



**INDUSTRY APPLICATIONS CHAPTER
THE INSTITUTE OF ELECTRICAL AND
ELECTRONICS ENGINEERS INC
KOLKATA SECTION**



IEEE Technical Lecture

(with the Department of Electrical Engineering, IEST Shibpur)

Topic	Opportunities in Power Electronics
Speaker	Dr. Karun Malhotra, Managing Director, Murata Business Engineering (India) Pvt. Ltd.
Date & Time	26th March, 2018; 5 PM - 7 PM
Venue	Seminar Hall, Second Floor, Electrical Engineering Department, Indian Institute of Engineering Science and Technology (IEST), Shibpur, Howrah – 711103
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About the speaker:

Dr Karun Malhotra is the Managing Director of Murata Business Engineering (India) Pvt. Ltd (MBEI). This company, with its office in Hyderabad, was established in Jan 2017 as a 100% owned subsidiary of Murata Manufacturing Co., Ltd, Japan (MMC), with a very specific purpose of creating and growing new business in India with local partners and within the local eco-system. The focus areas are Energy and Health care. Until, Dec 31 2016, Karun was the Director of Corporate Technology Planning & New Business Development Group at the parent company, MMC. In that role he was responsible for planning, promoting & coordinating the corporate strategy for new technology & new business/applications with a focus on energy, healthcare and automotive business areas. Collaboration and Innovation are the key words in his mission to accelerate development of “commercially attractive” products and solutions. Karun is now implementing his philosophy at MBEI. Karun is a graduate of IIT, Delhi and after post-graduate studies at McGill University, Canada and Kyoto University, Japan. He joined Murata in Japan in 1990. During his tenure at Murata he has almost equal amounts of time in R&D, production, marketing, new business planning & acquisition and corporate technology division. He was also deputed as an expatriate in the USA for close to 10 years. Murata is the worlds’ largest developer and manufacturer of passive electronic components, devices and modules. It recently acquired the battery division of Sony.

Abstract of the talk:

“Clean Energy”, “EV/HEVs”, “PV plants”, “Renewable Energy”, “Storage”, “Micro-Grids”, etc. are some of the key words that are ubiquitous nowadays. Everybody likes to be associated with them; everybody wants to get involved in business related to those areas. However, only a few people understand the “complete and integrated energy eco-system” or really understand the impact of each product on the entire eco-system to make a sound business decision. There is the “herd mentality” existing in the market now. It seems that many companies (and investors) want to be making lithium batteries, set-up PV plants, enter the EV market. Some of them may be in it because of subsidies or short term profit, but how many of those ventures would lead to a sustainable and profitable business in the long term? Is there any magic formula to be successful as some of the world’s leading companies are? For sure, there is no magic wand, but in this seminar, the speaker will try to highlight the whole energy eco-system with focus on power electronics, the key technologies required and based on my experience introduce some guidelines for success. The seminar will focus on 2 main topics. The first one will introduce and highlight the entire energy eco-system. However, the focus will not be on the grand schemes like smart cities, autonomous EV, clean energy generation, but on the technologies that will be the enablers. In other words, the speaker will introduce the basic platform or backbone technologies that can be the key for sustainable and profitable business in “Power Electronics”. In the last part the speaker will introduce the technologies, products and strengths (and limitations) of Murata. As is probably known, Murata Manufacturing Co. Ltd., Japan is the largest and the most respected manufacturer of passive electronic components, devices (including batteries) and modules (wireless communication and power supplies) with worldwide product shares ranging from 35% to 100%. The company’s annual turnover is over 11BUS\$ and profits close to 2BUS\$. The speaker’s task in India is to create new business in areas of energy and health care in India, with emphasis on using Indian eco-system and partners.