



अनुसंधान नेशनल रिसर्च फाउंडेशन  
Anusandhan National Research Foundation



Department of Electrical and Electronics Engineering  
Anusandhan National Research Foundation (ANRF), GOI

Sponsored National Seminar on

## Research Potential in Power Electronics Converters for Renewable Energy

📅 17<sup>th</sup> - 18<sup>th</sup> September 2025

🕒 10:00 AM

📍 Tejas Seminar Hall

Head of the Department  
Department of Electrical and Electronics Engineering  
New Horizon College of Engineering  
Ring Road, Kadubisanahalli, Bellandur Post  
Bangalore - 560103, Karnataka, India



## Department of Electrical and Electronics Engineering

### Event Completion Report

Title	<b>National Seminar on “Research Potential in Power Electronics Converters for Renewable Energy”</b>	
Department	Department of Electrical and Electronics Engineering	
Date	From: 17.09.2025	To: 18.09.2025
Time	From: 10:00 AM	To: 04:00 PM

*Sponsored by*



अनुसंधान नेशनल रिसर्च फाउंडेशन  
**Anusandhan National Research Foundation**

The Department of Electrical and Electronics Engineering, New Horizon College of Engineering organized a **two-day ANRF Sponsored National Seminar** on “*Research Potential in Power Electronics Converters for Renewable Energy*” on 17-18, September 2025. The seminar aimed to provide a platform for researchers, academicians, and industry experts to share their insights on the latest advancements, challenges, and opportunities in the field of power electronics applied to renewable energy systems.

### Objectives of the Seminar

- ✓ To explore the emerging research trends in power electronics for renewable energy integration.
- ✓ To discuss various converter topologies suitable for solar, wind, and hybrid energy systems.
- ✓ To identify research gaps and opportunities for innovation in renewable energy applications.
- ✓ To encourage collaboration between academia, research institutions, and industry.

### Inaugural Session

The seminar commenced with a formal inaugural session. The **Chief Guest** Dr. Kowsalya M, Dean, School of Electrical Engineering, Vellore Institute of Technology, Vellore and Dr. Vishal Anand A G, Director of Engineering, Bloom Energy (I) Pvt Ltd, Bengaluru addressed the gathering and highlighted the importance of sustainable energy solutions. The **Welcome Address** was delivered by Dr. Sujitha S, Professor and HoD of EEE Department, followed by the **Presidential Address** by Dr. Revathi V, Dean, Department of Research and Development. The session concluded with a **Vote of Thanks** by Dr. Vinoth Kumar K, Professor in EEE and Associate Head in R&D of NHCE.



अनुसंधान नेशनल रिसर्च फाउंडेशन  
Anusandhan National Research Foundation

Department of Electrical and Electronics Engineering  
cordially invites you to the Inaugural Function of  
Anusandhan National Research Foundation (ANRF), GOI

Sponsored

**National Seminar on**

**Research Potential in Power Electronics Converters for Renewable Energy**

**Chief Guests**

**Dr. Vishal Anand A G**

Director of Engineering  
Bloom Energy (I) Pvt Ltd, Bengaluru  
Chair - IEEE Industrial Electronics Society  
Bangalore Section Chapter

**Dr. Kowsalya M**

Dean  
School of Electrical Engineering  
Vellore Institute of Technology, Vellore

**In the presence of**

**Dr. Manjunatha**

Principal

**Dr. Anandhi R J**

Dean - Academics

**Dr. Revathi V**

Dean - R&D

**Dr. Sujitha S**

Head, Department of Electrical and Electronics Engineering

**Dr. Vinoth Kumar K**

Professor - EEE and Associate Head - R&D, Department of R&D  
Convenor - ANRF File No. SSY/2025/000557



**17<sup>th</sup> September 2025**



**10:00 AM**



**Tejas Seminar Hall**

## Technical Sessions

The seminar featured a series of expert lectures and interactive sessions by eminent speakers from reputed institutions and industries:

Expert name with Affiliation	Date	Session No.	Topics of Discussion
<b>Inaugural Function</b>	17.09.2025 (09:30 AM - 10:00 AM)	S0	<i>Officials from NHCE and Chief Guest from Bloom Energy (I) Pvt Ltd &amp; VIT Vellore</i>
<b>Dr. Vishal Anand A G</b> Chair IEEE IES Bangalore Section Chapter Director of Engineering, Bloom Energy (I) Pvt Ltd, Bengaluru	17.09.2025 (10:00 AM - 11:15 AM)	S1	Overview about Power Electronic Converters for Industrial Applications
<b>Break</b>			
<b>Dr. Kowsalya M</b> Dean School of Electrical Engineering Vellore Institute of Technology, Vellore- 632 014, Tamil Nadu, India	17.09.2025 (12:00 PM - 1:15 PM)	S2	Advanced Electric Drives and Control Techniques for EVs
<b>Lunch Break</b>			
<b>Dr. Prema V</b> Chair IEEE PELS Bangalore Section Chapter & Associate Professor, Department of EEE, B.M.S. College of Engineering, P.O. Box No.: 1908 Bull Temple Road, Bangalore - 560 019 Karnataka, India	17.09.2025 (2:00 PM - 3:15 PM)	S3	Advancements in Power Electronics with Wide Bank Gap Device
<b>Break</b>			
<b>Dr. Shefali Jagwani</b> Associate Professor Department of Electrical and Electronics Engineering, Nitte Meenakshi Institute of Technology P.B.No.6429, Yelahanka, Bangalore – 560064, Karnataka, India	17.09.2025 (3:30 PM – 4:45 PM)	S4	Role of Power Electronics Converters in Smart Cities
<b>End of Day 1 Session</b>			
<b>Dr. Suman M</b> Assistant Professor Department of Electrical and Electronics Engineering, National Institute of Technology, Tiruchirappalli - 620015, Tamil Nadu, India	18.09.2025 (9:30 AM - 11:15 AM)	S5	Impact of renewable energy in distribution system
<b>Break</b>			
<b>Dr. Saravanakumar Thangavel</b> Project Engineer senior professional Hitachi Energy Chennai	18.09.2025 (11:15 AM - 12:30 PM)	S6	Power converters for wireless charging applications of EV
<b>Lunch Break</b>			
<b>Dr. Prajof P</b> Assistant Professor, Department of Electrical and Electronics Engineering, National Institute of Technology, NH 66, Srinivasnagar, Surathkal - 575025, Mangalore, Karnataka, India	18.09.2025 (2:00 PM – 3:15 PM)	S7	Power Electronics Applications in Renewable Energy and Electric Vehicles
<b>Break</b>			
<b>Dr. Raghu N</b> Associate Professor Department of Electrical and Electronics Engineering, School of Engineering & Technology, Jain Deemed-to-be University, Jakkasandra Post, Kanakapura Taluk, Ramanagara District – 562112 Karnataka, India	18.09.2025 (3:30 PM – 4:45 PM)	S8	Wireless Power Transfer for High End and Low End EV Cars
<b>Valedictory and End of Day 2 Session</b>			



Each session provided participants with deep insights into converter design, control strategies, grid integration, and future research directions.

## Participation

The seminar received an overwhelming response with participation from:

- ✓ Faculty members and research scholars from various universities and institutes.
- ✓ Industry professionals working in renewable energy and power electronics.
- ✓ Postgraduate and undergraduate students with a keen interest in renewable energy systems.

**Total participants: 56**



## Outcomes of the Seminar

- ✓ Enhanced understanding of converter technologies for renewable energy applications.
- ✓ Identification of key areas for collaborative research.
- ✓ Networking opportunities between participants, speakers, and industry experts.
- ✓ Motivation for young researchers to contribute innovative solutions in the renewable energy sector.

## Valedictory Session

The seminar concluded with a Valedictory Function, where participants shared feedback and appreciated the knowledge gained. Certificates were distributed to all participants.

## Acknowledgements


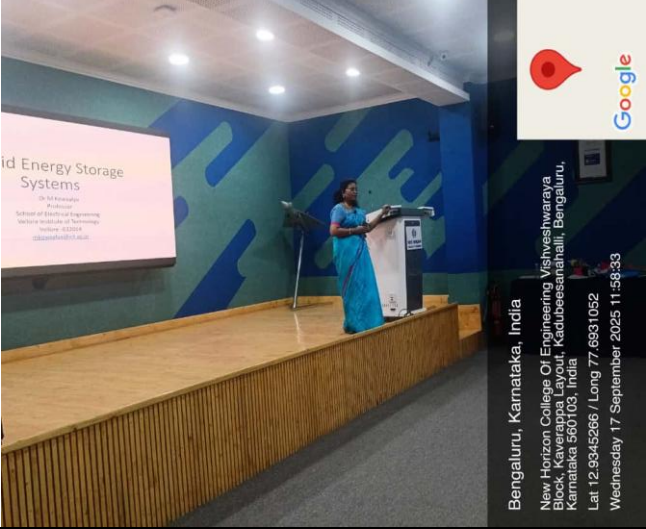

We extend our sincere gratitude to ANRF for sponsoring the national seminar, the management of New Horizon College of Engineering for their support, and all the speakers, participants, and organizing committee members for making the event a grand success.

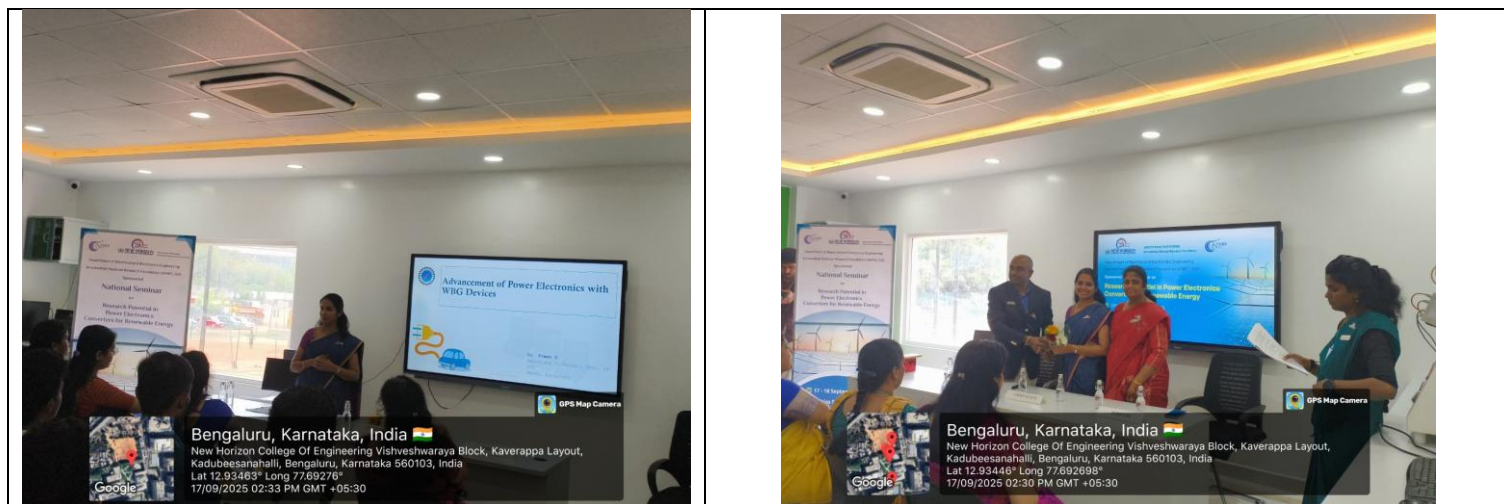
## Inauguration on 17.09.2025





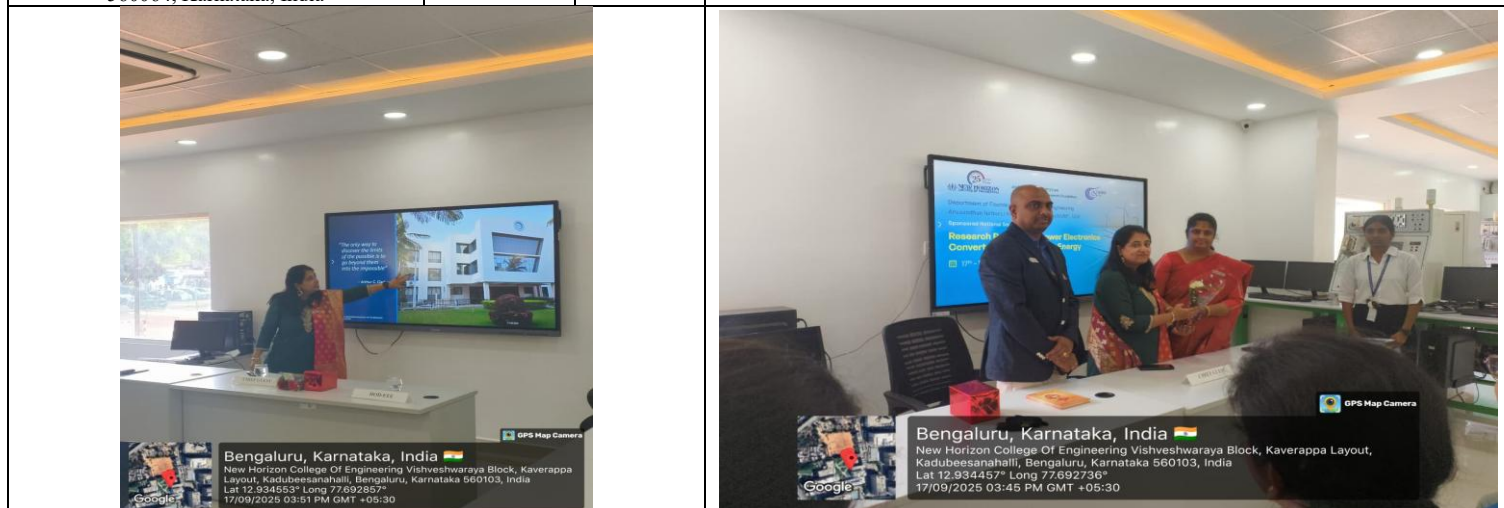
## Technical Sessions

Expert name with Affiliation	Date	Session No.	Topics of Discussion
<b>Dr. Vishal Anand A G</b> Chair IEEE IES Bangalore Section Chapter Director of Engineering, Bloom Energy (I) Pvt Ltd, Bengaluru	17.09.2025 (10:00 AM - 11:15 AM)	S1	Overview about Power Electronic Converters for Industrial Applications
			
Break			
<b>Dr. Kowsalya M</b> Dean School of Electrical Engineering Vellore Institute of Technology, Vellore- 632 014, Tamil Nadu, India	17.09.2025 (12:00 PM - 1:15 PM)	S2	Advanced Electric Drives and Control Techniques for EVs
			
Lunch Break			
<b>Dr. Prema V</b> Chair IEEE PELS Bangalore Section Chapter & Associate Professor, Department of EEE, B.M.S. College of Engineering, P.O. Box No.: 1908 Bull Temple Road, Bangalore - 560 019 Karnataka, India	17.09.2025 (2:00 PM - 3:15 PM)	S3	Advancements in Power Electronics with Wide Bank Gap Device
			



#### Break

<b>Dr. Shefali Jagwani</b> Associate Professor Department of Electrical and Electronics Engineering, Nitte Meenakshi Institute of Technology P.B.No.6429, Yelahanka, Bangalore – 560064, Karnataka, India	17.09.2025 (3:30 PM – 4:45 PM)	S4	Role of Power Electronics Converters in Smart Cities
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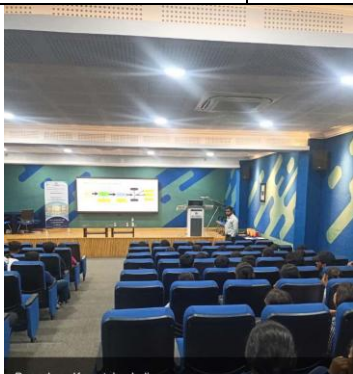

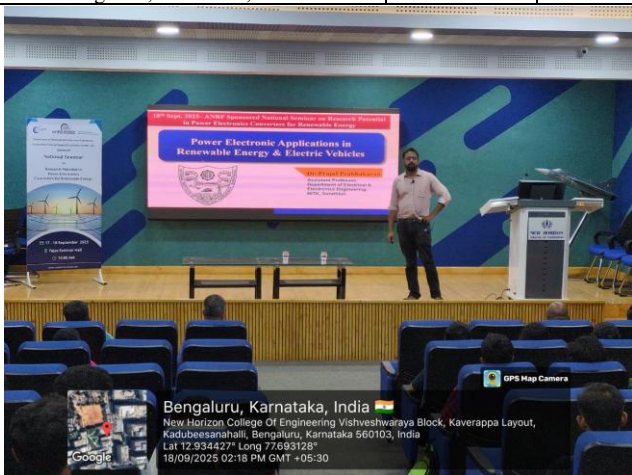



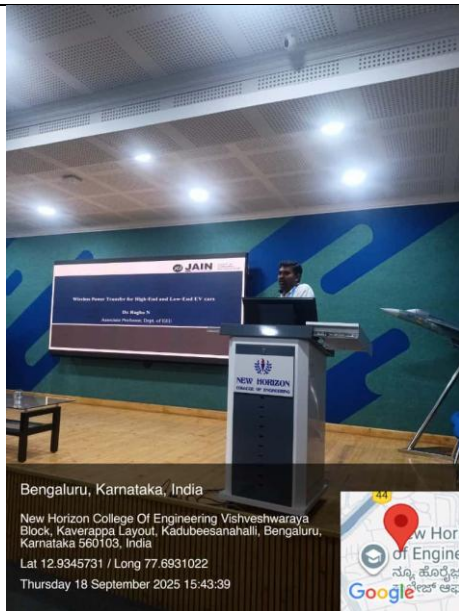
#### End of Day 1 Session

<b>Dr. Suman M</b> Assistant Professor Department of Electrical and Electronics Engineering, National Institute of Technology, Tiruchirappalli - 620015, Tamil Nadu, India	18.09.2025 (9:30 AM - 11:15 AM)	S5	Impact of renewable energy in distribution system
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Break			
<div>Dr. Saravanakumar Thangavel</div> <div>Project Engineer senior professional</div> <div>Hitachi Energy Chennai</div>	<div>18.09.2025</div> <div>(11:15 AM - 12:30 PM)</div>	S6	Power converters for wireless charging applications of EV
 <div>Bengaluru, Karnataka, India</div> <div>New Horizon College Of Engineering Vishveshwaraya Block, Kaverappa Layout, Kadubesanahalli, Bengaluru, Karnataka 560103, India</div> <div>Lat 12.9343678 / Long 77.693146</div> <div>Thursday 18 September 2025 11:51:43</div>		 <div>Bengaluru, Karnataka, India</div> <div>New Horizon College Of Engineering Vishveshwaraya Block, Kaverappa Layout, Kadubesanahalli, Bengaluru, Karnataka 560103, India</div> <div>Lat 12.9345675 / Long 77.693113</div> <div>Thursday 18 September 2025 12:15:08</div>	
Lunch Break			
<div>Dr. Prajof P</div> <div>Assistant Professor,</div> <div>Department of Electrical and Electronics Engineering,</div> <div>National Institute of Technology,</div> <div>NH 66, Srinivasnagar, Surathkal - 575025,</div> <div>Mangalore, Karnataka, India</div>	<div>18.09.2025</div> <div>(2:00 PM – 3:15 PM)</div>	S7	Power Electronics Applications in Renewable Energy and Electric Vehicles
 <div>Bengaluru, Karnataka, India</div> <div>New Horizon College Of Engineering Vishveshwaraya Block, Kaverappa Layout, Kadubesanahalli, Bengaluru, Karnataka 560103, India</div> <div>Lat 12.934427° Long 77.693128°</div> <div>18/09/2025 02:18 PM GMT +05:30</div>		 <div>Bengaluru, Karnataka, India</div> <div>New Horizon College Of Engineering Vishveshwaraya Block, Kaverappa Layout, Kadubesanahalli, Bengaluru, Karnataka 560103, India</div> <div>Lat 12.934451° Long 77.693104°</div> <div>18/09/2025 03:39 PM GMT +05:30</div>	
Break			
<div>Dr. Raghu N</div> <div>Associate Professor</div> <div>Department of Electrical and Electronics Engineering,</div> <div>School of Engineering &amp; Technology,</div> <div>Jain Deemed-to-be University,</div> <div>Jakkasandra Post, Kanakapura Taluk,</div> <div>Ramanagara District – 562112</div> <div>Karnataka, India</div>	<div>18.09.2025</div> <div>(3:30 PM – 4:45 PM)</div>	S8	Wireless Power Transfer for High End and Low End EV Cars



Bengaluru, Karnataka, India

New Horizon College Of Engineering Vishveshwaraya Block, Kaverappa Layout, Kadubeesanahalli, Bengaluru, Karnataka 560103, India

Lat 12.9345731 / Long 77.6931022

Thursday 18 September 2025 15:43:39



Bengaluru, Karnataka, India

New Horizon College Of Engineering Vishveshwaraya Block, Kaverappa Layout, Kadubeesanahalli, Bengaluru, Karnataka 560103, India

Lat 12.934524° Long 77.693081°

18/09/2025 03:58 PM GMT +05:30

### Valedictory and End of Day 2 Session



Bengaluru, Karnataka, India

New Horizon College Of Engineering Vishveshwaraya Block, Kaverappa Layout, Kadubeesanahalli, Bengaluru, Karnataka 560103, India

Lat 12.9343844 / Long 77.6931466

Wednesday 17 September 2025 09:52:01



Bengaluru, Karnataka, India

New Horizon College Of Engineering Vishveshwaraya Block, Kaverappa Layout, Kadubeesanahalli, Bengaluru, Karnataka 560103, India

Lat 12.934386 / Long 77.6926646

Wednesday 17 September 2025 09:33:01

Head of the Department  
Department of Electrical and Electronics Engineering  
New Horizon College of Engineering  
Ring Road, Kadubisanahalli, Bellandur Post  
Bangalore - 560103, Karnataka, India