



PELS CONNECT: Powering the Next Generation

PELS Mentorship Program organised during the IEEE Conference SPERT 2025

Date: 23rd December, 2025

Time: 10:00 AM – 12:00 PM

Venue: Staff Club, SVNIT, Surat

Organised by: IEEE Power Electronics Society (PELS) and Gujarat Section Jt. Chapter, IE13/IA34/PEL35 (CH10148)

Event Format: Mentorship Roundtable Interaction

As part of **SPERT 2025**, a flagship technical event, the **IEEE Power Electronics Society (PELS)** successfully organised a mentorship initiative titled **“PELS CONNECT: Powering the Next Generation.”** The program was conceptualised with the objective of nurturing future professionals in the field of power electronics by bridging the gap between academic learning, research exposure, and industrial practice.



Figure 1: Group photo of participants

Power electronics plays a pivotal role in modern technological advancements, including electric mobility, renewable energy systems, smart grids, and sustainable power solutions. Recognising the need for structured mentorship and professional guidance, **PELS CONNECT** was designed as an interactive platform to connect students and early-career professionals with distinguished mentors from academia and industry.



Objectives of the Program

The key objectives of PELS CONNECT: Powering the Next Generation were:

- To provide mentorship and career guidance to students and early-career researchers
- To expose mentees to real-world challenges and industrial perspectives in power electronics
- To facilitate interaction between academia, industry, and research professionals
- To encourage discussions on emerging technologies, research directions, and career pathways
- To build a sustainable mentorship ecosystem under IEEE PELS

The event commenced with a formal welcome address, where participants were introduced to the vision and mission of the PELS CONNECT program. The audience included faculty members, industry professionals, mentors, and enthusiastic student participants, creating a diverse and intellectually stimulating environment.

Esteemed Mentors

The success of the program was greatly enhanced by the presence of highly accomplished mentors from reputed institutions and industries:

- **Prof. S. N. Singh**, IEEE Fellow, IIT Kanpur
- **Dr. Brij N. Singh**, IEEE Fellow, John Deere, USA
- **Dr. Sanjeet Dwivedi**, Siemens Gamesa, Denmark
- **Mr. Amit Tailor**, REM Electromach Pvt. Ltd., Surat
- **Mr. Kinjal Panchal**, Director, Raj Electricals, Surat
- **Mr. Harsh Ghelani**, Technical Manager, Raj Electricals, Surat
- **Dr. Mahmadasraf A. Mulla**, Professor, EED, SVNIT, Surat
- **Dr. Mahesh Aeidapu**, Assistant Professor, EED, SVNIT, Surat



Figure 2: Group photo of Mentors

Their diverse expertise provided mentees with valuable insights into academic research, industrial practices, innovation, and global career opportunities.

Participation Details

- **Total Participants:** 61
- **Number of Mentors:** 8
- **Number of Mentees:** 53

The strong participation reflected the keen interest of students and young professionals in mentorship-driven learning and professional development.



Event Structure and Execution

The mentorship session was conducted in a roundtable discussion format, which encouraged open dialogue and close interaction between mentors and mentees. This interactive setup allowed participants to share experiences, ask questions freely, and engage in meaningful discussions, thereby enhancing the overall learning experience. The event was hosted by **Dr. Brij N. Singh**, whose guidance and leadership contributed significantly to the success of the session. The program was efficiently coordinated by **Mr. Jaiminkumar Patel**, with valuable support and assistance from **Dr. Mahmadasraf Mulla** and **Dr. Mahesh Aeidapu**, who collectively ensured smooth coordination among participants and effective time management throughout the event, resulting in a well-structured and impactful mentorship session.

The program structure was as follows:

- Two rounds of 30 minutes each
- In each round, mentees engaged in focused discussions with mentors
- After the first round, mentees rotated to different mentors, allowing exposure to multiple perspectives

This format encouraged open dialogue, personalised guidance, and meaningful engagement.

Participants discussed topics such as:

- Career planning in academia vs. industry
- Research opportunities and higher studies
- Skill development for power electronics engineers
- Industry expectations and real-world problem solving
- Emerging trends in power electronics and energy systems



Event Photographs







Appreciation to Mentors and Mentees







Outcomes and Impact

The roundtable mentorship sessions were highly interactive and impactful. Mentees gained clarity on career directions, research opportunities, and professional skill development. The mentors appreciated the enthusiasm and preparedness of the participants, leading to enriching discussions.

Key outcomes included:

- Enhanced understanding of career pathways in power electronics
- Direct exposure to industry and research insights
- Strengthened mentor-mentee connections
- Motivation among students to pursue innovation and excellence

The event successfully fulfilled its objective of empowering the next generation of power electronics professionals.

Conclusions

PELS CONNECT: Powering the Next Generation emerged as a flagship mentorship initiative under SPERT 2025, exemplifying the IEEE PELS' commitment to student development and professional growth. The collaborative environment, distinguished mentors, and enthusiastic participation made the event a resounding success.

The organising team expresses sincere gratitude to all mentors, participants, and IEEE PELS members for their valuable contributions. Such mentorship-driven initiatives will continue to play a crucial role in shaping future leaders in power electronics.

Mentorship