

IEEE FELLOW COMMITTEE

The Fellow Committee Handbook (June 2021)

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IEEE FELLOW COMMITTEE HANDBOOK

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1. Introduction

The IEEE Fellow Committee (IEEE FC) Operations Manual (hereafter referred to as “Manual”) contains the main policies for the Fellow Nomination and Evaluation process.

This normative Handbook complements the Manual and provides additional policies and operational details on the Fellow Nomination and Evaluation process. This Handbook shall be reviewed at least annually to ensure that the procedures and information are up to date and shall be posted on the IEEE Fellow webpage. In case of any discrepancy, the Manual takes precedence over this Handbook.

Amendments to this Handbook shall require approval of the IEEE Fellow Strategic Planning Subcommittee (FSPS) and the IEEE FC Chair. The IEEE FC and the IEEE Board of Directors shall be notified in a timely fashion of any revision of this Handbook.

Hereafter, IEEE FC Members (except the Chair and Vice-Chair) shall be referred to as “IEEE Judges.”

1.1 Section Labeling

With the goal of maintaining some history on who and when policies were approved, labels have been added to the end of a Section title followed by the year the decision was made.

The labels are:

1. “**BoD**”: consequence of a resolution of the IEEE BoD or change in higher precedence documents (IEEE Constitution, Bylaws, and Policies)
2. “**FC**”: resolution of the IEEE Fellow Committee
3. “**FSPS**”: resolution of the IEEE Fellow Strategic Planning Subcommittee

If a Section title has no label, then it means that what is specified is a legacy policy inherited from the 2015 Manual or a policy added to align with practices in use up to June 2016.

1.2 Diversity Statement

The IEEE Fellow Program recognizes exceptional contributions to all IEEE fields of interest made by individuals regardless of race, gender, age, religion, national origin, or other personal characteristics not related to ability, performance, or qualifications. The IEEE Fellow Program is committed to pursuing diversity in all its operations to help realize and maintain fair nomination and selection processes without bias or discrimination.

2. The Fellow Evaluation Process

The Fellow evaluation process shall involve the following sequence of steps:

1. Eligible Nomination and Endorsement Forms shall be submitted to the IEEE Society/Technical Council Evaluating Committees (S/TC-FECs) by a deadline set by the IEEE FC Chair (typically, in April);
2. The S/TC-FECs shall submit their evaluations by the deadline set by the IEEE FC Chair (typically, in June);
3. The entire nomination package (Nomination, Endorsements, References, and S/TC-FEC Evaluation Forms) shall be submitted to the IEEE Judges by a deadline set by the IEEE FC Chair (typically, in July).

4. IEEE Judges shall complete their assessments of the Nomination packages by a deadline set by the IEEE FC Chair (typically in September).
5. At the in-person meeting of the IEEE FC (typically, in October), the IEEE Judges shall finalize the list of Nominees recommended for elevation to the IEEE Fellow grade.
6. The IEEE FC shall also provide an appropriate citation for each Nominee recommended for elevation.

The IEEE FC and the IEEE S/TC-FECs shall adhere strictly to deadlines and no extensions shall normally be authorized. However, the IEEE FC chair may approve exceptions if it is deemed to be in the best interest of the IEEE FC.

3. Nominee data distribution/assignment of Judging Groups

IEEE Judges shall be divided into Judging Groups. Attention shall be given to ensuring a balance of expertise and experience within each Judging Group. The current practice utilizes ten Judging Groups composed of four Judges each..

Assignment of Nominees to Judging Groups shall be done in the following way:

- Nominees are sorted alphabetically by last name, from A to Z.
- Nominees are assigned a progressive Nominee ID, starting with Nominee ID =1
- Nominees shall be assigned to the Judging Group number $G = \text{mod}\{(\text{Nominee ID}), 10\}$, where $G=0$ means Judging Group 10.

3.1 Visibility of Fellow Nomination packages (FSPS 2019)

All IEEE Judges shall be allowed to see all Fellow Nominations packages (Nomination, References, Endorsements, and S/TC-FEC Forms), but will evaluate only the nominees assigned to their Judging Group.

4. Conflicts of Interest

As stated in the Fellow Manual, it is the responsibility of all Fellow Committee members to consider each item of business where they have a vote or decision-making authority to determine if a real or perceived Conflict of Interest (CoI) may exist.

Should any real or perceived CoI between an Fellow Committee member and a Nominee be identified, the conflicted member shall recuse him/her-self from any and all evaluations or evaluation-related discussions of such nominee and bring the matter to the attention of the Fellow Committee Chair or Vice-Chair. For other activities, such as flagging and flagging-related discussions, the conflicted XP/Judge shall disclose the CoI to the Chair/Vice-Chair, who will decide on the follow-up action based on the type of CoI and the relevance of the information.

Some examples of potentially biasing affiliations or relationships are listed below.

1. Your affiliation with the nominee's organization. You may have a conflict if you have/hold/are:
 - a. Current employment at same company, industry, university, institution, organization, etc.
 - b. Other current employment with the same company, university, institution, organization, etc., such as consulting or an advisory arrangement.

- c. Previous employment with the same company, university, institution, organization, etc., within the last 24 months.
 - d. Being considered for employment at the same company, university, institution, organization, etc.
 - e. Formal or informal reemployment arrangement with the same company, university, institution, organization, etc.
 - f. Any office, governing board membership, or relevant committee chairpersonship in the same company, university, institution, etc.
 - g. Received and retained an honorarium or award from the same company, university, institution, etc. within the last 24 months.
2. Your relationship with a nominee. You may have a conflict if you have/hold/are:
- a. Known family relationship such as spouse, child, sibling, or parent.
 - b. A romantic relationship with the nominee.
 - c. Business or professional partnership.
 - d. Present or past (within the last 10 years) association as thesis advisor or thesis student.
 - e. Collaboration on a project or on a book, article, report, or paper within the last 24 months.
 - f. Co-editing of a journal, compendium, conference proceedings, or conference organization within the last 24 months.
 - g. Nominator, Reference, or Endorser of the nominee within the last 24 months.
 - h. Any other potential situation where you or a family member may have a connection to the Nominee that might influence your decision.

5. Scoring Procedure

5.1 The scoring procedure

IEEE Judges shall use the IEEE web-based scoring application to score Nominees and submit their scores. A tutorial regarding the Fellow Scoring Program shall be given during the first IEEE FC orientation teleconference, while additional details are given in the “*IEEE Help Guide for using the IEEE web-based Fellow application*” posted on the Fellow website.

5.2 Calculation of the Average Total Score

IEEE Judges shall assign a numerical score (called “raw” score) between 0 and 100 (with 100 the strongest and 0 the weakest) to each of the four rating categories specified in the Manual. Judges shall submit their scores via the dedicated IEEE Web-Application by the deadline (see §2). Within a rating category, no two Nominees can be given the same raw score (see §5.2.1).

The “raw” scores of individual IEEE Judges are first normalized and then combined with the weights assigned to the rating categories yielding a Normalized Weighted Score per Nominee.

The Normalized Weighted Scores of all Judges in a Judging Group are then averaged, yielding an Average Weighted Score per Nominee.

An “experience recognition” (0.1 points for each year since the Nominee’s first degree) is then added to the Average Weighted Score creating an Average Total Score for each Nominee.

Nominees in all Judging Groups shall then be ranked based on their Average Total Score.

5.2.1 The Role of Normalization

IEEE Judges score Nominees differently from each other. This is a problem since IEEE Judges' scores must be averaged within a Judging Group and then used to create the ranking of all the Nominees across all judging groups.

“Normalization” is a rank-preserving transformation of the set of IEEE Judges' raw scores into a set of homogeneous scores and serves the function of removing scoring disparities among IEEE Judges. The goal of normalization is to “enforce” a uniform way of scoring across IEEE Judges so that the independent scores of all IEEE Judges across Judging groups can be merged to yield a single ranking for all Nominees. In the case of the EEP specified in §10, then normalization is applied only to the scores assigned to Nominees undergoing a full evaluation and thus not on the top/bottom nominees undergoing EEP.

For every IEEE Judge and for every rating category:

- Nominees are first ranked in ascending order of raw scores;
- The raw score of a Nominee ranked in the k -th position is replaced by the following normalized score:
- $y(k) = (100/N) \cdot k - 50/N$ ($k=1, \dots, N$), (1)
where N is the number of the Nominees evaluated in the Judging Group the IEEE Judge belongs to. Note that the normalized score is *independent* of the original raw score provided by the Judge.
- $y(1)$ and $y(N)$ are the normalized scores of the lowest and highest ranking Nominees, respectively.

The normalized scores, $y(k)$, $k=1, \dots, N$, form a monotonically increasing sequence of numbers equally spaced on the straight line and independent of the original raw scores. Since there must be a one-to-one mapping between a Nominee and his/her normalized score, no two Nominees can be given the same raw score by an IEEE Judge – the web scoring program enforces this to avoid ties.

The normalization operation preserves the original ranking provided by Judges. Furthermore, it assigns a normalized score to Nominees ensuring that every Nominee that occupies the same rank k in a Judge's ranking has the same normalized score $y(k)$ regardless of the raw score assigned by the Judge. Note that this will happen if and only if the two sets of scores are normalized using the same value N in eq. (1), i.e., the sets of scores being normalized must all contain the same number of scores/Nominees (very small differences like plus/minus one can be tolerated). For this reason, the scores on the S/TC-FEC Evaluation Forms are not normalized as there is no common and unique N across all S/TCs (the number of Nominees evaluated by S/TCs can vary from one to over one hundred). Therefore, IEEE Judges are asked to assign their own assessment of the “strength of support” of a S/TC to a Nomination (this is one of the four rating categories specified in the Manual) and not to use the S/TC score itself.

Examples of scores on N -normalized grids and their associated ranking:

	$N=10$	$N=49$	$N=50$	$N=99$	$N=100$
Rank #1 (lowest)	5	1.020	1	0.505	0.5
Rank #2	15	3.061	3	1.515	1.5
.....

.....
Rank #(N-1)	85	96.939	97	98.485	98.5
Rank #N (highest)	95	98.980	99	99.495	99.5

An example of score normalization is shown in Figure 1.

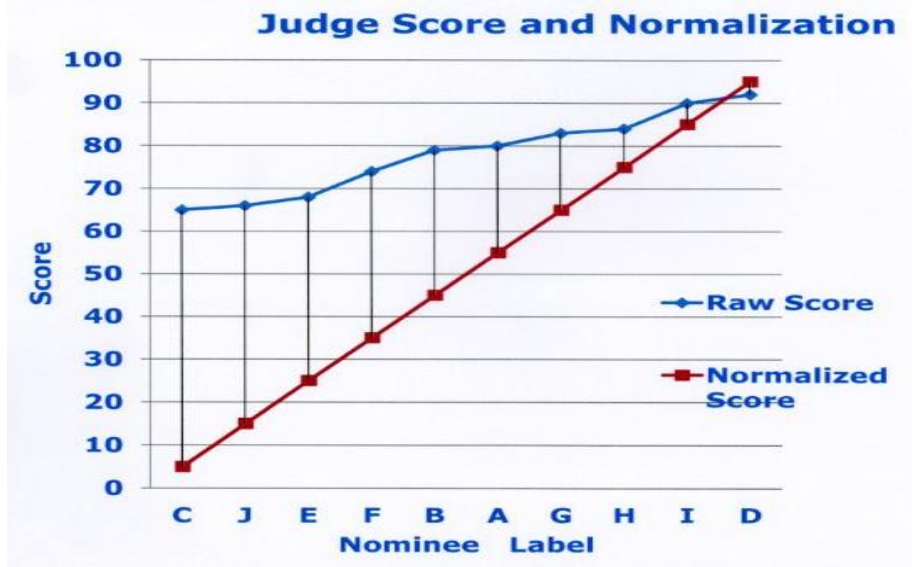


Figure 1 – Example on how score normalization works for N=10.

6. Process for Nominee discussion (FSPS 2019)

The goal of the process is to discuss as many Nominees as possible, especially those that are ranked in the elevation range. The process shall have the following phases:

1. Distribution of all Nomination packages to all Judges (typically, mid-June)
2. Flagging of Nominees (typically, mid-September)
3. Flag Panel down-selection of flagged Nominees (typically, mid/end-September)
4. At the face-to-face meeting, 1st day (Friday):
 - a. Group discussion of borderline and flagged Nominees (early morning, Executive Session);
 - b. Fellow Committee meeting to review Group decisions (late morning through afternoon, Deep Executive Session).
5. At the face-to-face meeting, 2nd day (Saturday):
 - a. Fellow Committee meeting, part in Executive Session and part in Open Session.

The priority for discussion of Nominees at the face-to-face meeting shall be given to Pass-to-Fail changes. Furthermore, a higher voting threshold (2/3 majority) shall be required for approving Fail-to-Pass recommendation changes whereas a simple majority shall be required for approving Pass-to-Fail recommendation changes at the face-to-face meeting. The rationale for this is that the

cost of elevating an undeserving nominee is much higher than that of not elevating a deserving one.

As all Nomination packages shall be made available to all IEEE Judges at the beginning of the judging phase (typically June/July), IEEE Judges can start looking at the Nominations well in advance of the face-to-face meeting. After submitting their scores in early September, IEEE Judges can also discuss with each other about Nominees regardless of whether they are in the same Group or not.

A preliminary ranking of Nominees shall be provided in early September, and the ranking shall also contain a preliminary Pass/Fail recommendation for each Nominee. Additional documentation shall also be made available:

1. To all IEEE Judges regardless of their Judging Groups:
 - a. Score and rank of all Nominees.
2. To all IEEE Judges, but on a per Judging Group basis:
 - a. Individual IEEE Judges' raw and normalized scores
 - b. Citation report.

6.1 Flagging of Nominees (FSPS 2019, FSPS 2021)

If IEEE Judges feel that the preliminary Pass/Fail recommendation is not appropriate, they can “flag” nominees and for additional discussion at the face-to-face meeting. Any case can be flagged, regardless of its preliminary ranking and Pass/Fail status.

Some examples for cases deserving to be flagged are:

- Nominees with no technical or educational contributions;
- Nominees with little or no verifiable evidence of impact;
- Nominees with S/TC evaluation's narrative inconsistent with rank and score;
- Nominees not referred to the appropriate S/TC;
- Nominees who were ranked very high (low) by the S/TC-FEC and very low (high) by IEEE Judges;
- Nominees with low citation count, especially if in the RE/S category.

These examples may not necessarily indicate that a Pass/Fail status change is indeed required, but just that it may be worth looking again at the case and discuss it.

Note that the flagging addressed here is limited to the discussion about technical qualification of Nominees and not about possible ethical misconduct cases. Those are handled in a different way, see §8.

Similarly, if IEEE Judges feel that the preliminary Fail/Pass recommendation is not appropriate, they can “flag” nominees and for additional discussion at the face-to-face meeting. Any case can be flagged, regardless of its preliminary ranking and Pass/Fail status.

6.1.1 Confidentiality of Flagger's identity

The identity of the Flagger shall remain confidential and be known to the Fellow Committee Chair and Vice-Chair only, unless voluntarily disclosed by the Flagger. An exception to the

confidentiality of the Flagger is made if the Flagger is also a member of the Flag Panel. In such a case, the Flagger identity shall be disclosed to the members of the Flag Panel while remaining confidential for the rest of the Fellow Committee.

The Fellow Committee Chair and Vice-Chair may submit flags, but they shall:

- Disclose their identity to the full Fellow Committee;
- Recuse themselves from chairing during the discussion of Nominees they have flagged.

6.1.2 Conflicts of Interest

Judges/XP Reviewers may still flag nominees with whom they have a Conflict of Interest, but they shall first report such CoI to the Fellow Committee Chair/Vice Chair who will decide on the follow-up action based on the type of CoI and the relevance of the information – see also Sect. 4. With the approval of the Chair/Vice Chair, the conflicted Judge/XP reviewer may flag the nominee and, in such case, shall also report the CoI on the flagging form.

6.1.3 Submission of Flagged Nominees

Judges (including XP Reviewers) submit their list of flagged nominees by the deadline set by the Fellow Committee Chair (typically, mid-September) using the spreadsheet/form provided by the Fellow Committee Chair. The flagging shall include a rationale, which must make a very clear and compelling case for seeking a reversal of the preliminary Pass/Fail or Fail/Pass assessment.

Judges shall submit their list of flagged nominees to the Fellow Committee Chair and Vice-Chair only, so that their confidentiality is preserved – with the exceptions noted in §6.1.1.

6.1.4 Nominees Flagged by a dedicated subcommittee

In addition to individual Judges flagging nominees, some sets of Nominees may also be flagged by action of a dedicated subcommittee of Judges appointed by the FC Chair. For example, such a subcommittee could look at the Nominees in the “Pass” zone that ranked high (e.g., in the top 20%-30%) of all Councils and Societies and flag for further discussion those cases that are not convincing. In another example, a second subcommittee could look at all the EDU and AE/P nominations and flag those cases that need further discussion.

6.2 The Flag Panel

A “Flag Panel” composed of at least five and no more than ten experienced Judges shall be appointed by the Fellow Committee Chair. The Fellow Committee Chair shall chair the Panel ex-officio and the Fellow Committee Vice-Chair shall also be a member of the Flag Panel.

The Flag Panel shall determine which of the flagged nominees can be brought to the attention of the whole Fellow Committee and which should be dismissed for example because of a weak rationale. The Flag Panel should also take into consideration realistic time constraints at the meeting and send forward for discussion a reasonable number of flagged cases. The Flag Panel may also set an order of priority for discussion.

6.3 The Discussion List

The Discussion List of a Group will contain the Nominees scheduled for discussion within that group. The Discussion List for each Group shall be distributed after the Flag Panel finalized the list of Flagged nominees up for discussion.

The Discussion List will contain two types of nominees:

1. *Borderline Nominees*, i.e. Nominees ranked within $\pm 10\%$ of the elevation cutoff (the cutoff rank is set by the IEEE Fellow Committee in the previous calendar year, as specified in the Fellow Manual).
2. *Flagged Nominees*, either flagged by Judges or by default. Flagged Nominees can be either Borderline or not.

An example of a Group’s Discussion List is shown in Figure 2, for a cutoff equal to 300.

Group Discussion List												
October DD, YYYY												
Group X - Judges yy - zz												
Nominee Number	Nominee Last Name	Affiliation Type	Category	Evaluating Society	Society Score	Society Rank	Group STD	Preliminary Rank	Flag Type	Flagged	Group Recommendation	Group Flag
101	Smith	Industry	EDU	SIT	95.0	1 of 2	18.16	22	P2F	Judge	F	
102								2	P2F	Default	F	
103								180	P2F	Judge		
104								271		N	F	
105								286	P2F	Default		
106								310		N	P	
107								322		N	P	Y
108								351	F2P	Judge		

Figure 2 – Discussion List table showing Borderline and Flagged Nominees in Yellow and Green highlight, respectively.

IEEE Judges in a Judging Group shall make a recommendation to the Fellow Committee to whether confirm or change the preliminary Pass/Fail recommendation of all the Nominees on the Group’s Discussion List. Any recommendation change shall be noted in the “Group Recommendation” column of the Discussion List.

The following rules shall hold:

1. Recommendation changes for Flagged Nominees
 - a. The Group shall justify the proposed recommendation changes by preparing a clear and compelling rationale in response to the Flagger’s rationale. If the Group agrees with the rationale of the Flagger, no need to prepare the rationale.
2. Recommendation changes for unflagged *Borderline* Nominees
 - a. The Group shall justify the proposed recommendation changes by preparing a brief explanation.
 - b. The number of Fail-to-Pass changes is limited: the number of Nominees moved above the elevation cutoff for elevation (Fail-to-Pass changes) shall always be less than or equal to the number of Nominees moved below the elevation cutoff (Pass-to-Fail changes).
 - If the Group wants to make additional Fail-to-Pass changes, the additional Fail-to-Pass changes can be brought by the Group for discussion in the entire Fellow Committee (on-site Group flagging of the Nominee). In this case, the Group will mark with a “Yes” the “Group Flag” column and shall provide a clear and compelling rationale to justify the recommendation change.

- c. If a Judging Group moves below the elevation cutoff more Nominees than those that were moved above it, no other Group shall be allowed to fill the leftover slots for elevation.
3. All Group recommendations are tentative and shall be reconfirmed by the Fellow Committee.

For example, based on the Discussion List in Figure 2, the Group shall:

- Prepare a rationale in response to the Flagger of Nominees 103, 105, and 108 as the Group disagreed with the Flagger's recommendation (no need to do so for 101 and 102);
- Justify the recommendation change for 104 and 106 by providing a brief explanation;
- Prepare a rationale in support of the Group on-site flagging of 107, as this is an extra F2P change for which there was no corresponding P2F change;

6.4 Group Discussions

All Group discussions will be scheduled in the early morning of Day 1 (Friday). If logistically possible, all 10 Groups should meet in parallel so that the Fellow Committee meeting can start earlier. If not, 5 Groups can meet simultaneously followed by the remaining 5. The Fellow Committee meeting should not start later than 10:30am.

A Group shall discuss all Nominees on its Discussions List and make recommendations. Each Group shall have a Group Chair appointed by the Fellow Committee Chair to guide Group discussions and make sure that all recommendations are finalized and recorded by the allotted time. The Group Chair shall have the support of a Fellow Staff person.

Given the small size of a Judge Group, the Group Chair can participate to debate, express opinions, make motions, and vote as any other member in the Group. Any recommendation change requires a simple majority to pass.

6.5 Face-to-Face meeting – Day 1 (Friday)

After all Group discussions are finished, the whole Fellow Committee meeting convenes to discuss borderline and flagged Nominees.

The Fellow Committee Chair and/or Vice-Chair shall present the cases and open the floor for discussion. If the Flagger of the Nominee under discussion is the Fellow Committee Chair, then the Vice-Chair shall preside the meeting during that discussion, and vice versa.

For each Group, the Group Chair shall review the Group's recommendations and respond to any questions. If any Fellow Committee member objects to the Group's recommendation, the case shall be discussed and, for each case, a vote shall be taken to determine whether to change the Pass/Fail status of a Nominee or not.

The following voting rules shall apply:

1. A simple majority of the voting members present at the time of the vote shall be necessary for passing a Pass-to-Fail recommendation change.
2. A 2/3 majority of the voting members present at the time of the vote shall be necessary for passing a Fail-to-Pass recommendation change.

Since decisions were made when the whole Fellow Committee was in session, there is no need to reconfirm the decisions on Day 2 (Saturday).

6.5.1 Splitting of the Fellow Committee

If the number of Flagged Nominees is high, the Fellow Committee could decide to split its meeting into two parallel meetings so that more cases can be discussed. In this case, the Fellow Committee Chair shall chair the meeting with half of the Groups and the Vice-Chair shall Chair the meeting with the other half.

Voting rules specified in the previous Section still hold for each of the two meetings, but all decisions will have to be re-confirmed in a meeting of the whole Fellow Committee – either at the end of Day 1 (Friday) or at the beginning of Day 2 (Saturday).

6.6 Face-to-Face meeting – Day 2 (Saturday)

During the first part of day two, IEEE Judges shall discuss cases of nominee misconduct and finalize the slate of Nominees to be recommended to the IEEE Board of Directors – if needed. This part shall be held in Executive Session – see the [IEEE Executive Session Documentation and Guidelines](#).

Part two of day two consists of a general business meeting, where IEEE FC members will hear reports from officers and staff, discuss/propose new policies, make motions, etc.

6.7 Process changes if virtual meetings are used

The process described in the previous Sections assumes the Fellow Committee is holding an in-person meeting. If extraordinary circumstances arise and virtual meetings are used, then the Chair may make some changes to the process outlined in the previous Sections. When appropriate, changes may also be proposed as Standing Orders to be approved on the first day of the virtual meeting.

Some examples of possible changes to adopt at virtual meetings are listed below:

- *Flagging* – Rather than flagging at the individual Judge/XP Reviewer level, flagging may be done on a per-Group basis and categorized in three sets based on the priority with which they should be addressed by the Fellow Committee (High Priority, Medium Priority, and Low Priority). In addition to the ten Groups, there is also the virtual group composed of the XP reviewers.
- *Confidentiality of flagger* – The Chair of each of the Judge/XP groups knows the identity of the flagger, as s/he will compile the summary of all cases flagged within her/his group.
- *Group Discussions* – These discussions may take place before the Flag Panel meeting as flagged cases will be discussed first in Groups and then sent to the Flag Panel.

7. Post meeting Activities

7.1 Citation and category review

After the face-to-face meeting, Group Chairs shall work with the judges in their Group to finalize the final Fellow citation and nomination category for each Nominee in their Group that is being recommended for elevation. A publicity list based on the specification given in the Manual shall also be created.

8. Discussion of misconduct cases

If a Judge has information on possible misconducts of a nominee, he or she shall reach out to the Fellow Committee Chair and Vice-Chair before informing other Judges. The Chair, upon consultation with the Vice-Chair, shall decide on the course of action which may include informing other Judges, creating an Ad Hoc Committee tasked with making a recommendation to the Fellow Committee, informing IEEE leadership, consulting with the Legal & Compliance office, etc.

9. Announcements of the Outcome of Fellow Nominations

The names of Nominees recommended for elevation shall not be disclosed by anybody prior to the date when the IEEE BoD has taken formal action of approving such recommendation. Upon BoD approval of the list of Nominees recommended for elevation, Fellow Activities Staff shall prepare a series of actions to inform Nominees and publicize elevations, as specified in the Manual. Among those actions, some details related to informing Nominators/Nominees of the outcome of their Nomination fall under the control of the FSPS and are addressed in the next Subsections.

9.1 E-mail to Successful Nominees

As specified in §19 of the Manual, an e-mail shall be sent to successful Nominees and their Nominators advising them of their elevation to Fellow grade.

The text of the e-mail currently used is reported below:

Dear <Nominee Name>:

Recognizing the achievements of its members is an important part of the mission of the IEEE. Each year, following a rigorous evaluation procedure, the IEEE Fellow Committee recommends a select group of recipients for elevation to IEEE Fellow. Less than 0.1% of voting members are selected annually for this member grade elevation.

It is my great pleasure to inform you that the IEEE Board of Directors, at its November <year> meeting, elevated you to IEEE Fellow, effective 1 January <year>, with the following citation:

<insert citation>

Within the next two months, you will receive your IEEE Fellow pin and certificate. Both serve as visible recognition of your elevation to the highest grade of membership in the IEEE.

Profile Verification - *Please verify the spelling of your name as you want it to appear on your Fellow certificate plus the address to mail your Fellow pin and certificate.*

Employer Notification - *Please advise us if you would like an electronic letter sent to your employer advising them that you have been elevated to IEEE's highest honor.*

Alumni Notification - *Please advise us if you would like an electronic letter sent to the University/College that you graduated from advising them that you have been elevated to IEEE's highest honor.*

*Please click [here](#) to respond to the above requests. The requested information must be received no later than **December <day>, <year>**.*

IEEE Recognition - If you would like your elevation to Fellow recognized at an IEEE Conference, Society, Region or Section event, please contact the appropriate IEEE Society President, Region Director, or Section Chair directly. You may also visit the following URL to obtain conference contact information:

https://www.ieee.org/conferences_events/index.html?WT.mc_id=uem_conf_srch

News Release Template – Attached to this correspondence is a news release template. You can use this outline to notify newspapers, publications, associations, of your choice. Insert your essential information in the yellow highlighted area and then you submit to the appropriate Editor/s.

You bring honor to yourself and to IEEE by your achievements. Congratulations!

Sincerely,

<Name of current IEEE President>

<Year and title>

9.2 Letter to Unsuccessful Nominees (FC 2016)

As specified in §19 of the Manual, an e-mail shall be sent only to Nominators regarding the unsuccessful outcome of their Nomination and expressing appreciation for their participation in the Fellow Nomination process. In §19 of the Manual, it is specified that the IEEE FC may make additional announcements as specified in this Handbook.

With the goal of encouraging “self-restraint” in the resubmission of Nominations of low-ranked Nominees, the IEEE Fellow Committee passed a motion at its 2016 in-person meeting that provides for two different letters to be sent to the Nominators of unsuccessful Nominees, depending on the final IEEE ranking of the Nominee:

1. Simple regret letter – to be used for Nominees that ranked above position #F.
2. Regret letter with feedback – to be used for low-ranked Nominees.

9.2.1 Simple regret letter

The text of the e-mail currently sent to the Nominators of unsuccessful Nominees ranked above position #F is reported here below:

Dear <Nominator Name>:

The IEEE Fellow Committee is most appreciative of your efforts in submitting a Fellow nomination for <Nominee Name>. Unfortunately, the nomination was not successful this year. Due to the confidentiality of the process, no additional feedback will be specified at this time.

The Committee looks forward to your continued interest and participation in the IEEE Fellow nomination process in the coming year.

<Name of current Fellow Chair>

<Year and Title>”

9.2.2 Regret letter with feedback (FC 2016)

Specifically, the motion states that the Nominators of Nominees ranked in position #F or below in the final IEEE ranking shall receive the following information via e-mail:

- The Nominee was ranked in position #F or below out of #N total Nominees.
- There were #E Nominees recommended for elevation.
- It is further suggested to wait additional years before submitting a re-nomination, allowing more time for the Nominee’s contributions and impact to become more evident.
- The Nominator is encouraged to share the feedback with the Nominee.

The number “F” shall be decided by the Fellow Committee at its fall face-to-face meeting for the current [same] year. “N” is the number of nominations received that year.

The text of the e-mail sent to the Nominators of unsuccessful Nominees ranked at or below position #F is reported here below:

Dear <Title> <Nominator Name>,

The IEEE Fellow Committee is most appreciative of your efforts in preparing and submitting a Fellow nomination for <Nominee>.

Unfortunately, the nomination was not successful this year. The Fellow Committee recognizes the time and commitment that preparing an effective nomination package entails, not only for you but also for the references and endorsers. In light of this, the Fellow Committee is providing you additional feedback.

As a result of the evaluation process, this nomination was ranked at or below <min number> out of the <max number> nominations received this year, while a total of <num_elevations> Nominees were elevated this year. To create a more competitive nomination package for a potential resubmission, you may consider waiting additional time for the Nominee’s contributions to become more evident or devoting additional time to clarify the importance and impact of those contributions. You are encouraged to share this feedback with the Nominee, if and where appropriate.

The Committee looks forward to your continued interest and participation in the IEEE Fellow nomination process.

<Chair Name>

<Year IEEE Fellow Chair>

10. Expedited Evaluation Procedure (FSPS 2019)

This procedure is scheduled to be used for the evaluations done in 2018 (Fellow Class 2019), when the scoring web application will likely be updated.

In the 2016 FSPS report it was shown that the S/TC Evaluators and the IEEE Judges had very high levels of agreement for the Nominees ranking in the top T% and bottom B% of the S/TC rankings of S/TCs that evaluated at least 10 Nominees (with T,B≤25%). The recommendation made in §7.3 of the 2016 FSPS report was to introduce a practice that took advantage of the very high elevation probability of Nominees ranked in the top of the S/TC rankings and the very low elevation probability of Nominees ranked in S/TC bottom quartile.

This Section specifies such practice which is called the “*Expedited Evaluation Procedure*” (EEP). The EEP shall be used to evaluate the top/bottom ranked Nominees in the S/TC rankings and the

usual full evaluation shall be used for the middle-ranked Nominees (see §5). Ten experienced Judges shall be appointed as “XP Reviewers” to perform the Expedited Evaluation (EE) of top/bottom Nominees, while regular IEEE Judges in groups shall evaluate middle-ranked nominees as in the past. XP Reviewers shall assess whether:

- The degree of qualification of a top Nominee is high enough to place immediately the Nominee on the list of Nominees *recommended* for elevation without undergoing a full evaluation; and
- The degree of qualification of a bottom Nominee is low enough that it can be immediately decided that the Nominee be *not recommended* for elevation without undergoing a full evaluation.

Each top/bottom Nominee shall be evaluated by two XP Reviewers. If the two XP Reviewers agree, then the Nominee shall be placed immediately in the pass/fail lists. If they disagree, then the Nominee shall be added to the set of Nominees undergoing the usual full evaluation and shall then be evaluated together with the middle-ranked Nominees by the Judges in a Judging Group (see §5). XP Reviewers shall evaluate Top/Bottom Nominees in parallel to all other Judges performing the usual full evaluation on the middle-ranked Nominees (parallel evaluation of Nominees by XP Reviewers and regular Judges is a 2017 FC resolution).

An overview of the EEP is shown in Figure 3 while the details of the EEP are specified in the next Subsections.

10.1 EEP for Top/Bottom Nominees (FSPS 2019)

1. The EEP shall be limited to S/TCs that have evaluated at least N Nominees, where N is a threshold set each year by the IEEE FC Chair with the concurrence of the Vice-Chair.
2. Nominees in the Top T percent and Bottom B percent shall be placed on the EE List.
3. Values for T and B shall be set each year by the IEEE FC Chair, with the concurrence of the Vice-Chair. The goal is to ensure a target workload of around 600 full evaluations. If less than around 600 Nominations are received, then T and B may be set to zero.

10.1.1 Recommended initial set of T and B values (FC 2017, FSPS 2021)

When the Expedited Evaluation Procedure has been implemented, it was recommended to set the values of $T=10\%$ and $B=25\%$. After collecting feedback from the XP reviewers, we recommend to set the values of $T=5\%$ and $B=30\%$.

10.2 Number XP Reviewers (FSPS 2019)

1. Ten experienced Judges shall serve as XP Reviewers. The remaining forty Judges shall be divided into ten Judging Groups, with four Judges per Judging Group.
2. The IEEE FC Chair shall appoint the ten XP Reviewers with the concurrence of the Vice-Chair. Preference should be given to Judges with substantial experience on the IEEE FC and attention should be given to ensuring diversity of S/TCs among the XP Reviewers.

10.3 Duties of XP Reviewers (FSPS 2019)

1. XP Reviewers shall perform all assigned EEs of the top/bottom ranked Nominees in the S/TC rankings by the deadline set by the IEEE FC Chair with the concurrence of the Vice-Chair.

2. XP Reviewers shall normally perform only EEs. However, they may also perform full evaluations in the following cases:
 - a. In case any Judge has declared a Conflict-of-Interest.
 - b. In case Judges withdraw from the IEEE FC and not enough alternates are available.

10.4 Assignment to Judging Groups (FSPS 2017)

1. Since the operation of score normalization requires assigning Nominees to Judging Groups as uniformly as possible, the following procedure ensuring the same number ± 1 of Nominees shall be adopted for assigning Nominees to Judging Groups:
 - a. Assignment to Judging Groups of Nominees outside the EE List shall be done in the usual fashion (see §3).
 - b. A Nominee on the EE List referred to full evaluation shall be assigned to any of the Judging Groups with fewer Nominees.

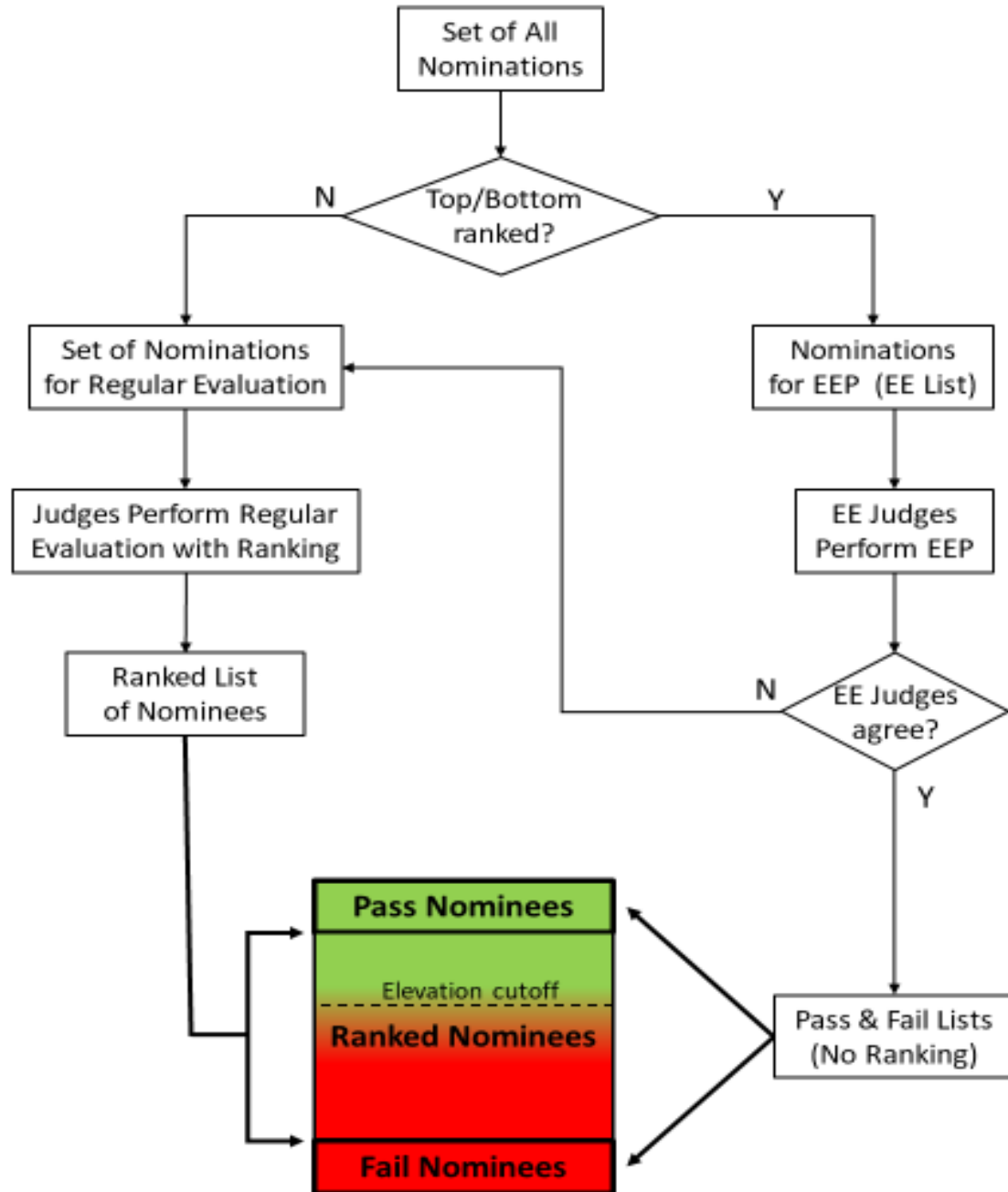


Figure 3 – An illustrative Flow-Chart of the EEP.

10.5 EEP requirements (FSPS 2019)

1. There shall be at least 2 XP Reviewers evaluating a Nominee, and they shall not be members of the same S/TC that evaluated the Nominee under consideration.
2. XP Reviewers shall indicate their agreement or disagreement for the elevation (top Nominees) or rejection (bottom Nominees) of a Nominee on the EE List:

- a. If the two XP Reviewers agree on elevating/rejecting a Nominee, then that Nominee shall be added to the set of pass/fail Nominees and shall not undergo a full evaluation.
 - b. If the two XP Reviewers disagree on a Nominee or agree on the necessity of a full review, then that Nominee shall be placed in the pool of Nominees undergoing a full evaluation. The Nominee shall undergo the usual full evaluation in a Judging Group and shall be evaluated as any other Nominee that was not on the EE list.
3. Working in parallel with XP Reviewers, IEEE Judges shall perform the usual full evaluation of Nominees not on the EE List and of those Nominees referred by the XP Reviewers to full evaluation.
 4. The two XP Reviewers evaluating a Nominee shall evaluate the Nominee independently and without communicating with each other.
 5. If an XP Reviewer has a Conflict-of-Interest in evaluating a Nominee, then the Chair or Vice Chair or another XP Reviewer (appointed by the Chair with the concurrence of the Vice-Chair) can replace the conflicted Judge in the evaluation of that Nominee.

10.6 Other Tasks by Chair/Vice Chair or Staff or the scoring Web application (FSPS 2019)

1. Create the EE List;
2. Identify experienced Fellow Committee members for serving as XP Reviewers;
3. IEEE FC Chair sets the values of T, B, and N with the concurrence of the FC Vice-Chair.
4. Handle Conflicts of Interest cases among XP Reviewers;
5. Update the EE List based on the decisions made by the XP Reviewers;
6. Ensure that the EEs are completed in a timely fashion, and that the Judges in the appropriate Group are alerted when a Nominee originally on the EE List has been referred to that Group for full evaluation by the XP Reviewers.

11. Minimum Number of Evaluations per Nominee (FSPS 2017)

There shall be at least four evaluations per Nominee. If one or more Judges declare a Conflict-of-Interest that prevents them from scoring a Nominee, then replacement Judges shall be appointed to provide evaluations for that Nominee and ensure a total of four evaluations. The IEEE FC Chair shall make such appointments with the concurrence of the Vice-Chair, choosing from among existing IEEE FC Members.

12. Scoring procedure when a Judge has a Conflict-of-Interest with a Nominee (FSPS 2017)

In the case of a Conflict-of-Interest (CoI), two situations can arise depending on whether four evaluations for a Nominee are available or not from the assigned Judging Group (see §11):

1. If four evaluations are available, the $N-1$ scores of the conflicted Judge shall be normalized over the same N used for normalizing the scores of the other Judges.
2. If four evaluations are not available, then a replacement Judge shall be appointed to evaluate the Nominee as specified in §11. The evaluations provided by the replacement Judge shall be harmonized with the other scores of the conflicted Judge. This is necessary because the conflicted and replacement Judges may have different scoring methodologies,

and problems may arise when “mixing” the single “set of raw scores”¹ assigned by the replacement Judge with the other $N-1$ sets of raw scores assigned by the conflicted Judge to the other $N-1$ Nominees.

We specify here a procedure that allows doing this “mixing” in the right way. According to this procedure, the replacement Judge shall assign a *rank* to the Nominee, not a raw score like a Judge would normally do. It is a single procedure with two variants for assigning a rank to a Nominee that has one or more conflicted Judges. The two variants allow assigning a rank to Nominees in two ways:

- A. Non-automated, i.e. with human intervention in assigning a rank
- B. Automated, i.e. without human intervention

The automated rank-assignment shall be used if there are already four evaluations for the Nominee. The non-automated rank-assignment shall be used in those cases when replacement Judges perform evaluations and assign ranks.

The CoI-Handling procedure is specified below. Depending on the type of rank-assignment, either Step 3.a) or 3.b) shall be used.

1. Judge A has provided $4(N-1)$ raw scores, where Judge A is the Judge that had a CoI with Nominee X. Judges B, C, and D have provided $4N$ raw scores.
2. The system ranks the Nominees of all Judges normalizing over N (see §5.2 and §5.2.1):
 - a. The $N-1$ Nominees of Judge A are ranked in terms of “Normalized Weighted Score” and are ranked from #1 to #(N-1), with no Nominee assigned to rank #N.
 - b. The N Nominees of the other three Judges (B, C, D) are ranked in terms of “Average Normalized Weighted Score”, where the averaging is over the three Judges.
3. The proper placing of Nominee X in the rank of Judge A can be done in either an Automated or Non-Automated fashion, depending on the situation:
 - a. NON-AUTOMATED (a person, the “replacement Judge,” is designated to fill-in for the conflicted Judge A): The replacement Judge J assigns rank #R to Nominee X based on his/her personal experience as a senior Judge.
 - b. AUTOMATED (no human intervention): The system checks what the ranking of Nominee X is at Step 2.b). Let this rank be #R.
4. The system inserts Nominee X at rank #R in the ranking of conflicted Judge A calculated in 2.a), sliding down of one position all the Nominees below rank #R. All Judges now have a ranking of N Nominees.
5. The system now computes the “Average Normalized Weighted Score” of all N Nominees, where the averaging is done over the four Judges (A, B, C, and D).

The replacement Judge assigns a rank to Nominee X, not a score as in previous practice. This rank #R ($1 \leq R \leq N$) should be a function of the level of qualification of the Nominee, the max number of elevation recommendations that the Fellow Committee can make to the BoD (set the year before), the number N of Nominees in the Judging Group, the set of Nominees that will likely receive the discouraging feedback letter (exact threshold will be known only later, at the in-person meeting), and any other appropriate variable in the discretion of the replacement Judge. This is not an easy task, so it is very important that the replacement Judge has a substantial experience in evaluating

¹ The “set of raw scores” is constituted by the four raw scores assigned by Judges to each Nominee in the four rating categories specified in the Manual.

Nominees. With this experience, even though the replacement Judge will not have seen the other (N-1) Nominees in the Judging Group of Judge A, the assigned rank would likely place the Nominee in the “ballpark” rank where Nominee X should be among the N Nominees in his/her group. This method is preferable to the previous practice where the replacement Judge assigned a score to Nominee X, not a rank.

If a Nominee on the Discussion List was evaluated using this CoI procedure (non-automated case), then the Judge who replaced the conflicted Judge shall be present at the face-to-face meeting discussion of borderline Nominees.

13. Election of FSPS members at the in-person fall meeting (FSPS 2017)

As specified in §3.2 of the Manual, the Fellow Committee shall appoint at its in-person meeting seven members to serve on the FSPS the following year. FSPS members may be current or past IEEE FC members. This Section specifies how to perform the appointment.

A couple of months prior to the in-person IEEE FC meeting, the IEEE FC Chair shall make a “Call for Candidates” for serving on the FSPS in the following year. The only two eligibility criteria for volunteering are: (a) being a current member of the IEEE FC; (b) willingness to serve on the FSPS. The Call shall expire a couple of weeks before the start of the IEEE FC in-person meeting.

Candidates who volunteer shall provide the following material (election package): a short bio (up to 150 words), a position statement (up to 150 words), and a picture. The IEEE FC Chair shall distribute to the IEEE FC the election packages of all candidates at least two weeks before the IEEE FC in-person meeting.

At the meeting, every IEEE FC member shall vote via secret ballot for up to seven candidates. The ballot shall include the list of all candidates who volunteered and a “write-in” option. The seven candidates that receive the most votes shall be appointed FSPS members for the following year. Should the 7th and 8th top candidates receive the same number of votes, then a second vote via secret ballot shall be carried out to select one of the two tied candidates.

If less than seven candidates volunteer, then the IEEE FC Chair shall continue to ask for volunteers after the “Call for Candidates” deadline has passed and during the IEEE FC meeting until there are at least seven candidates. If the number of candidates is still less than seven at the time of voting, then the IEEE FC meeting shall vote to confirm the appointment of the available slate. The incoming (new) IEEE FC Chair and Vice-Chair shall appoint the remainder FSPS members choosing from current and past IEEE FC members and possibly giving precedence to those who will be IEEE FC members in the following year.

13.1 Minimum Number of Fellow Committee Members on the FSPS (FC 2017)

The incoming FSPS Chair shall appoint FSPS members taking into account the following FC resolution: at least three FSPS members shall be concurrent Fellow Committee members.

14. Process for Changing a Citation after IEEE Board Approval (FSPS 2019)

If after the new elevations are announced the Nominator of an elevated nominee expresses concerns or disappointment for the final citation of his/her nominee, then the FC Chair will work with the Judges that have evaluated that nominee to ascertain whether the citation is appropriate or not. If the FC Chair believes that changes in the citation are needed, he or she shall propose a new citation to the nominator after consulting with the Judges that have evaluated the nominee.

15. Guidelines for Crafting Fellow Citations (FSPS 2019)

Fellow citations cannot exceed 15 words, as approved by the Fellow Committee in October 2017. The following guidelines for crafting Fellow citations are set:

1. Make an attempt to start citations with a word that will identify it with the category of interest such as:
 - For research of....
 - For application of....
 - For leadership in....
 - For development of.....
 - For contributions to.....
2. Avoid words that tend to exaggerate accomplishments such as:
 - Significant
 - Numerous
 - Frequently
 - Sustained
 - Big
 - Large
 - Tremendous
 - Extraordinary
3. Avoid words that have no means by which to measure effect or value such as:
 - Seminal
 - Pioneering
 - Sophisticated
 - Smart (unless used as part of a smart system, et. al.)
 - Robust (unless used as part of robust system et. al.)
 - Novel
 - Innovative
 - Creative
 - Understanding
 - Outstanding
4. Minimize or avoid use of phrases such as:
 - Systems and standards
 - The science and technology
 - Understanding and application
 - Theory and development
 - Discovery and development
 - Innovative research and widespread education activity
 - To the development, application and standardization
5. Avoid use of persons name in citation.
6. Avoid use of “his”, “her”, “their”, “they”.
7. Use “the” only where it denotes “the only one, et.al”.

15.1 Examples:

Original: *for technical and professional leadership of practical application engineering to the pulp and paper industry.*

Final: *for leadership in engineering applications for the pulp and paper industry.*

Original: *for contributions to the understanding of the electrophysiology of the atrial cardiac arrhythmias and electro technology for their management.*

Final: *for contributions to the electrophysiology of atrial cardiac arrhythmias.*

16. Further Reading

For further details on the normative requirements for the IEEE Fellow Nomination and Evaluations process as well as the eligibility requirements of all the participants in the IEEE Fellow process, please see the IEEE Fellow Committee governing documents and Recommendation Guides posted at <http://www.ieee.org/fellows>.

Appendix (informative)

List of motions for the Fellow Committee at the fall in-person meeting

The goal of this Appendix is to provide a list of the motions that must be made at the fall face-to-face Fellow Committee meeting. Only motions specific to the Fellow Committee shall be listed here, not the usual procedural ones established in Robert Rules of Order, e.g., approval of Agenda, approval of previous meeting minutes, etc.

This Appendix is informative. In case of any discrepancy, the Manual and the main body of the Fellow Committee Handbook take precedence over this Appendix. As Manual and Handbook evolve, this Appendix shall be kept up to date by the FSPS Chair. No FSPS approval is needed, simple notification to the FSPS of any update will suffice.

A. Motions that take effect the same year

1. Approve the slate of Nominees (and their Citations) recommended for elevation to the IEEE Board of Directors (IEEE Bylaws I-305.6, in Executive Session).
2. Set the threshold of the rank #F for the use of the regret letter with feedback (this Handbook, §9.2.2).

B. Motions that take effect the following year

1. Set the maximum number of Nominees that will be recommended for elevation to the IEEE Board of Directors for the following Fellow Class (Manual §14, in Executive Session).
2. Appoint seven members to the FSPS at the IEEE FC face-to-face meeting (Manual, §3.2) – for the election procedure, refer to §13 of this Handbook.