

# IEEE Power Electronics Society Bangalore Chapter

## Distinguished Lecture Report

*Title: “Application Reliability of a Wide Bandgap (WBG) Semiconductor Power Electronics Switch”*

The poster features a dark blue background with a network of glowing blue and yellow nodes connected by thin lines. At the top, logos for IEEE, New Horizon College of Engineering, IEEE Power Electronics Society (PELS), and IES are displayed. The text is arranged in a structured layout, with the title in a central white oval and the speaker's name in a bold, italicized font.

**IEEE** **NEW HORIZON COLLEGE OF ENGINEERING** **IEEE POWER ELECTRONICS SOCIETY** **ies**

AUTONOMOUS COLLEGE Permanently Affiliated to VTU, Approved by AICTE & UGC Accredited by NAAC with 'A' Grade

IEEE Distinguished Lecture Program  
Organised by IEEE PELS & IES Bengaluru Chapter in collaboration with IEEE NHCE SB

**26<sup>th</sup> JULY 2019**

**TITLE :**

**Application *Reliability* of a Wide Bandgap (WBG) Semiconductor Power Electronics Switch.**

**Speaker:**

***Dr. Krishna Shenai***  
*IEEE PELS Distinguished Lecturer*  
University of Chicago, Chicago, Illinois (USA)

**Time:** 3.30pm - 5.00pm  
**Venue:** Falconry Hall,  
New Horizon College of Engineering,  
Bangalore- 560103

IEEE Power Electronics Society (PELS) Bangalore Chapter in association with IEEE Industrial Electronics Society (IES) has organized a distinguished lecture titled “**Application Reliability of a Wide Bandgap (WBG) Semiconductor Power Electronics Switch**”. The speaker that delivered this lecture was **Dr. Krishna Shenai, IEEE PELS Distinguished Lecturer**. It was conducted in New Horizon College of Engineering (NHCE) , Bangalore from 3:30 p.m. to 5 p.m.

## Speaker Biography

Krishna Shenai earned his B. Tech. (electronics) degree from IIT-Madras in 1979, MS (EE) degree from the University of Maryland – College Park, Maryland (USA) in 1981, and PhD (EE) degree from Stanford University, Stanford, California (USA) in 1986. For nearly 40 years, Dr. Shenai and his students have made seminal contributions to silicon and wide bandgap (WBG) power electronics technologies that have shaped the world-wide industry. He is a Fellow of IEEE, a Fellow of American Association for the Advancement of Science (AAAS), a Fellow of the American Physical Society (APS), and a member of the Academy of Engineers of Serbia (AES). Dr. Shenai currently serves as a Distinguished Lecturer of IEEE Power Electronics Society (PELS) and as an Editor of IEEE J. Electron Devices Society (EDS). He has authored over 400 peer-reviewed archived papers in top international conference digests and journals, 10 books, 9 book chapters, and holds 12 issued US patents.

Dr. Nisha, Professor of ECE, New Horizon College of Engineering(NHCE) and IEEE PELS ExCom Member, formally welcomed the gathering on behalf IEEE PELS Bangalore chapter and college.



Dr. Nisha Welcoming the speaker for the Distinguished talk

Ms. Athira Ajayakumar, Vice-Chair of IEEE Student Branch NHCE, has introduced IEEE Distinguished lecturer Dr. Krishna Shenai to the gathering.



Dr. Sanjeev Sharma, Head of the Dept. ECE welcoming the speaker Dr. Shenai



Dr. Shenai addressing the audience about IEEE membership benefits

Prof. Krishna Shenai has started his presentation about IEEE Power Electronics Society, which was founded in the year 1988. At present the society have over 8500 members worldwide. Office bearers and officers of PELS Adcom were introduced to students and faculty members through PPT. The participants were oriented with benefits of IEEE PELS which includes Networking, paper publishing, attending conference, technical committee members and so on.



Dr. Shenai delivering the Distinguished Lecture on “Application Reliability of a Wide Bandgap (WBG) Semiconductor Power Electronics Switch”.

Dr. Krishna Shenai shared his knowledge he acquired for almost 40 years in the industry on power switches. As the audience was a mixture of professors, postgraduates and undergraduates, Dr. Shenai liberally explained on power switches so that everyone was on the same page. He elaborated on concepts such as: power backup for systems, efficiency of designing power circuits which extends the life time with a minimum area and how important it is to keep the customer’s requirements in mind, while designing the circuit. With an effective presentation, he was able to convey information visually through circuit diagrams and graphs. He emphasized on the importance of being Industry-Ready, motivating students to dig deeper into different fields pertaining to Power and Electronics. The lecture ended on a subtle note, inspiring students to pursue a career in Power Industry.

Dr. Mini Sujith, Secretary, IEEE PELS , Bangalore Chapter has honored the guest with a token of appreciation

Prof. Dharmambal V of NHCE has rendered Vote of thanks to he guest and the participants



Total of 64 participants including faculty members from NHCE, UG students from departments of ECE, EEE and also research scholars of NHCE, Amrita School of Engineering, Amrita School of Engineering and PG students and research scholars of UVCE have attended the Talk.

**Few Snap Shots of the event**



IEEE PELS Bangalore Chapter members with the speaker



NHCE ECE Team with Dr. Shenai