

The New IEEE Fellow Nomination

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The IEEE Fellow is an elite distinction that recognizes extraordinary contributions in IEEE fields of interest, bringing significant value to society. Categories include Research Engineer/Scientist, Technical Leader, Technical Innovation, Educator, and (new for 2025) Standards Contributor. This article describes each part of the nomination packet and provides hints for preparing a strong Fellow nomination.

INTRODUCTION

WHAT DOES IT MEAN TO BE AN IEEE FELLOW?

The IEEE Fellow is an elite distinction that recognizes extraordinary contributions in IEEE fields of interest, bringing significant value to society (Figure 1). It is the highest grade of IEEE membership. This honor is limited to a selection of no more than 0.1% of the total IEEE voting membership each year.

Read about the IEEE Fellow Program [1]. All resources are (or soon will be) posted on the TAB Committee on Standards (TCOS) Resource Center at <https://resourcecenter.tcos.ieee.org/>.

WHY SHOULD YOU STRIVE TO BECOME AN IEEE FELLOW?

Significant emphasis is placed on the societal impact of a Fellow's


EDITOR'S NOTE

Why choose to emphasize "The New IEEE Fellow Nomination" in the "Women in Engineering" column? First and foremost because, despite its name, this column is intended for all researchers and engineers working in the field of antennas and propagation. With this in mind, the following article explains the steps and key points for maximizing your application.

Second, because despite the growing number of female members in our Society, women tend not to apply, and I hope this article will encourage them to do so. I would like to emphasize that this is not about introducing quotas, which ultimately harm those who benefit from them, but simply about broadening the spectrum of possibilities so that the candidates better reflect the distribution of our Society. This is also the goal of the AP-S Fellow Search Committee (FSC), recently established within the AP-S and chaired by Prof. Cynthia Furse, who agreed to write this column.

Prof. Cindy Furse already has an exceptional career, both in academia and entrepreneurship. She has received several teaching and research awards, including the 2020 IEEE Chen To Tai Distinguished Educator Award, the 2009 IEEE Harriett B. Rigas Award, the 2017 Utah Governor's Medal for Science and Technology, the Pioneers of Progress Award for Scientific Achievement in 2017, and the Harrington-Mittra Award in Computational Electromagnetics in 2025 for "her fundamental contributions and innovations in the theory and applications of the Finite Difference Time Domain (FDTD) method in bioelectromagnetics" and is the first women to have ever received an AP-S field award. She has also demonstrated her entrepreneurial spirit by founding LiveWire (now Viper) Innovation, Inc., a spin-off company based on her research, which markets devices for locating intermittent faults in live cables.

Beyond these remarkable achievements, anyone who has ever heard Cindy present her work is immediately struck by her passion, her ability to think out of the box, and most of all, her enthusiasm, which motivates us and inspires us to do better. These qualities are also very valuable as the chair of the FSC. To conclude, I hope this section will motivate and help us, whether for an upcoming application or one further down the line.



Claire Migliaccio

contributions. Candidates must demonstrate two substantial and well-documented achievements that have made a meaningful difference. IEEE

Fellows have shaped the profession and helped improve the world. For a young engineer, working toward impactful goals can bring purpose

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FIGURE 1. The IEEE Fellow Pin.

and inspiration to a career. Seeking guidance from colleagues, peers, and mentors—both within IEEE and beyond—can provide valuable direction and support. Combining a commitment to meaningful impact with active engagement in the IEEE community creates a strong foundation for both professional and personal growth. Over time, as the influence of your work expands, this path may lead to IEEE Fellow elevation. But regardless of whether you ultimately achieve that distinction, your career will still be rich with purpose and success.

ELIGIBILITY?

An IEEE Fellow nominee must have at least 15 years of professional experience, have been an IEEE Member (not necessarily continually) for at least five years, and be an IEEE Senior or Life Senior Member [3]. Here is a list of all IEEE Fellows (from all Societies) [4], and here is a list of AP-S Fellows [5].

The Nomination Form includes sections for

- 1) Nominee information
- 2) Education
- 3) Professional history

FIND A NOMINATOR WHO IS FAMILIAR WITH YOUR WORK

IEEE Fellow status is not something you can apply for yourself. Someone else (familiar with your work) should nominate you for this status. This is

usually an existing IEEE Fellow (see the previous citations), but that is not required. Non-Fellow members and even non-IEEE members serve as nominators as well. Some exclusions apply, so check the following citation to be sure your proposed nominator is eligible to nominate you (see “Steps to Becoming an IEEE Fellow” [6])

Discuss with your nominator the two major contributions you plan to highlight, the impacts of those contributions, and the evidence that can be used to document those impacts. You should also determine together which IEEE Society will sponsor your nomination. If you belong to multiple Societies, choose the one whose scope best aligns with your contributions. It can also be helpful to consider the primary Society affiliations of your nominator, references, and endorsers. Work closely with your nominator to ensure that your nomination package is as strong and compelling as possible. If you do not know any IEEE Fellows in your technical area with whom you can discuss your nomination or references, you are encouraged to contact a member of the IEEE Fellow Search Committee [8].

Fellows are Fellows of IEEE, not a particular Society, and many Fellows are members of multiple Societies. After they are selected, their Fellow status is normally announced by all Societies of which they are members.

The Nomination Form includes sections for

- 4) Nominator information
- 5) Relationship with the nominee

IDENTIFY TWO MAJOR CONTRIBUTIONS YOU HAVE MADE THAT HAVE HAD SIGNIFICANT MEASURABLE/ DOCUMENTABLE IMPACT

IDENTIFY THE CATEGORY OF YOUR CONTRIBUTIONS

IEEE Fellow nominee contributions are classified into the following five categories, each with its own types of contributions and suggested ways to demonstrate impact (Table 1).

The two contributions can be in separate categories.

- Educator
- Research Engineer/Scientist
- Standards Contributor (NEW for 2025)
- Technology Innovator
- Technical Leader.

Review the IEEE Fellow Contributions Matrix [7] for each category.

IDENTIFY THE IEEE SOCIETY YOUR IMPACTS FIT BEST WITH

Since this article is in *IEEE Antennas & Propagation Magazine*, it is likely you might consider the AP-S for your Fellow nomination, especially if you have been involved in this Society for several years. Every Society can recommend members for Fellow status in any of the categories mentioned in Table 1. Many engineers are involved in multiple Societies, so consider which Society your contributions best align with.

The nomination process involves several stages. First, nominations are submitted to a specific IEEE Society (such as the AP-S) during the annual nomination window, which runs from 1 November to 7 February. After the deadline, the

Steps to becoming an IEEE Fellow Nominations are due 7 February each year.

For details, see the IEEE Fellow Nomination Quick Help Guide [2].

Fellow Committee of the selected Society reviews all submissions and recommends its strongest candidates to the IEEE Fellow Committee. Overall, the IEEE Fellow Committee then evaluates all nominations across Societies and makes the final selections for that year. The number of Fellows elevated from each Society is limited to fewer than 0.1% of that Society’s voting membership at the time.

A very important consideration when preparing your nomination is to be sure that it is understandable and compelling to electrical engineers in all aspects of AP-S (for the first committee) and all of IEEE (for the second). Be sure to explain all unfamiliar terms, explain the basics of and importance of each contribution, and describe the impact

TABLE 1. THE IEEE FELLOW CATEGORIES AND CONTRIBUTIONS MATRIX. MORE DETAILS ON THE CONTRIBUTIONS FOR EACH CATEGORY CAN BE FOUND AT [7].

Category	Contribution
Research Engineer/Scientist (RE/S)	Inventions, discoveries, or advances in state-of-the-art technical advances
Technology Innovator (TI)	Product development, advancement in system, application, or operation, project management or construction activity, process development, manufacturing innovation, codes or standards development, or other application of technology
Technical Leader (TL)	Managerial, team, or company-wide effort using technical innovation and resulting in outstanding performance, economic enhancement, or other advantages to benefit society
Educator (EDU)	Advances in electrical engineering and scientific technology through education by developing innovative and unique curricula and/or courses
Standards Contributor (STDC)	Development and advancement of technical standards adopted by IEEE and others

in terms familiar to both specialists and nonspecialists.

IDENTIFY TWO CONTRIBUTIONS

What are two key contributions for which you could be identified as a leader in the field (at least in the top 10%)? The Fellow program recognizes specific key contributions and is not a “lifetime achievement” award. These contributions should be an aggregation of multiple items of a similar nature rather than an individual article or paper, patent, etc. Choose the two most important contributions to focus on.

What impact have these contributions had on the field? What impact have they had on the world? (What has changed because of your work?) See the contribution categories matrix [7] for details.

Can we measure the impact? Seeing impact often takes time, so while a brilliant new idea may be a significant contribution, it may take some time for the impact to be achieved. The IEEE Fellow program looks for that impact to have been realized, so there will generally be some time between the genesis of a new contribution and the demonstration of its impact. How can the impact of your contributions be measured? Although the number of

citations is commonly used as a possible metric, it is even more meaningful to identify what the citations indicate, such as how your work was adapted and expanded by others, etc. What will the lasting impact of your contributions be?

The Nomination Form includes sections for

- 6) Nomination category and IEEE Society/Technical Council
- 7 and 8. **Two major contributions that have had significant measurable/documentable impact**
 - a. Identify the first individual contribution that qualifies the nominee for Fellow grade (maximum 200 words).
 - b. Identify verifiable evidence of the first contribution (maximum 400 words)
 - c. Identify the impact of the first contribution (maximum 200 words).
 - d. Identify verifiable evidence of the impact of the first contribution (maximum 200 words).

Consider the following suggestions for your nomination:

- The contributions and their impacts are the most important. They determine the highest percentage of the final score.
- Be sure to use all available space.
- These contributions should be an aggregation of multiple items of a similar nature rather than a single paper, patent, etc.
- The contributions should be presented in a way that conveys the impact of the work to a wide spectrum of engineers. Do not assume that the importance of the contributions is obvious. Most of the IEEE Fellows who will be reviewing the nomination will not be experts in this specific technology and/or will not be aware of its impact. State and support facts rather than just expressing opinions wherever possible, and encourage your references/endorsers [see the “Letter From References and Endorsers” section] to do this, too.
- Emphasize the impact of the contributions. The impacts need to be documentable and should have already occurred. Predictions of future impact are not rated highly.
- The statements of engineering significance should avoid using words such as “attended” and “participated.” Instead, use words that describe what was actually done—*invented, developed, wrote, pioneered, etc.* are better.
- First and second individual contributions can be categorized differently from each other. Here are some examples of well-written contributions with a lot of specifics to support the impact.
 - *Example 1:* Author 1, Author 2, and Author 3, “High efficiency solid state lighting,” *IEEE Transactions* ... This article was the first description of a method to process silicon nitride to create 99% efficient lighting. Such lights have replaced all other types and created a US\$100 billion per year industry (verifiable). The nominee personally discovered the sintering method that made the device

commercially viable. (Choose items that have verifiable/established evidence of impact.)

- *Example 2:* 2015, U.K. Patent #11,111,111, Inventor 1, Inventor 2, and Inventor 3, “Method to create light.” This patent was the first practical method to process silicon nitride to create 99% efficient lighting ...
- *Example 3:* Spotlight on Technical Leadership category (on YouTube at <https://www.youtube.com/watch?v=miGKwYRRZEE>).

AWARDS

The Nomination Form includes sections for

- 9) IEEE and non-IEEE awards
 - List awards, giving priority to those related to the two contributions described in Steps 7 and 8.
- 10) IEEE and non-IEEE activities
 - List activities, giving priority to those related to the two contributions described in Steps 7 and 8. These may include involvement on committees (especially for the Standards category), editor/associate editorships, conference organization, organization of workshops, short courses, special sessions, or special issues, etc.

CITATION

Prepare a citation (maximum of 20 words) that succinctly describes the contributions of the nominee. Review citations for other Fellows [4]. The citation should start with “for ...” Use strong and active wording that succinctly describes the contributions.

Review other citations for context. Be sure your citation is similar to those of other Fellows but unique enough to define your contributions. Here is a list of all IEEE Fellows (from all Societies) [4], and here is a list of AP-S Fellows [5].

The Nomination Form includes a section for

- 11) Proposed citation

LETTER FROM (THREE TO FIVE) REFERENCES AND (UP TO THREE) ENDORSERS

There are two types of support letters that accompany your nomination. References must be an IEEE Fellow in good standing. Endorsers can be any IEEE Member or nonmember. Here is a list of IEEE Fellows from all Societies [4], and here is a list of Fellows from AP-S [5].

Exceptions (who cannot serve as nominators or endorsers) are members of the IEEE Board of Directors, members of the IEEE Fellow Committee, IEEE Technical Society/Council Fellows Evaluating Committee chairs, members of the IEEE Society/Council Fellow Evaluating Committees reviewing the nomination, and IEEE staff. The nominator also may not serve as a reference for a nomination they are submitting. Lists of these committee members can be found on each Society’s web page (such as for the AP-S [8]).

The Nomination Form includes sections to list References and Endorsers. The full name, affiliation, email, and IEEE number (for References) must be given. They will be contacted directly by email and given a link to upload their letters. The nominator will be able to see that the letters are submitted, but will not be able to see their content. The nominator should follow up with references/endorsers, to be sure all letters get submitted.

REFERENCES

Together with your nominator, select a minimum of three and a maximum of five IEEE Fellows to write references for you. It is best if they do not come from your institution or company and can be considered as “outside” references. They can be from any IEEE Society. The nominator should contact these reference writers in advance to see if they are willing to write very strong letters evaluating your technical contributions. Your nominator should send the draft nomination form to the reference writers, get their feedback on it, and work with them to make sure they provide enthusiastic and specific

reasons with a lot of detail for their support of your nomination. The reference writers are asked to rank you as “extraordinarily qualified.” Even a rank of “highly qualified” is not sufficient.

Each reference or endorsement should address a significant aspect of the nomination and its *impact*. It is especially impactful if the letter writer has had personal experience with your work in some way.

ENDORSERS

You may also include letters from up to three endorsers. These are optional. These endorsement writers do *not* need to be IEEE Fellows or even IEEE Members. These endorsers who know you well and are keenly aware of your contributions should describe and emphasize the *impact* of your work, using specifics. Examples might be an industry partner who has helped commercialize your work or colleagues who have applied your contribution in their own work.

SUBMISSION

Contact information for the endorsements and references is submitted directly to the online IEEE Fellows site [9]. Here is a help guide [2] for the nominator, references, and endorsers [3].

- This guide [3] gives details on what to expect for each form. Forms are space-limited, so see the example references and endorsement forms under the guidelines before preparing materials.
- The online forms can be accessed at [9]. IEEE will automatically e-mail a submission link to the references and endorsers you provide. (So be sure the e-mails you submit are correct and current!)
- Be sure to allow the references and endorsers time to write and upload their letters before the 7 February deadline.

SUBMIT THE FELLOW NOMINATION FORM ONLINE

The nominator should upload the information from the previous sections

into the Fellow Nomination Form online. The nominee cannot self-nominate. The online Fellow Nomination Portal [9] can be accessed by creating and logging in to your IEEE account. The nominator should also periodically check to be sure the letters have been submitted and contact anyone whose letter is missing.

For an example of the nomination form, see the Fellow Nomination Quick Help Guide [2]. All nominations are done online, so it is best if the nominator prepares the nomination offline and then submits it.

EVALUATION PROCESS

Consider the evaluation process as you prepare the nomination package. First, you will be evaluated by the AP-S Fellow Evaluation Committee (FEC) (<https://ieeeps.org/committees/current-committee-members>) (or whatever other Society you choose). The

Important Dates

- *Nomination Portal Opens:* The Nomination Portal [9] opens on 1 November each year.
- *Nominations Due/Portal Closes:* The Nominations Due/Portal closes on 7 February each year. The nomination form and letters from references and endorsers must be received by this date. These letters must be submitted by the references and endorsers themselves, and the nominator should check in advance to be sure they have been uploaded (and remind the reference/endorser if their letter is missing).

committee will rank all of the nominations and forward those to the IEEE Fellows Committee, which makes the final decisions on elevations to Fellow. Remember that only 0.1% of 1% of the

overall IEEE membership is elevated each year. More details can be found in [6].

Questions? Please contact anyone on the IEEE AP-S Fellow Search Committee [8].

If you have additional questions, or if you would just like to chat about a possible nomination, or if you have thoughts on how to prepare for a future nomination, please reach out to anyone on the AP-S Fellow Search Committee (FSC) [8].

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