems (including on-board diagnostic OBD, the problems of on-board recording devices – "black box", and elements of Intelligent Transportation Systems). He specializes in RDE (Real Driving Emissions), using Portable Emission Measurement System, for all combustion engine applications. For example: mopeds, motorcycles, light and high duty vehicles, ships, vessels, aircraft (piston and turbojet engines), combat vehicles (tanks, armed vehicles), harvesters, tractors, hi-rail (bimodal) vehicles, diesel locomotives, cranes, excavators.

Professor Merkisz has authored and co-authored above 360 scientific reports (works) for the automotive industry, including 245 as project manager. Together with Solaris Bus & Coach SA, he has co-authored several designs of city buses (parallel and serial hybrids, first electric bus in Europe, Ebus with Fuel Cell Range Extender, ultra-light bus etc.). Together with Tabor Rail Vehicles Institute, he has co-authored several designs and patents for bimodal road & rail transport. Professor Merkisz has been the promoter of 43 doctoral thesis and author/co-author above 600 papers.