



The Engineering Institute of Canada

2021 Award Citation

EIC Fellow

Yi Zhang

Nominated by IEEE Canada

Dr. Zhang is an internationally renowned expert in power system engineering and made outstanding contributions to real time simulation and HVDC technology. As the Vice-President R&D and Chief Technology Officer of RTDS Technologies Inc., the world largest manufacturers of real-time simulators, he led the development of the RTDS simulator, which is now the world standard for protection and control equipment testing and closed-loop simulation of power systems.

In his 20+ years of employment in RTDS, he pioneered numerous new algorithms and applications in real time simulation, including initiating the FPGA based simulation, developing the TWRT facility, and expanding real time simulation to large power system study, etc. Dr. Zhang's work through RTDS has revolutionized the testing methodology for the protection and control equipment, significantly reduced the complexity and increased the fidelity of the testing process for the entire power industry.

In HVDC area, he guided and supported the simulation and testing of many major HVDC projects globally. He developed a new concept AISCR to evaluate the contribution of power electronics devices to system strength, and established the eigen-analysis procedure for EMT level dynamics in VSC-HVDC systems. Dr. Zhang is a Fellow of IEEE and a Fellow of IET.

Ladies and gentlemen, and Mr. President, please welcome Yi Zhang as a Fellow of the Engineering Institute of Canada.