

# Greetings from Amrita School of Engineering Bengaluru Campus

We encourage all the young Technologists, Researchers, Industry Professionals, Academicians to get benefited from this Distinguished Lecture by registering at the earliest through the link provided below.

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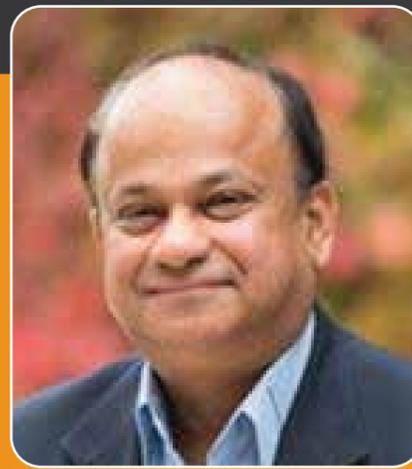
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**Krishna Shenai**

## ABSTRACT

### Distributed Clean Energy Infrastructure

Our ability to generate, store, and utilize DC electricity locally from clean and sustainable energy sources without the need for long-range transmission and distribution system enables the possibility for transformational changes in the electric utility and transportation infrastructures. The use of DC electricity enhances system-wide efficiency and reduces the overall cost. DC and hybrid microgrids powered by distributed clean energy sources such as wind and solar PV systems can rapidly contribute to human development around the world, and especially in emerging economies. Likewise, electric vehicles powered with clean energy technologies have the potential to dramatically impact the impending global climate changes. This talk will discuss the current status and emerging trends in this strategic technology.



**AMRITA**  
VISHWA VIDYAPEETHAM  
(Deemed to be university)

श्रद्धावान् लभते ज्ञानम् Established u/s - 3 of the UGC Act 1956  
**BENGALURU CAMPUS**



## IEEE PELS DISTINGUISHED LECTURE

# Distributed Clean Energy Infrastructure

**IEEE PELS Student Branch Chapter (SBC63931A),**

Amrita School of Engineering, Bengaluru



16<sup>th</sup> January 2018, 2.30 PM - 4.00 PM

Venue: Amriteswari Hall  
Amrita School of Engineering  
Bengaluru



## About the UNIVERSITY

Amrita Vishwa Vidyapeetham was established by the renowned humanitarian leader, Sri Mata Amritanandamayi Devi, who is also the Chancellor of the University. She is also affectionately known as Amma, who has dedicated her life for the upliftment of humanity through selfless service. The University started in November 1994 as an Institute of Technology with 120 students and 13 faculty members in the village of Ettimadai in Coimbatore District, Tamil Nadu. Today, Amrita Vishwa Vidyapeetham has emerged as one of the fastest growing institutions of higher learning in India. The University spreads over five campuses in three different states of India, with its headquarters at Coimbatore. It has a student population of around 18,000 and a faculty strength of over 1700. The university has over 150 undergraduate, postgraduate and doctoral programs. It has 15 constituent schools in Engineering, Medicine & Allied Health, Dentistry, Nursing, Pharmacy, Ayurveda, Management, Biotechnology, Arts & Sciences, Education, Communication, Nanosciences and Social Work.



## About BENGALURU Campus

Amrita School of Engineering, Bengaluru offers B. Tech. programs in five disciplines and M. Tech. programs in six disciplines. The school seeks to prepare graduates with a solution mindset and with a high degree of ethical standards. Recruiters from the best companies and institutes in India and abroad seek for these students. Curriculum is framed with extensive industry input. All programs are credit based. The school has a faculty strength of more than one hundred and fifty. Several of them have come to Amrita with rich experience from leading organizations and universities. The school traces its roots to the Amrita Institute of Technology & Science that was started in 2002 with a vision to produce quality engineers having an attitude of service, for the benefit of the society and nation. Affiliated then to the Visvesvaraya Technological University, Belgaum, the school is today one of the fifteen constituent schools of Amrita Vishwa Vidyapeetham. Highly qualified and experienced faculty members, state of the art facilities and the extensive industry-academia interaction all serve to make engineering education at Amrita's Bengaluru campus a unique and enriching experience.

## About the Department

The department of Electrical and Electronics Engineering (EEE) was established in the year 2004. It offers B.Tech., M.Tech. (Power Electronics) and Ph.D. programmes. The department has highly qualified, experienced and dedicated faculty from the industry and academia. The department is equipped with excellent infrastructure, state of art laboratories and funded research lab (DST-SERC, MHRD, Government of India). The faculty members of the department are actively involved in contemporary research. The department also offers several programmes to support overall development of the students.

## About the SPEAKER

**Krishna Shenai** earned the B. Tech. degree in electronics from IIT-Madras, India in 1979 and PhD. degree in electrical engineering from Stanford University, Stanford, CA in 1986. For over 40 years, Dr. Shenai has uniquely pioneered reliable power semiconductor and power converter technologies and has made seminal contributions to high-density power conversion. His research has shaped the world-wide industry and resulted in several key industrial products that are netting multi-billion dollar annual sales revenues. Some of these products include rugged low-voltage power MOSFETs and synchronous rectifiers, high-voltage high-speed IGBTs, broadband RF power transistors and power amplifiers, high-density resonant power converters, and widebandgap (WBG) power devices. He is widely credited for initiating and pioneering the development of WBG power devices and reliable high-density power converters.

**Dr. Shenai** has three dozen graduate student dissertations and founded and managed two successful VC-financed startup companies to successful outcomes. He has authored over 450 peer-reviewed archived papers, 3 books and 10 book chapters, edited 15 conference digests, and holds 13 issued US patents. He is a Fellow of IEEE, a Fellow of American Physical Society, a Fellow of American Association for the Advancement of Science, a Senior Fellow of The Computation Institute at The University of Chicago, a University Scholar of the University of Illinois, and a member of Serbian Academy of Engineers. Dr. Shenai serves as Distinguished Lecturer of both IEEE Power Electronics Society (PELS) and IEEE Electron Devices Society (EDS), and as an Editor of IEEE J. Electron Devices Society (JEDS).