



2017



Standing Committee Policies and Procedures

Awards Committee

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Constitution and Bylaws Chair
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Operations Manual of Awards Committee

IEEE Power Electronics Society

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1 Introduction — related documents

The IEEE Power Electronics Society (PELS) has a number of Standing Committees which are listed in the Bylaws with a scope approved by the PELS Advisory Committee (Adcom). This document defines the function and procedures that govern the operations for the Awards Committee. Note that both the IEEE and the IEEE PELS Constitutions and Bylaws each take precedence over these procedures.

Related documents including governing documents from IEEE and society level are listed in the references and cited where appropriate in the following.

2 Function — tasks of PELS awards committee

The awards committee has the following tasks:

- recommend candidates for all awards and prizes in accordance with requirements, requests, and rules and regulations of IEEE headquarters, both for general IEEE awards and those of the society
- recommend candidates for Fellow grade
- assist in appropriate ways in other member recognition and award matters
- maintain this document

Committee members shall refrain from:

- receiving, or acting as a nominator or reference for an award as individuals serving on a committee involved at any stage of the recipient-selection process for this award (conflict of interest limitation [1, 4.4H])

3 Composition of PELS awards committee and tasks of its members

PELS Awards Committee consists of:

- chairperson
 - responsible for all awards activities in PELS: oversees PELS awards strategy, represents awards issues in Adcom and reports directly to Adcom
 - The chairperson as ex-officio member of AdCom is required.

The chairperson of the awards committee shall be appointed by the society president with the advise and consent of the Adcom.

- secretary
 - supports the chairperson
 - responsible that the announcement and the selection process for the PELS awards are conducted on time and in accordance with the awards policies and documents, cf. sections 5.3.2, A.4
 - responsible that awards are established, maintained and discontinued in accordance with the awards policies and documents, cf. [3, 6.1]

The secretary shall be appointed with the consent of the AdCom on the recommendation of the committee chairperson.

- PELS Fellow and award nominations advisory subcommittee¹
 - responsible that sufficiently large pools of qualified candidates get nominated for PELS awards, for relevant IEEE medals, awards and recognitions, and for IEEE Fellows
 - The PELS Fellow and award nomination advisory subcommittee will be chaired by the immediate past chair of the PELS Fellows evaluations committee. The immediate past members of the same committee belong to its membership optionally along with further members appointed by the chairperson of awards committee, e. g. to care for specific awards.

Unless otherwise stated the term of the aforementioned officers ends with the term of PELS president according to [5]; reappointment is possible.

4 Conduction of Meetings

The awards committee and the PELS Fellow and award nomination advisory subcommittee shall meet using web-based conference tools or physically at places deemed convenient for its membership which will typically be chosen from among the major IEEE Power Electronics Society conferences, currently APEC, INTELEC, ECCE, ECCE-Asia, and ECCE-Europe. Meetings will be announced at least two weeks in advance on the committee mailing list. Meetings are only open to committee members and invited guests.

5 Procedures

5.1 General

Different procedures apply depending on the responsibility for a particular award according to [2, 4.2.B.16.i], i. e., basically as follows:

- Responsibility for the establishment and revision of Technical Conference awards, including technical conference contests and competitions, Technical Committee/Community, Chapter and Student Branch Chapter awards is delegated to the sponsoring societies².
- All other award issues on society level shall be forwarded to the TAB Awards and Recognition Committee for review and endorsement of the specifications of the award.
- Further there are IEEE awards which are managed by IEEE headquarters.
- Ad-hoc awards without approval or prudent selection process are discouraged.

The aforementioned structure is reflected in the following sections.

5.2 Awards of PELS conferences and technical committees, chapter and student branch chapter awards

5.2.1 Establish or change an award

A proposal will be submitted to PELS awards committee to establish or change such an award:

¹established according to Adcom decision 31 March 2017

²updated according to [2] of February 2023 including the referring sections, released by PELS Adcom in March 2023; previously "Responsibility for the establishment and revision of technical conference awards, including technical conference contests and competitions, is delegated to the society sponsoring the technical conference."

- The proposal shall include the informations indicated on [3, 6.1] and the respective forms, provided as governing documents on IEEE Technical Activities Operations' website <https://ta.ieee.org/operations/governing-documents>.

Note: Unless otherwise specified in governing documents, selection committee shall consist of at least three voting members. Care should be taken that selection committee is composed such that a sufficient number of votes can be obtained in time.

The proposal shall be processed as follows:

- Proposals for conference awards will be submitted to PELS awards committee latest with the submission of the conference budget for release by PELS meetings committee or administrative committee respectively.

PELS awards committee will verify the proposal whether it is complete and in accordance with the rules and policies (cf. e. g. summary in [2, template for establishing a new society award] and requirement of approval of TAB Awards and Recognition Committee [1, 4])

If yes, awards committee will decide upon the proposal with the votes of the majority of committee members and notify the signees.

- Proposals for awards of PELS technical committees, chapter and student branch chapter awards will be submitted to PELS awards committee.

PELS awards committee will verify the proposal whether it is complete and in accordance with the rules and policies (cf. e. g. summary in [2, template for establishing a new society award] and requirement of approval of TAB Awards and Recognition Committee [1, 4])

If yes, awards committee will move for the introduction of the award in the next meeting of PELS Adcom.

- After agreement to the proposal, the description of the award will be added to the appropriate section A.1, A.2 or A.3 of this document by the secretary of awards committee and it will be sent to the TAB Awards and Recognition Chair for reference [2, 4.2.B.15.i.2] by PELS staff.

5.2.2 Announcement, selection, award ceremony and reporting

The committee having proposed the award is responsible to keep the award vital and that all processes — like nomination, selection etc. — leading it to be presented are in accordance with the applicable rules.

- The award shall be announced at least three months before the deadline for applications
 - via awards menu on PELS website
 - via other channels such as the call for papers of the related conference
 - by addressing potentially suitable candidates personally

providing

- the information as in section A.1, A.2 or A.3: specification and previous holders
- an application form at least electronically in pdf format with the same information, space for the required indications, usually
 - * name of nominee, his IEEE membership number and grade, year of birth, title, affiliation, address, proposed citation and other information relevant for the selection; limitation of length is recommended
 - * name, IEEE membership number and grade, year of birth, affiliation, title, address of nominator

and indication of deadline and email address for submission of the proposal.

- After the deadline, the head of selection committee will organise selection process. Upon request PELS staff can support this process with formal checks, such as of IEEE membership. A decision is made with positive votes of a majority voting members of selection committee.

Please note that:

- selection process must comply to the limitations according to [1, 4.4]
- the awarded price items must not violate OFAC sanctions [6]
- Upon request, support can be obtained from PELS staff to design and fabricate plaques or certificates, cf. [4, reference material]; be aware of processing time when scheduling.
- A report about each award shall be supplied to PELS awards committee by the chairperson of the responsible committee within three months after each occasion where the award could have been awarded, irrespectively whether this happened but maximum once per year. The report should briefly contain at least the following information:
 - selection committee: members, term, procedures, responsibilities
 - applied mechanism to solicit nominations: e. g. call for nominations via www.ieee-pels.org from ... to ... or the like
 - nominees: number of nominees, number of new nominees
 - selection process: results of checking formal eligibility, reasons for selecting the award winner or winners
 - names and affiliations of award winner or winners if applicable
 - award presentation: location, date, event/conference etc.
 - publicity: newspaper articles etc.
 - recommendation to maintain or discontinue the award: At least if the indications differ from the general rules such as given in [3, 6.5] the reasons for this should be indicated.

PELS Awards Committee will review this information as a means of quality assurance and to make sure that only vital awards will be maintained. Otherwise it may initiate its discontinuation, cf. section 5.2.3.

5.2.3 Discontinue an award

For reasons like

- if an award does not any more meet an actual field of interest
- if conditions such as given in [3, 6.5c] apply — e. g. there is a continuous lack of nominations
- if there is no more occasion to award it — e. g. when the conference the award references has been discontinued

an award should be discontinued.

An informal letter signed by the chairperson of the responsible committee indicating the wish and the reasons to discontinue the award should be directed to PELS awards committee in this case.

As a response or otherwise if this is obviously necessary,

- PELS awards committee will verify whether it is adequate and in accordance with the rules (cf. e. g. requirement of approval of TAB Awards and Recognition Committee according to [1, 4]) to discontinue the award.
- If yes and a conference award is concerned, PELS awards committee will decide whether to discontinue the award with the majority of votes of committee members and notify the signee of the request to discontinue the award if applicable.

If yes and a technical committee or chapter award is concerned, PELS awards committee will move for the discontinuation of the award in the next meeting of PELS Adcom.

- After discontinuation, the the award will be marked to be inactive in section A.1, A.2 or A.3 of this document by the secretary of awards committee and this information will be sent to the TAB Awards and Recognition Chair for reference [2, 4.2.B.15.i.2] by PELS staff.

5.3 PELS awards on society level

5.3.1 Establish or change an award

Proposals to establish or change an award on society level can be submitted to PELS awards committee:

- The proposal shall include the informations indicated in [3, 6.1].
Note: Unless otherwise specified in governing documents, selection committee shall consist of at least three voting members. Care should be taken that selection committee is composed such that a sufficient number of votes can be obtained in time.
- The proposal shall be signed by at least five voting members of AdCom. These persons are not eligible for the award.

PELS awards committee will:

- verify the proposal whether it is complete and in accordance with the rules and policies (cf. e. g. summary in [2, template for establishing a new society award] and requirement of approval of TAB Awards and Recognition Committee [1, 4])
- If yes, awards committee will forward the verified proposal to PELS president for AdCom approval.
- After approval by AdCom, the proposal shall be forwarded to the TAB Awards and Recognition Committee for review and endorsement of the specifications of the award, to TAB for approval and to the IEEE Awards Board for information [2, 4.2.B.15.i.2] by PELS staff.
- After approval by TAB, the award will be listed section A.4 of this document by the secretary of awards committee.

5.3.2 Announcement, selection, award ceremony and reporting

- The award shall be announced at least three months before the deadline for applications
 - via awards menue on PELS website
 - via society publications — such as PELS Magazine — and electronic communications — such as newsletter by email
 - by addressing potentially suitable candidates personally

providing

- the information as in section A.4: specification as cited
- an electronic application form — via an appropriate data base or at least in pdf format to be sent to a dedicated email address (pels-awards-nominations@ieee.org) — to enter the required indications, usually
 - * name of nominee, his IEEE membership number and grade, year of birth, title, affiliation, address, proposed citation and other information relevant for the selection; limitation of length is recommended
 - * name, IEEE membership number and grade, year of birth, affiliation, title, address of nominator

and indication of the next deadline for submission of the proposal. Usually the deadline for selection process in the current year is end of March; nominations or applications received later will be considered in the following year. Respective details are specified in the award descriptions.

- After the deadline, upon mutual agreement, members of awards committee and PELS staff will organise selection process, i. e.:
 - verify the nominations formally for eligibility, e. g.
 - * plausibility check whether each nomination seems basically complete and to make sense
 - * prerequisites according to the awards description such as IEEE membership; upon request PELS staff can support this process with formal checks
 - * whether a nominee would have already received the same award for the same achievement
 - verify whether there is an obvious conflict of interest of members of selection committee — e. g. being nominee or acting as nominator; if this applies, the respective person is not invited as member of selection committee
 - invite selection committee
 - * providing the indications about electable nominees, their nominators and eventual endorsements, taking privacy issues into account — e. g. the data must not become public
 - * asking the members of selection committee to state in case they see a conflict of interest
 - * indicating the desired vote — e. g. name first, if appropriate second and third choice out of multiple candidates — and where to send the vote up to which deadline
 - collect the votes:
 - * A decision is made with positive votes of a majority voting members of selection committee.
 - * Scoring may be used to determine the award winner — e. g. for a first choice the respective nominee receives 3 points, for a second choice 2 and for a third choice one. The award winner would then be the nominee with the highest number of points.
 - notify selection committee, PELS officers, the award winner, all nominators and endorsers if applicable about the result of selection process
 - PELS staff will design and make fabricate plaques or certificates, cf. [4, reference material].
 - The following information should be recorded for eventual reporting:

- * selection committee: members, term, procedures, responsibilities
- * applied mechanism to solicit nominations: e. g. call for nominations via www.ieee-pels.org from . . . to . . . or the like
- * nominees: number of nominees, number of new nominees
- * selection process: results of checking formal eligibility, reasons for selecting the award winner or winners
- * names and affiliations of award winner or winners if applicable
- * award presentation: location, date, event/conference etc.
- * publicity: newspaper articles etc.
- * recommendation to maintain or discontinue the award: At least if the indications differ from the general rules such as given in [3, 6.5c in connection with 6-5f] the reasons for this should be indicated. Only vital awards will be maintained. Otherwise awards committee may initiate discontinuation, cf. section 5.3.3.

Please note that:

- Details of selection procedure are given in the respective award descriptions, cf. section A.4.
 - In case that awards are administered by PELS technical committees or similar entities, the aforementioned steps can be delegated to their officers.
 - Awards that receive fewer than three nominations may not be awarded unless special permission is granted by the IEEE awards board [3, 6.5c in connection with 6.5f].
 - Selection process must comply to the limitations according to [1, 4.4],
 - The awarded price items must not violate OFAC sanctions [6].
- The awards ceremony shall be organised by the respective hosts — e. g. ECCE (North America) conference committee — supported by PELS staff in conjunction with the members of PELS awards committee.

5.3.3 Discontinue an award

For reasons like

- if an award does not any more meet an actual field of interest, cf. [3, 6.5e in connection with 6.5f]
- if conditions such as given in [3, 6.5c in connection with 6.5f] apply — e. g. there is a continuous lack of nominations

an award should be discontinued. If applicable, PELS awards committee will submit a corresponding proposal to PELS president for approval by AdCom.

5.4 IEEE awards

- IEEE Medals may be established and terminated only by the IEEE Board of Directors [3, 5.4a].
- IEEE Technical Field Awards may be established and terminated only by the IEEE Board of Directors. [3, 5.5a]. A document for the establishment of New Technical Field Award can be obtained by sending an email to awards@ieee.org. [3, 6.1.b.6].
- IEEE Recognitions can be established and terminated only by the Board of Directors on the recommendation of the AB [3, 5.6a].

PELS is particularly encouraged to nominate candidates for such prestigious medals, field awards or recognitions in its field of interest, cf. tasks of the member (nominations) in section 3.

6 Changes to this document

Changes to this document must conform to [5] and be approved by PELS AdCom. The latter is not applicable to updates of section A.1, of award winners in section A and of references.

A List of relevant awards

A.1 PELS conference awards

A.1.1 IEEE PELS Best ECCE Paper on Emerging Technology Award

Specification³

1. description:

ECCE North America has been a renowned conference on industry applications and power electronics. Recently, there have been many new emerging technologies on power processing, energy storage, and smart control. In order to promote emerging technologies, the Technical Committee on High-Performance and Emerging Technologies (TC6) of the IEEE Power Electronics Society proposes a track, called high-performance and emerging technologies track, in ECCE North America. The papers associated with this track all have the same theme — emerging technologies. Since this track will be one of the tracks in the existing conference, the paper submission, reviewing process and presentation will follow the conference rules and procedures. Moreover, in order to attract paper submissions to this track, TC6 will offer two IEEE PELS TC6 Emerging Technology Best Paper Awards.

2. administration:

IEEE Power Electronics Society, TC6

3. eligibility:

all published papers, presented in the high-performance and emerging technologies track in the previous year of ECCE North America

Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society governing documents, particularly with IEEE Policy 4.4 [1] on Awards Limitations.

4. prize items:

There are two categories of IEEE PELS Best ECCE Paper on Emerging Technology Award — one for oral presentation and one for poster presentation. Up to one award per category is given per year.

- Each author of a paper receiving the award will obtain a certificate.
- All authors of a paper receiving the award will obtain an equal share of in total 300USD as a contribution to incurring travel expenses and conference fees when participating in the respective awards ceremony.

³released 24 September 2018

5. funds:

The award is wholly sponsored by TC6. The total annual expenses that can be incurred for this award shall be no more than 750USD and shall be included in the TC's annual budget. The expenses include

- travel refund as above
- printing of certificates

in total. The award can only be given if the respective budget remains net positive.

6. nominee solicitation:

The announcement that best papers will be awarded will be issued each year along with the call for high-performance and emerging technologies track at ECCE North America conference. All eligible papers are considered automatically, so there is no need for application or nomination.

7. selection committee:

The chair of TC6 will appoint a chair and another four members of selection committee. They shall be members of IEEE PELS. Their term is one year, i. e., they carry out selection for one ECCE North America conference.

8. schedule:

The award is made annually at the ECCE North America conference. The selection committee shall evaluate and select two prize papers after the conference. The announcement of the prize papers will be made in March of the year following the conference, and the award certificates will be presented at the next ECCE North America.

9. selection:

judging criteria:

- scope — whether the paper refers to an emerging technology or application respectively
- novelty of the idea
- quality of the theoretical analysis and experimental verification (if applicable)
- quality of the paper writing

Decisions will be taken with the majority of members of selection committee

Papers of which at least one author belongs to the selection committee will however not be considered.

10. presentation:

The ceremony for IEEE PELS Best ECCE Paper on Emerging Technology Award will be held during the PELS TC6 Technical Committee meeting during ECCE North America.

11. publicity:

On the initiative of the chair of the award selection committee articles about the award recipients will be published in IEEE PELS Magazine or similar publications. The recipients will also be named on IEEE PELS TC6 web page.

Signees to establish the award

- Prof. Chung Shu Hung Henry
- Prof. Yaow-Ming Chen
- Prof. Peter Tsorng-Juu Liang

A.1.2 IEEE ECCE Best Student Project Demonstration on Emerging Technology Awards**Specification⁴**

1. description:

Since 2011, ECCE North America has introduced a demo session for students to showcase their research projects in front of the participating academia and industry. It is of particular importance that this event provides a platform for students to establish a social network among students from different universities and countries. The demo session has received good response. In order to enhance this event, IEEE PELS TC6 has sponsored and jointly organized a hardware demo event as a student project on emerging technology. Further TC6 will value excellent presentations within its scope with the IEEE ECCE Best Student Project Demonstration on Emerging Technology Awards.

2. administration:

IEEE Power Electronics Society, TC6

3. eligibility:

University students can then submit project proposals to be considered for the ECCE Student Project Demonstration on Emerging Technology event. The project proposals can be submitted by an individual or a team, provided that the individual or each member of the team has paid the registration fee of ECCE North America in the year when the project demonstration is held. All of the demonstrated projects will be evaluated to compete for the IEEE ECCE Best Student Project Demonstration on Emerging Technology Awards.

Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society governing documents, particularly with IEEE Policy 4.4 [1] on Awards Limitations.

4. prize items:

There will be three awards:

- best demonstration award (honorarium 700USD)
- 1st runner up (honorarium 500USD)
- 2nd runner up (honorarium 300USD)

If a team consisting of multiple individuals receives one award for its common project, the honorarium is equally shared amongst the individuals. Each individual receives a certificate.

5. funds:

The awards are wholly sponsored by TC6. The total annual expenses that can be incurred for these awards shall be no more than 1800USD and shall be included in the TC's annual budget. The expenses include

⁴released 24 September 2018

- honorarium as above
- printing of certificates.

The awards can only be given if the respective budget remains net positive.

6. nominee solicitation:

Prospective participants shall apply as individuals or a team of individuals, cf. items 3 and 8.

7. selection committee:

The chair of TC6 will appoint a chair and another four members of selection committee. They shall be members of IEEE PELS. Their term is limited to the current selection process.

8. schedule:

The following schedule is for the calendar year in which the respective ECCE North America is held:

- April 01: call for application announcement
- July 01: deadline of application form submission
- August 01: notification of acceptance or rejection
- September 01: deadline of report submission for accepted projects
- September: project demonstration and presentation of the awards at ECCE North America

In case ECCE North America would be differently scheduled, the schedule for the award is shifted accordingly.

9. selection:

The student projects are judged according to the following criteria with equal weight (i.e., a full score of 100 with 20 of each) by the selection committee:

- creativity and originality
- engineering design
- value/potential to practical applications
- presentation and demonstration
- general effectiveness and audience appeal

The final results are the average scores given by the members of selection committee. The projects with the top three scores will be awarded. The members of selection committee (if students) and their current students are not eligible for the awards in the year they serve in the selection committee.

10. presentation:

The awards will be presented at the ECCE North America upon specific arrangement coordinated each year with the conference award chair.

11. publicity:

On the initiative of the chair of the award selection committee articles about the award recipients will be published in IEEE PELS Magazine or similar publications. The recipients will also be named on IEEE PELS TC6 web page and videos from the awarded projects can be posted on ECCE North America website.

Signees to establish the award

- Prof. Chung Shu Hung Henry
- Prof. Yaow-Ming Chen
- Prof. Peter Tsorng-Juu Liang

A.1.3 IEEE SDEMPED Prize Paper Award**Specification⁵**

1. description:

The SDEMPED (Symposium on Diagnostics of Electric Machines, Power Electronics, and Drives) prize paper award of the Technical Committee on Motor Drives and Actuators (TC3) of IEEE Power Electronics Society has been established to honour innovators who contributed to the field of diagnostics of electric machines, power electronics, and drives. The award is to be presented for up to three technical papers (in no order) for outstanding technical competence displayed in a paper presented at an IEEE SDEMPED conference, taking place biennially, i. e., once every second year in odd years.

2. administration:

The SDEMPED prize paper award is administered by the SDEMPED International Steering Committee (ISC). The members of the committee will be determined latest when issuing the call for papers and their names be published on the conference website.

OK?

3. eligibility:

All full papers accepted by and submitted to the SDEMPED conference by the deadline are eligible for the SDEMPED prize paper award.

Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society governing documents, particularly with IEEE Policy 4.4 [1] on Awards Limitations.

4. prize items:

Each author of a paper winning SDEMPED prize paper award will receive a certificate.

5. funds:

The incurring costs for printing the certificates will be covered by the respective conference budget.

6. nominee solicitation:

The SDEMPED prize paper award will be announced in the call for papers of the SDEMPED conference and on the conference website.

All papers meeting eligibility criteria according to item 3 are considered automatically — cf. item 9 — so there is no need for application or nomination.

7. award committee:

The SDEMPED prize paper award selection committee consists of the SDEMPED International Steering Committee (ISC) awards chair and three members selected by him inside or outside the SDEMPED ISC:

⁵Italics to be clarified, not released

- Election of the awards chair will be based on nomination and voting of the SDEMPED ISC members. He must be member of at least one of the IEEE societies which financially sponsor the conference. A nomination can be filed by each ISC member. The nominee receiving the highest number of votes is elected, provided that a quorum of more than 50% of the committee members has been reached. The SDEMPED awards committee chair will be elected once every four years, i. e., for two editions of the SDEMPED conference. He can be elected for a maximum of two terms.
- The other members should be selected for their technical competence. They must be member of at least one of the IEEE societies which financially sponsor the conference. They will be selected to serve for one edition of SDEMPED.

8. schedule:

The selection of prize papers will start when review of the SDEMPED papers is complete. The selection should be carried out by the SDEMPED prize paper award selection committee before the SDEMPED conference usually held in August/September. The prize papers will be announced during the awards ceremony at the gala dinner during the SDEMPED conference. Papers which have not been presented at the conference — no shows — are excluded.

9. selection:

The awardees will be selected as follows:

- The technical programme chair of the SDEMPED conference will select 10 prize paper award candidates being technical papers with the highest score from the paper review process. This is numerically determined out of scores for several criteria fixed prior to the review process like originality, importance, readers' interest, references to others, presentation.

Papers of which at least one author belongs to the SDEMPED prize paper award selection committee will however be excluded.

<http://inpact.inp-toulouse.fr/SDEMPED2019/committees.html> does not indicate any technical programme chair. Who is meant? Otherwise OK?

- Voting will be under the leadership of the SDEMPED International Steering Committee (ISC) awards chair. The outcome will be based on the scores of the selection committee: Its members should vote for up to three technical papers. They may also indicate if they consider a technical paper to be inappropriate to receive the award. The three papers with the highest score not being considered inappropriate will receive the award; if three suitable papers however would not be available in the current selection process, the number of awards can be appropriately reduced. The technical programme chair of the SDEMPED conference may break a tie if necessary. *simplified — OK?*

10. presentation:

The award will be presented during the awards ceremony at the gala dinner of the IEEE SDEMPED conference.

11. publicity:

On the initiative of the SDEMPED International Steering Committee (ISC) awards chair articles about the award recipient will be published in IEEE PELS Magazine or similar publications. The announcement of the award and the recipient(s) in IEEE Technical Society publications will be at the discretion of the particular Society.

Signees to establish the award

- Professor Alberto Bellini
- Pascal Maussion, General Chair of SDEMPED 2019

Did Pascal Maussion agree? Signature of TC3 Chair would be additionally appreciated.

A.1.4 IEEE PELS Sustainable Energy Systems Prize Paper Awards**Specification**

1. description:

The IEEE PELS Sustainable Energy Systems Prize Paper Award is established to recognize three outstanding papers and the associated authors for originality, practicality, and broader impact of the work in the area of sustainable energy systems.

2. administration:

The award is administrated by the IEEE PELS Technical Committee of Sustainable Energy Systems.

3. eligibility:

To be considered for an award, a nominated paper must meet the following criteria:

- The paper must be presented at the current IEEE PEDG symposium or other conferences organised by IEEE PELS Technical Committee of Sustainable Energy Systems and the full paper must be submitted between the previous PEDG symposium and the current PEDG symposium.
- The focus of the paper must be in the area of sustainable energy systems.
- It must be selected from a set comprising two mutually exclusive or two mutually inclusive subsets comprising, respectively, 5 papers that received the highest review scores from the PEDG reviewers and 5 papers selected by the PEDG technical programme committee and corresponding sets from the other conferences organised by IEEE PELS Technical Committee of Sustainable Energy Systems with a schedule as indicated above.

4. prize items:

Each of the top three prize-paper awards consists of an appropriately worded certificate(s) and an honorarium. The honorarium is 500USD for each of the prize paper.⁶ The honorarium for each paper will be shared equally among authors if the paper is written by multiple authors.

5. funds:

The award is paid out of the budget of the PELS Technical Committee of Sustainable Energy Systems.

6. nominee solicitation:

The announcement for establishing the prize papers will be issued each year along with the call for papers of the conferences sponsored by the TC of Sustainable Energy Systems, and will be posted on the conference websites. Five papers with the highest scores from the conference paper reviewers and five papers nominated by the conference Technical Program Committee members will be the nominees for the three prize papers.

⁶changed 27 August 2015 – previous version: The honorarium is 700USD for the first prize paper, 500USD for the second prize paper, and 300USD for the third prize paper.

7. award committee:

The Award Committee consists of 5 members including one Chair. The committee members shall be the members of the TC of Sustainable Energy Systems. The Award Committee members are appointed by the Chair of the TC of Sustainable Energy Systems. The members serve on a 4-year term, and can be continued for multiple terms. The Award Committee is responsible for the management of the awards.

The inaugural awards committee for 2013 selection process will consist of:

- Sudip K. Mazumder, University of Illinois, Chicago, USA, Award Committee Chair, mailing address: 851 South Morgan Street, M/C 154, 1020 SEO, Chicago, IL: 60607, USA; E-mail: mazumder@uic.edu
- Liuchen Chang, University of New Brunswick, Canada, Chair PELS TC of Sustainable Energy Systems
- Rik De Doncker, RWTH Aachen U., Germany, Co-Chair PELS TC of Sustainable Energy Systems
- Peter Steimer, ABB, Turgi, Switzerland
- Dehong Xu, Zhejiang University, Hangzhou, China

8. schedule:

The award is made annually at IEEE PEDG symposium.

The nominees shall be determined after the completion of the submission of the full papers to PEDG. The Selection Committee shall evaluate and select three prize papers before the start of the conference. The announcement of the prize papers will be made at a plenary event of the PEDG symposium, along with the presentations of the award certificates.

9. selection:

Upon receipt of all of the nominations, the Award Committee will review the nominated papers to select three prize papers based on the following criteria:

- Originality, quality, and intellectual merit of the papers
- Technical and/or scientific contribution of the papers to the area of sustainable energy systems
- Broader societal impact of the papers
- TPC nominations
- Review scores of the papers

Decisions will be taken with the majority of members of Award Committee.

10. presentation:

The awards will be presented at the IEEE PEDG symposium.

11. publicity:

The announcement for establishing the prize papers will be issued each year along with the call for papers of the conferences sponsored by the TC of Sustainable Energy Systems, and will be posted on the conference websites. The recipients of each year will be reported to PELS Award Committee. The recipients should be named in PELS Magazine or similar publications.

Signees to establish the award

- Dr. Liuchen Chang, Chair of Technical Committee of Sustainable Energy Systems, IEEE Power Electronics Society, Professor, Department of Electrical and Computer Engineering, University of New Brunswick, Fredericton NB, Canada E3B 5A3
- Dr. Sudip K. Mazumder, Award Committee Chair, Technical Committee of Sustainable Energy Systems, IEEE Power Electronics Society, Professor, University of Illinois, Chicago, USA.
- Dr. Dehong Xu, Steering Committee Chair of PEDG, Professor, Zhejiang University, Hangzhou, China

A.1.5 IEEE PELS Drs. Muhammad Harunur and Fatema Rashid Student Programme**Specification⁷**

1. description:

The IEEE PELS Drs. Muhammad Harunur and Fatema Rashid Student Programme is dedicated to support students in the area of power electronics to participate in related conferences by travel grants.

2. administration:

The award is administrated by the IEEE Power Electronics Society's Conference Committee.

3. eligibility⁸:

Undergraduate and graduate students with a strong record in power electronics are eligible; they need to be PELS member of any grade, typically student member. There are no limitations as of nationality, gender, age etc.

4. prize items:

The award consists of a certificate and a reimbursement of expenses according to section B.1.

5. funds:

The expenses that can be incurred for this award shall be covered by a donated funds, managed by the IEEE Foundation. 4% of the accumulated amount will annually be handed out for the award.

PELS VP conferences is responsible to decide in the beginning of each year which conferences shall be served with which amount for travel grants in the year after: As long as the number of grants does not cover the expected demand, funds shall be allocated with priority PELS flagship conferences — i. e., currently all ECCE conferences, amongst those in particular ECCE America, and APEC. The conference organisers will be notified accordingly.

The maximum number of awards for dedicated conferences is determined this way. The respective amount will be included in the respective conference budget. As the expenses for the travel refund within the award are not exactly predictable, possible differences, which should be quite minor, will be compensated out of the conference budget.

⁷released by PELS Adcom in November 2023, to be reported to Tabarc; written consent from Drs. Rashid agreeing to have the IEEE award named in the honour of them received January 9th, 2024

⁸Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society governing documents, particularly with IEEE Policy 4.4 on Awards Limitations [1].

6. nominee solicitation:

The organisers of the conferences obtaining funds out of this award programme will advertise the travel grant.

Eligible students are to be nominated by their supervisors at university. The nomination must indicate the student's name and IEEE membership number, indicate papers submitted to the conference the student is author or co-author of, and comprise a brief endorsement letter about the student's track record in the area of power electronics and the benefit expected from the attendance at the conference. If the nominee is not a native speaker, a proof of language proficiency — i. e., English for a travel grant to a conference in English — is required.

Electronic submission of the nomination is acceptable only. The administration may be supported by PELS staff and using the award management system.

Self-nominations will not be allowed.

7. award committee:

The chair of a conference obtaining funds out of this award programme is responsible to establish an award selection committee by appointing a chair and four other members. Those must not be nominators. In case that a designated chair or member of the selection committee would declare a conflict of interest, another member with no conflict of interest shall be appointed. The chair and members of the selection committee shall be experts in the field of power electronics. They may belong to other committees of the conference and should obtain access to the the submitted papers and the related review results.

The term of this award selection committee is limited to the selection process of the current conference. No chair or member may be sequentially re-appointed for the same award more than twice.

8. schedule:

The schedule is as follows:

- for PELS conference committee:
 - PELS Vice-President Conferences shall decide in the beginning of each year which conferences shall be served with which amount for travel grants in the year after.
 - PELS Vice-President Conferences shall notify the chairpersons of the conferences obtaining funds out of this award programme accordingly.
 - The conference budget shall be augmented by the related funds.
- for the organisers of the conferences obtaining funds out of this award programme
 - The award shall be announced and advertised together with the call for papers.
 - Deadline for nominations for the award is the deadline for the submission of papers.
 - Subsequently the award selection committee shall be established.
 - The selection of the awardees shall take place within four weeks after the decision about the acceptance or rejection of the submitted papers.
 - Subsequently the awardees are notified.
 - The awardees who participated in the conference will send a proof of their reimbursable expenses to the conference organisers within four weeks after the conference.
 - The conference organisers will pay the amount out of the conference budget as above.

- The award selection committee and the names of the nominees and awardees shall be part of the report to the PELS Conference Committee besides the financial reporting.

9. selection:

- criteria:

Judgment of the award recipient will be based on :

- the nomination
- whether the nominee has submitted a paper to the conference and what has been the outcome of the reviews⁹

Criteria shall be applied in a way considering the educational level of the student, e. g., whether he is an undergraduate or graduate student or working on a PhD or doctoral thesis. They comprise:

- quality and innovation of the student’s contribution to the conference
- the profit the student can expect from attending the conference, which may e. g. permit to exchange with other researchers in power electronics which may be in particular beneficial if this would be difficult at his home institution

- process:

- Each member of the selection committee should vote for as many students as awards are available if there are enough suitable nominations.
- The nominees with the highest scores obtain the award.
- The chair of the selection committee may break a tie if necessary.

10. presentation:

The award is presented during the respective conference. It is encouraged to invite the winners of the award to dedicated PELS student activities during the conference.

11. publicity:

On PELS level the award will be generally publicized through IEEE PELS website, IEEE PELS magazine, and sending messages to IEEE PELS members. Conferences obtaining funds out of this award programme will advertise it in particular.

The award and the recipient can also be announced in IEEE Technical Society publications and advertisements of the respective conference.

Signees to establish the award

- *should be 5 voting members of Adcom*

A.2 PELS technical committee awards

A.2.1 Modeling and control technical achievement award

Specification ¹⁰

⁹Incidents of misconduct including, but not limited to, violations of IEEE’s publication policies, will be strongly considered by the awards committee and may be grounds for denial of an award.

¹⁰introduced travel refund: released by Adcom in autumn 2020, released by TAB in February 2021 with editorial changes

1. description:

The Modeling and Control Technical Achievement Award of the IEEE Power Electronics Society is established to honor innovators and researchers who have made outstanding and sustained technical contributions to the advancement of power electronics in the area of modeling and control.

2. administration:

The award is administrated by the PELS Technical Committee on Power and Control Core Technologies.

3. eligibility:

The award recipient has to be an active IEEE member; there are no other restrictions as to nationality, age, gender, or IEEE member grade.

4. prize items:

The award recipient will receive an honorarium of 1500USD¹¹, an engraving of suitable plaque, and an award certificate.

In addition, up to 1000USD will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

The award can only be given if the respective budget remains net positive.

5. funds:

This award is a Society funded award. The total annual expenses that can be incurred for this award shall be no more than 3000USD and shall be included in the Society's annual budget for the Technical Committee. The expenses include:

- honorarium and travel refund as above
- engraving of suitable plaque
- award certificate

6. nominee solicitation:

The award selection committee solicits nominations for this award. To nominate a candidate, the nominator must fill out and submit the nomination form together with up to two reference letters to the award selection committee Chair. Electronic submission is preferred.

7. award selection committee:

The award selection committee will consist of TC chair, the last two COMPEL chairs and the last two award recipients. An award selection committee chair will be selected by the award selection committee among its members.

For 2014, the award selection committee thus consists of TC chair as of January 2014, chairs of COMPEL 2012 and COMPEL 2013 and award recipients of 2012 and 2013.

Initially, before two previous award winners are available, the inaugural award selection committee consists of four persons, with the Chair of the PELS Technical Committee of Power & Control Core Technologies as a default member:

- Toshiji Kato (Doshisha University, Japan; COMPEL 2012 general chair)
- Yan-Fei Liu (Queen's University, Canada; award selection committee chair)
- Marta Molinas (Norwegian University of Science and Technology, Norway)

¹¹changed honorarium from previously 1000USD and total annual expenses from previously 1500USD

- Jian Sun (Rensselaer Polytechnic Institute, USA; PELS Power & Control Core Technology Tech Committee Chair)

Decisions will be taken with the majority of members of award selection committee.

8. schedule:

The schedule below is for the third award to be given in 2014. Further award schedules remain the same except that the year is shifted by one.

Due date	Action	Person Responsible
Nov. 1, 2013	Call for Nominations	award selection committee chair
Mar 31, 2014	All nominations received	award selection committee chair
May 1, 2014	Award winner selected by award selection committee	award selection committee chair
May10, 2014	Award winner contacted for information required for the award; information forwarded to PELS Awards Chair, Treasurer, and Administrator	award selection committee chair
May 30, 2014	Award check and plaque ready and shipped to COMPEL 2014 Organization Committee	award selection committee chair
COMPEL 2014	Award presented at COMPEL	Technical Committee Chair

9. selection:

Judgment of the award recipient will be based on the nominator's recommendation, the endorsement letters, and knowledge of the award selection committee members. Voting will be under the leadership of the award selection committee chair and the outcome will be based on the majority consensus. One awardee will be selected each year. If suitable candidates are not available for that year, the award selection committee can decide not to make an award for that year.

The criteria established for this award include:

- quality of technical achievement and contribution to the field
- enhancement of technology
- impact on the relevant technical community and the profession
- benefit to society
- the quality of the nomination

10. presentation:

The award is to be presented at COMPEL. The award would be made annually.

11. publicity:

Articles about the award recipient will be published in the IEEE PELS Magazine or similar publications. The announcement of the award and the recipient(s) in other IEEE Technical Society publications will be at the discretion of that particular society.

Signees to establish the award

- Dr. Yan-Fei Liu, Fellow IEEE
Chair of Technical Committee of Modeling and Control Core Technologies, IEEE Power Electronics Society
Professor, Department of Electrical and Computer Engineering, Queen's University, Kingston ON, Canada K7L 3N6

Previous holders

- 2012. Dragan Maksimovic
- 2013. Jian Sun
- 2014. Seth Sanders
- 2015. Brad Lehman
- 2016. Paolo Mattavelli
- 2017. Yan-Fei Liu
- 2018. Charles Sullivan
- 2019. Alan Mantooth
- 2020. Lennart Harnefors
- 2022. Tobias Geyer
- 2023. Josep M. Guerrero
- 2024. ...

A.2.2 IEEE PELS Technical Achievement Award for Integration and Miniaturisation of Switching Power Converters**Specification¹²**

1. description:

The IEEE PELS Technical Achievement Award for Integration and Miniaturisation of Switching Power Converters is established to recognize innovators and researchers who have made outstanding technical contributions to the advancement of power electronic circuits, components, devices, and/or systems toward a higher level of integration and/or miniaturisation of switching power converters.

2. administration:

The award is administrated by the IEEE Power Electronics Society's Technical Committee on Power Conversion Systems and Components (TC2).

3. eligibility:

Active IEEE Members only; an award will be given to a single person only.

Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society governing documents, particularly with IEEE Policy 4.4 [1] on Awards Limitations.

4. prize items:

The award consists of an award plaque and a one-time honorarium of 1500USD.

In addition, up to 1000USD will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony

¹²released by PELS Adcom in autumn 2020, released by IEEE TAB in February 2021 with editorial changes

5. funds:

This award is a society funded award. The total annual expenses shall be included in the society's annual TC2 budget. The expenses that can be incurred for this award shall be no more than 3000USD per year, including:

- honorarium as above
- engraving of suitable plaque as above
- travel refund and conference fees as above

The award can only be given if the respective budget allocated to PELS TC2 remains net positive.

6. nominee solicitation:

PELS TC2 solicits nominations for this award. Self-nominations will not be allowed, but there will be no further restrictions on who could act as a nominator. To nominate a candidate, the nominator must submit the required information including a description of the merits of the nominee and the evidence of the achievements. Only electronic submission via PELS website is accepted.

Nominations should comply with IEEE Policies and restrictions on awards. Incidents of misconduct including, but not limited to, violations of IEEE's publication policies, will be strongly considered by the awards committee and may be grounds for denial of an award.

7. award selection committee:

An award selection committee composed by a chair and four other members, where, when applicable and possible

- the past PELS TC2 Chair serves as the chair
- the last four recipients of the award serve as members

of the award selection committee carrying out selection.

Initially, when there are not yet at least four past recipients of the award, the proper number — such as the number of members is four plus the chairperson — of experienced PELS members active in the area of TC2 will be appointed by the TC2 chair to become members of award selection committee instead.

In case of conflict of interest (e. g. that a designated member of award selection committee would be nominated for the award or a designated member of award selection committee would declare a conflict of interest) he or she will not become member of the selection committee. If necessary because quorum cannot be met, the chairperson of PELS awards committee will be notified before starting the selection process and appoint substitutes instead to make sure that selection committee consists of at least three members.

The term of this award selection committee is limited to the selection process in the current year.

8. schedule:

The annual schedule is as follows:

- beginning of January in the year of the award: start of publicity, solicit nominations
- 31 March in the year of the award: deadline for nominations
- 15 April: nominations screened and formally checked for eligibility; nominations of formally eligible candidates distributed to the members of the award selection committee

- 30 May: members of award selection committee finished voting
- award presentation at a PELS conference in summer or autumn as specified below

9. selection:

- criteria:

Judgment of the award recipient will be based on the nomination. The criteria considered by the award selection committee are:

- quality of the technical achievement or innovation
- sustained impact on the relevant technical community and the profession, benefit to the society
- past relevant activities to the field and technical committee
- the quality of the nomination

- process:

- If at least three eligible nominations have been received, the members of award selection committee should indicate their first (3 points), if adequate second (2 points) and third (1 point) choice. If the majority of the members of award selection committee identified their respective first choice, the awardee is the nominee with the highest number of points summed up over all votes; the chairperson of PELS awards committee may break a tie if necessary. Otherwise, no award will be presented in the current year.
- If less than three applications of eligible candidates would be received, the process may be appropriately simplified.
- The award may not be given more frequently than annually nor does it need to be given each and every year, i. e., the award will only be given in years when a suitable candidate is selected based upon meeting all of the eligibility and selection requirements.

10. presentation:

As a rule, the award is presented during the International Workshop on Power-Supply-on-Chip (PwrSoC) or during the IEEE Energy Conversion Congress and Exposition (ECCE) America. Taking into account the international character of PELS and its members, it may also be presented at another PELS conference upon mutual agreement.

11. publicity:

The award will be publicised through IEEE PELS website, IEEE PELS magazine, and sending messages to IEEE PELS members. In addition, it might be publicised through distributing flyers in various IEEE PELS sponsored conferences such as APEC, ECCE, PwrSoC, etc. The announcement of the award and the recipient in IEEE Technical Society publications will be at the discretion of the particular Society.

Signees to establish the award

- Frede Blaabjerg
- Liuchen Chang
- Johan Enslin
- Patrick Wheeler
- Brian Zahnstecher

Previous holders

2021. Cian O'Mathuna
 2022. Noah Sturcken
 2023. Zheng (John) Shen
 2024. ...

A.2.3 IEEE PELS Electrical Machines, Drives and Related Automation Technical Achievement Award**Specification¹³**

1. description:

The IEEE PELS Electrical Machines, Drives and Related Automation Technical Achievement Award of the IEEE Power Electronics Society is established to honour innovators and researchers who have made outstanding and sustained technical contributions to the advancement of the areas of electrical machines, drives or related automation.

2. administration:

The IEEE PELS Electrical Machines Drives and Related Automation Technical Achievement Award is administered by the IEEE Power Electronics Society through the Technical Committee on Electrical Machines, Drives and Automation (TC3).

3. eligibility:

The award recipient should be an active member of IEEE and of the IEEE Power Electronics Society and demonstrate a significant track record of achievements in the areas of electrical machines, drives or related automation. There are no other restrictions as to nationality, age, gender, or IEEE member grade. An award will be given to a single person only.

Eligibility and Selection process shall comply with procedures and regulations established in IEEE and Society governing documents, particularly with IEEE Policy 4.4 on Awards Limitations [1].

4. prize items:

The award consists of an award plaque and a one-time honorarium of 1500USD. In addition, up to 1000USD will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

5. funds:

The expenses that can be incurred for this award shall be no more than 3000USD per year, including:

- honorarium as above
- engraving of suitable plaque as above
- travel expenses coverage and conference fees as above¹⁴

The society's budget includes the amount for this award and the budget is net positive with the inclusion of the award. The total annual expenses shall be included in the society's annual TC3 budget. The award can only be given if the respective budget allocated to PELS TC3 remains net positive.

¹³released by PELS Adcom in October 2021, subsequently released by Tabarc with editorial changes

¹⁴Travel expenses and conference fees reimbursements will follow IEEE Policies and Procedures.

6. nominee solicitation:

PELS TC3 solicits nominations for this award. Self-nominations will not be allowed, but there will be no further restrictions on who could act as a nominator. To nominate a candidate, the nominator must submit the required information including a description of the merits of the nominee and the evidence of the achievements. The nomination may be accompanied by up to three endorsement letters. Only electronic submission via PEELS website is accepted.

7. award committee:

The award selection committee is composed by the chair and four members, if possible as follows:

- The PEELS TC3 Chair serves as the chair.
- Two members are elected with simple majority by the voting members of TC3 according to TC3's Policies and Procedures. Prior to their election, they shall have announced their candidature and they must not have acted as nominators or endorsers or be nominees for the award.
- The last two recipients of the award serve as additional members.

Initially, when there are not yet at least two past recipients of the award, the TC3 chair will appoint substitutes, i. e., experienced PEELS members active in the area of TC3; this assures that the award selection committee consists of four members plus the chairperson.

In case of conflict of interest (e. g. that a designated member of the award selection committee would be nominated for the award or a designated member of award selection committee would declare a conflict of interest)¹⁵ he or she will not become member of the selection committee. If the remaining number of members of selection committee is too low to reach quorum, the chairperson of PEELS awards committee will be notified before starting the selection process and appoint substitutes instead to make sure that selection committee consists of at least three members and this way can meet the quorum. If the chair of the award selection committee would be concerned by a conflict of interest, the chairperson of PEELS awards committee will be notified before starting the selection process and appoint another designated member of the award selection committee to act as chair.

The term of this award selection committee is limited to the selection process in the current year. The term and eligibility of TC3 chair as chairperson are ruled in TC3 policies and procedures; re-election of the two elected members as above is possible.

8. schedule:

The annual schedule is as follows:

- beginning of January in the year of the award: start of publicity, solicit nominations
- 31 March in the year of the award: deadline for nominations
- 15 April: screening — formally checking eligibility — by PEELS staff ready; distribution of the nominations of eligible candidates to the members of selection committee as previously determined by TC3
- 31 May: votes of the members of selection committee sent to PEELS awards committee

¹⁵Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C [1]. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

- 30 June: notification of the award winner by PELS staff
- award presentation at a PELS conference in summer or autumn as specified below

9. selection:

- criteria:

Judgment of the award recipient will be based on the nomination. The criteria considered by the award selection committee are:

- quality of the technical achievement
- contribution to the field — impact and merit of the innovation
- advancement of the technology
- sustained impact on the relevant technical community and the profession, benefit to the society
- past relevant activities to the field and technical committee
- the quality of the nomination including endorsement letters

- process:

- If at least three eligible nominations have been received, the members of award selection committee should indicate their first (3 points), if adequate second (2 points) and third (1 point) choice. If the majority of the members of award selection committee identified their respective first choice, the awardee is the nominee with the highest number of points summed up over all votes; the chairperson of PELS awards committee may break a tie if necessary. Otherwise, no award will be presented in the current year.
- If less than three applications of eligible candidates would be received, the process may be appropriately simplified.
- The award may not be given more frequently than annually nor does it need to be given each and every year, i. e., the award will only be given in years when a suitable candidate is selected based upon meeting all of the eligibility and selection requirements.

10. presentation:

If an award is given, it will be presented in the current year at one of the following IEEE PELS sponsored conferences, depending on the field of expertise of the recipient: PRECEDE, SLED or SDEMPED

11. publicity:

The award will be publicised through IEEE PELS website, IEEE PELS magazine, and sending messages to IEEE PELS members. In addition, it might be publicised through distributing flyers in various IEEE PELS sponsored conferences such as SDEMPED, PRECEDE, ECCE, IEMDC, APEC, SLED etc. The award and the recipient can also be announced in IEEE Technical Society publications.

Signees to establish the award

- Liuchen Chang
- Johan Enslin
- Jinjun Liu
- Yan-Fei Liu
- Alan Mantooth

Previous holders

2024. ...

A.2.4 IEEE PELS Vehicle and Transportation Systems Technical Achievement Award**Specification¹⁶**

1. description:

The IEEE PELS Vehicle and Transportation Systems Technical Achievement Award recognises innovators and researchers who have made outstanding technical contributions to the advancement of power electronics in the area of vehicle and transportation systems.

2. administration:

The award is administrated by the IEEE PELS Technical Committee on Vehicle and Transportation Systems (TC4).

3. eligibility:

The award recipient shall be an active member of IEEE. There are no other restrictions as to nationality, age, gender, or IEEE member grade. The award is made to one individual person and not to a company.

4. prize items:

The award consists of an award plaque and a one-time honorarium of 1500USD.

In addition, up to 1000USD will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

5. funds:

This award is a society funded award. The total annual expenses shall be included in the society's annual TC4 budget. The expenses that can be incurred for this award shall be no more than 3000USD per year, including:

- honorarium as above
- engraving of suitable plaque as above
- travel refund and conference fees as above

The award can only be given if the respective budget allocated to PELS TC4 remains net positive.

6. nominee solicitation:

PELS TC4 solicits nominations for this award. Self-nominations are deprecated, but there will be no further restrictions on who could act as a nominator. To nominate a candidate, the nominator must submit the required information together with two or three reference letters. Only electronic submission via PELS website is accepted.

7. award selection committee:

An award selection committee consisting of

- PELS TC4 Chair as chairperson
- two members of PELS TC4 appointed by the chairperson

¹⁶released by PELS Adcom 09 March 2018 and by IEEE Tabarc June 2018; changed travel refund: released by Adcom in autumn 2020, released by TAB in February 2021 with editorial changes

- the last two recipients of the award

will carry out selection.

Initially, when there are not yet at least two past recipients of the award, one or two more PELS TC4 members will be appointed by the TC4 chair to become member of award selection committee instead.

In case of conflict of interest (e. g. that a designated member of award selection committee would be nominated for the award) he will not become member of the selection committee. If necessary, the chairperson of PELS awards committee will be notified about such issues and appoint substitutes instead to make sure that selection committee consists of at least three members.

The term of this award selection committee is limited to the selection process in the current year.

8. schedule:

The annual schedule is as follows:

- August of the previous year: start of publicity, solicit nominations
- 31 March in the year of the award: deadline for nominations
- 15 April: nominations screened and formally checked for eligibility; nominations of formally eligible candidates distributed to the members of award selection committee
- 30 April: members of award selection committee finished voting
- 10 May: notification of the winner of the award
- award presentation at following ITEC award ceremony (ITEC America typically in June)

9. selection:

- criteria:

Judgment of the award recipient will be based on the nomination including the reference letters. The criteria considered by the award selection committee include:

- quality of technical achievement and contribution to the field
- advancement of the technology
- sustained impact on the relevant technical community and the profession
- benefit to the society
- past relevant activities to the field and technical committee
- the quality of the nomination

The award may not be given more frequently than annually nor does it need to be given each and every year, i. e., the award will only be given in years when a suitable candidate is selected based upon meeting all of the eligibility and selection requirements.

- process:

- If at least three eligible nominations have been received, the members of award selection committee should indicate their first (3 points), if adequate second (2 points) and third (1 point) choice. If a majority of the members of award selection committee vote this way, the awardee is the nominee with the highest number of points summed up over all votes. The chairperson of PELS awards committee may break a tie if necessary.

If at least half of the members of selection committee however abstain, no award will be presented in the current year.

- If less than three applications of eligible candidates would be received, the process may be appropriately simplified.

10. presentation:

As a rule, the award is presented in the award ceremony during ITEC America. Taking into account the international character of PELS and its members, it may also be presented at another conference of global ITEC series upon mutual agreement.

11. publicity:

The award will be publicised through IEEE PELS website, IEEE PELS magazine, and sending messages to IEEE PELS members. In addition, it might be publicised through distributing flyers in various IEEE PELS sponsored conferences such as APEC, ECCE, ITEC, etc. The announcement of the award and the recipient in IEEE Technical Society publications will be at the discretion of the particular society.

Signees to establish the award

- Alan Mantooth
- Don Tan
- Pradeep Shenoy
- Issa Batarseh
- Liuchen Chang

Previous holders

- 2019. Kaushik Rajashekara
- 2020. Burak Ozpineci
- 2021. Abas Goodarzi
- 2022. Alireza Khaligh
- 2023. Chunting (Chris) Mi
- 2024. ...

A.2.5 IEEE PELS Sustainable Energy Systems Technical Achievement Award

Specification¹⁷

1. description:

The Sustainable Energy Systems (SES) Technical Achievement Award of the IEEE Power Electronics Society (PELS) has been established to recognize and honor individuals who have contributed with sustained and significant scholarly and original technical and scientific contributions towards the advancement of power electronics in the area of sustainable energy systems.

¹⁷released by Adcom 09/2015, released by TAB 06/2016; introduced travel refund: released by Adcom in autumn 2020, released by TAB in February 2021 with editorial changes

2. administration:

The award is administrated by the IEEE PELS Technical Committee (TC) of SES, and will be presented at a PELS sponsored conference, with the first award to be presented at the 2017 IEEE International Symposium on Power Electronics for Distributed Generation Systems (PEDG) (<http://www.pedg2017.org/>). The award is intended for annual awards; however, the award may not be given in years if no qualified candidate is nominated and selected based upon the eligibility and selection requirements.

3. eligibility:

The award recipient must be an active IEEE member; there are no other restrictions as to nationality, age, gender, or IEEE member grade.

4. prize items:

The award recipient will receive a one-time honorarium of 1500USD, an engraving of suitable plaque, and an award certificate.

In addition, up to 1000USD will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

No more than one award will be made each year.

5. funds:

This award is a society funded award. The total annual expenses that can be incurred for this award shall be no more than 3000 USD and shall be included in the society's annual budget for the Technical Committee of Sustainable Energy Systems. The expenses include:

- honorarium and travel refund as above
- engraving of suitable plaque
- award certificate

The award can only be made when the respective budget remains net positive.

6. nominee solicitation:

The IEEE PELS TC SES award selection committee solicits nominations for this award. To nominate a candidate, the nominator must fill out and submit the nomination form together with up to two reference letters and a no more than five-page curriculum vitae of the nominee to the award selection committee chair. Only electronic submission is accepted.

7. award committee:

The award selection committee will consist of the chair of the PELS TC SES of the year preceding the award, the last PEDG general chair, and the last award recipient. Those will elect one amongst themselves as award selection committee chair for the next selection process.

For 2018, the award selection committee thus consists of IEEE PELS TC SES chair as of 2017, chair of PEDG 2017, and award recipient of 2017. One of them will be elected as award selection committee chair.

Initially, before previous award winner is available, the inaugural award selection committee consists of the following three persons:

- Sudip K. Mazumder, University of Illinois, Chicago, USA, mailing address: 851 South Morgan Street, M/C 154, 1020 SEO, Chicago, IL: 60607, USA; E-mail: mazumder@uic.edu, IEEE PELS TC SES chair 2015, as award selection committee chair

- Gerard Hurley, National University of Galway, Ireland, General Chair PEDG 2016; E-mail: gerard.hurley@nuigalway.ie
- Juan Balda, University of Arkansas, USA, E-mail: jbalda@uark.edu, IEEE PELS TC SES vice chair 2015 and general chair of PEDG 2015

Decisions will be taken with the majority of members of award selection committee.

8. schedule:

The schedule below is for the first award to be given in 2017. Further award schedules remain the same except that the year is shifted.

due date	action	person responsible
November 1, 2016	call for nominations	award selection committee chair
March 31, 2017	all nominations received	award selection committee chair
May 1, 2017	award winner selected by the award selection committee	award selection committee chair
May 10, 2017	award winner contacted for information required for the award; information forwarded to PELS awards committee chair, treasurer, and administrator	award selection committee chair
May 30, 2017	award check and plaque ready and shipped to PEDG 2017 organization committee	award selection committee chair
IEEE PEDG 2017	award presented at IEEE PEDG	IEEE PELS TC SES chair

9. selection:

Judgment of the award recipient will be based on the nominator's recommendation, the endorsement letters, and evidence collected by the award selection committee members. Voting will be under the leadership of the award selection committee chair and the outcome will be based on the majority consensus. One awardee will be selected each year. If suitable candidates are not available for that year, the Award Committee can decide not to make an award for that year.

The criteria established for this award include:

- contributions of the candidate to power electronics in the field of sustainable energy systems;
- specific intellectual merit of the original contributions and innovations;
- broader societal impact of the of the contribution(s) on sustainable energy systems and applications;
- list of related significant publications;
- candidate's stature in the area of sustainable energy systems, in particular, and power electronics, in general;
- professional activities or involvements;
- the quality of the nominations.

10. presentation:

The award is to be presented at IEEE PEDG. The award is intended be made annually.

11. publicity:

Articles about the award recipient will be published in the IEEE PELS Website, IEEE PELS Magazine and/or similar publications. The announcement of the award and the recipient(s) in other IEEE Technical Society publications will be at the discretion of that particular society.

Signees to establish the award

- Sudip K. Mazumder, PELS SES TC Chair, Professor, University of Illinois, Chicago, USA
- Alan Mantooth, PELS VP Technical Operations, Professor, University of Arkansas, USA
- Frede Blabjerg, PELS VP Products, Professor, Aalborg University, Denmark
- Vladimir Blasko, Member at Large, Senior Fellow, United Technologies Research Center, USA
- Maryam Saeedifard, Member at Large, Assistant Professor, Georgia Tech, USA

Previous holders

2017. Marco Liserre

2018. Liuchen Chang

2019. Xiongfei Wang

2020. Pedro Rodriguez

2021. Wei Qiao

2022. Xinbo Ruan

2023. Hua Geng

2024. ...

A.2.6 IEEE PELS Milan M. Jovanović Award for Power Electronics Emerging Technology**Specification¹⁸**

1. description:

The IEEE PELS Milan M. Jovanović Award for Power Electronics Emerging Technology (previously IEEE Power Electronics Emerging Technology Award) of the IEEE Power Electronics Society is established to recognise engineers and researchers who have made outstanding technical contributions to one or more emerging research topics in power electronics. Milan M. Jovanović's contributions to the field were exemplary, and this award serves as a lasting tribute to his groundbreaking work.

The emerging areas in power electronics are evolving. At least three emerging research topics will be announced each year with the call for nominations, which are decided annually by PELS TC6.

¹⁸released as IEEE Power Electronics Emerging Technology Award by PELS Adcom 27 September 2018, released by IEEE Tabarc January 2019 with minor changes; introduced travel refund: released by Adcom in autumn 2020, released by TAB in February 2021 with editorial changes; written consent from Mirjana Jovanović agreeing to have the award named in the honour of her husband obtained 25 July 2023; conditionally released by Adcom in November 2023; new name and travel refund, confirmed by Tabarc in January 2024; name change put into effect in February 2024

2. administration:

The award is administrated by the IEEE Power Electronics Society's Technical Committee on High Performance and Emerging Technologies (TC6).

3. eligibility:

The award recipient must be an active member of IEEE. There are no other restrictions as to nationality, age, gender, or IEEE member grade. An award will be given to a single person only.

4. prize items:

The award consists of an award plaque and a one-time honorarium of 1500USD.

The award winner is entitled to obtain a reimbursement of expenses according to section B.1.

5. funds:

The expenses include the honorarium, engraving of a suitable plaque and cost reimbursement as above. The funds are managed by the IEEE Foundation. Sponsoring will be subject to a contract between the Foundation and a company.

The award can only be given if the respective budget remains net positive.

6. nominee solicitation:

PELS TC6 solicits nominations for this award. Self-nominations will not be allowed, but there will be no further restrictions on who could act as a nominator. To nominate a candidate, the nominator must submit the required information including a description of the merits of the nominee. Only electronic submission via PEELS website is accepted.

7. award selection committee:

An award selection committee consisting of

- PEELS TC6 Chair as chairperson
- two members of PEELS TC6 appointed by the chairperson
- the last two recipients of the award

will carry out selection.

Initially, when there are not yet at least two past recipients of the award, one or two more PEELS TC6 members will be appointed by the TC6 chair to become member of award selection committee instead.

In case of conflict of interest (e. g. that a designated member of award selection committee would be nominated for the award) he will not become member of the selection committee. If necessary because quorum cannot be met, the chairperson of PEELS awards committee will be notified in the beginning of selection process and appoint substitutes instead to make sure that selection committee consists of at least three members.

The term of this award selection committee is limited to the selection process in the current year. *Members may repeatedly belong to the award selection committee, but not for more than four consecutive years.*

8. schedule:

The annual schedule is as follows:

- The PELS TC6 Chair will annually consult with the members of the Technical Committee and choose the topics for the next year. The decision will define at least three emerging research topics to be considered in the call for nominations for the next nomination period.

April of the previous year: publishing this information on the website

- August of the previous year: start of publicity, solicit nominations
- 31 March in the year of the award: deadline for nominations
- 15 April: nominations screened and formally checked for eligibility; nominations of formally eligible candidates distributed to the members of award selection committee
- 30 May: members of award selection committee finished voting
- award presentation at a PELS conference in summer or autumn as specified below

9. selection:

- criteria:

Judgment of the award recipient will be based on the nomination. The criteria considered by the award selection committee include:

- quality of technical achievement and contribution to the field
- advancement of the technology
- sustained impact on the relevant technical community and the profession
- benefit to the society
- past relevant activities to the field and technical committee
- the quality of the nomination

The award may not be given more frequently than annually nor does it need to be given each and every year, i. e., the award will only be given in years when a suitable candidate is selected based upon meeting all of the eligibility and selection requirements.

- process:

- If at least three eligible nominations have been received, the members of award selection committee should indicate their first (3 points), if adequate second (2 points) and third (1 point) choice. If a majority of the members of award selection committee vote this way, the awardee is the nominee with the highest number of points summed up over all votes. The chairperson of PELS awards committee may break a tie if necessary.

If at least half of the members of selection committee however abstain, no award will be presented in the current year.

- If less than three applications of eligible candidates would be received, the process may be appropriately simplified.

10. presentation:

As a rule, the award is presented during ECCE America. Taking into account the international character of PELS and its members, it may also be presented at another PELS conference upon mutual agreement.

11. publicity:

The award will be publicised through IEEE PELS website, IEEE PELS magazine, and sending messages to IEEE PELS members or IEEE PELS TC6 members respectively. In addition, it might be publicised through distributing flyers in various IEEE PELS sponsored conferences such as APEC, ECCE, WiPDA, WoW, etc. The announcement of the award and the recipient in IEEE Technical Society publications will be at the discretion of the particular Society.

Signees to establish the award

- Yaow-Ming Chen
- Frede Blaabjerg
- Jinjun Liu
- Marco Liserre
- Helen Li

Previous holders

2019. Chunting (Chris) Mi
2020. Brij Singh
2021. Grant Covic
2022. Jin Wang
2023. Leon Tolbert
2024. ...

A.2.7 IEEE Joseph John Suozzi INTELEC Fellowship Award in Power Electronics¹⁹**Previous holders**

2001. Robert Balog, University of Illinois at Urbana-Champaign, Illinois, USA
2002. Peng Li, Northeastern University, Boston, Massachusetts, USA
2003. Mehdi Ferdowsi, Illinois Institute of Technology, Chicago, Illinois, USA
2005. Alexis Kwasinski, University of Illinois at Urbana-Champaign, Illinois, USA
2006. Bradley Oraw, Arizona State University, Tempe, Arizona, USA
2007. Tirthajyoti Sarkar, University of Illinois at Chicago, Chicago, Illinois, USA
2008. Jian Lu, University of Central Florida, USA
2009. Omer C. Onar, Illinois Institute of Technology, Chicago, Illinois, USA
2011. Alessandro Costabeber, University of Padova, Italy
2012. Hamid Behjati, University of Texas at Arlington, USA
2013. Ankan De, North Carolina State University, USA
2014. Eunice Ribeiro, Universidade de Coimbra, Portugal
2016. Liyao Wu, Georgia Institute of Technology, USA
2017. Enver Candan, University of Illinois at Urbana-Champaign, USA
2021. Rose Abramson
2022. Hussain Sayed
2024. ...

¹⁹clarification that only IEEE members are eligible as awardee added with release by TAB in June 2017

A.2.8 IEEE PELS Outstanding Achievement Award for Contributions in Electronic Power Grid Technology

Specification²⁰

1. description:

The IEEE PELS Outstanding Achievement Award for Contributions in Electronic Power Grid Technology is established to recognise innovators and researchers who have made outstanding technical contributions to allow power electronics to take a managerial role in the future electronic grid.

2. administration:

The award is administrated by the IEEE Power Electronics Society's Technical Committee on Electronic Power Grid Systems (TC8).

3. eligibility²¹:

Active IEEE Members only; an award will be given to a single person only.

4. prize items:

The award consists of an award plaque and a one-time honorarium of 1500USD.

The award winner is entitled to obtain a reimbursement of expenses according to section B.1.

5. funds:

The expenses include the honorarium, engraving of a suitable plaque and cost reimbursement as above.

The society's budget includes the amount for this award and the budget is net positive with the inclusion of the award. The total annual expenses shall be included in the society's annual TC8 budget. The award can only be given if the respective budget allocated to PELS TC8 remains net positive.

6. nominee solicitation:

PELS TC8 solicits nominations for this award. Self-nominations will not be allowed. To nominate a candidate, the nominator must submit the required information including a description of the merits of the nominee and the evidence of the achievements. Only electronic submission via PELS website is accepted.

7. award committee:

An award selection committee composed by a chair and four other members, where, when applicable and possible

- the PELS TC8 chair serves as the award selection committee chair
- two most recent recipients of the award and two additional members appointed by the chair serve as members of the award selection committee

carry out selection.

Initially, when there are not yet at least two past recipients of the award, the TC8 chair will appoint substitutes, i. e., experienced PELS members active in the area of TC8; this assures that the award selection committee consists of four members plus the chairperson.

²⁰released by PELS Adcom in May 2023 and confirmed by Tabarc in January 2024

²¹Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society governing documents, particularly with IEEE Policy 4.4 on Awards Limitations [1].

In case of conflict of interest (e. g. that a designated member of award selection committee would be nominated for the award or a designated member of award selection committee would declare a conflict of interest)²² he or she will not become member of the selection committee. If the remaining number of members of selection committee is too low to reach quorum, the chairperson of PELS awards committee will be notified before starting the selection process and appoint substitutes instead to make sure that the selection committee consists of at least three members. If the chair of the award selection committee would be concerned by a conflict of interest, the chairperson of PELS awards committee will be notified before starting the selection process and appoint another designated member of the award selection committee to act as chair.

The term of this award selection committee is limited to the selection process in the current year. The term and eligibility of TC8 chair as chairperson are ruled in TC8 policies and procedures; re-appointment of the two appointed members as above is possible.

8. schedule:

The annual schedule is as follows:

- beginning of January in the year of the award: start of publicity, solicit nominations
- 31 March in the year of the award: deadline for nominations
- 15 April: screening — formally checking eligibility — by PELS staff ready; distribution of the nominations of eligible candidates to the members of selection committee
- 31 May: votes of the members of selection committee sent to PELS awards committee
- 30 June: notification of the award winner by PELS staff
- award presentation at a PELS conference in summer or autumn as specified below

9. selection:

- criteria:

Judgment of the award recipient will be based solely on the information provided in the nomination form. The criteria considered by the award selection committee are:

- quality of the technical achievement or innovation
- sustained impact on the relevant technical community and the profession, benefit to the society
- past relevant activities to the field and technical committee
- the quality of the nomination

- process:

- If at least three eligible nominations have been received, the members of award selection committee should indicate their first (3 points), if adequate second (2 points) and third (1 point) choice. If the majority of the members of award selection committee identified their respective first choice, the awardee is the nominee with the highest number of points summed up over all votes; the chairperson of PELS awards committee may break a tie if necessary. Otherwise, no award will be presented in the current year.
- If less than three applications of eligible candidates would be received, the process may be appropriately simplified.

²²Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C [1]. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

- The award may not be given more frequently than annually nor does it need to be given each and every year, i. e., the award will only be given in years when a suitable candidate is selected based upon meeting all of the eligibility and selection requirements.

10. presentation:

As a rule, the award is presented during the eGrid Workshop. Taking into account the international character of PELS and its members, it may also be presented at another PELS conference upon mutual agreement.

11. publicity:

The award will be publicized through IEEE PELS website, IEEE PELS magazine, and sending messages to IEEE PELS members. In addition, it might be publicized through distributing flyers in various IEEE PELS sponsored conferences such as APEC, ECCE, etc. The award and the recipient can also be announced in IEEE Technical Society publications.

Signees to establish the award

- Liuchen Chang
- Christina diMarino
- Ulrike Grossner
- Brad Lehman
- Giovanna Oriti

Previous holders

2024. ...

A.2.9 IEEE International Challenge in Design Methods for Power Electronics

Specification²³

1. description:

The best performing teams in the IEEE International Challenge in Design Methods for Power Electronics will be awarded. An actual topic for the competition will be defined each year. The organizing and award structure will remain the same.

2. administration:

The award is administrated by the IEEE PELS Technical Committee Design Methodologies (TC10).

The following committees shall be established to care for one award cycle:

- steering committee, consisting of
 - TC10 chair
 - two members, who are member of PELS or another sponsoring IEEE society and experts in the area, appointed by the TC10 chair
- organising committee, consisting of

²³released by PELS Adcom in March 2023, subsequently editorially updated according to recommendations from Tabarc

- general chair, appointed with a majority of votes by the steering committee and, appointed by the general chair, considering suggestions from the steering committee
- co-chair
- treasurer

A decision of one of these committees will require the majority of votes of at least half of its members.

3. eligibility:

Schools can participate with a student team as follows:

Eligible schools must be a college or university with engineering curricula leading to a full first degree or higher and have an accredited or similarly officially recognised engineering programme. They need to demonstrate a strong commitment to undergraduate and graduate engineering education. It is expected that they provide the necessary support from faculty and from administration for the team participating in the challenge.

Each school may propose one team. The minimum student number in the team is three (3) and the maximum student number is five (5) to qualify for the competition. Each team should consist of at least one undergraduate student and at most two graduate students. Interdisciplinary and diversified teams are encouraged. A faculty advisor for the team needs to be identified.

4. prize items:

The award is annual. Each of the winning teams obtains one of the following prizes:

- first prize:
 - honorarium of 10000USD paid to the university of the winning team
 - certificate with citation

The prize will be awarded for the solution with highest scores, also meeting all minimum requirements specified each year as confirmed through reports and software verifications.

- second prize
 - honorarium of 5000USD paid to the university of the winning team
 - certificate with citation

The prize will be awarded for the solution with the second highest scores, also meeting all minimum requirements specified each year as confirmed through reports and software verifications.

- two third prizes
 - honorarium of 2500USD paid to the university of the winning team
 - certificate with citation

The prizes will be awarded for the solution with third *and fourth* highest scores, also meeting all minimum requirements specified each year as confirmed through reports and software verifications.

- up to three honourable-mention prizes
 - honorarium of 1000USD paid to the university of the winning team
 - certificate with citation

They are intended to acknowledge remarkable solutions in detail, also meeting all minimum requirements, proposed by teams not winning the first to third prizes.

Schools receiving the payment for their winning team are intended to let benefit the team members and student team design project activities from it.

Each award winning team is entitled to obtain a reimbursement of expenses according to section B.1.

5. funds:

This award is initially funded as follows:

- IEEE Power Electronics Society 10000USD
- industry sponsors 20000USD

This amount may be renegotiated on a yearly basis prior to the announcement of the next competition. Sponsorship of other IEEE societies will be possible as well. A sponsor must provide funds of at least 10000USD to be mentioned as sponsor of the competition. The renegotiation will influence the accountable cost. Anyway, prior to announcing the competition, funds of in total at least 25000USD must be guaranteed for it.

The total annual expenses that can be incurred for this award shall be no more than the sum of the aforementioned funding, i. e., the award can only be given up to an extent that the budget remains net positive. The contribution of the societies shall be included in their annual budget.

The expenses include:

- honorarium, engraving of suitable plaque and cost reimbursement as above
- cost for software infrastructure, IT service, and cloud computing access if required

6. nominee solicitation:

The team of the IEEE International Challenge in Design Methods for Power Electronics — cf. the committees according to item 2 — will advertise the competition. In particular information will be disseminated through the respective website.

Participation in the competition is on an application basis. Schools that are interested to participate with a student team must submit some formal indications and the following documents before the deadline:

- a proposal

The proposal shall express the intent to participate in the competition. It is to explain the ideas and plans relevant to the competition topic area: The work should include the construction and operation of a software prototype. The proposal must address both technical and organisational issues for each phase of the prototype's development and testing.

The proposal is to be prepared by the student team in collaboration with the faculty advisor and must be signed by all authors or the student team leader and the faculty advisor. It must be written in English with at least 11pt font size and is limited to 2 pages 8.5"x11" or A4 with all contents included.

- a letter of support

The letter of support from an appropriate Dean, Department Chair, or other authorised school official must confirm the school's commitment to participate. It shall indicate how the participation in the challenge relates to the educational programmes and potentially other activities within the school. It can also state the support from the institution for the participating team.

Additional letters of support from other team sponsors are optional.

All documents must be submitted in English electronically in PDF format.

7. award committee:

The award selection committee consists of:

- general chair, cf. item 2
- co-chair, cf. item 2
- treasurer, cf. item 2

If any of these members of the selection committee would be concerned by a conflict of interest — e. g., that a team of the university they belong to participates in the competition — the person will be replaced by another expert in the field with no conflict of interest by appointment of the steering committee.

- Additional judges are appointed by the steering committee for the assessment of the finalists according to item 9. They should be most distinguished scholars or industry leaders with respect to the topic of the competition, and not be concerned by any conflict of interest regarding the teams participating in the respective competition. Minimum two judges will be appointed, but — if more — no more than the number of participating teams.

The term of this award selection committee is limited to the selection process in the current year. Members may repeatedly belong to the award selection committee, but not for more than three consecutive years.

A decision of the award selection committee will require the majority of votes of at least half of its members.

8. schedule:

Major steps of the competition are typically scheduled as follows; details for the current period will be published on its website:

- November: formation of the steering committee according to item 2 for the next competition
- December: elaboration of the theme of the next competition by the steering committee
- January: announcement of the theme of the next competition
- May: proposals due
- June: schools informed of acceptance into the competition
- September: qualification reports due, which must include preliminary results
- October: workshop at ECCE, where all accepted qualified teams must give a virtual presentation; feedback will be given to the team to improve their work.
- November: testing data and scenario for the final competition announced
- December: submission of the results and reports of the final competition
- next January: final evaluation of the submitted results
- February/March: announce the winner of the competition and honour them at the APEC conference together with an information session for the next competition

9. selection:

There is a three-step assessment as follows:

- (a) assessment of proposals, cf. items 3 and 6:

Proposals will be judged on the quality of plans, the likelihood that a team will be successful in meeting the objectives of the IEEE International Challenge in Design Methods for Power Electronics, feasibility and degree of innovation. Acceptable proposals will involve one or more undergraduate students as team members.

The selection committee will decide upon the list of teams whose proposals are accepted and who thus can participate in the competition.

- (b) assessment of the work of teams whose proposals have been accepted:

This assessment is carried out based on the qualification reports and the workshop at ECCE America. Selection is based upon likelihood of deliverable software, quality of implementation, and likelihood of success in meeting all the challenge objectives. The leading teams will be invited as finalists.

The selection committee will decide upon the list of teams who are accepted as finalists in the competition.

- (c) assessment of the teams accepted as finalists:

This assessment is carried out based on the final reports and the final competition. Student team project results will be judged based on novelty of the algorithm, quality of the software implementation and other results, engineering reports, adherence to rules and deadlines, innovation, future promise, and related criteria. Each aspect of judging will be scored according to a point list and test protocol adapted to the particular challenge in the current year as prepared by selection committee prior to selection.

The selection committee will decide upon the assignment of awards to the finalist teams.

10. presentation:

The winners will be honoured at the APEC conference of the next year. They are further listed on the website of IEEE Power Electronics Society.

11. publicity:

Articles about the award recipients will be published on the website of the IEEE International Challenge in Design Methods for Power Electronics and shall be submitted to IEEE PELS Magazine and/or similar publications also of other IEEE Technical Societies.

Signees to establish the award

- Frede Blaabjerg
- Liuchen Chang
- Mario Pacas
- Pat Wheeler
- Dehong Xu

Previous holders

2024. ...

A.2.10 IEEE PELS Outstanding Achievement Award in Aerospace Power**Specification²⁴**

1. description:

The IEEE PELS Outstanding Achievement Award in Aerospace Power is established to recognise innovators and researchers who have made outstanding technical contributions to the advancement of power electronic components and systems for both aviation and space applications.

2. administration:

The award is administrated by the IEEE Power Electronics Society's Technical Committee in Aerospace Power (TC11).

3. eligibility:

Active IEEE Members only; an award will be given to a single person only.

Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society governing documents, particularly with IEEE Policy 4.4 on Awards Limitations [1].

4. prize items:

The award consists of an award plaque and a one-time honorarium of 1500USD.

In addition, up to 1000USD will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony

5. funds:

The expenses that can be incurred for this award shall be no more than 3000USD per year, including:

- honorarium as above
- engraving of suitable plaque as above
- travel expenses coverage and conference fees as above²⁵

The society's budget includes the amount for this award and the budget is net positive with the inclusion of the award. The total annual expenses shall be included in the society's annual TC11 budget. The award can only be given if the respective budget allocated to PELS TC11 remains net positive.

6. nominee solicitation:

PELS TC11 solicits nominations for this award. Self-nominations will not be allowed. To nominate a candidate, the nominator must submit the required information including a description of the merits of the nominee and the evidence of the achievements. Only electronic submission via PELS website is accepted.

7. award committee:

An award selection committee composed by a chair and four other members, where, when applicable and possible

- the PELS TC11 chair serves as the award selection committee chair

²⁴released by PELS Adcom in October 2021, subsequently released by Tabarc with editorial changes

²⁵Travel expenses and conference fees reimbursements will follow IEEE Policies and Procedures.

- two most recent recipients of the award and two additional members appointed by the chair serve as members of the award selection committee

carry out selection.

Initially, when there are not yet at least two past recipients of the award, the TC11 chair will appoint substitutes, i. e., experienced PELS members active in the area of TC11; this assures that the award selection committee consists of four members plus the chairperson.

In case of conflict of interest (e. g. that a designated member of award selection committee would be nominated for the award or a designated member of award selection committee would declare a conflict of interest)²⁶ he or she will not become member of the selection committee. If the remaining number of members of selection committee is too low to reach quorum, the chairperson of PELS awards committee will be notified before starting the selection process and appoint substitutes instead to make sure that selection committee consists of at least three members. If the chair of the award selection committee would be concerned by a conflict of interest, the chairperson of PELS awards committee will be notified before starting the selection process and appoint another designated member of the award selection committee to act as chair.

The term of this award selection committee is limited to the selection process in the current year. The term and eligibility of TC11 chair as chairperson are ruled in TC11 policies and procedures; re-appointment of the two appointed members as above is possible.

8. schedule:

The annual schedule is as follows:

- beginning of January in the year of the award: start of publicity, solicit nominations
- 31 March in the year of the award: deadline for nominations
- 15 April: screening — formally checking eligibility — by PELS staff ready; distribution of the nominations of eligible candidates to the members of selection committee
- 31 May: votes of the members of selection committee sent to PELS awards committee
- 30 June: notification of the award winner by PELS staff
- award presentation at a PELS conference in summer or autumn as specified below

9. selection:

- criteria:

Judgment of the award recipient will be based solely on the information provided in the nomination form. The criteria considered by the award selection committee are:

- quality of the technical achievement or innovation
- sustained impact on the relevant technical community and the profession, benefit to the society
- past relevant activities to the field and technical committee
- the quality of the nomination

- process:

²⁶Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C [1]. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

- If at least three eligible nominations have been received, the members of award selection committee should indicate their first (3 points), if adequate second (2 points) and third (1 point) choice. If the majority of the members of award selection committee identified their respective first choice, the awardee is the nominee with the highest number of points summed up over all votes; the chairperson of PELS awards committee may break a tie if necessary. Otherwise, no award will be presented in the current year.
- If less than three applications of eligible candidates would be received, the process may be appropriately simplified.
- The award may not be given more frequently than annually nor does it need to be given each and every year, i. e., the award will only be given in years when a suitable candidate is selected based upon meeting all of the eligibility and selection requirements.

10. presentation:

As a rule, the award is presented during the IEEE Energy Conversion Congress and Exposition (ECCE) America. Taking into account the international character of PELS and its members, it may also be presented at another PELS conference upon mutual agreement.

11. publicity:

The award will be publicized through IEEE PELS website, IEEE PELS magazine, and sending messages to IEEE PELS members. In addition, it might be publicized through distributing flyers in various IEEE PELS sponsored conferences such as APEC, ECCE, etc. The award and the recipient can also be announced in IEEE Technical Society publications.

Signees to establish the award

- Frede Blaabjerg
- Yunwei Li
- Yan-Fei Liu
- Xiongfei Wang
- Mark Dehong Xu

Previous holders

2023. Don Tan

2024. ...

A.3 PELS chapter and student branch chapter awards

A.3.1 IEEE Power Electronics Society Best Chapter Awards

Specification²⁷

²⁷update of IEEE PELS Best Chapter Award released by PELS Adcom 31 March 2017 and subsequently IEEE Tabarc; addition of the category IEEE PELS Best Student Branch Chapter Award released by PELS Adcom 09 March 2018 and by IEEE Tabarc June 2018 with change to 1000USD for student branch chapter in accordance to hierarchical guidelines; changed travel refund: released by Adcom in autumn 2020, released by TAB in February 2021 with editorial changes; changed travel refund and introduced three categories for best chapters and best student branch chapters: released by PELS Adcom in May 2023, subsequently editorially modified according to Tabarc's recommendation and confirmed by Tabarc in January 2024

1. description:

The awards are intended to annually recognise excellent service by PELS chapters to their members and to the power electronics community and to encourage subsequent additional activities. There are the following categories:

- Best IEEE PELS large chapter
- Best IEEE PELS medium size chapter
- Best IEEE PELS small chapter
- Best IEEE PELS large student branch chapter
- Best IEEE PELS medium size student branch chapter
- Best IEEE PELS small student branch chapter

2. administration:

IEEE Power Electronics Society

3. eligibility:

- all IEEE PELS chapters are eligible for the categories of best IEEE PELS chapters, including chapters sponsored jointly with other IEEE entities
- all IEEE PELS student branch chapters are eligible for the categories of best IEEE PELS student branch chapters, including student branch chapters sponsored jointly with other IEEE entities

Size limits according to item 9. apply.

4. prize items:

The following prize items are foreseen for each category:

- the following amount to support activities of the chapter or student branch chapter respectively:
 - Best IEEE PELS large chapter: 1500USD
 - Best IEEE PELS medium size chapter: 1250USD
 - Best IEEE PELS small chapter: 1000USD
 - Best IEEE PELS large student branch chapter: 1000USD
 - Best IEEE PELS medium size student branch chapter: 750USD
 - Best IEEE PELS small student branch chapter: 500USD
- a certificate that contains the names of the chapter or student branch chapter chair, secretary and treasurer
- One representative of each award winning chapter or student branch chapter respectively is entitled to obtain a reimbursement of expenses according to section B.1.

5. funds:

These awards are society funded awards. The expenses that can be incurred for these awards shall be included in the society's annual budget. The awards can only be given if the respective budget remains net positive.

6. nominee solicitation:

Chapters or student branch chapters respectively should apply for the award with the required indications to be submitted electronically via PELS website. The chapter or student branch chapter chair in duty at the time of submission is responsible to submit the application.

7. award committee:

A selection committee consisting of

- PELS Vice-President for Membership (as head of selection committee)
- four members appointed by the head of selection committee from the group of PELS Regional Chairs or vice-chairs, the PELS young professional (YP) chair or other members of PELS' membership committee
- four additional members appointed by the head of selection committee who are PELS members at large in the first year of their term,

will carry out selection. The term of this committee is limited to the selection process in the current year.

In case of conflict of interest the designated member of selection committee will not become member. If necessary, the chairperson of PELS awards committee will appoint substitutes instead to make sure that selection committee consists of at least five members.

8. schedule:

The annual schedule is as follows:

- January: publicity, solicit nominations
- 31 March: deadline for applications
- 30 April: screening — formally checking eligibility — ready; distribution of the applications of eligible candidates to the members of selection committee
- 15 June: votes of the members of selection committee ready
- 31 July: notification of the winners of the award
- ECCE conference: award ceremony

9. selection:

- First, the applying chapters and student branch chapters will be formally assigned to the appropriate category as follows:
 - Best IEEE PELS large chapter
with more than 70 members
 - Best IEEE PELS medium size chapter
with 41 to 70 members
 - Best IEEE PELS small chapter
with 12 to 40 members
 - Best IEEE PELS large student branch chapter
with more than 30 members
 - Best IEEE PELS medium size student branch chapter
with 11 to 30 members
 - Best IEEE PELS small student branch chapter
with 6 to 10 members

The indicated numbers of members include all members of the chapter or student branch chapter, also in case of joint chapters or student branch chapters, as of the day being the deadline for applications in the year of the award.

- Considering the respective category, criteria are substantial chapter or student branch chapter accomplishments in fields such as: local service to PELS members; chapter meetings with technical, educational or networking contents, including meetings with

invited distinguished lecturers from PELS; offering networking opportunities between local industry and academia, between students, young and senior engineers; power electronics related contribution to IEEE activities, such as establishment and promotion of IEEE milestones; essential local support of international IEEE PELS power electronics conferences; visibility e. g. related to high numbers of members and participants in chapter meetings, gain of new PELS members or successfully supporting elevation of their membership grade, public relations including website and publications; networking with local societies with a similar scope

- process:

The following process will be applied to the selection of the awardee in each category:

- If at least three applications of eligible chapters or student branch chapters have been received, the members of selection committee should indicate their first (3 points), if adequate second (2 points) and third (1 point) choice. If a majority of the members of selection committee vote this way, the awardee is the nominee with the highest number of points summed up over all votes. The chairperson of PELS awards committee may break a tie if necessary. If at least half of the members of selection committee however abstain, no award will be presented in the current year.
- If less than three applications of eligible candidates would be received, the process may be appropriately simplified.

10. presentation:

As a rule, the awards are presented in PELS award ceremony during ECCE America. Taking into account the international character of PELS and its members, they may also be presented at another conference of global ECCE series upon mutual agreement.

11. publicity:

The awards are advertised on PELS website, indicating their description and providing means for web based nomination as above. In addition, the previous holders as below are indicated there. Nominations should be additionally solicited by announcement in PELS Magazine, emails to PELS chapter or student branch chapter chairs respectively and the like.

Signees to establish the award

- Jinjun Liu, Professor, Xi'an Jiaotong University

Previous holders

- previous holders of the IEEE Power Electronics Society Best Chapter Award:

2000. Morelos Section PELS Chapter

2001. Russian Joint PELS/IES/PES Chapter

2002. German Joint IAS/IES/PELS Chapter

2003. Hong Kong Joint PELS/PES/IES/IAS Chapter

2004. Brazil North-East, Bahia Section, Joint PELS/IAS/PES Chapter

2005. United Kingdom - Republic of Ireland PELS Chapter

2008. Germany Joint IAS/PELS/IES Chapter

2009. The Denmark Chapter

2010. PELS/PES Joint Student Chapter - University of Illinois at Urbana-Champaign.

- 2011. The Joint Delhi Section Chapter, PEL35/IE13
- 2012. The Argentina Section Joint Chapter
- 2013. Delhi Section (India) Joint Chapter PELS/IES
- 2014. IEEE Fukuoka Section PELS Chapter
- 2015. Pittsburgh Section, USA
- 2016. Serbia and Montenegro Section Jt C,IE13/IA34/PEL35 Joint Chapter
- 2017. San Francisco Bay Area Council (SFBAC) PELS Chapter
- 2018. Taipei Chapter PELS
- 2020. IEEE PELS Wuhan Chapter
- 2021. IEEE PELS Bangalore Chapter
- 2023. IEEE PELS IES Delhi Chapter
- previous holders of the IEEE Power Electronics Society Best Chapter Award in the category large chapter:
 - 2024. ...
- previous holders of the IEEE Power Electronics Society Best Chapter Award in the category medium size chapter:
 - 2024. ...
- previous holders of the IEEE Power Electronics Society Best Chapter Award in the category small chapter:
 - 2024. ...
- previous holders of the IEEE Power Electronics Society Best Student Branch Chapter Award:
 - 2019. Universidade Federal de Campina Grande (UFCG, Brazil) Student Branch Chapter, IA34/PEL35
 - 2020. IEEE PELS Student Branch Chapter IIT Mandi
 - 2021. IEEE PELS Tsinghua University Student Branch Chapter
 - 2023. Sri Sai Ram Engineering College
- previous holders of the IEEE Power Electronics Society Best Student Branch Chapter Award in the category large student branch chapter:
 - 2024. ...
- previous holders of the IEEE Power Electronics Society Best Student Branch Chapter Award in the category medium size student branch chapter:
 - 2024. ...
- previous holders of the IEEE Power Electronics Society Best Student Branch Chapter Award in the category small student branch chapter:
 - 2024. ...

A.4 PELS awards on society level

PELS is responsible for the following awards approved on IEEE level. Unless otherwise specified, details on these awards are documented in [4].

A.4.1 IEEE PELS R. David Middlebrook Achievement Award

Prize items ²⁸

The award consists of a bronze medal, a certificate and an honorarium of 5000USD.

In addition, up to 1000USD will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

Award selection committee

- PELS president
- PELS VP technical operations
- PELS VP conferences
- PELS VP products
- PELS Fellow Evaluations Chair
- Chair of PELS Awards and Nominations Committee
- 1st immediate past winner of the award
- 2nd immediate past winner of the award
- 3rd immediate past winner of the award
- 4th immediate past winner of the award
- 5th immediate past winner of the award

Previous holders

2012. Prasad Enjeti

2013. William Gerard Hurley

2014. Johann Kolar

2015. David Perreault

2016. Dehong Xu

2017. Jian Sun

2018. Grahame Holmes

2019. Issa Batarseh

2020. Alex Qin Huang

2021. Henry Chung

2022. Dragan Maksimovic

2023. Marco Liserre

2024. ...

²⁸introduced travel refund: released by Adcom in autumn 2020, released by TAB in February 2021 with editorial changes

A.4.2 IEEE Mc Murray Award for Industry Achievements in Power Electronics

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Specification

1. description:

The IEEE Mc Murray Award for Industry Achievements in Power Electronics of the IEEE Power Electronics Society is established to recognise the work of engineers working in the field of power electronics which has shown or is likely to show a major impact on industry, and the resulting products possibly on society.

2. administration:

The award is administrated by the IEEE Power Electronics Society's Industry Advisory Board.

3. eligibility:

The award recipient must be an active member of IEEE. There are no other restrictions as to nationality, age, gender, IEEE member grade, or affiliation e. g. to industry or academia. An award will be given to a single person only.

4. prize items:

The award consists of an award plaque and a one-time honorarium of 3500USD.

In addition, up to 1000USD will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

5. funds:

This award is a society funded award. The total annual expenses shall be included in the society's annual budget for Industry Advisory Board. The expenses that can be incurred for this award shall be no more than 5000USD per year, including:

- honorarium as above
- engraving of suitable plaque as above
- travel refund and conference fees as above

The award can only be given if the PELS operating budget remains net positive.

6. nominee solicitation:

PELS Industry Advisory Board solicits nominations for this award. Any IEEE member, except members of the award selection committee below, may nominate. Self-nominations are deprecated, but there will be no further restrictions on who could act as a nominator. To nominate a candidate, the nominator must submit the required information including a description of the merits of the nominee. Only electronic submission as indicated on PELS website is accepted.

7. award selection committee:

An award selection committee consisting of

- PELS Industry Advisory Board Chair as chairperson

²⁹written consent from William B. Mc Murray agreeing to have the IEEE award named in the honour of his father obtained 23 December 2018; award released by PELS Adcom 22 March 2019, released by Tabarc in June 2019; changed travel refund: released by Adcom in autumn 2020, released by TAB in February 2021 with editorial changes

- two members of PELS Industry Advisory Board appointed by the chairperson
- the last two recipients of the award

will carry out selection.

Initially, when there are not yet at least two past recipients of the award, one or two more PELS members from industry will be appointed by the chair of Industry Advisory Board to become member of award selection committee instead.

In case of conflict of interest (e. g. that a designated member of award selection committee would be nominated for the award) he will not become member of the selection committee. If necessary because quorum cannot be met, the chairperson of PELS awards committee will be notified in the beginning of selection process and appoint substitutes instead to make sure that selection committee consists of at least three members.

The term of this award selection committee is limited to the selection process in the current year.

8. schedule:

The annual schedule is as follows:

Due Date	Action	Person Responsible
November 15	Call for nominations	chair of PELS Industry Advisory Board
March 31	All nominations received	chair of PELS Industry Advisory Board
May 15	Award winner selected by the Award Committee	chair of PELS Industry Advisory Board
June 1	Award winner contacted for information required for the award; information forwarded to PELS Awards Chair, Treasurer, and Administrator	chair of PELS Industry Advisory Board
September 1	Award check and plaque ready for presentation at a PELS conference	chair of PELS Industry Advisory Board

ECCE 2020 will be the first year that the award is given.

9. selection:

- criteria:

Judgment of the award recipient will be based on the nomination. The criteria considered by the award selection committee include:

- quality of technical achievement and contribution to the field
- advancement of the technology
- impact on the relevant technical community and the profession
- benefit to the society
- past relevant activities to the field
- patents, inventions, products, and design
- validated impact on products is paramount
- the quality of the nomination

The award may not be given more frequently than annually nor does it need to be given each and every year, i. e., the award will only be given in years when a suitable candidate is selected based upon meeting all of the eligibility and selection requirements.

- process:
 - If at least three eligible nominations have been received, the members of award selection committee should indicate their first (3 points), if adequate second (2 points) and third (1 point) choice. If a majority of the members of award selection committee vote this way, the awardee is the nominee with the highest number of points summed up over all votes. The chairperson of PELS awards committee may break a tie if necessary.
If at least half of the members of selection committee however abstain, no award will be presented in the current year.
 - If less than three applications of eligible candidates would be received, the process may be appropriately simplified.

10. presentation:

As a rule, the award is presented during ECCE America. Taking into account the international character of PELS and its members, it may also be presented at another PELS conference upon mutual agreement.

11. publicity:

The award will be publicised through IEEE PELS website, IEEE PELS magazine, and sending messages to IEEE PELS members. The announcement of the award and the recipient in IEEE Technical Society publications will be at the discretion of the particular Society.

Signees to establish the award

- Sudip Mazumder
- Brad Lehman
- Johan Enslin
- Maryam Saeeddifard
- Pat Wheeler

Previous holders

2020. Patrick L. Chapman

2021. Amit Gupta

2022. Noriko Kawakami

2023. Shinzo Tamai

2024. ...

A.4.3 IEEE PELS Award for Achievements in Power Electronics Education

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³⁰released by PELS Adcom in October 2019, released by Tabarc in June 2020; changed travel refund: released by Adcom in autumn 2020, released by TAB in February 2021 with editorial changes

Specification

1. description:

The IEEE PELS Award for Achievements in Power Electronics Education is established to recognise the work of engineers which has shown a major impact on education in the area of power electronics, or which is groundbreaking for the education in the area of power electronics.

2. administration:

The award is administrated by the IEEE Power Electronics Society.

3. eligibility:

Any award recipient must be an active member of the IEEE Power Electronics Society at the time of nomination and presentation of the award. There are no other restrictions as to nationality, age, gender, IEEE member grade, or affiliation. An award will by default be given to a single person; in case of collective merits — e. g. a team of coworkers having equally contributed to an impactful oeuvre — it may be shared between up to three persons.

4. prize items:

The award consists of:

- an award plaque
(one per awardee)
- a one-time honorarium of 3500USD
(for a single awardee or shared equally between multiple awardees)

In addition, irrespective of the number of awardees (1, up to a maximum of 3), a total available budget of up to 1000USD is available towards equal reimbursement of necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

5. funds:

This award is a society funded award. The total annual expenses shall be included in the society's annual budget. The expenses that can be incurred for this award shall be no more than 5000USD per year, including:

- honorarium as above
- engraving of suitable plaque(s) as above
- travel refund and conference fees as above

The award can only be given if the PELS operating budget remains net positive.

6. nominee solicitation:

IEEE PELS solicits nominations for this award. While self-nominations are not allowed, any IEEE PELS member can nominate any other IEEE PELS member. To nominate a candidate or a group of up to three candidates, the nominator must submit the required information including a description of the merits of the nominee(s). Only electronic submission as indicated on PELS website is accepted.

7. award selection committee:

An award selection committee consisting of

- PELS Vice President for Products as chairperson
- two members of PELS Administrative Committee (Adcom) appointed by the chairperson, who should be involved in power electronics education, e. g. as professors
- the last two recipients of the award

will carry out selection.

Initially, when there are not yet at least two past recipients of the award, one or two more PELS Adcom members will be appointed by the chairperson to become member of award selection committee instead.

In case of conflict of interest (e. g. that a designated member of award selection committee would be nominated for the award) he will not become member of the selection committee. If necessary because quorum cannot be met, the chairperson of PELS awards committee will be notified in the beginning of selection process and appoint substitutes instead to make sure that selection committee consists of at least three members.

The term of this award selection committee is limited to the selection process in the current year.

8. schedule:

The annual schedule is as follows:

due date	action	responsible person
November 15	call for nominations	PELS Vice President for Products supported by PELS staff
March 31	all nominations received	
May 15	award winner selected by the award selection committee	PELS Vice President for Products
June 1	award winner contacted for information required for the award; information forwarded to PELS Awards Chair, Treasurer, and Administrator	PELS Vice President for Products supported by PELS staff
September 1	award check and plaque(s) ready for presentation at a PELS conference	PELS Vice President for Products supported by PELS staff

9. selection:

- criteria:

Judgment of the award recipient(s) will be based on the nomination. The work of the respective nominee(s) which has shown a major impact on education in the area of power electronics, or which is groundbreaking for the education in the area of power electronics will be considered, which may comprise:

- material and tools for power electronics education, e. g. textbooks, software for simulation or visualisation, videos, webinars etc.

Criteria for their impact may e. g. be the widespread use of a textbook or educational software tool, a remarkable outreach of teaching via electronic media or the novelty of a promising new approach for power electronics teaching.

- teaching activities

Criteria may be the long-lasting service as a teacher, having laid the base for the career of a remarkable number of graduates, having established major education programmes or having left a novel imprint on widely applied teaching methods or curricula.

Selection committee will take care that the awardees will appropriately reflect the different aspects as above over the years.

The award may not be given more frequently than annually nor does it need to be given each and every year, i. e., the award will only be given in years when a suitable candidate is selected based upon meeting all of the eligibility and selection requirements.

- process:
 - If at least three eligible nominations have been received, the members of award selection committee should indicate their first (3 points), if adequate second (2 points) and third (1 point) choice. If a majority of the members of award selection committee vote this way, the awardee is given by the nomination with the highest number of points summed up over all votes. The chairperson of PELS awards committee may break a tie if necessary.
 - If at least half of the members of selection committee however abstain, no award will be presented in the current year.
 - If less than three applications of eligible candidates would be received, the process may be appropriately simplified.

10. presentation:

As a rule, the award is presented during ECCE America. Taking into account the international character of PELS and its members, it may also be presented at another PELS conference upon mutual agreement.

11. publicity:

The award will be publicised through IEEE PELS website, IEEE PELS magazine, and sending messages to IEEE PELS members. The announcement of the award and the recipient in IEEE Technical Society publications will be at the discretion of the particular Society.

Signees to establish the award

- Vladimir Blasko
- Uday Deshpande
- Noriko Kawakami
- Dan Kinzer
- Pradeep Shenoy
- Shinzo Tamai

Previous holders

2022. Katherine Kim

2023. Jacobus Daniel van Wyk

2024. ...

A.4.4 IEEE PELS Harry A. Owen, Jr. Distinguished Service Award**Specification** ³¹

1. description:

to honour long and distinguished Service to the welfare of the Power Electronics Society at a level of dedication and achievement rarely demonstrated

2. administration:

by IEEE Power Electronics Society (PELS)

3. eligibility:

open to all members of the Power Electronics Society

4. prize items:

- 3500 USD
- a suitably engraved plaque

In addition, up to 1000USD will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

5. funds:

funded by the IEEE Power Electronics Society

6. nominee solicitation:

Candidates for the award should be nominated, using an appropriate nomination form with the required indications and an adequate amount of space to describe the merits of the nominee. This is available on PELS website. There are no restrictions who is entitled to act as nominator.

7. award committee:

An selection committee consisting of

- PELS President
- PELS Vice Presidents
- chairperson of PELS history committee
- PELS members at large in the third year of their term

will carry out selection. The term of this committee is limited to the selection process in the current year.

In case of conflict of interest — e. g. that a designated member of selection committee would be nominated for the award — he will not become member of the selection committee. If necessary, the chairperson of PELS awards committee will appoint substitutes instead — e. g. a past President or past Vice Presidents or other members at large — to make sure that selection committee consists of at least five members.

8. schedule:

The annual schedule is as follows:

³¹changed travel refund: released by Adcom in autumn 2020, released by TAB in February 2021 with editorial changes

- January: publicity, solicit nominations
- 31 March: deadline for nominations
- 30 April: screening — formally checking eligibility — by PELS awards committee ready; distribution of the nominations of eligible candidates to the members of selection committee
- 15 June: votes of the members of selection committee sent to PELS awards committee — i. e., selection process ready
- 31 July: notification of the winner of the award by the chairperson or secretary of PELS awards committee
- ECCE conference: award ceremony

9. selection:

- criteria: Outstanding contributions over a substantial time period encompassing creative and invigorating leadership of the society, exceptional administrative and managerial accomplishments on behalf of the society, identification of new technologies within the scope of the society and nurturing activities to support these emerging technologies, initiation of innovative programs to encourage wider participation in the full spectrum of society activities, and the general communication and advocacy of power electronics technology to the technical community as a whole.
- process:
 - If at least three nominations of eligible candidates have been received, the members of selection committee should indicate their first (3 points), if adequate second (2 points) and third (1 point) choice. If a majority of the members of selection committee vote this way, the awardee is the nominee with the highest number of points summed up over all votes. The chairperson of PELS awards committee may break a tie if necessary.
If at least half of the members of selection committee however abstain, no award will be presented in the current year.
 - If less than three nominations of eligible candidates would be received, the process may be appropriately simplified.

10. presentation:

As a rule, the award is presented in PELS award ceremony during ECCE America. Taking into account the international character of PELS and its members, it may also be presented at another conference of global ECCE series in mutual agreement.

11. publicity:

The award is advertised on PELS website, indicating its description and providing the nomination form as above. In addition, the previous holders as below are indicated there.

Nominations should be additionally solicited by announcement in PELS Magazine, emails to PELS membership and the like.

Signees to establish the award

- tbd.

Previous holders

1997. Harry A. Owen, Jr.

1998. John G. Kassakian

1999. Thomas G. Wilson, Sr.

2000. Richard G. Hoft

2001. William M. Portnoy

2002. Robert V. White

2003. Koosuke Harada

2004. Arthur W. Kelley

2005. Christopher O. Riddleberger

2006. Jacobus Daniel van Wyk

2007. Thomas M. Jahns

2008. Philip T. Krein

2009. Frede Blaabjerg

2010. John M. Miller

2012. Thomas Habetler

2013. Ralph Kennel

2014. Rik De Doncker

2015. Jerry Hudgins

2016. Dushan Boroyevich

2017. Dong Tan

2018. William Hurley

2019. Brad Lehman

2020. Dean Patterson

2021. Braham Ferreira

2023. Alan Mantooth

2024. ...

A.4.5 IEEE PELS Young Professional Exceptional Service Award

Specification³²

1. description:

This award was created to recognise exceptional service to the welfare of the IEEE Power Electronics Society by members who have graduated from their first professional degree within the past 15 years. The contributions can be from involvement in any PELS-oriented activities such as chapters, committees, conferences, transactions, and others.

2. administration:

IEEE Power Electronics Society

3. eligibility:

Active members of the Power Electronics Society are eligible who have graduated from their first professional degree within the past 15 years as of 1 January in the year of the award.³³

4. prize items:

This is a single award with only one recipient selected annually: The award consists of an award plaque and a one-time honorarium of 1500USD. In addition, up to 1000USD will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

5. funds:

This award is a society funded award. The total annual expenses shall be included in the society's annual budget. The award can only be given if the respective budget remains net positive.

The expenses that can be incurred for this award shall be no more than 3000USD per year, including:

- honorarium as above
- engraving of suitable plaque as above
- travel refund and conference fees as above³⁴

6. nominee solicitation³⁵:

PELS members can act as nominator; self-nominations will not be allowed. To nominate a candidate, the nominator must submit the required information including a description of the merits of the nominee. The nomination may be accompanied by up to three endorsement letters. Only electronic submission via PELS website is accepted.

³²released by Adcom in spring 2022; after requested change of the wording in accordance to <https://yp.ieee.org/> subsequently released by Tabarc

³³Eligibility and selection process shall comply with procedures and regulation established in IEEE and Society governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. Previous award winners are not eligible for substantially the same achievements (per IEEE Policies 4.4: An individual shall receive only one award for a given achievement, unless the significance merits a higher award, which may be given in the following year or thereafter.)[1]

³⁴The reimbursements of travel or conference fees to be provided as part of the award will follow IEEE Policies and Procedures.

³⁵Nominations should comply with IEEE Policies and restrictions on awards. Incidents of misconduct including, but not limited to, violations of IEEE's publication policies, will be strongly considered by the awards committee and may be grounds for denial of an award or leadership position.

7. award committee:

The award selection committee is composed by the chair and four members as follows:

- PELS vice-president for membership serves as the chair.
- PELS young professional (YP) chair as member
- PELS young professional immediate past chair as member
- another member of PELS young professional sub-committee appointed by the chair
- another PELS member appointed by the chair

In case of conflict of interest³⁶ (e. g. that a designated member of award selection committee would be nominated or has acted as a nominator for the award or a designated member of award selection committee would declare a conflict of interest) he or she will not become member of the selection committee. If necessary because quorum cannot be met, the chairperson of PELS awards committee will be notified before starting the selection process and appoint substitutes instead to make sure that selection committee consists of at least three members and this way can meet the quorum.

The term of this award selection committee is limited to the selection process in the current year.

8. schedule:

The annual schedule is as follows:

- beginning of January in the year of the award: start of publicity, solicit nominations
- 31 March in the year of the award: deadline for nominations
- 30 April: nominations screened and formally checked for eligibility; nominations of formally eligible candidates distributed to the members of the award selection committee
- 15 June: members of award selection committee finished voting
- 31 July: notification of the winner of the award by the chairperson or secretary of PELS awards committee
- award presentation at a PELS conference in summer or autumn as specified below

9. selection:

- criteria:

Judgment of the award recipient will be based on the nomination. Impactful contributions to the welfare of the IEEE Power Electronics Society are considered by the award selection committee. The contributions can be in any part of PELS hierarchy, for example in PELS chapters, committees, conferences, transactions, and others. Leadership, administrative and managerial accomplishments on behalf of the society will be considered. Initiation of innovative programs and nurturing of society activities will be considered, as well as the general communication and advocacy of power electronics technology to the technical community as a whole.

- process:

³⁶Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

- If at least three eligible nominations have been received, the members of award selection committee should indicate their first (3 points), if adequate second (2 points) and third (1 point) choice. If the majority of the members of award selection committee identified their respective first choice, the awardee is the nominee with the highest number of points summed up over all votes; the chairperson of PELS awards committee may break a tie if necessary. Otherwise, no award will be presented in the current year.
- If less than three applications of eligible candidates would be received, the process may be appropriately simplified.
- The award may not be given more frequently than annually nor does it need to be given each and every year, i. e., the award will only be given in years when a suitable candidate is selected based upon meeting all of the eligibility and selection requirements.

10. presentation:

As a rule, the award is presented in PELS award ceremony during ECCE America. Taking into account the international character of PELS and its members, it may also be presented at another conference of global ECCE series in mutual agreement.

11. publicity:

The award is advertised on PELS website, indicating its description and providing means for the nomination as above. In addition, the previous holders as below are indicated there.

Nominations should be additionally solicited by announcement in PELS Magazine, emails to PELS membership and the like.

Signees to establish the award

- Stephanie Butler
- Ryan Li
- Axel Mertens
- Giovanna Oriti
- Xiongfei Wang
- Mark Dehong Xu

Previous holders

2023. Harish Krishnamoorthy

2024. ...

A.4.6 Richard M. Bass Outstanding Young Power Electronics Engineer Award

Specification ³⁷

1. description:

to recognize outstanding achievement in the field of power electronics by an engineer less than 35 years of age

³⁷changed travel refund: released by Adcom in autumn 2020, released by TAB in February 2021 with editorial changes

2. administration:

by IEEE Power Electronics Society (PELS)

3. eligibility:

open to all IEEE members of any grade active in the field of power electronics and less than 35 years of age as of 1 January in the year of the award

4. prize items:

- 1500 USD
- a certificate

In addition, up to 1000USD will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

5. funds:

funded by the IEEE Power Electronics Society

6. nominee solicitation:

Candidates for the award should be nominated, using an appropriate nomination form with the required indications and an adequate amount of space to describe the merits of the nominee. This is available on PELS website. There are no restrictions who is entitled to act as nominator.

7. award committee:

An selection committee consisting of

- PELS President
- PELS Vice Presidents
- PELS members at large in the second year of their term

will carry out selection. The term of this committee is limited to the selection process in the current year.

In case of conflict of interest — e. g. that a designated member of selection committee would be nominated for the award — he will not become member of the selection committee. If necessary, the chairperson of PELS awards committee will appoint substitutes instead — e. g. a past President or past Vice Presidents or other members at large — to make sure that selection committee consists of at least five members.

8. schedule:

The annual schedule is as follows:

- January: publicity, solicit nominations
- 31 March: deadline for nominations
- 30 April: screening — formally checking eligibility — by PELS awards committee ready; distribution of the nominations of eligible candidates to the members of selection committee
- 15 June: votes of the members of selection committee sent to PELS awards committee — i. e., selection process ready
- 31 July: notification of the winner of the award by the chairperson or secretary of PELS awards committee

- ECCE conference: award ceremony

9. selection:

- criteria: Outstanding contribution in the multidisciplinary field of power electronics: Outstanding contribution encompass a broad range of activities including research, innovative product design, teaching, and project management. The technical disciplines which encompass the field of power electronics include the analysis, design, development, simulation and application of electronics devices, magnetics, controls and power circuits for inverters, converters and motor drives ranging in power levels from fractions of a watt to megawatts.
- process:
 - If at least three nominations of eligible candidates have been received, the members of selection committee should indicate their first (3 points), if adequate second (2 points) and third (1 point) choice. If a majority of the members of selection committee vote this way, the awardee is the nominee with the highest number of points summed up over all votes. The chairperson of PELS awards committee may break a tie if necessary.
If at least half of the members of selection committee however abstain, no award will be presented in the current year.
 - If less than three nominations of eligible candidates would be received, the process may be appropriately simplified.

10. presentation:

As a rule, the award is presented in PELS award ceremony during ECCE America. Taking into account the international character of PELS and its members, it may also be presented at another conference of global ECCE series in mutual agreement.

11. publicity:

The award is advertised on PELS website, indicating its description and providing the nomination form as above. In addition, the previous holders as below are indicated there.

Nominations should be additionally solicited by announcement in PELS Magazine, emails to PELS membership and the like.

Signees to establish the award

- tbd.

Previous holders

1997. Vlako Vlatkovic

1998. Frede Blaabjerg

1999. Steven B. Leeb

2000. José A. Cobos

2001. David J. Perreault

2002. Pallab Midya

2003. Babak Fahimi

- 2004. Philip Carne Kajaer
- 2005. Ali Emadi
- 2006. Patrick Chapman
- 2007. Christian Klumpner
- 2008. Regan Zane
- 2009. Rangarajan Tallam
- 2010. Maryam Saeedifard
- 2011. Jin Wang
- 2012. Samir Kouro
- 2013. Yunwei Ryan Li
- 2014. Robert Pilawa-Podgurski
- 2015. Zixin Li
- 2016. Huai Wang
- 2017. Ali Davoudi
- 2018. Xiongfei Wang
- 2019. Katherine Kim
- 2020. Pradeep Shenoy
- 2021. Yongheng Yang
- 2022. Daniel Costinett
- 2023. Minjie Chen
- 2024. ...

A.4.7 IEEE PELS Graduate Studies Scholarship and IEEE PELS Jan Abraham “Braham” Ferreira Scholarship

Specification³⁸

1. description:

Multiple scholarships³⁹ are awarded to promote, recognise, and support eligible students with a Bachelor degree or equivalent pursuing a higher level graduate degree like a Master degree within the IEEE Power Electronics Society’s fields of interest. The purpose is to support awardees towards a stay at a foreign university or research institution, i. e., for a limited time of six to twelve months abroad to later come back to the home university for at least one year. The scholarships have not any country or region restriction.

³⁸written consent from Rina Ferreira agreeing to have the IEEE scholarship named in the honour of her husband obtained 18 October 2021; released by PELS Adcom in October 2021, revised version released by Tabarc in June 2022; editorial correction with reference to the duration of the stay and comment with reference to the budget added — released by PELS Adcom in November 2023, for release by Tabarc

³⁹maximum number as indicated in item 4

One of the scholarships is awarded as IEEE PELS Jan Abraham “Braham” Ferreira Scholarship, named in honour of the late Professor Jan Abraham “Braham” Ferreira, who was a past president of PELS. This scholarship is reserved for the highest ranked winner from a traditionally underserved country or region — i. e., whose home institution is located in a country/region that qualifies for IEEE’s electronic membership option — in the spirit of providing opportunities to those less able to financially manage the expenses of foreign study.

2. administration:

IEEE Power Electronics Society

3. eligibility:

A candidate must be a member, graduate student member or student member of IEEE and the Power Electronics Society at the time of nomination; students with a Bachelor degree or equivalent pursuing a higher level graduate degree like a Master degree within the PELS fields of interest on a full-time basis are eligible, when they plan a stay to study at a host institution in a foreign country for six to twelve months and will presumably continue the studies at the home university with the same faculty advisor for the twelve months after receipt of the scholarship. A recipient is not allowed to accept another award of the same kind for the same purpose⁴⁰.

4. prize items:

One scholarship for one person consists of:

- a certificate
- a one-time honorarium of 5000USD
- complimentary IEEE and PELS membership in the following year

In addition, up to 1000USD will be reimbursed to each of the awardees towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

Up to seven persons, and out of them one person may be awarded each year with the IEEE PELS Graduate Studies Scholarship and IEEE PELS Jan Abraham “Braham” Ferreira Scholarship respectively, if the funds permit.

5. funds:

The expenses that can be incurred for this scholarship shall be no more than 45500USD per year, including:

- up to 35000USD funded by contribution directly from the IEEE Power Electronics Society, managed by the IEEE Foundation for the honorarium as above
- up to 10500USD funded by the IEEE Power Electronics Society for
 - printing certificates as above
 - administration of complimentary membership as above
 - travel expenses coverage and conference fees as above⁴¹

The scholarship can only be given if the respective budgets remain net positive.

⁴⁰Details need to be outlined in the budget as indicated below.

⁴¹Travel expenses coverage and conference fees reimbursements will follow IEEE Policies and Procedures.

6. nominee solicitation:

IEEE PELS solicits nominations for this scholarship.

The following records shall be submitted for nomination:

- a nominating letter from the prospective candidate's hosting advisor, acting as nominator, endorsing the stay at the host institution and confirming that it can be carried out; the hosting advisor needs to be a PELS member⁴²
- a two-page maximum professional/academic CV of the graduate advisor at the nominee's home university⁴³
- two letters of recommendation from senior scientists other than the nominator who are familiar with the candidate's research and education qualifications
- a one-page biographical summary of the candidate⁴⁴
- copies of the candidate's transcripts: Include an explanation if the grading system differs from the A to F format.
- certificate of language proficiency, if the host institution is in an area where another language than the candidate's mother tongue is spoken
- a one-page single-spaced statement, written by the candidate, outlining the education and research goals and accomplishments with respect to his/her current studies. Summer internships, undergraduate, and graduate work may be mentioned.
- an academic proposal, no more than five (single-spaced) pages, that specifically provides the following information:
 - a title page⁴⁵
 - study proposal describing the study to be completed by the applicant. Objectives, approach, and estimated start and completion dates should be indicated. The stay at the host university should start not later than nine months after receipt of the scholarship. It shall have a duration of six to twelve months. Afterwards, the candidate has to return to his home institution for at least one year.
 - The anticipated type of paper (short or full) for the final report must be identified: Any change during the timeframe of the grant support requires approval by the chair of selection committee as below. The chair of selection committee is also the recipient of the mandatory report, to be submitted by the awardee within three months after completion of the stay at the host institution.
 - budget for the project: Explicitly outline how the funds from the scholarship will be allocated⁴⁶.

Only electronic submission of the nomination as indicated on PELS website is accepted.

7. award committee:

An award selection committee consisting of

- PELS VP of Global Relations as chairperson

⁴²His/her IEEE membership number is required.

⁴³including the advisor's IEEE membership number

⁴⁴including the student's IEEE membership number

⁴⁵containing the title, university name, and contact information of the faculty member submitting the nomination package, and the candidate; include email addresses and phone numbers

⁴⁶The budget shall outline how the anticipated costs for the stay abroad will be covered. Financial sources other than the scholarship and their allocation need to be indicated as well if applicable; this is to make sure that the stay is feasible and that the anticipated costs won't be overcompensated.

- four additional members appointed by the chairperson, who are PELS members and should be involved in the supervision of graduate students or Ph.D. candidates, typically as professors and who should be composed internationally

will carry out selection.

In case of conflict of interest (e. g. that a designated member of award selection committee would be the supervisor of a candidate nominated for the scholarship)⁴⁷ he/she will not become member of the selection committee. The chairperson of selection committee will appoint a substitute instead. If the conflict of interest concerns the chairperson, the chair of IEEE PELS awards committee shall be notified and appoint a substitute instead.

The term of this award selection committee is limited to the selection process in the current year. The term and eligibility of PELS' VP of Global Relations as chairperson are ruled in PELS bylaws [5]; re-appointemnt of the additional members according to the aforementioned criteria is possible.

8. schedule:

The annual schedule is as follows:

- January: publicity, solicit nominations
- 31 March: deadline for nominations
- 30 April: screening — formally checking eligibility and whether the home institution is located in a country/region that qualifies for IEEE's electronic membership option — by PELS staff ready; distribution of the nominations of eligible candidates to the members of selection committee
- 31 May: votes of the members of selection committee sent to PELS awards committee
- 30 June: notification of the winners of the scholarship by PELS staff

9. selection:

- Criteria: Judgment of the scholarship recipient will be based on the nomination material. The criteria considered by the award selection committee include:
 - the quality and impact of all the nomination's material including the recommendation letters
 - the contentual and organisational plan for the stay
 - the grades and in general the education career of the nominees
- If at least seven nominations of eligible candidates have been received, the members of selection committee should indicate their first (7 points), if adequate second (6 points) etc. up to last (1 point) choice. If a majority of the members of selection committee vote this way, the nominees with the highest number of points summed up over all votes will obtain the scholarship. The chairperson of the selection committee may break a tie if necessary.

Nominees with a score of zero — i. e., who have not been selected by any of the members of selection committee — will not obtain the scholarship. This also applies if less than seven scholarships would be given — i. e., the scholarship will only be given if suitable recipients of the scholarship have been identified.

⁴⁷Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C [1]. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

If at least half of the members of selection committee however abstain, no scholarship will be presented in the current year.

If less than seven nominations of eligible candidates would be received, the process may be appropriately simplified.

One of the scholarships is awarded as IEEE PELS Jan Abraham “Braham” Ferreira Scholarship, named in honour of the late Professor Jan Abraham “Braham” Ferreira, who was a past president of PELS. This scholarship is reserved for the highest ranked winner from a traditionally underserved country or region — i. e., whose home institution is located in a country/region that qualifies for IEEE’s electronic membership option — in the spirit of providing opportunities to those less able to financially manage the expenses of foreign study.

10. presentation:

The scholarship is to be presented at a PELS sponsored conference.

11. publicity:

The scholarship is advertised on PELS website, indicating its description and providing the nomination interface as above. In addition, the previous holders as below are indicated there.

Nominations should be additionally solicited by announcement in PELS Magazine, emails to PELS membership and the like.

Signees to establish the award

- Antonio Cardoso
- Johan Enslin
- Alan Mantooth
- Mario Pacas
- Mark Dehong Xu

Previous holders

2023. ...

A.4.8 IEEE PELS Graduate Studies Fellowship and IEEE PELS John G. Kassakian Fellowship

Specification⁴⁸

1. description:

Multiple fellowships⁴⁹ are awarded to promote, recognise, and support eligible students with a Master degree or equivalent pursuing an advanced doctoral/PhD degree within the IEEE Power Electronics Society’s fields of interest. The purpose is to support awardees towards a stay at a foreign university or research institution, i. e., for a limited time of six

⁴⁸written consent from John G. Kassakian agreeing to have the IEEE fellowship named in the honour of him obtained 11 February 2022; released by PELS Adcom in October 2021, revised version released by Tabarc in June 2022; editorial correction with reference to the duration of the stay and comment with reference to the budget added — released by PELS Adcom in November 2023, for release by Tabarc

⁴⁹maximum number as indicated in item 4

to twelve months abroad to later come back to the home university for at least one year. The fellowships have not any country or region restriction.

One of the fellowships is awarded as IEEE PELS John G. Kassakian Fellowship, named in honour of Professor John G. Kassakian, the second president of the Council and subsequently the founding president of the new Power Electronics Society from 1988 on. This fellowship is reserved for the highest ranked winner.

2. administration:

IEEE Power Electronics Society

3. eligibility:

A candidate must be a member, graduate student member or student member of IEEE and the Power Electronics Society at the time of nomination; students with a Master degree or equivalent pursuing an advanced doctoral/PhD degree within the PELS fields of interest on a full-time basis are eligible, when they plan a stay to research at a host institution in a foreign country for six to twelve months and will presumably continue the studies at the home university with the same faculty advisor for the twelve months after receipt of the fellowship. A recipient is not allowed to accept another award of the same kind for the same purpose⁵⁰.

4. prize items:

One fellowship for one person consists of:

- a certificate
- a one-time honorarium of 5000USD
- complimentary IEEE and PELS membership in the following year

In addition, up to 1000USD will be reimbursed to each of the awardees towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

Up to seven persons, and out of them one person may be awarded each year with the IEEE PELS Graduate Studies Fellowship and IEEE PELS John G. Kassakian Fellowship respectively, if the funds permit.

5. funds:

The expenses that can be incurred for this fellowship shall be no more than 45500USD per year, including:

- up to 35000USD funded by contribution directly from the IEEE Power Electronics Society, managed by the IEEE Foundation for the honorarium as above
- up to 10500USD funded by the IEEE Power Electronics Society for
 - printing certificates as above
 - administration of complimentary membership as above
 - travel expenses coverage and conference fees as above⁵¹

The fellowship can only be given if the respective budgets remain net positive.

6. nominee solicitation:

IEEE PELS solicits nominations for this fellowship.

The following records shall be submitted for nomination:

⁵⁰Details need to be outlined in the budget as indicated below.

⁵¹Travel expenses coverage and conference fees reimbursements will follow IEEE Policies and Procedures.

- a nominating letter from the prospective candidate's hosting advisor, acting as nominator, endorsing the stay at the host institution and confirming that it can be carried out; the hosting advisor needs to be a PELS member⁵²
- a two-page maximum professional/academic CV of the graduate advisor at the nominee's home university⁵³
- two letters of recommendation from senior scientists other than the nominator who are familiar with the candidate's research and education qualifications
- a one-page biographical summary of the candidate⁵⁴
- copies of the candidate's transcripts: Include an explanation if the grading system differs from the A to F format.
- certificate of language proficiency, if the host institution is in an area where another language than the candidate's mother tongue is spoken
- a one-page single-spaced statement, written by the candidate, outlining the education and research goals and accomplishments with respect to his/her current studies. Summer internships, undergraduate, and graduate work may be mentioned.
- an academic proposal, no more than five (single-spaced) pages, that specifically provides the following information:
 - a title page⁵⁵
 - research proposal describing the research to be completed by the applicant. Objectives, approach, and estimated start and completion dates should be indicated. The stay at the host university should start not later than nine months after receipt of the fellowship. It shall have a duration of six to twelve months. Afterwards, the candidate has to return to his home institution for at least one year.
 - The anticipated type of paper (short or full) for the final report must be identified: Any change during the timeframe of the grant support requires approval by the chair of selection committee as below. The chair of selection committee is also the recipient of the mandatory report, to be submitted by the awardee within three months after completion of the stay at the host institution.
 - budget for the project: Explicitly outline how the funds from the fellowship will be allocated⁵⁶.

Only electronic submission of the nomination as indicated on PELS website is accepted.

7. award committee:

An award selection committee consisting of

- PELS VP of Global Relations as chairperson
- four additional members appointed by the chairperson, who are PELS members and should be involved in the supervision of graduate students or Ph.D. candidates, typically as professors and who should be composed internationally

⁵²His/her IEEE membership number is required.

⁵³including the advisor's IEEE membership number

⁵⁴including the student's IEEE membership number

⁵⁵containing the title, university name, and contact information of the faculty member submitting the nomination package, and the candidate; include email addresses and phone numbers

⁵⁶The budget shall outline how the anticipated costs for the stay abroad will be covered. Financial sources other than the fellowship and their allocation need to be indicated as well if applicable; this is to make sure that the stay is feasible and that the anticipated costs won't be overcompensated.

will carry out selection.

In case of conflict of interest (e. g. that a designated member of award selection committee would be the supervisor of a candidate nominated for the fellowship)⁵⁷ he/she will not become member of the selection committee. The chairperson of selection committee will appoint a substitute instead. If the conflict of interest concerns the chairperson, the chair of IEEE PELS awards committee shall be notified and appoint a substitute instead.

The term of this award selection committee is limited to the selection process in the current year. The term and eligibility of PELS' VP of Global Relations as chairperson are ruled in PELS bylaws [5]; re-appointemnt of the additional members according to the aforementioned criteria is possible.

8. schedule:

The annual schedule is as follows:

- January: publicity, solicit nominations
- 31 March: deadline for nominations
- 30 April: screening — formally checking eligibility — by PELS staff ready; distribution of the nominations of eligible candidates to the members of selection committee
- 31 May: votes of the members of selection committee sent to PELS awards committee
- 30 June: notification of the winners of the fellowship by PELS staff

9. selection:

- Criteria: Judgment of the fellowship recipient will be based on the nomination material. The criteria considered by the award selection committee include:
 - the quality and impact of all the nomination's material including the recommendation letters
 - the contentual and organisational plan for the stay
 - the grades and in general the education career of the nominees
- If at least seven nominations of eligible candidates have been received, the members of selection committee should indicate their first (7 points), if adequate second (6 points) etc. up to last (1 point) choice. If a majority of the members of selection committee vote this way, the nominees with the highest number of points summed up over all votes will obtain the fellowship. The chairperson of the selection committee may break a tie if necessary.

Nominees with a score of zero — i. e., who have not been selected by any of the members of selection committee — will not obtain the fellowship. This also applies if less than seven fellowships would be given — i. e., the fellowship will only be given if suitable recipients of the fellowship have been identified.

If at least half of the members of selection committee however abstain, no fellowship will be presented in the current year.

If less than seven nominations of eligible candidates would be received, the process may be appropriately simplified.

One of the fellowships is awarded as IEEE PELS John G. Kassakian Fellowship, named in honour of Professor John G. Kassakian, the second president of the Council

⁵⁷Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C [1]. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

and subsequently the founding president of the new Power Electronics Society from 1988 on. This fellowship is reserved for the highest ranked winner.

10. presentation:

The fellowship is to be presented at a PELS sponsored conference.

11. publicity:

The fellowship is advertised on PELS website, indicating its description and providing the nomination interface as above. In addition, the previous holders as below are indicated there.

Nominations should be additionally solicited by announcement in PELS Magazine, emails to PELS membership and the like.

Signees to establish the award

- Antonio Cardoso
- Johan Enslin
- Alan Mantooth
- Mario Pacas
- Mark Dehong Xu

Previous holders

2023. . . .

A.4.9 IEEE PELS Ph.D. Thesis Talk Award (P³ Talk)

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Specification

1. description:

The goal of the IEEE PELS Ph.D. Thesis Talk (P³ Talk) competition is to showcase Ph.D. projects to the entire power electronics community — both in academia and industry: Video submissions are invited. Up to five P³ Talks will be awarded each year.

2. administration:

The award is administrated by the IEEE Power Electronics Society (PELS). The PELS products committee is responsible, delegating the handling to its Digital Media Editor.

3. eligibility:

All Ph.D. graduates across the world who defended their thesis and have received their Ph.D. or doctoral certificate or have a proof of final thesis defense after March 31st of the year preceeding the award, and who are IEEE PELS members at the time of nomination and presentation of the award are eligible. The topic of the Ph.D. thesis should be in one of the focus areas of IEEE Power Electronics Society.

⁵⁸award proposal released by PELS Adcom in October 2019, released by Tabarc in June 2020; changed travel refund: released by Adcom in autumn 2020, released by TAB in February 2021 with editorial changes

There are no other restrictions as to nationality, gender, age, IEEE member grade, or affiliation of the applicant. Each award will be given to a single person only.

Only videos not exceeding a specified length, in English language and in an appropriate file format can be considered. Details may be specified in separate instructions accessible via PELS website.

As a prerequisite for eligibility, the applicant with the submission of a video expresses the consent that the video may be published by IEEE PELS, and assures that it does not contain otherwise copyrighted or confidential material.

4. prize items:

One award for one person consists of:

- an award certificate
- a one-time honorarium of 1000USD

In addition up to 1000USD will be reimbursed to each of the up to five awardees towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

Up to five persons may be awarded each year.

5. funds:

This award is a society funded award. The total annual expenses shall be included in the society's annual budget. The expenses that can be incurred for this award shall be no more than 11000USD per year, including:

- honorarium as above
- printing certificates as above
- travel refund and conference fees as above

The award can only be given if the PELS operating budget remains net positive.

6. nominee solicitation:

IEEE PELS solicits nominations for this award: The submission of videos as specified above (cf. eligibility criteria) together with the required data of the applicant is invited, which constitutes an application for the IEEE P³ Talk Award. Only electronic submission as indicated on PELS website is accepted.

7. award selection committee:

An award selection committee consisting of

- PELS Digital Media Editor as part of IEEE PELS Products Committee as chairperson
- four additional members of PELS Administrative Committee (Adcom) appointed by the chairperson, who should be involved in the supervision of Ph.D. candidates, typically as professors, who should be familiar with digital media, e. g. as members of digital media team or the like, and who should be composed internationally

will carry out selection.

In case of conflict of interest (e. g. that a designated member of award selection committee would be the supervisor of a candidate who applies for the award) he will not become member of the selection committee. The chairperson of selection committee will appoint a substitute instead. If the conflict of interest concerns the chairperson, the chair of IEEE PELS awards committee shall be notified and do so instead.

The term of this award selection committee is limited to the selection process in the current year.

8. schedule:

The annual schedule is as follows:

due date	action	responsible person
January 31	call for applications	PELS Digital Media Editor supported by PELS staff
March 31	all applications received	
May 31	award winner selected by the award selection committee	PELS Digital Media Editor
June 15	award winner contacted for information required for the award; information forwarded to PELS Awards Chair, Treasurer, and Administrator	PELS Digital Media Editor supported by PELS staff
September 1	award check and certificate ready for presentation at a PELS conference	PELS Digital Media Editor supported by PELS staff

9. selection:

- criteria:

Each submission will be reviewed by the members of selection committee. They are asked to score the video submissions according to the judging rubrics given below:

- Problem definition
 - 10% Clear research objectives, problems, and hypothesis
 - 10% Rich in engineering judgement and insight
- Design methodology
 - 10% Methods are technically and mathematically accurate
 - 10% Well supported with analysis and experimental evidence (Are there any prototype/application demonstrations?)
- Achieved outcomes
 - 10% Contribution to the field (e.g., interesting to readers, stimulates new ideas, publications/result dissemination)
 - 10% Valuable for practicing engineers or researchers
- Quality of video and presentation
 - 10% Present within 200 seconds, personally appear in the video, and use of English (clear, concise, and correct)
 - 10% Present the material in a well-organized way — from framing the problem to presenting the proposed solution
 - 10% Effective use of visual aids (figures, tables, charts, layout, etc.) improves effectiveness of video and presentation
 - 10% Video and audio quality (e.g., resolution, clear audio, design)

Each criterion is rated on a scale of 1 to 5 with:

- 1 Not satisfactory
- 2 Satisfactory
- 3 Good

4 Very good

5 Excellent

- process:

- The scores of each member of selection committee are then summed up with the weight given as a percentage above. In the following, the sums obtained from the different members of selection committee are averaged. The up to five applicants reaching the highest results will be the winners of the award, provided that they reach an average score which in sum is higher than 3.5 and that none of the single criteria is scored with 1.
- To assure comparability, the scores of a member of selection committee will only be counted if he has scored all criteria for all applications. If this would not be the case, none of his scores will be counted. Quorum is required, i. e., that more than half of the members of selection committee have scored all criteria for all applications.
- The chairperson of selection committee may break a tie if necessary.
- Up to five awards may be given annually; they do not need to be given each year. , i. e., the awards will only be given in years when suitable applications are selected based upon meeting all of the eligibility and selection requirements.

10. presentation:

As a rule, the award is presented during ECCE America. Taking into account the international character of PELS and its members, it may also be presented at another PELS conference upon mutual agreement.

11. publicity:

The award will be publicised through IEEE PELS website and social media, also sending electronic messages to IEEE PELS members and other recipients, and IEEE PELS magazine.

Signees to establish the award

- Brad Lehman
- Frede Blaabjerg
- Alan Mantooth
- Sudip Mazumder
- Yan-Fei Liu

Previous holders

2020. winners:

- Lei Gu, Stanford University/US: Design Considerations for Radio Frequency Power Converters
- Affif Nazib, RMIT University/Australia: Synchronised Control of Grid-Interactive Inverters Using Stationary Frame Resonant Regulators
- Yi Zhang, Aalborg University/Denmark: Mission Profile based System-Level Lifetime Prediction of Modular Multilevel Converters
- Mehdi Mohammadi, University of British Columbia/Canada: Three-Layer Control Strategy for LLC Converters

- Maria Martinez Gomez, University of Oviedo/Spain: Torque Estimation in Permanent Magnet Synchronous Machines

2021. winners:

- Sung Yul Chu, University of Michigan, USA: Electromagnetic Model-Based Measurement, Sensing, and Detection for Wireless Power Transfer
- Joseph Kozak, Virginia Tech, USA: Hard-Switched Robustness of Wide Bandgap Power Semiconductor Devices
- Yicheng Liao, Aalborg University, Denmark: Impedance Modeling and Stability Analysis of Grid-Interactive Converters
- Fei Yang, The University of Texas at Dallas, USA: Reliability Evaluation and Condition Monitoring of Wide bandgap Devices
- Zichao Ye, University of California, Berkeley, USA: Hybrid Switched-Capacitor Power Converters: Fundamental Limits and Design Techniques

2022. winners:

- Giovanni Bonanno, University of Padova, Italy: Multi-Level Flying Capacitor Buck Converters with Digital-Predictive Current-Mode Control
- Mausamjeet Khatua, Cornell University, USA: Wide Operating Range Resonant Converters
- Kerui Li, The University of Hong Kong, Hong Kong: Stability of Wireless Power Receivers
- Bochen Shi, Tsinghua University, China: Discrete State Event-driven Modeling and Simulation Approach for Power Electronics Systems
- Jiale Xu, Stanford University, USA: Design of MHz Power Amplifiers Using Wide Bandgap Devices

2023. winners:

- Jessica Boles, Massachusetts Institute of Technology, USA: Power Electronics Meet Piezoelectrics: Converters, Components, and Miniaturization
- Zhou Dong, University of Tennessee, Knoxville, USA: High Power Lightweight Solid-state Circuit Breaker Development and Motor Drive Design for Electrified Aircraft Propulsion
- Reza Kheirollahi, Drexel University, USA: Direct Current Solid-State Circuit Breakers: Advanced Approaches to Improve Lifetime, Safety, and Reliability
- Ripunjoy Phukan, Virginia Tech, USA: Design of High-Density Filter Building Blocks for SiC-Based Three-Phase Power Converters
- Cheng Xue, University of Alberta, Canada: Advanced Predictive Control for Back-to-Back Current-Source Motor Drives With Transformerless Operation

2024. ...

A.4.10 IEEE PELS Energy Storage Innovation Award

Specification

1. description:

The award is given to an individual or a group of up to three individuals for innovation in energy storage technology that significantly exceeds contemporary performance limits and has practical application in communications energy systems. The innovation may be in the form of an adequately-described new design or practicable concept, an invention, or a verified manufacturing step or product.

The award is not to be made to a company.

The Award may not be given more frequently than annually nor does it need to be given each and every year, i. e., the award will only be given in years when a suitable candidate is selected based upon meeting all of the eligibility and selection requirements. The reason for the potentially 'occasional' nature of the award is that major breakthroughs in the complex field of energy storage technology can't be expected to be achieved regularly each year. The INTELEC Executive Committee will be responsible for ensuring that the potentially occasional nature of the Award does not breach IEEE Policy.

2. administration:

IEEE Power Electronics Society (PELS) is responsible for the administration of the Award, delegated through the PELS Technical Committee on Communications Energy Systems (TC7). It is the responsibility of the TC7 Executive Committee to establish procedures in relation to the Award.

The Chair of the TC7 Executive Committee will nominate a Coordinator to manage the administrative procedures within TC7. The Coordinator shall be a person mutually acceptable to PELS and the TC7 Executive Committee. The coordinator is responsible for working with the PELS Admin and the PELS Awards Committee in matters related to this Award, and shall also confer with PELS in matters related to notifications and award ceremony activities.

3. eligibility:

This is an open award. Nominees for the Award should have a record of activity in the research or product development of energy storage for communications energy systems.

4. prize items:

The Award consists of an award certificate and a one-time honorarium of 2500 USD. In the case of multiple Award recipients, each recipient will receive an award certificate naming all the co-recipients and an equal share of the honorarium.

A maximum and total amount of 1000 USD will be available to recipient(s) to share as reimbursement of travel and accommodation costs incurred to attend the place of presentation of the Award. Any conference registration fees that the Award recipient(s) would have to pay to attend the award ceremony will be waived.

5. funds:

The honorarium of the Award and any associated travel reimbursement will be initially funded through the IEEE PELS operating budget. Any conference registration fees payable for the recipient to attend the award ceremony will be funded from the TC7 budget. IEEE PELS will work with the IEEE Foundation and its development office staff to identify an external industry sponsor to secure multi-year funding support for the Award. PELS will seek approval for establishment of a dedicated Award Fund through the IEEE Foundation Board.

The PELS budget includes the amount for this award and the PELS budget is net positive with the inclusion of the award.

6. nominee solicitation:

The notification of the existence of the Award, its scope and selection basis, and solicitation of nominees is through the INTELEC conference and PELS websites, periodic announcements published in the IEEE Power Electronics Newsletter, and more widely in trade publications, as appropriate.

A person may be nominated for the Award by another person, provided the nominated person acquiesces to the nomination. A person may individually nominate (i.e. self-nominate) for the Award.

The steps and procedure to lodge a nomination will be detailed on both the INTELEC conference and PELS websites. Nominations for the Award are made by formal application. Applications will be forwarded to and retained by the PELS administration.

Applications can be received at any time. However, a review and assessment of applications will only occur once a year. Applications received in the previous period (year) prior to 31 March of the current year will be considered for assessment. If there are no applications received by 31 March in the current year, there will be no Award given. Applications received by 31 March in the current year will be reviewed and assessed against selection criteria by an Expert Group that will make recommendations as to whether an Award should be given. While applications are assessed against specific merit criteria, there is no requirement for the Expert Group to recommend any of the applications for an Award.

On receipt of a nomination:

- (a) The person making the application will be notified of the receipt of the application
- (b) The nomination will be reviewed and assessed during the next Assessment Cycle.
- (c) If the Assessment Cycle is more than 3 months from the time the application is received, the applicant will be invited to submit amendments to the original application up until 31 March.

7. award committee:

If there is one or more applications submitted for the Award and are received by 31 March in a given year an Expert Group will be established for the purpose of review and assessment. The Coordinator will establish the membership of the Expert Group, subject to ratification by the IEC.

The Expert Group shall consist of experts in the field of energy storage and shall be recruited from academia and industry. Expert Group members will be required to declare any potential conflict of interests and independence of association with applicants. The Expert Group shall consist of at least three, but not more than 5 members including the Coordinator. Due to the expected occasional nature of this Award, the term of the Expert Group shall be that time needed to assess and make recommendations in relation to the applications received. Assessment of any applications shall normally be completed by 31 July.

8. schedule:

The general schedule is:

- (a) TC 7 Chair recommends a Coordinator to PELS.
- (b) Coordinator liaises with PELS Admin to monitor for Applications.
- (c) If applications have been received prior to 31 March, Coordinator starts to assemble an Expert Group:
 - i. Expert Group assembled and ratified by 30 April.

- ii. Applications received up to 31 March are reviewed and assessed by the Expert Group.
 - iii. Expert Group makes Award recommendations based on applications by 31 July.
 - iv. Expert Group is dissolved (31 July).
- (d) If an Award has been recommended, Coordinator confers with PELS Admin to ensure timely notification, and ceremony details. (Note this timing may need to reflect the actual schedule of the next INTELEC conference)

9. selection:

The purpose of the Award is to recognize individuals for their outstanding innovations in battery and energy storage technologies as applied to communications energy systems. The selection process shall comply with procedures and regulations established in IEEE and Society governing documents, particularly with IEEE Policy 4.4 on Awards Limitations.

The Selection/Assessment process has three specific areas of focus and uses a points-scheme to help rate the elements. Assessment will be based on the contents of the application, including supplied supporting documentation.

- Area 1: Description of Innovation.

Nominees must adequately establish the nature of the innovation in the context of existing technology. The applicant must successfully articulate existing limitations and why these are problematic and how the claimed innovation is a significant technical improvement rather than a marginal or incremental gain. Applicants must also describe their rationale of approach which led to the innovation.

40% of rating

- Area 2: Merit of Innovation

Nominees must adequately establish the value of the innovation in the context of existing technology. This includes establishing the dimensions of the innovation in terms of significance as well as indicating any new avenues the innovation may enable which were not previously possible or were greatly hindered. For a specific manufacturing step or product, evidence as to the implementation and successful operation over a period of time must be provided.

40% of rating

- Area 3: Past activities

Applicants are invited to describe and document the extent of their previous activities in the area of energy storage in communication energy systems and in particular any prior work in which they have been involved that directly contributed to the outcomes of the claimed innovation.

20% of rating

10. presentation:

If an Award is given, it will be identified by the next number in the sequence reflecting the number of times the Award has been previously given (i.e. 1st, 2nd, etc.) Presentation of the Award will normally occur during the Conference Dinner at an INTELEC event.

11. publicity:

The recipients and the award ceremony will be published in the IEEE Power Electronics Society Newsletter or Magazine respectively and otherwise promoted on the INTELEC conference and/or PELS website, as appropriate.

Signees to establish the award

- John Hawkins
- ... *tbd.* — *should be 5 voting members of Adcom*

Previous holders

2024. ...

A.4.11 IEEE International Future Energy Challenge Award**Specification⁵⁹**

1. description:

The best performing teams in the IEEE International Future Energy Challenge design competition will be awarded. An actual topic for the competition will be defined each year. The award structure will remain the same.

2. administration:

- Future Energy Challenge Steering Committee
- Future Energy Challenge Organising Committee, consisting of
 - General Chair, appointed with a majority of votes by Future Energy Challenge Steering Committee; the General Chair usually originates from the competition host institute.
 - Co-Chair, appointed by the General Chair, taking into account suggestions from the Steering Committee
 - Treasurer, appointed by the General Chair, taking into account suggestions from the Steering Committee

3. eligibility:

Participation is on a proposal basis. Those schools that are interested must submit a proposal before the submission deadline as follows:

Respondents should express their ideas and plans relevant to the competition topic area. The project should include the construction and operation of a complete hardware prototype. The proposal must address both technical and organizational issues for each phase of the prototype's development and testing. It must contain a realistic project budget, along with a plan to secure the necessary funding. The educational goals, including any course credit provided for work related to International Future Energy Challenge, and how the project relates to other efforts within the school and at the regional or national level should be addressed.

Only one proposal will be considered for each school. Eligible schools must have an accredited or similarly officially recognized engineering programme, be a college or university with engineering curricula leading to a full first degree or higher, have the support of the school's administration, establish a team of student engineers with an identified faculty advisor, demonstrate the necessary faculty and financial support commitments and demonstrate a strong commitment to undergraduate engineering education through their proposal. Proposals thus must be accompanied by a letter of support from an appropriate Dean, Department Chair, or other authorized school official. The letter must confirm the school's commitment to participate. It must also state the type(s) and value of support

⁵⁹update released by PELS ADCOM 31 March 2017 and subsequently by IEEE Tabarc

from the institution. School support should match the value of cash and in-kind support from the team's principal sponsors. The letter of support should outline the plans of the school in the event that a prize is received. Additional letters of support from other team sponsors are optional. For each team, the minimum undergraduate student number is three to qualify for the competition. Interdisciplinary teams are encouraged. Graduate students are not excluded, but are limited to technical assistant role in the team. The upper limit of graduate student participants is two for each team.

Proposals are to be prepared by the student team in collaboration with the faculty advisors and must be signed by all authors or the student team leader and the faculty advisor. They must be written in English and are limited to 12 pages 8.5"·11" or A4, plus the letters of support. They must be submitted electronically in PDF format.

4. prize items:

The award is annual. The winning teams obtain the following:

- first prize
 - honorarium of 10000USD paid to the university of the winning team
 - certificate with citation

The prize will be awarded for the solution with highest scores, also meeting all minimum requirements as confirmed through reports and hardware tests.

- second prize
 - honorarium of 5000USD paid to the university of the winning team
 - certificate with citation

The prize will be awarded for the solution with the second highest scores, also meeting all minimum requirements as confirmed through reports and hardware tests.

- third prize
 - honorarium of 3000USD paid to the university of the winning team
 - certificate with citation

The prize will be awarded for the solution with third highest scores, also meeting all minimum requirements as confirmed through reports and hardware tests.

- up to three fourth prizes
 - honorarium of 1000USD paid to the university of the winning team
 - certificate with citation

They are intended to acknowledge remarkable solutions in detail, proposed by teams not winning the first to third prizes.

While a first, second and third prize will always be awarded, the fourth prizes are only applicable if no budgetary restriction occurs according to item 5.

The prizes will be paid to the university of the winning team. Schools are intended to let benefit the team members and student team design project activities from them.

5. funds:

This award is currently funded as follows:

- IEEE Power Electronics Society 40000USD
- IEEE Industry Applications Society 25000USD
- IEEE Power and Energy Society 20000USD
- Power Source Manufacturers Association 10000USD

The amounts indicated above might be renegotiated on a yearly basis prior to the announcement of the next competition, depending on the financial situation of the involved societies and the location of the competition, influencing accountable travel cost; however prior to announcing the competition, funds of in total at least 75000USD must be guaranteed for it by the funding societies. A society must provide funds of at least 10000USD to be mentioned as sponsor of the competition.

The total annual expenses that can be incurred for this award shall be no more than the sum of the aforementioned funding. The contribution of the societies shall be included in their annual budget. The award can only be given up to an extent that the budget of the donors and the resulting budget of Future Energy Challenge competition remain net positive.

The expenses include:

- honorarium as above and engraving of suitable plaque
- refund of travel cost
 - to the workshop according to item 8 for
 - * invited teams: 1000USD per team for distances up to 5000km, 2000USD per team for distances of more than 5000km
 - * organising committee – cf. item 2 – according to IEEE policies, if budget allows
 - to the final competition according to item 8 for
 - * invited teams: 1000USD per team for distances up to 5000km, 2000USD per team for distances of more than 5000km
 - * judges – cf. item 7 – according to IEEE policies, if budget allows
 - meals and other organisation related cost occurring at the competition host institute

6. nominee solicitation:

The team of Future Energy Challenge — cf. item 2 — will advertise the competition. In particular informations will be disseminated through the respective website, currently <http://www.energychallenge.org/>.

7. award committee:

The award committee consists of

- general chair, cf. item 2
- co-chair, cf. item 2
- treasurer, cf. item 2
- judges: Minimum three judges are invited by the General chair for the final competition. They should be most distinguished scholars and industry leaders with respect to the topic of the particular competition, and not be concerned by any conflict of interest regarding the teams participating in the respective competition.

8. schedule:

Major steps of the competition are typically scheduled as follows; details for the current period will be published on the website of Future Energy Challenge:

- mid of May: announcement of the next competition
- September to beginning of October: optional information session at ECCE conference
- mid of October: proposals due

- mid of December: schools informed of acceptance into the competition
- mid of March: qualification reports due, which must include preliminary experimental results (limited to 25 pages)
- typically end of March: workshop at APEC, where all accepted qualified teams must give an oral presentation; feedback will be given to the team to improve the elaborated solution.
- mid of April: finalists notified
- mid of July: final reports due (limited to 50 pages)
- end of July: final competition, concluding with the announcement of the winners

9. selection:

There is a three-step assessment as follows:

(a) assessment of proposals:

Proposals — cf. item 3 — will be judged on the quality of plans, the likelihood that a team will be successful in meeting the International Future Energy Challenge objectives, technical and production feasibility and degree of innovation. Other key criteria are evidence of the school's commitment, capability, experience, and resources to implement their design over the one-year span of the competition. Commitment to excellence in undergraduate education is important, and acceptable proposals will involve undergraduate students as the primary team members. The impact on undergraduate education is a critical judging criterion.

(b) assessment of the work of teams whose proposals have been accepted:

This assessment is carried out on the basis of the qualification reports and the workshop at APEC. Selection is based upon likelihood of deliverable hardware, quality of design, and likelihood of success in meeting all the challenge objectives. The leading teams will be invited as finalists.

(c) assessment of the teams accepted as finalists:

This assessment is carried out on the basis of the final reports and the final competition. Student team project results will be judged based on cost effectiveness, performance, quality of the prototype and other results, engineering reports, adherence to rules and deadlines, innovation, future promise, and related criteria. Each aspect of judging will be scored according to a point list and test protocol adapted to the particular challenge in the current year as prepared by selection committee prior to selection.

10. presentation:

The winners will be announced at the end of the final competition carried out in a power electronics laboratory. They are further listed on the website of Future Energy Challenge www.energychallenge.org.

11. publicity:

Articles about the award recipients will be published on the website of Future Energy Challenge www.energychallenge.org and shall be submitted to IEEE PELS Magazine and/or similar publications also of other IEEE Technical Societies.

Signees to establish the award

- Dr. Jin Wang, Associate Professor, Ohio State University

A.4.12 IEEE Award for Achievement in Power Electronics Standards**Specification⁶⁰**

1. description:

The Achievement Award of Standards of the IEEE Power Electronics Society (PELS) has been established to recognize and honour individuals who have made outstanding and sustained contributions or services in IEEE standards relevant to the field of power electronics.

2. administration:

The award is administrated by the IEEE PELS Standards Committee (PELSC), and will be presented at a PELS sponsored conference. The award is intended for annual awards, however, the award may not be given in years if no qualified candidate is nominated and selected. No more than one award will be made each year.

3. eligibility:

The award will be made to an individual. The recipient must be an active IEEE member; there are no other restrictions as to nationality, age, gender, or IEEE member grade.

4. prize items:

The award recipient will receive a one-time honorarium of 1500USD, along with an engraving of suitable plaque.

In addition, up to 1000USD will be reimbursed towards necessary conference registration, travel and accommodation costs incurred to attend the award ceremony.

5. funds:

This award is a society funded award. The total annual expenses that can be incurred for this award shall be no more than 3000USD and shall be included in the society's annual PELSC budget. The expenses include:

- honorarium and travel refund as above
- engraving of suitable plaque

The award can only be given if the respective budget allocated to the PELSC remains net positive.

6. nominee solicitation:

PELSC solicits nominations for this award. To nominate a candidate, the nominator must fill out and submit the nomination form together with at least two reference letters. Only electronic submission is accepted.

7. award committee:

The award selection committee consists of the executives of PELSC, and is chaired by the Executive Vice President of Standards. The PELSC executives consist of the Executive Vice President of Standards, the Co-Chair, treasurer and the secretary.

Decisions will be taken with the majority of members of Award Selection Committee.

8. schedule:

⁶⁰released by Adcom 09/2015, released by TAB 06/2016 with editorial change of name; introduced travel refund: released by Adcom in autumn 2020, released by TAB in February 2021 with editorial changes

Due Date	Action	Person Responsible
November 15	Call for nominations	Executive Vice President of Standards
March 31	All nominations received	Executive Vice President of Standards
May 15	Award winner selected by the Award Committee	Executive Vice President of Standards
June 1	Award winner contacted for information required for the award; information forwarded to PELS Awards Chair, Treasurer, and Administrator	Executive Vice President of Standards
September 1	Award check and plaque ready for presentation at a PELS conference	Executive Vice President of Standards

9. selection:

Judgment of the award recipient will be based on the nominator's recommendation, the endorsement letters, and evaluation of the award selection committee members. Voting will be under the leadership of the award selection committee chair and the outcome will be based on the majority consensus. One awardee will be selected each year. If no suitable candidate is available for a year, the award selection committee can decide not to make an award for that year.

The criteria established for this award include:

- sustained contributions of the candidate to the advancement of IEEE standards in the field of power electronics
- sustained services of the candidate to the IEEE standards in the field of power electronics
- dissemination of knowledge by the candidate of the IEEE standards in the field of power electronics
- candidate's stature in the area of IEEE standards in the field of power electronics
- quality of the nomination

10. presentation:

The award is to be presented at a PELS sponsored conference. The award is intended to be made annually.

11. publicity:

Articles about the award recipient will be published in the IEEE PELS website, IEEE PELS Magazine and/or similar publications. The announcement of the award and the recipient in other IEEE Technical Society publications will be at the discretion of that particular society.

Signees to establish the award

- Prof. Peter Wilson
- Prof. Alan Mantoath
- Dr. Sudip Mazumder
- Prof. Patrick Wheeler
- Robert Balog

Previous holders

2018. Brad Lehman
 2020. John DeCramer
 2021. Bruce Thackwray
 2022. Matthew Wilkowski
 2024. ...

A.4.13 IEEE Power Electronics Society Transactions Prize Paper Award

61

Specification

1. description:

to annually recognise the best papers published in the IEEE Transactions on Power Electronics

2. administration:

IEEE Power Electronics Society — Editor in Chief of the IEEE Transactions on Power Electronics

3. eligibility:

papers published during the preceding calendar year

4. prize items:

To secure equal opportunities when the number of published papers evolves over the years, the number of awarded papers shall represent:

- 0,5% of them for a first prize
- 1% of them for a second prize

The number of published papers will be determined in the end of a calendar year and the number of awards — i. e.,

- 0,5% for a first prize
- 1% for a second prize

appropriately rounded to an integer number — will be fixed. This will be the basis for budget planning and selection in the following year.

The award for a selected paper comprises:

- a certificate presented to each author
- a prize of 1000USD for a first prize or 500USD for a second prize, shared equally among the paper's authors

5. funds:

This is a society funded award which is accounted for in the society operating budget.

The actual budget is determined by the number of awards as above multiplied with

⁶¹changed the number of awards and added details about the process — released by Adcom in April 2020 and by Tabarc in autumn 2020

- 1100USD for each first prize
- 600USD for each second prize

including printing the certificates.

An award can only be given when the dedicated budget remains net positive — i. e., the number of awards may be limited below the aforementioned number for budgetary reasons.

6. nominee solicitation:

All papers published in the previous year are by default nominated.

7. award committee:

To deal with the considerable amount of papers, selection is a multi-step process as described in detail under item 8. The committees are composed as follows:

- The committee for the first preselection consists of the Editor in Chief of the IEEE Transactions on Power Electronics leading the process and all other members of the Editorial Board as listed in the IEEE Transactions on Power Electronics. This currently comprises the Editor in Chief (EIC) of the IEEE Power Electronics Letters, Co-EICs or EICs-at-Large respectively and Associate Editors. The list in the first issue of the year the award is given is binding.
- The committee for the second preselection is composed in the same way.
- The committee for the final selection is again led by the Editor in Chief of the IEEE Transactions on Power Electronics. To cover the various contentual aspects of the papers the EIC will appoint six to eight members of selection committee with profound expertise. They shall again belong to the current Editorial Board as explained above or have belonged to it in the last ten years. To avoid any conflict of interest members may only be appointed when they aren't author or coauthor of preselected papers. Additionally the Editor in Chief of the IEEE Power Electronics Letters is ex officio member.

8. schedule:

- up to March 15th:

The Editor in Chief will invite the committee according to item 7 for the first preselection: Each committee member may name up to three papers, published in the previous year. To avoid a conflict of interest, it is not allowed for them to preselect papers they are author or coauthor of, or papers the Editor in Chief of the IEEE Transactions on Power Electronics or of the IEEE Power Electronics Letters are author or coauthor of.

- up to April 15th — this deadline may be extended by up to two weeks according to the Editor in Chief's discretion:

first preselection completed: The members of the selection committee for the first preselection according to item 7 will send the bibliographical data of the papers preselected by them, and a short explanation why the papers have been preselected to the Editor in Chief.

- up to April 30th:

slate of candidate papers assembled by the Editor in Chief and distributed to the committee for the second preselection according to item 7:

Each committee member may vote as follows:

- for a number of papers equal to the number of first prizes to be awarded

- for a number of papers equal to the second prizes to be awarded

Fewer votes for first and/or second prize (per voter) are permissible. A committee member may not vote for a paper on which he or she is listed as an author or a coauthor, otherwise all of his or her votes won't be counted. All votes of a committee member who has exceeded the aforementioned numbers of votes will also be discarded.

- May 31st: voting ends

The summary of the valid votes from the second preselection received by the Editor in Chief will be distributed to the members of the committee for the final selection according to item 7. The preselection identifies and rates a slate of candidate papers for the first and second prize. On this basis additional rounds of review and discussion amongst the committee are performed, considering the complete picture. The aim is to find a consensus about a balanced slate of prize papers, optimally fulfilling all criteria. The formalised decision will eventually be carried out with each member of selection committee voting as follows:

- for a number of papers equal to the number of first prizes in the actual year with two votes per paper
- for a number of papers equal to the number of second prizes in the actual year with one vote per paper

Less votes for first and/or second prize are permissible; all votes of a member of selection committee who has exceeded the aforementioned numbers of votes will be discarded.

The award can be given if more than half of the members of selection committee including the Editor in Chief have placed valid votes.

The Editor in Chief will then determine the winners based on the number of obtained votes, where the appropriate number of papers having obtained the highest count of votes will obtain a first prize and the subsequent appropriate number of papers a second prize. The Editor in Chief may break a tie if necessary.

- July 1st:

prize papers selected

The information will be sent to PELS Award Committee and PELS staff.

Subsequently the authors of the awarded papers will be notified, the documents prepared etc.

9. selection:

The criteria for preselection and selection comprise:

- originality
- contribution to the field
- value to practicing engineers
- extent to which paper is supported by analysis and experimental evidence
- quality of presentation including effectiveness of illustrations and tables

The selection process is described in item 8.

10. presentation:

As a rule, the award is presented during ECCE America. Taking into account the international character of PELS and its members, it may also be presented at another PELS conference upon mutual agreement.

11. publicity:

The award and the winners will be publicised through IEEE PELS website and other channels for society publicity.

Signees to establish the award

- tbd.

A.4.14 IEEE Power Electronics Society Prize Letter Award

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Specification

1. description:

Beginning in 2007, the PELS Letters Editor and Associate Editors of the IEEE Transactions on Power Electronics have recognised letters deemed best among those published in the Transactions during the preceding calendar year. The established letters review criteria are used as the basis for the Prize Letter selection. Specific emphasis is placed on originality, contribution to the field and the quality of presentation, including the effective use of illustrations. A particular emphasis is placed on contributions with high value for rapid publication.

2. administration:

IEEE Power Electronics Society — Editor in Chief of the IEEE Power Electronics Letters

3. eligibility:

letters published during the preceding calendar year

4. prize items:

To secure equal opportunities when the number of published letters evolves over the years, the number of awarded letters shall represent 1% of them: The number of published letters will be determined in the end of a calendar year and the number of awards — i. e., 1% appropriately rounded to an integer number — will be fixed. This will be the basis for budget planning and selection in the following year.

The award for a selected letter comprises:

- a certificate presented to each author
- a prize of 1000USD⁶³ shared equally among the letter's authors

5. funds:

This is a society funded award which is accounted for in the society operating budget.

The actual budget is determined by the number of awards as above multiplied with 1100USD for the prize and printing the certificates.

An award can only be given when the dedicated budget remains net positive — i. e., the number of awards may be limited below the aforementioned number for budgetary reasons.

6. nominee solicitation:

All letters published in the previous year are by default nominated.

⁶²changed the number of awards and added details about the process — released by Adcom in April 2020 and by Tabarc in autumn 2020

⁶³changed from previously 500USD

7. award committee:

To deal with the considerable amount of letters, selection is a multi-step process as described in detail under item 8. The committees are composed as follows:

- The committee for the first preselection consists of the Editor in Chief of the IEEE Power Electronics Letters leading the process and all other members of the Editorial Board as listed in the IEEE Transactions on Power Electronics. This currently comprises the Editor in Chief (EIC) of the IEEE Transactions on Power Electronics, Co-EICs or EICs-at-Large respectively and Associate Editors. The list in the first issue of the year the award is given is binding.
- The committee for the second preselection is composed in the same way.
- The committee for the final selection is again led by the Editor in Chief of the IEEE Power Electronics Letters. To cover the various contentual aspects of the papers the EIC will appoint six to eight members of selection committee with profound expertise. They shall again belong to the current Editorial Board as explained above or have belonged to it in the last ten years. To avoid any conflict of interest members may only be appointed when they aren't author or coauthor of preselected papers. Additionally the Editor in Chief of the IEEE Transactions on Power Electronics is ex officio member.

8. schedule:

- up to March 15th:
The Editor in Chief will invite the committee according to item 7 for the first preselection: Each committee member may name up to two letters, published in the previous year. To avoid a conflict of interest, it is not allowed for them to preselect letters they are author or coauthor of, or letters the Editor in Chief of the IEEE Transactions on Power Electronics or of the IEEE Power Electronics Letters are author or coauthor of.
- up to April 15th — this deadline may be extended by up to two weeks according to the Editor in Chief's discretion:
first preselection completed: The members of the selection committee for the first preselection according to item 7 will send the bibliographical data of the papers preselected by them, and a short explanation why the papers have been preselected to the Editor in Chief.
- up to April 30th:
slate of candidate letters assembled by the Editor in Chief and distributed to the committee for the second preselection according to item 7:
Each committee member may vote for a number of letters equal to the number of awards in the actual year. Fewer votes (per voter) are permissible. A committee member may not vote for a paper on which he or she is listed as an author or a coauthor, otherwise all of his or her votes won't be counted. All votes of a committee member who has exceeded the aforementioned number of votes will also be discarded.
- May 31st: voting ends
The summary of the valid votes from the second preselection received by the Editor in Chief will be distributed to the members of the committee for the final selection according to item 7. The preselection identifies and rates a slate of candidate letters. On this basis additional rounds of review and discussion amongst the committee are performed, considering the complete picture. The aim is to find a consensus about a balanced slate of prize papers, optimally fulfilling all criteria. The formalised decision

will eventually be carried out with each member of selection committee voting for a number of letters equal to the number awards in the actual year. Less votes are permissible; all votes of a member of selection committee who has exceeded the aforementioned numbers of votes will be discarded.

The award can be given if more than half of the members of selection committee including the Editor in Chief have placed valid votes.

The Editor in Chief will then determine the winners based on the number of obtained votes, where the appropriate number of papers having obtained the highest count of votes will obtain the award. The Editor in Chief may break a tie if necessary.

- July 1st:

prize letters selected

The information will be sent to PELS Award Committee and PELS staff.

Subsequently the authors of the awarded letters will be notified, the documents prepared etc.

9. selection:

The established review criteria are used as the basis for the the preselection and selection as above, with particular emphasis on originality, contribution to the field, and overall quality of the letter.

10. presentation:

As a rule, the award is presented during ECCE America. Taking into account the international character of PELS and its members, it may also be presented at another PELS conference upon mutual agreement.

11. publicity:

The award and the winners will be publicised through IEEE PELS website and other channels for society publicity.

Signees to establish the award

- tbd.

A.4.15 IEEE PELS Open Journal of Power Electronics Prize Paper Award

64

Specification

1. description:

to annually recognise the best papers published in the IEEE Open Journal of Power Electronics (OJPEL)

2. administration:

IEEE Power Electronics Society — Editor in Chief (EIC) of the IEEE OJPEL

3. eligibility:⁶⁵

All papers published in IEEE OJPEL during the preceding award timeframe are eligible.

⁶⁴released by Adcom in October 2022, released by Tabarc in October 2023 with editorial changes

⁶⁵Eligibility and Selection process shall comply with procedures and regulation established in IEEE and Society governing documents, particularly with IEEE Policy 4.4 on Awards Limitations.

The award timeframe is defined as the period of one or several calendar years in which at least 200 papers have been published in the journal. To achieve a critical mass of papers as the OJPEL starts up, the first award will be delivered once at least 200 papers have been published in the journal since the year 2020. When the award is delivered, the paper counter is reinitialized to zero. If more than 200 papers are published within a year, the award timeframe will be the calendar year.

For example, if the number of published papers from 2020 through 2022 total over 200, these years will constitute the award timeframe. The total number of published papers to be considered will then be reset to 0 starting in 2023. In the end of the year when the next 200 papers are published, the next award timeframe will be closed and another set of prize paper awards will be made.

4. prize items:

In each award timeframe, the number of awarded papers shall be one for a first prize and at least one for a second prize. The total number of second prizes will be dependent on how many published papers are eligible in the given timeframe as outlined. The number of awarded papers shall not exceed 1% of the qualifying number of papers. For example:

qualifying number < 300 papers: 1 first prize, 1 second prize
 300 papers \leq qualifying number < 400 papers: 1 first prize, 2 second prizes
 etc.

The award for a selected paper is comprised of a certificate presented to each author and a monetary award to be shared equally among the paper's authors (USD 1000 for a first prize and USD 500 for a second prize).

5. funds:

This is a society funded award which is accounted for in the society operating budget. The actual budget for each prize is USD 1100 for a first prize and USD 600 for a second prize, which includes the monetary award and the printing of certificates. An award can only be given when the dedicated budget remains net positive (i.e., the number of awards may be limited below the aforementioned numbers for budgetary reasons).

6. nominee solicitation:

All papers published in the previous award timeframe according to item 3 are by default nominated.

7. award committee:

To deal with the considerable number of papers, selection is a multi-step process as described in detail under item 8. The committees are composed as follows:

- (a) The committee of the preselection consists of the EIC of the IEEE OJPEL leading the process and all other members of the Editorial Board as listed in the IEEE OJPEL. This is currently comprised of the Co-EICs and the Associate Editors (AE). The list in the first issue of the year the award is given is binding.
- (b) The committee for the final selection is again led by the EIC of the IEEE OJPEL. To cover various contextual aspects of the papers, the EIC will appoint three to four members of the selection committee with profound expertise. They shall again belong to the current Editorial Board as explained above or have belonged to in the last ten years. To avoid any conflict of interest, members may only be appointed when they are not an author or a co-author of the preselected papers.

8. schedule:

- (a) Up to 31 March: The EIC will invite all preselection committee members to name up to three papers that were published in the eligible years. To avoid a conflict of interest, it is not allowed for them to preselect papers they are an author or a co-author of as well as papers the EIC of the IEEE OJPEL is an author or a co-author of. The members of the preselection committee will send the bibliographical data of the papers preselected by them and a short explanation why the papers have been preselected to the EIC.
- (b) Up to 30 April (this deadline may be extended up to two weeks according to the EIC's discretion): The slate of candidate papers will be assembled by the EIC and distributed to the members of the committee for the final selection according to item 7. Rounds of review and discussion amongst the committee are performed, considering the complete picture — the aim is to find a consensus about a balanced slate of prize papers, optimally fulfilling all criteria. The formalised decision will eventually be carried out with each member of the selection committee submitting votes as follows:
 - two points for one first prize paper
 - one point for each second prize paper: The maximum number of second prizes has been previously determined according to item 4.

Less votes for first and/or second prize are permissible, but all votes of a member of the selection committee who has exceeded the aforementioned numbers of votes will be discarded.

The award can be given if more than half of the members of selection committee including the EIC have placed votes. The EIC will then determine the winners based on the number of obtained votes, where the paper having obtained the highest count of points will obtain a first prize and the subsequent appropriate number of papers a second prize. As an author can produce excellent papers that merit an award across the years, but shall not receive more than one award in the considered timeframe, papers having have at least one common author with an awarded paper and which are ranked lower with less points than this awarded paper will however not be further considered and not be awarded. The EIC may break a tie if necessary.

- (c) 15 June: Prize papers are selected and the information will be sent to the PELS Awards Committee for review and PELS staff. Subsequently, the authors of the awarded papers will be notified, the documents prepared, etc.

9. selection:

The criteria for preselection and selection comprise:

- (a) originality
- (b) contribution to the field
- (c) value to practicing engineers
- (d) extent to which paper is supported by analysis and experimental evidence
- (e) quality of presentation including effectiveness of illustrations and tables

10. presentation:

The award is usually presented in PELS award ceremony during a conference of global ECCE series or another PELS conference in mutual agreement.

11. publicity:

The award and the winners will be publicised through the IEEE PELS website and other channels for society publicity.

Signees to establish the award

- Liuchen Chang
- Johan Enslin
- Yan-Fei Liu
- Mario Pacas
- Stephanie Watts-Butler

A.4.16 IEEE Journal of Emerging and Selected Topics in Power Electronics (JESTPE) prize paper award

66

Specification

1. description:

Beginning in 2015, the editorial committee of IEEE JESTPE (IEEE Journal of Emerging and Selected Topics in Power Electronics) will recognize a first prize paper and second prize papers that were deemed the best papers among those published in JESTPE during the proceeding calendar year. The selection criteria are: Originality, Contribution to the field, Extent to which the paper is supported by analysis and experimental evidence and Quality of the presentation, including effective use of illustrations.

2. administration:

IEEE Power Electronics Society

3. eligibility:

Eligibility and Selection process shall comply with procedures and regulation established in IEEE and Society governing documents, particularly with IEEE Policy 4.4 on Awards Limitations. All papers published in IEEE JESTPE during the preceding calendar year are eligible for nomination. For 2015 award papers, all the papers published in 2013 and 2014 will be eligible for nomination.

4. prize items:

- There will be maximum one first prize with a honorarium of 1000USD.
- In addition there will be maximum six second prizes with a honorarium of 500USD.

The honorarium is shared equally among the authors of the respective prize paper. In addition a certificate is presented to each author.

5. funds:

This is a society funded award which is accounted for in the society operating budget. The society budget is net positive including the funding for this award. The estimated total budget is 4500USD, with 4000USD as honorarium and 500USD for certificate preparation. The total budget is equally shared between PELS and IAS⁶⁷.

⁶⁶changed the number of 2nd prize awards (3 to 6) — released by Adcom in autumn 2020, released by TAB in February 2021

⁶⁷cf. E-Mail of Blake Lloyd "Confirmation of IAS's committment for JESTPE paper award" to Dong Tan and others, dated 19 Sept. 2014

6. nominee solicitation:

The JESTPE Editor in Chief (EIC) solicits nominations from (1) EIC, all the Editors and Associate Editors, (2) Guest Editors and Guest Associate Editors of special issues and (3) Chair of each Technical Committees of PELS and IAS, who will represent each Technical Committee.

7. award committee:

JESTPE editorial board, which consists of all the editors, associate editors and the guest editors and guest associate editors for the special issue published in proceeding year.

8. schedule:

- April 15: nomination by EIC, Editors, Associate Editors, Guest Editors, Guest Associate Editors, TC chairs — each person can nominate up to two papers with a short description
- May 15: slate of candidate papers assembled by the JESTPE EIC and distributed to JESTPE Editorial Board members for voting
- June 15: voting close; editor-in-chief (EIC) of JESTPE will decide the winner of the first prize paper and second prize papers based on the vote; in case of tie, EIC will appoint an ad hoc committee to resolve.
- July 1: prize papers selected; information sent to PELS Award Committee and IAS Award Committee

9. selection:

- The EIC, Editors and Associate Editors of JESTPE, Guest Editors and Guest Associate Editors of JESTPE for that year, and chairs of each Technical Committee of PELS and IAS make nominations from papers published in the preceding year. Each person (and the EIC) can nominate up to two papers. The established review criteria are used as the basis for the nomination, with particular emphasis on originality, contribution to the field, analysis and experimental evidence, and quality of the presentation of the papers.
- The EIC assembles the nominations and distributes them to the members of JESTPE editorial board for voting. Each member can vote for up to three papers. EIC will decide the winner of the first prize paper and second prize papers based on the vote.
- The EIC can cast a vote, or reserve his/her vote for tiebreaking, should it occur. In case of tie (with EIC's vote), EIC will appoint an ad hoc committee to resolve the tie.

10. presentation:

This award will be presented at ECCE every year.

11. publicity:

The prize paper award authors will be published on the IEEE PELS Website and Newsletter.

Signees to establish the award

- Yan-Fei Liu
- Dong Tan

A.4.17 IEEE Power Electronics Society Value to Industry and Practitioners (VIP) Best Paper Award

Specification⁶⁸

1. description:

The IEEE Power Electronics Society Value to Industry and Practitioners (VIP) Best Paper Award recognises papers that are deemed most valuable to industry and practitioners in the field of power electronics. The award is established to encourage the publication of research work that focuses on practical challenges and needs of industry. Candidate papers must have been presented at a recent PELS conference. Papers selected for the award are published in IEEE Open Journal of Power Electronics (OJ-PEL) to make them openly accessible, with the publication fee paid by the award.

2. administration:

IEEE Power Electronics Society

3. eligibility:

Papers presented in the half-year as specified in item 8 at an IEEE conference that was technically sponsored or co-sponsored by PELS are eligible for the award. Eligible conferences include PELS society- and major TC-level conferences. The list of eligible conferences is proposed by the award selection committee (defined below in item 7) and approved by PELS Conference Committee. The list shall be reviewed and updated periodically as the PELS conference portfolio evolves. Candidate papers must not be under consideration for publication in any journal at the time of nomination, cf. item 6.

4. prize items:

Each award consists of::

- one award plaque for each author
- paid publication of the paper in IEEE OJ-PEL for open access

5. funds:

Expenses of the award include payment for open-access publication fees as well as the making and handling of award plaques. Total expenses to PELS incurred for this award shall not exceed 30000 USD per year, supporting about 15 awards. Funds from non-IEEE sources may be developed and used to increase the number of awards per year depending on the pool and quality of nomination.

The award can only be given if the respective budget remains net positive. The maximum number of awards is limited by the funds or to 5% of the number of papers published in OJ-PEL in the previous year, whichever is lower.

6. nominee solicitation:

The award selection committee issues a call for nominations to each eligible conference at the beginning of a year. The solicitation shall specify the number of papers each Eligible Conference may nominate in percentage of the total number of papers presented at the conference. It is expected that 1-2% of the papers presented at the eligible conferences will be nominated each year.

Nomination by each eligible conference shall be conducted by an ad hoc nomination committee consisting of four or more members of the conference's organisation committee. At least half of the nominating members should be from industry.

⁶⁸released by Adcom in spring 2022; submitted to Tabarc for release with minor changes

Nomination shall be based on the criteria defined in item 9, taking into account the paper's review scores as well as the quality of presentation at the conference.

To avoid conflicts of interest, no nominated papers may have a nomination committee member as author or co-author, i. e., committee members must not nominate their papers.⁶⁹

The nomination committee shall communicate with the authors of nominated papers to verify the eligibility and secure authors' agreement to participate in the process described in item 9 before submitting the nominations to the award selection committee.

The following information shall be provided to the award selection committee for each nominated paper:

- the title of the paper, a list of all authors and contact information of the corresponding author
- name, dates, and location of the conference
- a summary of qualifications of the paper against the criteria of the award (limit to $\frac{1}{2}$ page)
- confirmation obtained from the authors that the paper currently is not under consideration for publication in any journal

Together with the aforementioned informations about the particular papers, the following shall in addition be indicated to the award selection committee:

- names of the members of the nomination committee
- the number of votes in favour of the list of nominated papers, which shall be more than half of the number of committee members, votes against and abstentions

Nominations must be submitted to the award selection committee by the specified deadline in order to qualify for the selection process.

7. award committee:

The award selection committee shall consist of a chair and six (6) members. The chair and members of the committee are appointed by the PELS Vice President of Conferences for a two-year term, with a two-term limit in each position.

The chair and at least two-thirds of the members of the committee shall be from industry. One member, hereafter referred to as the Editor Member, shall be an editor of OJ-PEL who has the authority to organize paper review and make final accept/reject decisions in OJ-PEL online review system. Appointment of the Editor Member shall be coordinated with the OJ-PEL editorial board.

The award selection committee reports to the PELS Conference Committee through the VP of Conferences. Responsibilities of the award selection committee include the following:

- identify and recommend an initial list of eligible conferences for approval by the conference committee
- review and propose changes to the list of eligible conferences every two years for approval by the conference committee
- determine the number of awards to be given in the year depending on available funds and the number of papers published in OJ-PEL in the previous year, cf. item 5; those will be shared between the first and the second round according to item 8 proportionally to the number of expected nominations according to item 6.

⁶⁹Nominations should comply with IEEE Policies [1] and restrictions on awards. Incidents of misconduct including, but not limited to, violations of IEEE's publication policies, will be strongly considered by the awards committee and may be grounds for denial of an award or leadership position.

- solicit and receive nominations from eligible conferences according to the schedule defined in item 8
- invite authors of nominated papers to submit their papers to a special track of OJ-PEL set up for this award
- work with OJ-PEL editorial board through the editor member to ensure timely review of nominated submissions
- select award papers by majority agreement based on the criteria established in item 9
- work with OJ-PEL editorial board to publish the award papers and with PELS staff to prepare and distribute other award items

It shall be considered a conflict of interest if a committee member is an author or co-author or is affiliated with any author or co-author of a nominated paper. In such a case, the affected member shall not participate in the voting in the respective round. If more than one member has such conflicts, the VP of Conferences may appoint temporary substitute members to the committee to ensure sufficient review and votes.⁷⁰

8. schedule:

PELS-sponsored conferences span most months of the year. To reduce the time delay from presentation at an eligible conference to nomination and publication, the evaluation and selection of papers for the award will be conducted in two rounds each year.

1 st round targets at papers presented at conferences held in the second half of the previous year

- January 31: deadline for nomination
- March 1: deadline for online submission by authors of nominated papers
- April 15: completion of online review by OJ-PEL editorial board; this and the following steps accordingly may be delayed if the decision by OJPEL would take longer
- May 15: selection and announcement by the award selection committee

2 nd round targets at papers presented at conferences held in the first half of the current year

- July 31: deadline for nomination from eligible conferences
- August 31: deadline for online submission by authors of nominated papers
- October 15: completion of online review by OJ-PEL editorial board as above
- November 15: selection and announcement by the award selection committee

9. selection:

The selection of papers for the award is conducted in two steps:

1 st step: review in OJ-PEL online submission system

- The award selection committee invites submission to OJ-PEL from authors of nominated papers. A special category will be set up in OJ-PEL online submission system to receive these submissions.

⁷⁰Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B, and C [1]. Any real and perceived conflict of interest (COI) shall be avoided. Anyone with a COI shall recuse themselves from nominating, endorsing, discussing, and evaluating. Individuals serving on any board or committee involved at any stage of the recipient selection or approval process for an award shall be ineligible to receive, or act as a nominator or reference for that award.

- Each submitted paper will be reviewed and scored by OJ-PEL editorial board according to OJ-PEL "industry track" publication criteria. The editor member of the award selection committee is responsible for organising this review.
- Papers that do not meet OJ-PEL publication standards will be rejected. The award selection committee will be consulted by the editor member before such a decision is made and communicated to the authors. It is expected that such papers are rare. The affected papers will be removed from the rest of the process.
- Papers that meet OJ-PEL publication standards will be accepted. Authors may be asked to make revisions before final acceptance but such revisions are expected to be minor.
- Accepted papers may be published immediately in OJ-PEL, provided that authors agree to pay the applicable open-access fee. Alternatively, the authors can choose to wait for step 2 outcome before releasing their papers for publication.

2 nd step: evaluation and selection by the award selection committee

- The award selection committee meets twice a year to select papers (among those that have been accepted by OJ-PEL editorial board in step 1) for the award.
- The selected papers will be published in OJ-PEL, with open-access fees paid by the award. Authors of awarded papers who have already paid the open-access fee to publish their papers in step 1 will be reimbursed for the actual amount they have paid.
- All nominated papers that are accepted by OJ-PEL for publication are published with a note "Nominated by (conference name) for PELS VIP Best Paper Award" in the header regardless if the paper is selected for the award or not.

To facilitate the selection, the award selection committee will be provided an electronic copy of each nominated and accepted paper along with its review scores/comments by OJ-PEL editorial board at least two weeks before the committee meets. The award selection committee selects the winning papers according to the following criteria:

- importance of the problem/subject to industry (15 points)
- quality of proposed technology/solutions and level of innovation (20 points)
- expected performance in practical and realistic environments (20 points)
- ease of implementation and adoption by practitioners (15 points)
- scalability and scope of applications (15 points)
- OJ-PEL review scores (15 points)

Each committee member can vote by assigning between zero and the aforementioned number of points to each of the criteria of each paper, where the highest number of points corresponds to the best rating. All points a paper has received will be summed up. The papers with the highest total number of points will receive the award, provided that they have at least received $\frac{2}{3}$ of the achievable number of points. The number of awards has previously been determined as indicated in item 7.

A decision is only made if more than half of the committee members — i. e., four — have voted; otherwise, no award will be given. The committee may ask the VP of Conferences to break the tie if only a part of several papers with the same total number of points can receive an award because of the limited number in the current round.

10. presentation:

The award plaques for each award paper should be presented to the authors or their representatives in the following year at the same conference that nominated the paper for

the award. Alternative arrangements may be made between the nominating conference committee and the authors.

11. publicity:

Award papers will be featured on OJ-PEL webpage and listed in the PELS award brochure distributed at a PELS award event. The award selection committee will work with OJ-PEL to arrange additional publicity to promote the papers to industry and practitioners. Individual conferences are encouraged to further publicise the winning papers they nominated. The award will also be publicised through IEEE PELS website and PELS magazine.

Signees to establish the award

- Liuchen Chang
- Noriko Kawakami
- Yan-Fei Liu
- Maryam Saeedifard
- Navid R. Zargari

Previous holders

2023. . . .

A.4.18 IEEE Transactions on Transportation Electrification Prize Paper Awards

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Specification

1. description:

To annually recognise the best papers published in the IEEE Transactions on Transportation Electrification in the previous year.

2. administration:

The award will be administered by the editorial board of the IEEE Transactions on Transportation Electrification. It consists of the current editor in chief, the deputy editor in chief, the members of the steering committee and the associate editors as specified in the journal. The list in the first issue of the year the award is given is binding.

3. eligibility:

All the papers that were published in the IEEE Transactions on Transportation Electrification in the previous calendar year are eligible. Exception is made for the first award which will include all the papers published in the two previous calendar years.

Previous recipients are not eligible. However authors who won the award for a different paper are eligible.

4. prize items:

To secure equal opportunities when the number of published papers evolves over the years, the number of awarded papers shall represent:

⁷¹released by Adcom in autumn 2020, released by TAB in February 2021 with editorial changes

- 0,5% of them for a first prize
- 1% of them for a second prize

The number of published papers, as determined at the end of a calendar year and appropriately rounded to an integer number, will be the basis for budget planning and selection in the following year.

The award for each selected paper comprises:

- a certificate presented to each author
- a prize of 1000USD for a first prize or 500USD for a second prize, shared equally among the paper's authors

5. funds:

The award is accounted in the publication budget with the societies sharing financial responsibility for the IEEE Transactions on Transportation Electrification as regulated in the respective inter-society agreement.

The actual budget is determined by the number of awards as above multiplied with

- 1100USD for each first prize
- 600USD for each second prize

including printing the certificates.

For a sustainable planning the expected number of first and second prizes to be given in the next year shall be indicated timely prior to budget planning and the respective amount assigned. An award can only be given when the dedicated budget remains net positive — i. e., the number of awards may be limited below the aforementioned number for budgetary reasons.

6. nominee solicitation:

All papers published in the previous year are by default nominated.

Nominations should comply with IEEE Policies and restrictions on awards. Incidents of misconduct including, but not limited to, violations of IEEE's publication policies, will be strongly considered by the awards committee and may be grounds for denial of an award.

7. award committee:

To deal with the considerable amount of papers, selection is a multi-step process as described in detail under item 8. The committees are composed as follows:

- The committee for the preselection consists of the editor in chief of the IEEE Transactions on Transportation Electrification leading the process, the deputy editor in chief and the associate editors as specified in the first issue of the journal in the year the award is given, and additionally the guest editors and guest associate editors of special issues that were published in previous year.
- The committee for the final selection consists of the editor in chief of the IEEE Transactions on Transportation Electrification leading the process and all other members of the editorial board as specified in item 2.

In general, everyone involved in the different phases of the selection, who has a real or perceived conflict of interest shall declare it, and recuse themselves from discussing and evaluating any conflicted paper.

8. schedule:

To deal with the considerable amount of papers, selection is a multi-step process as follows:

- up to February 1st:
The editor in chief will invite the committee according to item 7 for the preselection: Each committee member may name up to two papers, published in the previous year. To avoid a conflict of interest, it is not allowed for them to preselect papers they are author or coauthor of, papers where another conflict of interest occurs, or papers the editor in chief of IEEE Transactions on Transportation Electrification is author or coauthor of.
- up to March 1st:
preselection completed: The members of the selection committee according to item 7 will send the bibliographical data of the papers preselected by them together with a short motivation to justify the preselection to the editor in chief.
- up to March 15th:
slate of candidate papers assembled by the editor in chief and distributed to the committee for final selection according to item 7:
Each committee member may vote as follows:
 - 2 points for a number of papers up to the number of first prizes to be awarded
 - 1 point for a number of papers up to the number of second prizes to be awarded
 Fewer votes with 2 and/or 1 point per voter are permissible. A committee member shall not vote for a paper on which he or she is listed as an author or a coauthor or papers where another conflict of interest occurs, otherwise all of his or her votes won't be counted. All votes of a committee member who has exceeded the aforementioned numbers of votes will also be discarded.
- April 1st: voting ends
The editor in chief will then determine the winners based on the number of obtained points, where the appropriate number of papers having obtained the highest count of points will obtain a first prize and the subsequent appropriate number of papers a second prize. The editor in chief may break a tie if necessary.
- April 15th:
prize papers selected
The information will be sent to PELS Award Committee and PELS staff.
Subsequently the authors of the awarded papers will be notified, the documents prepared etc.

9. selection:

Specific emphasis of the IEEE Transactions on Transportation Electrification Prize Paper Award selection is placed on the following criteria:

- originality
- contribution and impact to the field
- extent to which the paper is supported by analysis and experimental evidence
- quality of presentation, including the effective use of illustrations

The selection process is described in item 8.

An award will be given only if a suitable prize paper is identified, i. e., less awards than allowable according to item 4 may be given.

The selection process shall comply with procedures and regulations established in IEEE and Society/Council governing documents, particularly with IEEE Policy 4.4 on Awards Limitations.

10. presentation:

As a rule, the presentation of the IEEE Transactions on Transportation Electrification Prize Paper Award will be made each year in the IEEE Transportation Electrification Conference (ITEC) North America.

11. publicity:

The recipients and the award ceremony will be reported in the IEEE Power Electronics Society Newsletter and Magazine, as well as promoted on IEEE Transactions on Transportation Electrification, IEEE Transportation Electrification Community (TEC) and PELS websites.

Signees to establish the award

- Liuchen Chang
- Noriko Kawakami
- Pradeep Shenoy
- Jian Sun
- Brian Zahnstecher

A.5 IEEE awards

Unless otherwise specified, details on these awards and lists of previous holders are available on IEEE websites.

A.5.1 William E. Newell Power Electronics Award

— sponsored by PELS —

Previous holders

- 1977. Richard G. Hoft
- 1978. William McMurray
- 1979. Shashi Dewan
- 1980. Alexander Kusko
- 1981. Thomas G. Wilson
- 1982. R. David Middlebrook
- 1983. Francise C. Schwarz
- 1984. Loren F. Stringer
- 1985. Klemens Heumann
- 1986. Philip L. Hower

- 1987. John G. Kassakian
- 1988. Koosuke Harada
- 1989. Fred C. Lee
- 1990. Thomas A. Lipo
- 1991. B. Jayant Baliga
- 1992. Werner Leonhard
- 1993. Robert L. Steigerwald
- 1994. Laszlo Gyugyi
- 1995. J. Daan van Wyk
- 1996. Akira Nabae
- 1997. Pierre Thollot
- 1998. Joachim Holtz
- 1999. Thomas Jahns
- 2000. Luigi F. Malesani
- 2001. Hirofumi Akagi
- 2002. Emanuel E. Landsman
- 2003. Philip T. Krein
- 2004. M. Azizur Rahman
- 2005. Bimal K. Bose
- 2006. Deepakraj M. Divan
- 2007. Dushan Boroyevich
- 2008. Istvan Nagy
- 2009. Tadashi Fukao
- 2010. Akio Nakagawa
- 2011. Praveen Jain
- 2012. Leo Lorenz
- 2013. Rik W. De Doncker
- 2014. Frede Blaabjerg
- 2015. Shu Yuen Ron Hui
- 2016. Johann Kolar
- 2017. Seung-Ki Sul
- 2018. Rainer Marquardt

- 2019. Patrizio Vinciarelli
- 2020. Ivo Barbi
- 2021. Robert W. Erickson
- 2022. Fang Zheng Peng
- 2023. Dragan Maksimovic
- 2024. ...

A.5.2 IEEE Transportation Technologies Award

— cosponsored by PELS —

Previous holders

- 2014. Linos J. Jacovides
- 2015. Robert D. King
- 2016. Petros Ioannou
- 2017. Claire Tomlin
- 2018. James C.C. Chan
- 2019. Hao Huang
- 2020. Markos Papageorgiou
- 2021. Philip T. Krein
- 2022. Minggao Ouyang
- 2023. Holger Meinel
- 2024. ...

A.5.3 IEEE Medal in Power Engineering

— cosponsored by PELS —

Previous holders

- 2010. Prabha S. Kundur
- 2011. William Tinney
- 2012. Edmund O. Schweitzer, III
- 2013. Hermann W. Dommel
- 2014. Thomas A. Lipo
- 2015. Fred C. Lee
- 2016. Arun Phadke
- 2017. Marian P. Kazmierkowski

- 2018. Hirofumi Akagi
- 2019. Lionel Olav Barthold
- 2020. Rik de Doncker
- 2021. Praveen Jain
- 2022. Thomas Jahns
- 2023. Kamal al-Haddad
- 2024. ...

B General processing rules

B.1 Reimbursement of costs for awardees

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If specified in the respective award description in sections A.1, A.2, A.3 or A.4, necessary conference registration, travel and accommodation costs incurred to attend the award ceremony can be reimbursed as follows:

- The Guidelines for Expense Reimbursement for IEEE Volunteers [7] apply.
- The amount is limited to
 - 1000USD or — if a flight with a flying time over six hours is included — 2000USD
 - the award honorariumwhatever is lower.
- The reimbursement will generally be paid out of the same funds as the award honorarium. If this would not be possible — e. g. using funds from the IEEE Foundation excluding this — the regular PELS budget will be used instead.
- Unless otherwise specified, the reimbursement will be paid once for a single award; i. e., when a team of award winners or representatives of an award winning entity would travel, the amount will remain the same for the team as a whole.

References

- [1] IEEE Policies; the Institute of Electrical and Electronics Engineers, Inc., 2019
- [2] Operations Manual; IEEE Technical Activities Board, February 2023
- [3] IEEE Awards Board Operations Manual, June 2022
- [4] Awards and Recognition Manual; IEEE Technical Activities Board, February 2023
- [5] Bylaws; IEEE Power Electronics Society, 2020
- [6] <http://www.treasury.gov/resource-center/sanctions/Programs/Pages/Programs.aspx>
- [7] Expense Reimbursement — Guidelines for IEEE Volunteers; August 26, 2022

Newer versions of the referenced documents may apply. The documents can easily be found in the web.

⁷²released by PELS Adcom in March 2023