IEEE Electron Devices Society Delhi Chapter - India

in collaboration with

Department of Electronic Science, University of Delhi South Campus

and

Center for India-Canada Studies, University of Delhi

Invites you to the

IEEE Distinguished Lecture

on

"Artificial Intelligence and Brain Biofields Quantum Computing"

by

Prof. Adam W. Skorek

University of Quebec at Trois-Rivières, Canada

***Date* : March 30, 2022**
Time : 7 PM (IST) /8.30 AM (East Canada)

MS Teams Link - https://tinyurl.com/hzvfnfb7

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Artificial Intelligence and Brain Biofields Quantum Computing

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Abstract
Artificial intelligence (AI) is present in electrical, electronics, and computer engineering for years. In particular, the biofields defined as electromagnetics and thermal fields in living matter are naturally related to AI studies and applications, including brain analysis with numerical modeling and simulations. Brain functionalities inspire all developments in AI from theoretical investigations to machine learning, humanoids robots, and brains interface devices implementation. The brain biofields interactions with external excitations such as 5G telecommunications devices, transcranial magnetic stimulation, and even other brains biofields are currently explored more than ever before. The computation demand in modeling and simulation is still growing and it is particularly high in both AI and brain biofields applications. Hopefully, the High-Performance Computing (HPC) and High-Performance Quantum Computing (HPQC) infrastructures become more easily accessible and offer researchers some new opportunities based on the open and shared resources including not only computing facilities with quantum units but also knowledge with currently observed openings in the field of intellectual property issues. A presentation from a worldwide perspective of some modern research works with their results applications is completed by the lecturer's experiences and guidelines for the future. Some practical examples and instructions for researchers, engineers, and students are presented, stimulating the audience to various scientific as well R&D activities in those so promising areas.

Prof. Adam Waldemar Skorek, M'87, SM'90, F'09 completed Bachelor and Master of Electrical Engineering Program at Bialystok University of Technology(Poland) receiving both Master and Engineer degrees in 1980. Participant of the Electrical Engineering Faculty Doctoral Studies, he received a Doctor of Technical Sciences degree in Electrical Engineering at Warsaw University of Technology(Poland) in 1983. From 1983 to 1987 he was a Visiting Lecturer at the Institute of Telecommunications in Oran (Algeria).In 1987, he joined the University of Quebec at Trois-Rivières (UQTR), where currently, he is a Full Professor and Director of the Research Group on Industrial Electronics. He founded the UQTR's Electro-Thermal Management Laboratory which succeeded both the Nano-Heat Laboratory and the UQTR's Industrial Electro-Heat Laboratory founded and directed by himself since 1989. He is conducting electrical engineering courses for bachelor, master, and Ph.D. students. His research works were granted by NSERC, CFI, FRQNT, MITACS, and Industry. He was made contributions to the numerical analysis of electro-thermal and biofields phenomena exploring and applying various techniques to electrical apparatus, electronic devices, and living organisms. His publications and communications record include works on High-Performance Computing, Artificial Intelligence, and Quantum Computing applications, in electro-thermal and biofields analysis. A number of those publications are available in IEEE Xplore. The IEEE Fellow, as well Fellow of the Engineering Institute of Canada - he is the recipient of the 2021 IEEE Industry Applications Society Distinguished Service Award.