

1. Nominee Information

Prefix:	
First Name:	
Middle Name:	
Last Name:	
City:	
US State/Canadian Province:	
Other State/ Province:	
Country:	

2. Nominator Information

Prefix:	
First Name:	
Middle Name:	
Last Name:	
E-mail Address:	
Organization Name:	
City:	
US State/Canadian Province:	
Other State/ Province:	
Country:	

3. Education

Degrees	Year	Educational Institution	Location

4. Professional History

From (year)	To (year)	Name of Company	Position Held

5. Individual Contributions

5a. Identify the area that the nominee has made significant contributions, which qualifies him/her for Fellow grade:

- Application Engineer/Scientist
- Research Engineer/Scientist
- Educator
- Technical Leader

5b. Describe your relationship to the nominee and how you, PERSONALLY, became aware of the importance of his/her extraordinary accomplishments and their impact on society. (100-Word Limit)

5c. Explain how the nominee's one or two most distinctive contributions have contributed to the advancement or application of engineering, science, and technology. Explain how these contributions of unusual distinction have had a lasting impact on society. Identify specific attributes of the nominee's contributions that qualify him/her for elevation to Fellow, and why the nominee ranks near the top of those in his/her discipline. (750-Word Limit)

6. Evidence of Technical Accomplishment

Supply the following information in two Parts. (1,000-Word Limit)

Part 1: List the three most important items of tangible and verifiable evidence of technical accomplishments identified in section 5b, such as: technical publications; technical reports and presentations; patents; development of products, applications and systems; and, application of facilities and services. In sentence form, state the engineering significance and lasting societal impact of each.

Part 2: List not more than 10 additional items, subdivided into distinct areas of contributions. In sentence form, identify the significance and impact of each:

7. IEEE Activities (250-Word Limit)

8. Non-IEEE Activities (250-Word Limit)

9. Proposed Citation (20-Word Limit)

10. Evaluation by IEEE Society/Technical Council

(Name Society/Technical Council to Evaluate Nominee)

11. References (Five to Eight Fellows)

First Name	Last Name	E-mail Address
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12. Endorsements (Optional: IEEE Section, Chapter, Committee; Non-IEEE Organization, Individual)

Endorser Name	E-mail Address
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NOTE: If the above nominee is elevated to Fellow grade, the nominator agrees to release the contents of this form to authorized IEEE committees of the Awards Board for the purpose of recommending nominees for IEEE Awards. Only the nomination form will be released for this purpose.

THE PLAYERS

NOMINATOR

- Complete the IEEE Fellow Grade Nomination Form.
- Identify a minimum of five but no more than eight references.
- Identify a maximum of three endorsements (optional).
- Submit the IEEE Fellow Grade Nomination Form to the IEEE Fellow Activities Staff to be received no later than 1 March.

Eligibility: Any person, including non-IEEE members, may serve as a nominator.

Non-eligibility: In accordance with IEEE Bylaw I-305.5, members of the IEEE Board of Directors, members of the IEEE Fellow Committee, IEEE Society/Technical Council Fellow Evaluating Committee Chairs, members of the IEEE Society/Technical Council Fellow Evaluating Committee reviewing the nomination or IEEE Staff may not serve as nominators. In addition, a nominator may not serve as a reference or endorsement for a nomination he/she is submitting.

NOMINEE

Eligibility: An IEEE Senior or Life Senior Member in good standing and who has been an IEEE member for five years or more preceding 1 January of the year of elevation may be nominated for Fellow grade. **Note: IEEE Society affiliation membership does not apply.**

Non-eligibility: Members of the IEEE Board of Directors and members, or individuals, who are prohibited from publishing in IEEE publications, as identified by the Publication Services and Products Board may not be nominated for Fellow grade.

REFERENCE

- Complete an IEEE Fellow Grade Reference Form
- Submit the IEEE Fellow Grade Reference Form to the Fellow Activities Staff to be received no later than 1 March.

Eligibility: A reference must be an eligible IEEE Fellow or Life Fellow (Note: a waiver is noted below for Region 9) in good standing. As defined in IEEE Bylaw I-104.14.2a “when applied to an IEEE member, the term member in good standing shall mean an IEEE member of any grade who is not under suspension” and 104.14.1.c “Meet the monetary obligations required for membership such as the payment of dues and applicable assessments. In addition, Life Members shall be obligated to confirm annually the desire to continue to receive services and publications(s) to which they are entitled”.

Non-eligibility: Members of the IEEE Board of Directors, members of the IEEE Fellow Committee, the IEEE Society/Technical Council Fellow Evaluating Committee Chairs or members who are reviewing the nomination or IEEE Staff may not serve as References.

Note: References shall be accepted if a reference is an IEEE Senior Member or IEEE Life Senior Member from Region 9 in good standing and the nominee they are serving as a reference for resides in Region 9.

ENDORSER

- Complete an IEEE Fellow Grade Endorsement Form.
- Submit the IEEE Fellow Grade Endorsement Form to the Fellow Activities Staff to be received no later than 1 March.

Eligibility: Any person, including non-IEEE members may serve as an Endorser.

Non-eligibility: Members of the IEEE Board of Directors, members of the IEEE Fellow Committee, the IEEE Society/Technical Council Fellow Evaluating Committee Chairs or members who are reviewing the nomination or IEEE Staff may not serve as Endorsers.

THE PROCESS

PRE-NOMINATION SUBMISSION INFORMATION FOR THE NOMINATOR

1. Meet the deadline: All forms (nomination, reference, and endorsement) must be received no later than 1 March. Submitting a nomination early gives references and endorsers more time to complete their form.

2. Nominee eligibility: The nominee must be an IEEE Senior Member or IEEE Life Senior Member in good standing, who has been an IEEE member for five years or more preceding 1 January of the year of elevation. All forms are checked thoroughly, and those that do not meet the requirements are not accepted. The Fellows staff will verify the actual date that the nominee joined IEEE against the years of service listed on the application.

3. Ensure correct spelling of nominee's name: Often, the nominee's names are misspelled, or the first name and the surname are transposed. Pay special attention to international names with special characters and/or names that are hyphenated. This can cause problems later on in the nomination process.

4. Reference eligibility: Check your reference's eligibility. A reference must be an IEEE Fellow or IEEE Life Fellow in good standing, with the exception of Region 9 (refer to instructions for explanation). In addition, verify that your references do not currently serve on boards or committees that would make them ineligible to support the nomination. The Fellows staff strongly encourages you to solicit the maximum of eight references to increase the chances of fulfilling the minimum five reference requirement. (NOTE: No Fellow reference can be a member of the IEEE Board of Directors, the IEEE Fellow Committee, Chair of a Society Fellow Committee, or a member of the Society Fellow Committee reviewing a particular nominee.) NOTE: You will need the IEEE Member Number and E-Mail Address of each reference!!!

5. Listing of endorsers: When entering a name of an endorser, input the last name, first name, and e-mail address in the appropriate fields. If entering the name of a society, corporation, chapter, or region, input the information in the "organization name" field and leave the "first name" field blank, then enter the e-mail address for the contact issuing the endorsement.

6. E-mail addresses: Input only one e-mail address for a reference and/or an endorser. Entering multiple e-mail addresses causes system errors.

7. Self-employed" or retired nominee: Do not enter anything in the "organization's name" field.

8. Proposed citation: The proposed citation should always begin with the word "for":

- "for contributions to..."
- "for the development of..."

9. Printable version: Prior to submitting the nomination form, remember to hit the printable version button and print a copy of the completed nomination form.

NOMINATION SUBMISSION OF DATA ON-LINE BY NOMINATOR

Go to

http://www.ieee.org/membership_services/membership/fellows/fellows_nomination.html

If you do not have an IEEE Account, you will first need to set-up an IEEE Account. At the top of this page, is text labeled "Create Account", click on those words, and you will be transferred to an area for you to set-up an IEEE Account.

Return to

http://www.ieee.org/membership_services/membership/fellows/fellows_nomination.html

From the items in the left-hand column, select "Online Nomination Form" to begin entering data. Entry will be accomplished by "cutting and pasting" content from the data which you have been provided into the electronic form.

POST-SUBMISSION ACTIVITIES FOR THE NOMINATOR

E-Mail each Reference and Endorser stating that the nomination has been officially submitted and ask that they E-Mail you when they have completed and submitted their reference/endorsement.

If no response from a reference or endorser by February 15, contact the reference/endorser and ask (1) if they submitted their reference/endorsement and just failed to notify you or (2) if they had not submitted their reference/endorsement form. If the latter, ask them to immediately submit their reference/endorsement.

After March 1, no further actions are required.

THE REST OF THE PROCESS

1. The IEEE Fellow Staff will review all nominations to verify nomination qualifications (primarily that the nominee is a member in good standing at the appropriate membership grade and has a sufficient number of submitted, qualified IEEE Fellow references).
2. The IEEE Fellow Staff then will organize qualified nominations alphabetically. (There are usually between 800 and 900 qualified nominations each year.)

3. The nominations are next divided into groups by the various IEEE technical societies that will evaluate the technical contributions of the nominees in that technical area and will be forwarded to that societies' Fellow Committee for evaluation. This distribution will occur around April 1, with an evaluation due no later than June 1.
4. Each Society Fellow Committee must give its group of nominees a number grade between 0.0 and 100.0 with no two nominees receiving the same grade, i.e., no ties. (I served as Chair of the IEEE Education Society Fellow Committee and was fortunate to have no more than 20 nominations to evaluate each year. The Fellow Committee of the some societies, the IEEE Power and Energy Society for example, will typically have between 50 and 100 nominees to evaluate.)
5. While the society Fellow Committees are accomplishing their task, the IEEE Fellow Staff will divide the 50-member IEEE Fellow Committee into ten sub-committees of five members each attempting to achieve diversity on each sub-committee in areas such as vocational emphasis, geographic diversity, and area of technical specialization. A training session will be held for the IEEE Fellow Committee in early June.
6. Upon receipt of society Fellow Committee evaluations, all nominations along with the evaluation from society Fellow Committees are again organized alphabetically.
7. The first five-member, IEEE Fellow Committee sub-committee will be assigned nominees 1, 11, 21, 31, 41, 51, 61, 71, 81, 91, 101, 111, etc., and the second five-member sub-committee will be assigned nominees 2, 12, 32, 42, 52, 62, 72, 82, 92, 102, 112, etc. . . . (My last year on the IEEE Fellow Committee, my sub-committee had 81 nominations to evaluate.) The file of nominations to be reviewed by each sub-committee will be distributed to members of the sub-committees in late June with each member's scores due back to the IEEE Fellow Staff by an early August date.
8. Each member of the sub-committee must evaluate each assigned nomination and assign a grade between 0.0 and 100.0 to each nominee in each of four categories: (a) individual technical/professional contributions, (b) society evaluation (a tough one since each society has a different philosophy in evaluating the contributions of its members), (c) evaluations of references and endorsers, and (d) professional activities within the nominee's area of expertise. Within each of the four categories no two nominees can be given the same score, i.e., no ties.
9. Once all scores have been submitted, the IEEE Fellow Staff will use an algorithm that will provide a single, composite score for each nominee. The algorithm includes established weighting factors between the four scoring categories noted in 8 above and normalizes the average scores between sub-committees to ensure that the nominees assigned to a particular sub-committee were not given an advantage due to lenient scoring or a disadvantage due to tough scoring.

- 10. The IEEE Fellow Staff will then reorganize the nominees from highest composite score to lowest composite score. At this point a cut-off point is established based upon IEEE Bylaws which states that, in no year, the number of Senior Members that can be elevated to the Grade of Fellow can exceed the number of 0.001% of higher-grade IEEE members (i.e., Members, Senior Members, and Fellows). This number is normally near 300.
- 11. The IEEE Fellow Staff then determines the 5% of nominees whose score is just above the “cut-off” line and the 5% of nominees that are just below the “cut-off line.
- 12. In September, the entire IEEE Fellow Committee will meet to reevaluate the nominees in this borderline group. Normally a few adjustments are made with a few nominees above the “cut-off” line being replaced by an equal number of nominees that were originally below the “cut-off” line. Once the final list is formalized, the entire IEEE Fellow Committee votes to forward the list to the IEEE Board of Directors for formal election to the Grade of Fellow.
- 13. The IEEE Board of Directors, in its November meeting, will formally elect the slate of new Fellows. (I served three terms on the IEEE Board and never saw it reject any nominee for Fellow that had been forwarded by the IEEE Fellows Committee.)
- 14. In December, the IEEE Fellow Staff will formally notify newly elected Fellows and notify the nominators on the disposition of their nomination.
- 15. Normally, for nominations that were unsuccessful, the nomination form should be immediately updated and a new nomination entered for the next cycle of evaluations.
- 16. Successful nominees will officially become an IEEE Fellow on January 1.
- 17. The Fellow data for members nominated by March 1, 2013 and elevated to the grade of Fellow on January 1, 2014. The data is as follows.

<u>Professional Area</u>	<u>Nominated</u>	<u>Elevated</u>	<u>Percentage</u>
Industry	182	77	42.3%
Education	566	191	33.7%
Government	65	24	36.9%
Other	<u>18</u>	<u>5</u>	27.7%
TOTAL	831	297	35.7%

- 18. The Fellow data for members nominated by March 1, 2014 and elevated to the grade of Fellow on January 1, 2015. The data is as follows.

<u>Professional Area</u>	<u>Nominated</u>	<u>Elevated</u>	<u>Percentage</u>
Industry	190	65	34.2 %
Education	619	211	34.1%
Government	52	21	40.4%
Other	<u>13</u>	<u>3</u>	23.1%
TOTAL	874	300	34.3%

FELLOW COMMITTEE SCORING

Scoring Criterion

IEEE Fellow Committee Members must enter a numerical score using the scale from 0.0 to 100.0 for each of the four categories. The Fellow Scoring Program shall accept whole numbers and tenths. Note: In scoring, a member of the Fellow Committee cannot give two nominees the same score within a category.

Individual Contributions/Evidence of Technical Accomplishment

(weighted score = 40 points)

Individual contributions of the nominee are for one of four categories: Application Engineer/Practitioner, Educator, Research Engineer/Scientist, or Technical Leader. In all cases, the contributions are based on technical achievement. The individual's contributions can take as many forms as there are nominees. The contributions can take the form of a new and significant piece of theoretical and/or experimental work leading to an important advance in the state of the art. Practitioners may make significant technical contributions in the design and evolution into manufacturing of products or systems – or to the use, operation, or application of such products or systems. The contributions shall be based on the realization to society, in accordance with IEEE Bylaw I-104.2 as judged by the IEEE Fellow Committee, considering innovativeness, originality, creativity, meeting market needs, regional as well as global impact on the profession or society at large, or advances in quality, reliability, cost effectiveness, or manufacturability.

The individual's contributions can also be exemplified through technical leadership of a managerial, team or company-wide effort that led to an important benefit to society, to technical innovation, to the advancement of a device, idea or system leading to development, application and/or production. The technical innovation, risk involved, performance improvement, economic results or other advantages must be perceived by the IEEE Fellow Committee as above the norm.

As an Educator, the nominee's contributions can encompass the development of a new curriculum or courses that are innovative or unique. An accepted and widely used pioneering text is also a significant useful contribution. The contributions, again, are to be judged on the basis of uniqueness, innovation, wide acceptance, etc.

The technical accomplishments of a nominee can take the form of technical publications as evidenced by refereed papers in archival journals, edited or authored books, papers in technical reports, or other publications. The technical contributions may be in the form of patents, standards or other documentation describing the development or application of products, systems, facilities, services, or software.

Evidence is the author's technical presentation in the form of keynote papers, papers summarized in conference digests, documented invited papers, developed courses and textbooks. Where the nominee's contribution is improved product or system design, which may have been held confidential by his employer, the technical accomplishment

can be documented by using internal technical reports identifying the nominee's role in the development.

The nominee's contributions can also consist of the development, manufacture or application of products, systems, facilities, and services. Where a nominee makes his contribution as part of a team, his specific contribution as identified in the nomination, and verified by in-house Fellow references, constitutes suitable evidence. The evidence can be in the form of survey articles, review papers, company reports, published specifications, instruction manuals, application information, competitive analyses, government publications, market trend studies, etc.

IEEE Society/Technical Council Evaluation (weighted score = 25 points)

The IEEE Society/Technical Council Evaluators shall complete an evaluation form for each nominee that is referred to them in accordance with the below scale. In addition, the IEEE Society/Technical Council final rank, a computed score based on certain questions, plus a rank based on the computed score shall appear on each evaluation form.

Extraordinarily Qualified	90-100
Highly Qualified	80-89.9
Qualified	60-79.9
Marginally Qualified	50-59.9
Not Qualified	0-49.9

References/Endorsements (combined weighted score = 15 points)

References shall complete an IEEE Fellow Grade Reference Form and shall score their nominee in accordance with the following scale:

- Extraordinarily Qualified
- Highly Qualified
- Qualified
- Marginally Qualified
- Not Qualified

Endorsements are optional.

Professional Activities (IEEE and Non-IEEE) (weighted score = 10 points)

The IEEE and non-IEEE activities include awards, professional society membership and offices, major professional, government or international committee memberships, internal organization awards or licensure or professional registration within areas associated with the IEEE Fields of Interest, including, for example, Professional Engineer, specialty certification, and Patent Law. The IEEE and non-IEEE activities shall be evaluated on the basis of length and type of service as well as degree of responsibility and scope encompassed in the offices held.

Additional Factor (weighted score = 0.1 point per year since receiving first degree up to a maximum of 10 points)

Ranking

The raw scores from each of the IEEE Fellow Committee Members shall be fed into an IEEE Fellow Scoring Program. For each IEEE Fellow Committee Member and for each of the four categories, the Scoring Program shall determine a set of normalized scores. The Scoring Program shall combine the normalized scores with pre-specified weights to obtain a total score for each of the nominees for Fellow grade, for each IEEE Fellow Committee Member who evaluated that nominee. The sum of the weights is 90 points, so the maximum score a nominee can receive is 90 plus the points for years since receiving the first degree.

Final Ranking

The Scoring Program shall compute an overall total score for each nominee by simple averaging of the computed total scores that the nominee received from all of the IEEE Fellow Committee Members who scored that nominee. The Scoring Program shall then place all of the Fellow nominees in rank order according to these overall total scores.