Inaugural Ceremony of IEEE Power Electronics Society - Student Branch Chapter &
Orientation of New Members, IEEE Student Branch (IEEE-STB)

Organized by: Electrical Engineering Department, School of Engineering Harcourt Butler Technical University, Kanpur

May 26, 2023





Advancing Technology for Humanity

ABOUT IEEE

 IEEE is the largest professional association dedicated to advancing technological innovation and excellence for the benefit to humanity.

• IEEE and it's members inspire a global community through IEEE's highly cited publications, conferences, technology standrads, and professional and educational activities.



- Has 39 technical Societies and seven Technical Councils representing a wide range of IEEE technical interests
- Has more than 5 million documents in the IEEE Xplore® digital library, with more than 15 million downloads each month
- Has an active portfolio of 1,032 standards and more than 1,045 projects under development
- Publishes more than 200 transactions, journals, and magazines
- Sponsors more than 2,000 conferences and events in 106 countries while contributing over 4 million total conference papers to IEEE Xplore since 1936, with more than 200,000 new papers added annually

IEEE has:

- Over 427,000 members in more than 190 countries, more than 64 percent of whom are from outside the United States
- More than 145,000 Student members
- 344 Sections in ten geographic Regions worldwide
- 2,702 Chapters that unite local members with similar technical interests
- 3,700 Student Branches at colleges and universities in over 100 countries
- 3,625 Student Branch Chapters of IEEE technical Societies

MISSION

• IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity.

VISION

• IEEE will be essential to the global technical community and to technical professionals everywhere, and be universally recognized for the contributions of technology and of technical professionals in improving global conditions.

The value of IEEE membership

Knowledge-

staying current with fast changing world of technology.

Community-

unparalleled networking opportunities, and the buying power in low, members-only rates on benefits and services.

• Profession-

empowering members to build their career, and giving back to society.

STUDENTS BENIFITS

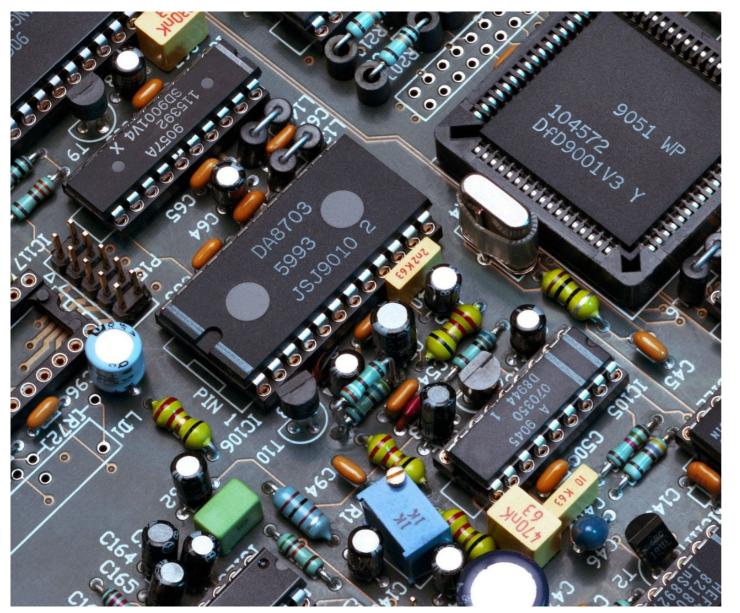
- Exiting context
- Award and scholarships
- > Travel grants
- > Project funds
- > IEEE BDS events

Computer Society Scholarships for Students

- Richard E. Merwin Scholarship
 - ▶ 40, US\$1000 Scholarships Awarded
 - Deadlines: April 30 & September 30
- ➤ Upsilon Pi Epsilon Honor Society
 - ▶4, \$1,000 Scholarships Awarded
 - Deadline: October 31
- Lance Stafford Larson Paper Contest
 - ≥2, \$500 Scholarships Awarded
 - Deadline October 31

IEEE STB HBTUK

- Counsellor
 - DR. SANJIV KUMAR (Associate Professor EED HBTUK)
- Chair
 - ✓ Mr. Akshat Shrivastava
- Vice Chair
 - ✓ Mr. Abhinav Singh
- Secretary
 - ✓ Ms. Aastha Tripathi
- Treasurer
 - ✓ Mr. Aman Abhijat
- Web Master



IEEE POWER ELECTRONICS SOCIETY



ABOUT PELS

The Power Electronics Society (PELS) is one of the fastest growing technical societies of the Institute of Electrical and Electronics Engineers (IEEE).

MISSION

PELS shall advance the theory and practice of electrical and electronics engineering and it shall promote a high level of technical excellence among its members.

VISION

The PELS's goal is to keep its members current and competitive in the workplace and provide them with the tools necessary to help them grow both personally and professionally.

Field of Interest

The field of interest of the Society shall be the development and application of power electronic systems, which encompass the effective use of electronic components, the application of circuit theory, conditioning of electric power to enable the sustainable use of energy.

<u>AWARDS</u>

•There are various prestigious awards in the field of Power Electronics that aim at students and young engineers for their service in supporting the welfare of PELS and the Power Electronics community.

PLES SBC HBTUK

COUNSELLOR -> Dr. Sanjiv Kumar (Associate Professor EED HBTUK)

CHAIR -> MR. ASHUTOSH YADAV

VICE CHAIR -> MR. AMAN SINGH

SECRETARY -> MR. KAUSHAL MATHURIA

TREASURER -> MR. RAHUL KUSHWAHA



PELS invites everyone to celebrate PELS Day on 20 June. On this day in 1987, PELS became a full-fledged Society within IEEE. There are contests that will be organized on this occasion.

1.PHOTO CONTESTS:

<u>Objective:</u> The primary aim of this contest is to promote PELS, increase branding, increase member engagement, and share PELS global activities.

Prize: People's Choice: USD 500

Timeline:

- 20 June: Submission opens
- 30 June (11:59 PM EDT): Submission closes
- 2 July: Voting opens
- 10 July (11:59 PM EDT): Voting closes

How to Enter: Entrants must submit a photo ("Entry") by uploading a photo to the form below. Each PELS Chapter, Joint Chapter, SBC, or Joint SBC can submit ONLY ONE photo to this contest, irrespective of how many events they had conducted per PELS Day 2023 celebrations.

2.Trivia Challenge: Beginning on 14 June, PELS-themed trivia questions will be posted on PELS's social media pages leading up to 20 June. During the closing celebration, the final question will be posted. Submissions will be open for each day's

<u>Prizes:</u> Daily prizes will be awarded to the first correct responses, and a grand prize will be awarded to the individuals with the most correct answers over the 7 days.

Those who answer all 7 correctly will be entered into a raffle to receive a PELS-themed prize!

STUDENT BRANCH CHAPTERS

Student Members are vital members of PELS since they represent the future of the field.

PELS aims to cultivate a vibrant community for Student Members to develop their careers in power electronics by providing the following:

->Student Competitions:

ECCE Student Project Demonstrations on Emerging Technology
Award Program-

ECCE has organized a hardware demonstration event for students to showcase their research outcomes and interact with academia and industry.

Topics of interest include all emerging areas of power electronics and related technologies, such as 3-D power electronics integration, emerging power devices and their applications, energy harvesting, high-reliability power electronic components and converters.

• Prizes:

- First Place: Certificate and a one-time cash award of USD 700
- Second Place: Certificate and a one-time cash award of USD 500
- Third Place: Certificate and a one-time cash award of USD 300

Other Competitions:

-> IEEE International Future Energy Challenge

<u>Student Travel Grants:</u> The PELS has a travel reimbursement program for students who present a paper at PELS-sponsored conferences and workshops. PELS provides travel support at conferences and workshops.

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| | Dates | Event Topics | Description | Require Items | Budget |
| 6. | 14/10/2023 | Webinar | Webinar on 'Simulation of Power Converters Using Python' | E-Certification of participants, Momento for speakers, E-Certificate for Event Organizers | ₹8000 |
| 7. | 1/11/2023 | Executive Committee Meeting 3 | To analyse the overall effectiveness and performance of the Members and to take feedback regarding all the students chapter activities. | Refreshments | ₹2,000 |
| 8. | 26/11/2023 | Webinar | Webinar: Increasing Power Density in Electric Vehicle Converters | E-Certification of participants, Momento for speakers, E-Certificate for Event Organizers | ₹8000 |

THANK YOU!