

The Engineering Institute of Canada 2021 Award Citation EIC Fellow



Natalia Nikolova

Nominated by IEEE Canada

Dr. Natalia Nikolova, a Professor of Electrical Engineering at McMaster University, has contributed to the global advancement of the computer-aided analysis of microwave systems. Her pioneering work enabled response sensitivity analysis in modern design -software. She developed the quantitative real-time methods of microwave imaging, a new powerful class of imagereconstruction algorithms capable of mapping the electrical properties of objects in three dimensions within seconds. This advanced the microwave imaging modality in medical diagnostics, security systems and non-destructive testing of materials.

An internationally recognized leader in the field of microwave and millimeter-wave imaging, she has published two monographs on the real-time methods of microwave imaging, six book chapters, and more than 270 refereed articles. She has given 49 lectures and Ph.D. courses worldwide along with IEEE Webinars on microwave imaging methods and computer-aided analysis and design.

Her service in promoting the Canadian engineering profession at home and abroad is outstanding, especially through her activities with the Institute of Electrical and Electronic Engineers. She is an active promoter of the engineering profession among women through her global activities in the IEEE Women in Engineering and locally at McMaster University.

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