

**Welcome and Call to order by President, Liuchen Chang at 2:30 PM ET**

	<b>Name</b>	<b>Title</b>	<b>In Attendance</b>
1	Liuchen Chang	President	x
	Brad Lehman	President Elect	x
2	Jian Sun	VP Conferences	x
3	Brad Lehman	VP Products	x
4	Pat Wheeler	VP Technical Operations	x
5	Mark Dehong Xu	VP Membership	x
6	Mario Pacas	VP Global Relations	x
7	Johan Enslin	VP Standards	x
8	Frede Blaabjerg	Immediate Past President	X
9	Alan Mantooth	Senior Past President	X
10	Alireza Khaligh	Treasurer	X
11	Katherine Kim	Constitution & Bylaws Chair	X
<b><u>TC Chairs</u></b>			
12	Al-Thaddeus Avestruz	TC 1: Technical Committee Chair Power & Control Core Technologies	
	Hanh-Phuc Le	TC 2: Technical Committee Chair Power Conversion Systems and Components	X
	Ali Bazzi	TC 3: Technical Committee Chair Motor Drives and Actuators	
13	Mahesh Krishnamurthy	TC4: Technical Committee Chair Vehicle and Transportation Systems	X
	Juan Balda	TC 5: Sustainable Energy Systems	
14	Robert Pilawa-Podgurski	TC 6: Technical Committee Chair High Performance and Emerging Technologies	
	Alexis Kwasinski	TC 7: Technical Committee Chair Communications Energy Systems	X
15	Marco Liserre	TC 8: Electronic Power Grid Systems	X
	Chris Mi	TC 9: Wireless Power Transfer Systems	
16	Kevin Hermanns	TC 10: Design Methodologies	X
	Jin Wang	TC 11: Aerospace Power	
17	Sanjib Panda	TC 12: Energy Access and Off-Grid Systems	X
<b><u>Members at Large-2020-2021-2022</u></b>			
18	Christina DiMarino	Member-at-Large	X
19	Marco Liserre	Member-at-Large	X
20	Sudip K. Mazumder	Member-at-Large	X
21	Brendan McGrath	Member-at-Large	X
22	Xiongfei Wang	Member-at-Large	X
dup	Mark Dehong Xu	Member-at-Large	X
<b><u>Members at Large 2021-2022-2023</u></b>			
23	Noriko Kawakami	Member-at-Large	X
24	Yan-Fei Liu	Member-at-Large	X
25	Yunwei (Ryan) Li	Member-at-Large	X
26	Pedro Rodriguez	Member-at-Large	x
27	Jennifer Vining	Member-at-Large	
28	Navid R. Zargari	Member-at-Large	X
<b><u>Members at Large 2022-2023-2024</u></b>			

29	Stephanie Butler	Member-at-Large	X
30	Ulrike Grossner	Member-at-Large	
31	Axel Mertens	Member-at-Large	X
32	Giovanna Oriti	Member-at-Large	X
33	Maryam Saeedifard	Member-at-Large	X
34	Shinzo Tamai	Member-at-Large	X
<b>Ex Officio Members of the AdCom (Non-Voting Members)</b>			
	Andreas Lindemann	Awards Chair	X
	Ger Hurley	History Chair	X
	Don Tan	Past President	X
	Phil Krein	Past President	X
	Dushan	Past President	x
<b>Staff</b>			
	Mike Kelly	Society Executive Director	X
	Becky Boresen	Technical Community Program Specialist	X
	Megan Cichoki	Technical Community Program Specialist	X
	Jane Celusak	Project Manager	X
	Alicia Tomazewski	TEC Project Manager	X
	MaryBeth Schwartz	Publications Administrator	X
	Jessica Uherek	Publications Administrator	X
<b>Guests in attendance</b>			
	Jinjun Liu	Yongsug Suh	Dong-Choon Le
	Srinivas Bhaskar	Brian Zahnstecher	Seung-Ki Sul
	Antonio Cardoso	Joao Pinto	Christopher Wright. IEEE Foundation

#### Quorum Met

#### Approval of Agenda

**MOTION: to approve the agenda: Robert Pilawaa**

**Second: Alan Mantooth**

**MOTION: Carried**

#### Approval of AdCom Minutes from APEC 2022

**MOTION: to approve the minutes: Stephanie Butler**

**MOTION: Carried**

#### Review of Remaining Action Items

Liuchen Chang

- <https://app.smartsheet.com/b/publish?EQBCT=da9ab7b6cb7644f2ba8ed8bc8ba60511>

#### Approval of Action Item

**MOTION: to approve the action items:**

**MOTION: Carried**

#### President's Report

Liuchen Chang

#### Review of Adcom Members

#### Highlights

- 11,000 members world-wide.
- 233 Chapters & Joint Chapters and Student Branch Chapters in all 10 Regions.
- Strong publication portfolio: quality, performance and growth (page count increases)
  - TPEL remains the most downloaded Transactions (overlength page charge starts on Page 11)
- Full operation of 12 TCs:
  - 3,500+ TC members: conferences, webinars, awards, publications, student events/grants etc.
- Conferences are coming back: hybrid
- Value to Industry and Practitioners (VIP) Best Paper Award

- Many successful in-person events – WIE, YP, Mentorship, demos, workshops
- EBL 2.0 (2021-2023) is ongoing, with extremely strong partnerships
- Strong financial position
- FEPPCON 2022 in June Iceland
- VP Industry and Standards
  - New standing committee: Industry Committee chaired by Stephanie Butler +existing standing committee: Standards Committee
- Scholarship and Fellowship Programs
  - Up to 7 & 7 with \$6,000 each to support research exchange at intl. institutions
- Flourishing education activities
  - Fellowship/Scholarship programs, PELSTube, P3 Talks, PhD/Summer schools, support to PE education in developing countries, student competitions/demos...

#### **AdHoc Committee for Developing a Society Annual General Meeting (Members' Congress)**

- 100% PELS event for members (Student &YP event, Chapter forums, WiE and mentorship event, regional events, Awards, PELS Day Close-up, job fairs for students, education events, K-12 engagement, student competitions, AdCom and committee meetings)
- Co-locating with PELS conferences, and rotating globally
- Developing and implementing in the next 2-3 years
- In the interim, we may hold a third AdCom meeting of strategic discussions on selected topics co-located with ECCE Asia 2023 in May 2023 in Jeju, Korea

#### **Motion for Changing VP Global Relations to VP Educational Activities**

Katherine Kim

Second: Frede Blaabjerg

Motion Passes

#### **Motion for holding a third AdCom meeting in 2023 on strategically focused topics, co-located with ECCE Asia 2023**

Navid Zargari

Second: Alan Mantooth

Motion Passes

#### Constitution and Bylaws Katherine Kim

Katherine presented the process for changes to Bylaws

Review of next proposed change of the name change of VP of Global Relations to VP of Education, with this iteration in front of the Board for discussion. Update to standing committee list.

Discussion – re: conflicting definitions regarding priorities. No unilateral consensus in discussion.

Motion tabled

#### Treasurer's Report Alireza Khaligh

Review of PELS Conference revenues and society operations

- \$14M on Reserves at the end of 2020
- \$18M on Reserves at the end of 2021
- Net 2021 Forecast (excluding initiatives): ~ \$2,977,926
- Estimate for 2022 50% Spending Available: \$1,488,963

Budget notes:

- Estimated \$540K (\$180K) in 3% (1%) spend for 2022
- 2022 Initiatives budget: \$154,000
- Transferred \$450K to two Foundations was approved in March PELS AdCom
  - \$250K for EBL (Humanitarian Funds)
  - \$200K for Fellowships (Future Workforce)

## PELS 2023 Proposed Initiatives

Technical Committees Growth and Support	\$45,000
PELS Global PhD Schools - Education Program	\$35,000
Global Presence - Membership Development, Diversification, and Support	\$18,000
Roadmapping and Standards Activities	\$25,000
PUBLICATIONS - IEEE Open Journal of Power Electronics (OJ-PEL)	\$30,000
Society Growth, Branding, and Recognition	\$30,000
Conference Development and Attendee Growth Program	\$25,000
PELS Industry Engagement for Service and Growth Program	\$15,000
Educational Products Development and Outreach	\$30,000
Standards - Training for Member/Volunteers	\$8,000
Diversity & Inclusion - Membership/Leadership/Board level engagement and representation	\$12,000
PELS-A-Pedia, Society-level Educational Repository and Portal	\$12,000
PELS Website Redesign/Update	\$75,000
OJ-PELS Support & Review System	\$20,000
Young Professionals and Students Conference Series (PELS CONGRESS proposed working title)	\$35,000
Topical workshops on future PE technologies	\$45,000
PELS Regional Chapter Development, Engagement, and Support	\$50,000

### Initiatives

- PELS 2023 Initiatives request \$510K
- IEEE 3%/1% spending Rule limit for 2023:
  - \$5.136M
  - IEEE received \$8.354M in project requests from 31 S/Cs
  - Approved \$6.054M (1.25%)
- 1.25% of (~\$18M) = \$225K
- 2023, 50% spending (Jul Fcst): ~\$600K

### Reinvestments

- Memberships
  - Reduced/revised membership fees
  - Chapter growth/support
  - Regional membership support
- Diversity & Inclusion
- PhD Schools/Scholarships
- Products
  - Discounting overlength charges
  - Increasing page numbers
- Hiring a new full-time staff

### Summary

Thanks to all our volunteers and great Staff, PELS is doing exceedingly well financially

- \$3.45M Total Net for 2020
- \$4.85M Total Net for 2021
- Reserves Exceeded \$18M
- ~\$1.258M Operation Net Projected (July) for 2022

### Nominations Report

Frede Blaabjerg

Review of committee members, tasks, eligibility reviewed.

Discussion about regional diversity

Consider opening elections a bit more to engage more members.

This year:

- Officer Elections in Fall 2022 (2 minimum on each slate)
  - VP of Products
  - VP of Technical Operations
  - VP of Conferences
- Members-at-Large (MAL) (9 minimum on slate)
  - Petition open June – July (none)
  - Collection of petition signatures 1 Aug- 1 Sept.
  - MAL election November – controlled by IEEE

#### Diversity, Equity and Inclusion & WIE

Frede Blaabjerg

#### New AdHoc Committee:

- Create a strategic path-forward to support IEEE's D&I Statement:
  - *IEEE's mission to foster technological innovation and excellence to benefit humanity requires the talents and perspectives of people with different personal, cultural, and disciplinary backgrounds. IEEE is committed to advancing diversity in the technical profession, and to promoting an inclusive and equitable culture in its activities and programs that welcomes, engages and rewards those who contribute to the field without regard to race, religion, gender, disability, age, national origin, sexual orientation, gender identity, or gender expression.*
- Defined Timeline to Work Directly with PELS Standing Committees for Action Driven by PELS Strategic Plan
- Initiative by President Liuchen Chang (Autumn 2021) – in our strategic goals for 2021-2025
- PELS-Wide Invitation to Join this Committee with Strong Interest

#### Responsibilities:

- **Develop & Assess DEI Strategies, Metrics, Initiatives, and Key Milestones** for IEEE PELS
- **Identify & Disseminate Both Successes & Barriers** of DEI that Impact the PELS Community, Including: Members, PELS-Related Workforce, & Global Energy Equity
- Provide **Recommendations** for Content, Training, Administration & Finances for the Promotion of DEI within PELS

#### Activities in 2022

- Organisation - Steering group – and an advisory committee (15-20 people) to give feedback
- Make a strategic plan on which topics to work with 2022 and next years incl its goals – and actions (From IEEE DEI)
- Be aligned with IEEE metrics – to be able to deliver data
- Define PELS metrics

#### VP for Membership

Mark Dehong Xu

Mark presented 10 year membership history

Highlight - PELS reached 12K members

PELS YOY member increase is good and in the top three of YOY increase for IEEE. Chapter increase is also good.

2023 Goals and Plan reviewed. Background given on best chapter awards.

**Motion from Membership Committee to approve an amount of up to 9k, for up to three PELS Best Chapters, Joint Chapters, Student Branch Chapters.**

**Motion approved**

#### VP Products Report

Brad Lehman

#### Reviews of PELS portfolio

- PELS Transactions Editor: Yaow-Ming Chen
- PELS Letters Editor: Ryan (Yunwei) Li
- IEEE Open Journal of Power Electronics –Alan Mantooth
- IEEE Journal of Emerging and Selected Topics in Power Electronics (50%): Joseph Ojo
- IEEE Transactions of Transportation Electrification (45%): Mahesh Krishnamurthy
- Newsletter and Magazine Editor: Ashok Bindra
- Digital Media Editor: Prasad Enjeti
- PELS-Tube: Katherine Kim –launched at APEC 2022 [www.ieeepelstube.org](http://www.ieeepelstube.org)

- Representatives: IEEE Trans. Sustainable Energy (10%): Mei Su
- IEEE Journal on Photovoltaics (8%): Vivek Agarwal
- IEEE Trans. Smart Grid (Tech Spo.): XiaonanLu
- IEEE Electrification Magazine (20%): Brad Lehman, Omer Onar
- IEEE Journal of Emerging and Selected Topics in IE (Tech Spon): Dmitri Vinnikov

#### Summary

- Excellent net revenue from publications
- All journals very high Impact Factors, Downloads, and have paper growth
- IEEE TPEL is the most downloaded IEEE Transactions
- IEEE TPEL overlength page charge is \$200 after page 10 instead of (2022) \$162 after page 8 for papers submitted in 2023
- Magazine has 2 new columnists (Kristen Parrish –Industry perspectives, Trishan ESRAM Patents)
- Magazine has new ad solicitation firm June 2022, WelComm, Inc.:2020, 2021 saw reduction in advertising
- JESTPE , TTE backlog being tackled with increase page count
- OJPEL –Best Paper Award motion - Alan called for 5 voting members to endorse to awards with the understanding they would be ineligible to receive the award in perpetuity
- OJ-PEL is 20% paper growth and last quarter #1 fastest review time of any IEEE Open Access Journal
- PRAC reviews for TPEL and Magazine in June (waiting for final PRAC recommendations); TTE PRAC review in November
- Big project finished: Keywords Updated on Manuscript Central (better matching of reviewer expertise to subject of paper)
- Moving digital/education to new VP of Education in 2023 instead under VP Products
- Digital offerings/webinars/conferences are doing well and expanding. Many 2022 new initiatives: Webinars, monthly podcasts expanding, contests.
- PELS-Tube slowly progressing [www.ieeepelstube.org](http://www.ieeepelstube.org)
- New keywords are online now in Manuscript Central

**Motion from Products Committee: The OJ-PEL Editorial Board moves to approve a Best Paper Award for the journal. This award will establish a 1stPrize Award for \$1000 and a 2ndPrize Award of \$500. Multiple awards are possible but will not exceed 1% of the eligible papers.**

**Motion approved**

VP for Global Relations Mario Pacas

Mario Presented that the global relations committee meeting and participation attendance is quite low.

Regional chair report directly in the membership committee meeting though liaisons should contact the VP for matters not related to membership.

Shared reasons for the shift to education. Global Relations has taken the lead in many educational issues.

Ongoing activities PhD schools – successful event – Mexico (2<sup>nd</sup> time) Columbia and India in planning. We have people who would like to do these activities.

Fellowship and scholarship program – work to be done – launching in 2023

Future Activities – need an appropriate web interface for PELSTube. Train the trainer – licenses, lab-kit, and joint webinar projects.

VP of Industry and Standards Johan Enslin

Review of portfolio

- PELS Standards Committee (PELSC)
  - All standards development activities with IEEE SA
  - New PARs, Study Committees, SCC-21
  - Collaborate with TCs

- PELS Industry Committee (IAB)
  - Chair:- Stephanie Watts Butler
  - Membership development with industry benefits
  - Product development for industry members
  - Special Sessions; Job fairs; WIE Industry
  - Distinguished Lecturers from Industry
- Power Electronic Roadmaps
  - Roadmaps – ITRW and ITRD
  - ITRW:- Chair:- Liuchen Chang
  - ITRD:- New Chair:- Victor Veliadis
  - New Roadmap Initiatives in collaboration with TCs

#### VP of Technical Operations

Pat Wheeler

##### Updates

- ECCE Technical Committee meetings
  - TC meetings were hybrid and well attended
- FEPPCON Roadmapping
  - Data from FEPPCON is in two categories:
    - 1. Topics which were perceived as having no home in a current Technical Committee
      - Some topics highlighted the need for improvements to the messaging and presentation of Technical Committees
      - Some topics have ‘no home’ – a topic for discussion with either new or refocused Technical Committees
    - 2. Topics considered to be in current *Technical Committees*
      - To be used as input for a search engine on the new PELS Web site in 2023
- **Existing TC mapping** – input for the new PELS web site search engine to assist members in finding the ‘right’ Technical Committee – Keyworks shared in ppt.
- We are trialing the use of a list-server for four Technical Committees as an alternative to eNotices – hoping for improved communications
- Webinars- will be creating more

#### VP Conferences Report

Jian Sun

##### Review of PELS Conference structure

Number of PELS conferences remain steady

Revenue is Still Down but Net is Growing Again

##### Updates:

- VIP Best Paper Award Approved by AdCom and Pending IEEE TABARC Approval
- Recognition of Conference Organizers
- Conference Growth Strategy
  - Short of Staff Support/Hiring for the Original Plan
  - Refocus on Selected Conferences
- Operationalization of Conf. Committee Budget from 2023

##### Conf. Portfolio Review Committee (CPRC) Review in July

- Feedback was Very Positive in General
  - Job Recruiting - New IEEE Policy 10.1.25 (Updated Feb 2022)
- Conference Development in Asia and Middle East, Pacific

##### Motion from Conference Committee – on consent agenda

##### Motions with Financial Implications

- Motion from APEC: Approve travel grant for 40 students each at \$1,000. The funds will be provide equally by three sponsors, PELS, IAS, PSMA.
- MOTION from SPEC Steering Committee: Approve \$5,000 loan for SPEC 2023.

- MOTION from TC2: Approve \$10,000 loan for PwrSoC 2023
- MOTION from TC2: Approve \$12,500 loan for WiPDA 2023

All motions approved

Strategic Planning Committee Alan Mantoath

FEPPCON was held June 2022 – Next articles are due for the PELS Magazine

Long Range Planning was held August 2022, Cork Ireland- small committee mainly covering the PELS Society Review Due in October 2022.

Awards Andreas Lindemann

Reminder to submit award nominees- Awards opening 1 January

New awards in 2023

- IEEE PELS Graduate Studies Scholarship and IEEE PELS Jan Abraham “Braham” Ferreira Scholarship (new)
- IEEE PELS Graduate Studies Fellowship and IEEE PELS John G. Kassakian Fellowship (new)

In review Tabarc:

- IEEE PELS Young Professional Exceptional Service Award
- IEEE PELS Electrical Machines, Drives and Related Automation Technical Achievement Award
- IEEE PELS Outstanding Achievement Award on Aerospace Power Current activities

Submission pending Tabarc:

- IEEE Power Electronics Society Value to Industry and Practitioners (VIP) Best Paper Award
- IEEE PELS Open Journal of Power Electronics Prize Paper Award

Awards under discussion/preparation:

- Jovanovic Award (PELS, new)
- IEEE Joseph John Suozzi INTELEC Fellowship Award in Power Electronics (TC 7, revision?)
- IEEE PELS Technical Achievement Award for Electronic Grid (TC 8, new)
- ICDCM conference award (new)

Discussion- combine Best Chapter/Student Branch award with young engineers award

Milestone Program/ PELS/History Chair Gerard Hurley

Oral Histories

- [https://ethw.org/Oral-History/List\\_of\\_all\\_Oral\\_Histories](https://ethw.org/Oral-History/List_of_all_Oral_Histories)
- IEEE Life Fellows (approx. 3,200); PELS 15??
- The IEEE History Center Oral History Program is designed to capture the career experiences of prominent engineers, scientists, and technologists in IEEE fields of interest, **not just PELS History of devices etc**
- Oral History interview with Bill Peterson completed and sent to IEEE for review
- Upload interview to PELS website
- Planned interview with Tom Jahns
- Possible candidates John Kassakian, Fred Lee and Bob Steigerwald

Possible topics:

- History of Power Electronics in Europe (L. Lorenz, M. Pacas)
- History of Power Electronics in South America (J. Arau, M. Pacas)
- AC Drive Locomotives in France and Germany
- Follow-up articles in Power Electronics Magazine
- Other subjects: NASA History (P. Krein, V. Vorperian)

Nicholas Callan: Induction Coil in 1836

- Contemporary of Faraday
- Applications include ignition coil for Internal Combustion Engine
- Precursor of ac transformer discovered in Maynooth University
- Sponsors would be UKRI Section and UKRI PELS Chapter



Empower a Billion Lives Update presented by Liuchen Chang

Strong partnerships

Concept papers – online rounds- now field testing – global rounds at APEC 2023.

IEEE Foundation Christopher Wright

History of the IEEE Foundation – who they are – what they do

Core Services- Inspire Philanthropic investments in IEEE, manage donations, Invest in IEEE Programs

Humanitarian Fund- 410K; Future Work Force Fund 131K

50<sup>th</sup> anniversary in 2023 – Celebration February 16<sup>th</sup>, NYC.

Financial implication of this AdCom Alireza Khaligh

46K President

204.5K Membership

311.1K Operations

1.4M Products/Pubs

60K Conferences

450K Treasurer/Foundation

Adjourn

MOTION from To Adjourn 6:42 PM

Alan Mantooth

Mario Pacas

Motion approved