IEEE Power Electronics Society (PELS) Young Professionals' – Activities and Practices

www.ieee-pels.org

ECCE Asia 2021

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Advancing Technology for Humanity

IEEE Power Electronics Society (PELS)

A Not-For-Profit Organization Society within the **IEEE**:

 IEEE is the world's largest professional association dedicated to advancing technological innovation and excellence for the benefit of humanity. IEEE and its members inspire a global community through IEEE's highly cited publications, conferences, technology standards, and professional and educational activities.

The <u>IEEE Power Electronics Society (PELS)</u> was founded in 1987, after a few years of operation as the Power Electronics Council.

PELS is an IEEE Society with over 10,000 members worldwide





Officers of the PELS AdCom

President 2019-2020



Frede Blaabjerg

President-Elect 2021-2022



Liuchen Chang





Alan Mantooth





PELS Membership Benefits Include:

Publications

- Print & Digital Subscription
 - IEEE Power Electronics Magazine
- Online Subscriptions
 - IEEE Transactions on Power Electronics
 - IEEE Journal of Emerging and Selected Topics on Pov Electronics
 - IEEE Transactions on Sustainable Energy
 - IEEE Transactions on Transportation Electrification
 - IEEE Transactions on Smart Grid
 - IEEE Journal of Photovoltaics
 - IEEE Electrification Magazine
 - All sponsored conference proceedings
- NEW! Launched October 2019
 - IEEE Open Access Journal of Power Electronics





Membership Benefits Include:



Conferences &
Workshops - Online Access
to all PELS sponsored
conference proceedings.
Registration discounts on
conferences, symposiums
and workshops



Easy access to books, tutorials, webinars, and videotapes, at discounted member rates.. or FREE!







Technical Committees-

Active committees concentrate on such key areas of technology as:

- Power & Control Core Technologies,
- Power Conversion Systems and Components
- Motor Drives and Actuators
- Vehicle and Transportation Systems
- Sustainable Energy Systems
- High performance and Emerging Technologies
- Communication Energy Systems
- TC-1 to TC-12...



Membership Benefits Include:

Networking

- PELS has over 170 chapters, worldwide, professional & student branches (~85 SBCs)
- Young Professionals enjoy networking events at:
 - APEC
 - ECCE: North America, Asia, Europe
 - SPEC
 - Collaborate with IAS/IES YP
- Members Participate in:
 - Technical committees
 - Conference committees
 - Chapters
- Women in Engineering events/socials gatherings







Education/Student Activities

PELS has a broad student program and supports exciting student activities:

- IEEE Future Energy Challenge
 - International competition for innovation, conservation and effective use of electrical energy
- Student Travel Grants
 - Supporting students who participate in PELS Conferences
- Mentorship
 - Mentorship events (round tables) at major PELS conferences
 - Such as APEC, ECCE-NA, and others
- PELS Prize Ph.D. Thesis Talk (P3-Talk)
 - Encourages recently graduated Ph.D. students to make a video of up to 200 seconds on their Ph.D. projects showcasing their research achievements in academics and industrial fields (submission ~June – July)

Distinguished Lecturer Program

- Class of 2019-2020
 - Vassilios G. Agelidis
 - Technical University of Denmark
 - **Huang-Jen Chiu**
 - National Taiwan University of Science and Technology
 - Paolo Mattavelli
 - University of Padova, Italy
 - Krishna Shenai
 - Nitte University, India
 - Petar J. Grbović
 - University of Innsbruck, Austria
 - Jian Sun
 - Rensselaer Polytechnic Institute, NY, USA

- Class of 2018-2019
 - Hui "Helen" Li
 - Florida State University, USA
 - **Sudip Mazumder**
 - University of Illinois, Chicago, USA
 - Udaya K. Madawala
 - The University of Auckland, New Zealand
 - **Robert Balog**
 - Texas A&M University at Qatar
 - An Luo
 - Hunan University, China



To request a DL talk, please submit your request by completing

this form





Other Best Practices of IEEE PELS YP

- ➤ Webinar series: three by YP since July 2020 → planning at least one per quarter in 2021
- Contribute towards PELS society-level Long Range Planning (or LRP)
- Member of the Core Steering Committee for FEPPCON
- > PELS YP and Students' Guidebook
- PELS Day photo contest & awards





By Mark Ledingham - Sommernatt i Tromsø. The Municipality of Tromsø from Tromsø, Norway; Uploaded by Arsenikk, CC BY 2.0, https://commons.wikimedia.org/w/index.php?curid=29360000



Student Branch Annual Reporting

- PELS offers US \$500 to newly established Chapters/Student Branch Chapters.
- Chapters and Student Branches Chapters in good standing may request US \$250 yearly as operational funding to support their activities.
- The chapters receive \$250 for reporting;
- 107 % more reports in 2020;
- R9 and R10 had significant improvements in the number of reports;
- PELS Best Student Branch Chapter Award (IIT Mandi in 2020)



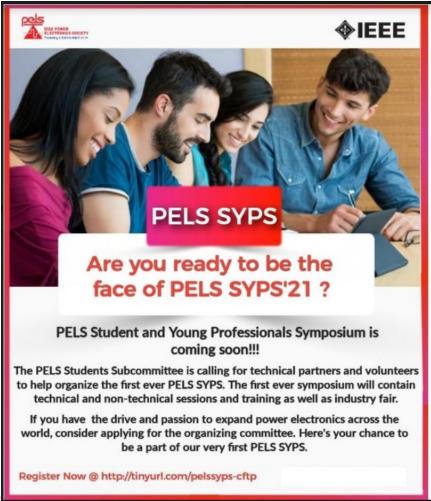


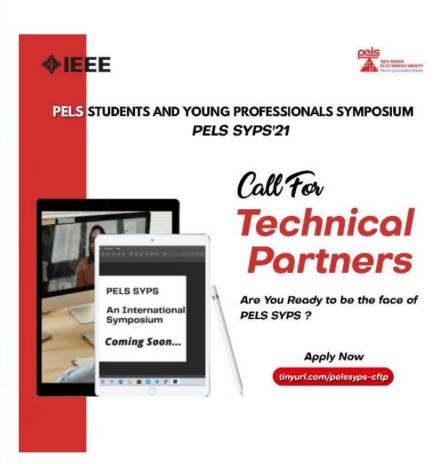
IEEE PELS Day - June 20th

- PELS Day Student Regional Leaders
 - Encouragement of student activities and photo contest participation.
- Seminars, discussions, historical site or industry visits, social events, Distinguished Lecturers, research demonstrations ...
- PELS Day Photo Contest:
 - US\$500, US\$300, andUS\$200 prizes;



IEEE PELS Students and Young Professionals Symposium (SYPS)









Fuel Your Career and Your Future!

In striving to build knowledge and awareness of the latest technologies and other advances in power electronics, the Power Electronics Society's goal is to keep members current and competitive in the workplace, and provide the tools necessary to help them grow both personally and professionally.

Join IEEE PELS today...

And be connected to the ultimate source of POWER in your industry!

We welcome motivated volunteers from academia, industry as well as national laboratories!







Thank you!

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Visit: https://www.ieee-pels.org/membership/young-professionals



