

Dr Barna Szabados received the Diplôme d'Ingénieur from the University of Grenoble, France, and Master's and PhD from McMaster University. While on staff at the University of New Brunswick, he pioneered the field of inductive coordination, and became the expert on harmonic propagations in multi-grounded distribution systems. His mitigation procedures were adopted by utilities in North America and he spearheaded the IEEE 519 regulation still used today.

He joined McMaster as the "Westinghouse Chair in Energy Technologies" in 1980, heading a research program leading to transformer screen designs that lowered tank losses. He proceeded to work on induction machines, producing working models and new methods to place vents minimizing local heating. He was also involved with General Motors and developed the first industrial network which became the base for the universally adopted Manufacturing Automation Protocol, culminating with the implementation of the world first fiber optic network in a factory environment. In the mid 90's he discovered a method to dim fluorescent lights driven by magnetic ballasts, technology that eluded researchers for three decades. This work led to the creation and development of the present company, Fifth Light Technologies.

He became Director of the Power Research Laboratory at McMaster, and during his academic career he authored over 130 scientific publications, produced over 20 industrial reports, was invited speaker for industrial workshops on 10 occasions with Power Distribution Utilities in North America and Europe, contributed to 6 books, and was the primary investigator on 3 patents. He produced 14 Standard Engineering Practices for New Brunswick Electric Power Commission (NBEPCC), a Standard Operating Practice for NBEPCC and a "Joint Use Practice for NBEPCC and NBTel". He was a regular consultant to a variety of large companies and represented NBEPCC on CIGRE.

Dr. Szabados has been recognized by the Société des Ingénieurs Electriciens et Electroniciens de France with the award of the 'Médaille Ampère'. Later he was elevated by the First Minister of France to the rank of Chevalier de l'Ordre des Palmes Académiques (Knight of the order of the academic palms), "for the exceptional technical contributions and dissemination of knowledge", which is the highest French award given to a civilian. McMaster recognized his achievements by inducting him into the McMaster Hall of Fame. Recently he received the 2007 Outstanding Engineer Award from IEEE (Institute of Electrical and Electronic Engineers). He has also been recognized by the engineering profession by being elevated to the Order of Honour of the Professional Engineers of Ontario (PEO). He is now Professor Emeritus at McMaster.

Dr Szabados was a member of several IEEE working committees, is a regular reviewer for transaction journals, and was on the organizing committee of conferences. He has served on many NSERC and NRC committees, has participated in federal as well as provincial grant adjudication teams. He has served on the Canadian Engineering Accreditation Board for 9 years, spearheading the emerging software engineering professional accreditation. He is very active with PEO where he is notably a member of the "Academic Requirements Committee" and the "Licensing Committee".

Dr Szabados has also left his imprint on community affairs, having been President of the Canadian Fencing Association, member of the Canadian Olympic Committee, Senior fencing coach, as well as involved in the direction of his Church.