# FELLOW NOMINATION HELP GUIDE

# TABLE OF CONTENTS

ltem #	Item Name	Page #
1	Eligible Individuals	3
2	General Information	4
3	Evaluation Process	5
4	Components of the Nomination Form	6

# 1. ELIGIBLE INDIVIDUALS

# a. NOMINATOR

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 BoD, 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.

# b. 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 BoD 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.

# c. **REFERENCE**

Eligibility: A Reference must be an eligible IEEE Fellow or Life Fellow (Note: 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 BoD, 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.

# d. ENDORSEMENT

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

Non-eligibility: members of the IEEE BoD, 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 Endorsements.

# 2. GENERAL INFORMATION

# **Browsers**

The IEEE Fellow Online Nomination Process is supported by the following browsers:

IE: 9, 10 Chrome: Latest version Firefox/Safari: Latest 2 versions

# <u>Deadline</u>

All forms (nomination, reference and endorsement) must be received by March 01 (11:59 EST). NO EXCEPTIONS WILL BE MADE.

# Starting the Process

Only a Nominator can start the process. He/she will need to go to the Fellow Web Site and login with an IEEE Primary Account.

# Accessing the Fellow Nomination System

To access the Fellow Nomination System, an IEEE Primary Account must be used. If you need assistance, contact the IEEE Support Center. You can reach the Global Offices directly on-line at: <u>www.ieee.org/contactcenter</u> - or - by telephone at:<u>1.732.981.0060</u> Worldwide, <u>1.800.678.4333</u> US & Canada.

# Changes to a Nomination Form

Modifications will be permitted up to the deadline of March 01. This will include updating core text and e-mail addresses, adding or deleting a reference and endorsement name, or removing a nomination.

# Checking Status of a Nomination

The Nominator will be permitted to check status and/or resend reminders to those references and endorsements who have not responded up to the deadline of March 01.

# Nomination Form

The nomination form can be printed up to the deadline of March 01.

# Notifying References and Endorsements

Once a nomination is submitted, the references and endorsements listed on the form will automatically be notified.

#### New Fellows Announcement

The newly elevated IEEE Fellows are announced shortly after the November IEEE Board of Directors meeting.

-2-

# 3. EVALUATION PROCESS

The process consists of two evaluations. The first evaluation is completed by the IEEE Society/Technical Council that is identified on the nomination form. The IEEE Society/Technical Council evaluation is extremely important, because it is an impartial and even-handed view of the nominee's merit, by persons who are familiar with his or her work. Once the IEEE Society/Technical Council evaluation is completed, their comments and scores are given to the IEEE Fellow Committee for the second evaluation. Society/Technical Council's Fellow evaluations that are not received by the 15 June deadline will be deemed incomplete and will not be forwarded for consideration to the IEEE Fellow Evaluation Committee.

As discussed above, the nomination form is evaluated twice: first by the IEEE Society/Technical Council and second by the Judges on the IEEE Fellow Committee. These Judges are IEEE Fellows, but they may not have worked in the exact area of expertise of the Nominee. Your goal, as a Nominator, is to make the cited contributions of the Nominee easy to identify and to make their importance and impact easy to understand and verify.

Include in the nomination sufficient background material about the outstanding contributions of the Nominee; which you cited and why they are important. Describe the state of the art prior to the Nominee's contributions and highlight the significance of the contributions in this context. Finally, summarize how the Nominee overcame the challenges involved. Include examples, if appropriate, illustrating the impact of the Nominee's work. Such impact might include how the Nominee's contributions paved the way for future contributors.

All nomination materials are forwarded in confidence to the IEEE Fellow Committee. The IEEE Fellow Committee has 51 members plus a chair. All committee members are IEEE Fellows and selected to represent the 10 IEEE Regions, and have expertise in the technical areas represented by IEEE Societies/Technical Councils.

The IEEE Fellow Committee recommends nominees to the IEEE Board of Directors, according to the following criteria.

- Significant contributions as Application Engineer/Practitioner, Educator, Research Engineer/Scientist, and Technical Leader.
- Evidence of technical accomplishments and realization of significant impact to society
- Evaluation by the IEEE Society/Technical Council selected by the nominator
- Confidential opinions of references and endorsers
- Service to professional engineering societies
- Total years in the profession

Each nominee is rated numerically on the basis of this information.

# 4. COMPONENTS OF THE NOMINATION FORM

# a. ESSENTIAL INFORMATION

# Nominator

After a nominator logs in the system, their contact information will automatically be populated on the nomination form.

# <u>Nominee</u>

A nominator will need to enter the nominee's IEEE member number. Once the member number is entered, the system will automatically check for eligibility.

# b. EDUCATIONAL AND PROFESSIONAL INFORMATION

# Education

Provide complete name and location of educational institutions and year that degrees were earned by the nominee.

# Professional History

Provide a list of employers and job positions held by the nominee.

# c. CONTRIBUTIONS/ACCOMPLISHMENTS

# Individual Contributions

Since the IEEE Fellow Committee must compare nominees in varied disciplines and situations, objective information on your nominee's excellence is required. Contributions are not always theoretical in nature or new inventions; for instance, engineering efforts that bring a design or theory to fruition through economic, governmental, or other applications can also be important contributions to society. The IEEE Fellow Committee recognizes that it may be more difficult to document the contributions of the practitioner engineer and technical leader because of proprietary constraints on publication. Part of the nominator's job is to request the nominee's organization to provide the information necessary to document the contributions of the nominee. It is important for the nominator to select a category that best defines the nominee's significant contributions, and the IEEE Fellow Committee recognizes that contributions may fall under one of the following disciplines within the engineering profession:

# Application Engineer/Practitioner

-What product development, advancement in systems, application or operation, project management or construction activity, process development, manufacturing innovation, codes or standards development, or other application of technology was the direct result of the nominee's personal effort?

-Describe the innovation, creativity, and importance of the development, advancement or application of technology.

-List the most important tangible and verifiable evidence of the nominee's contributions and, if pertinent, relevant significant technical publications, e.g. patents, reports, articles.

-Where a team effort was involved, identify and document the specific technical contributions of the nominee.

-Describe and verify the lasting impact of the nominee's contribution on society.

# Educator

-What impact has the nominee had on education in the field of interest of the IEEE?

-What unique and innovative curricula or courses has the nominee personally developed? –What innovative and unique contributions has the nominee made to engineering education as an administrator?

-Has the nominee written a pioneering text in his/her field?

-What impact have these innovations had?

-What is the range of acceptance, local, regional or worldwide?

-Describe and verify the lasting impact of these efforts on engineering education.

#### Research Engineer/Scientist

-What inventions, discoveries or advances in the state of the art made by the nominee indicate innovation, creativity, and importance of the nominee's research?

-List patents, papers published in refereed journals and other tangible and verifiable evidence of the nominee's accomplishments.

-Where a team effort was involved, identify and document the specific technical contributions of the nominee. -Describe and verify the lasting impact of the nominee's contributions to society.

# Technical Leader

-What outstanding engineering application or scientific accomplishments resulted from a managerial, team, or company-wide effort that was lead by this nominee?

-Explain the technical innovation, difficulties and risk involved, achieving economic acceptability, and other advantages.

-The nominee's organizational position, while important, cannot be used as the sole evidence of achievements or technical contribution.

-Describe and verify the specific technical contributions that the nominee made which made the achievement possible?

-Describe and verify the lasting impact of the nominee's contribution to society.

# d. EVIDENCE OF TECHNICAL ACCOMPLISHMENT

Tangible evidence is defined as documentation, which a reference or evaluation committee member may review to assess the nominee's technical contributions or engineering achievements. The achievements may be described in internal organization reports that could be made available for evaluation. If the technical achievements have not resulted in any products, papers or reports, the achievement must be described and validated by the references and/or the IEEE Society/Technical Council evaluation. Describe the originality, novelty, complexity, usage, distribution and other characteristics of each of the nominee's technical contributions or engineering achievements and indicate the potential for realization of value to society. Please list all documentation in English.

# **Technical Publication**

- Books (authored; edited)
- Refereed papers in archival journals
- Papers in technical conference proceedings
- Technical reports (published; or internal, if available)
- Published standards (specify nominee's role) IEEE Fellow grade is awarded for outstanding original and creative work. Individuals nominated for long and dedicated service in standards activities are frequently rejected because their nominator does not identify the nominee's original and creative contributions.
- Other publications
- Technical Presentations (printed talks, television or video scripts, course outlines)

Internal reports should be identified for verification. Indicate the names of co-authors. Indicate the nature of the nominee's contributions to all co-authored publications and reports (principal author, subsidiary author, contributor to work, leader of group). Nominations must provide names of all co-authors, complete citations and, for each document, in a few concise sentences summarize the significance of this work, its impact, and the role of the nominee in this work.

#### Example for listing a paper in a journal:

1. Author 1, Author 2, Author 3, Author 4, "A theory for multi-resolution signal decomposition: the wavelet representation," IEEE Transaction on xxxxx,vol. xx, p. xxx-xxx, July xxxx.

Author 1 is one of the pioneers for the development of wavelet technologies and in particular to their application to image processing. This publication first introduced the multi-resolution theory that makes the bridge between the first wavelet bases that were discovered in mathematics and the sub-band filtering algorithms used in signal processing. This publication also introduced the fast wavelet transform which has become the basis for almost all wavelet applications. Wavelets and the fast wavelet transforms are used in a considerable number of signal and image processing applications and products, among which the image compression standard JPEG-2000. The use of techniques described in this publication has directly led to the JPEG-2000 standard which is universally used today in applications much broader than signal processing. This publication has been cited more than 1000 times in referred journal articles. Author 1 personally developed the theory behind the fast wavelet transform and also developed the multiresolution theory highlighted in the publication. His contributions were enabling to the content of the publication.

#### Example for listing a book:

(1) Author, The Wireless Mobile Internet -Architectures, Protocols and Services, UK: John Wiley & Sons, 2003.

The nominee is the sole author of this book as the first comprehensive text that covers both core network and access network technological aspects of the wireless Internet. This book bridges the gap between the previous research texts written by cellular and computer experts. In addition to providing comprehensive descriptions of the current technologies for the wireless Internet, it gives a forward look at crucial features of future mobile Internet architectures. The book not only facilitates engineering research and education for this emerging technology but also opens several research topics to researchers and engineers.

# Patents:

Nomination must provide patent number, subject and date, country of issue, names of co-inventors. Most importantly, <u>state the significance</u> of each patent and identify the extent of its use and the role of the nominee in the work.

# Example for listing a Patent:

1962. U. S. Patent #x,xxx,xxx; Author 1, Author 2, Author 3;

Method of Fabricating Composite Superconducting Wire. [8/30/1977]. This is the original patent that described the fabrication of an improved Nb- Ti/Copper composite superconducting strand. The improvements described enhanced the basic strand properties of resistivity, current carrying capability, critical temperature and magnetic field and became the enabling technology for composite superconducting wires fabricated after 1982. The prior fabrication technology has been completely replaced by the techniques disclosed in the patent. The techniques described in the patent are now used by all superconducting wire manufacturers and are the basis for a \$xx million dollar industry. This is a long-lasting impact to the superconducting wire technology. The patent was a team effort but the Fellow nominee provided the technical expertise that enabled the implementation of a conventional form of wire manufacturing while retaining the superior performance properties. The Fellow nominee developed the critical theoretical analysis and provided the engineering expertise to reduce the theory to practice. The ability to deliver superior performance with a conventional manufacturing technique has reduced the product price to the point where high quality superconducting wires are affordable in even small quantities.

# Other Documentation

- Internal drawings or reports
- Documentation of a product or system's commercial success
- Document other acceptance of products or systems by society resulting from the nominee's engineering achievements
- Description of Software

Authenticate the development or application of products, systems, facilities or services, including software. Cite whether the accomplishment was a sole effort or team effort. Include a careful description of the degree of the nominee's participation in the project and references to any available documentation thereon.

# Examples:

Design of hydroelectric generation station at (location), the largest in country).

Described in the (19\_/20\_) annual report of X Co.

Designed system architecture and wrote the software for the first digital single loop process controller (type no. and manufacturer) to be competitive in price with analog controllers, described in the review paper by D. Smith and R. Jones, ACM Journal, Vol. 7, pp. 17-45, (1962).

Leader of group developing flight control systems for a succession of aircraft (F300, F501, A495). This work is described in a series of Air Force Avionics Laboratory progress reports, which are available through Defense

Documentation Center (Report Nos. \_\_\_\_).

A nominee's contributions may be subdivided by area of contribution (patents on computers, patents on optics), and/or by activity (publications, internal project reports, facilities developed products and their applications, commercial successes, patents, etc.) Indicate at least one of the following: name of conference for keynote or conference digest papers; the inviting organizer for the presentation; the short course developed or taught.

# e. PROFESSIONAL ACTIVITIES

#### IEEE Activities

List separately IEEE awards and major activities (offices, committee/board memberships etc.) in descending chronological order.

#### Non IEEE Activities

List separately awards and memberships/activities in descending chronological order by date. If possible, Briefly define the scope of the awards listed. Society memberships: provide membership grade and note major volunteer service participation. Describe technical contributions to government, international and Educational committee work, trade associations and those services of a professional or public nature having a technical content. Include college honor societies; please do not use acronyms.

# f. PROPOSED CITATION

- The citation should be no more than 20 words.
- The citation should be complete, correct, and succinct.
- The citation may begin with the following words:
  - o for contributions to (in)...
  - o for developments in...
  - o for leadership of (in)...
  - o for discovery of...
- Avoid superfluous phrases. Adding an adjective to the above words, such as "outstanding", is superfluous since the member's work must be outstanding to fulfill the requirements for Fellow grade.
- Use care when incorporating words like "discovery" and "invention". Evidence of a discovery or invention must be included in the information provided.
- Citations should be free of reference to gender ("his" and "her").
- Only in exceptional cases should the citation include the name of a particular country where the nominee's work is especially recognized.
- Avoid references to specific companies or organizations.

Examples of citations may be found on the IEEE Fellow Web Site at <u>www.ieee.org/fellows</u>.

# g. **REFERENCES**

A nominator will need to enter a reference's IEEE member number. Once the member number is entered, the system will automatically check for eligibility.

A nomination must be supported by at least five, but no more than eight references. It is recommended to list the maximum of 8 references in order to avert any eligibility problems that may come up.

The selection of references is very important. References must be qualified to judge the nominee's work. That is, they must have personal knowledge of the nominee's technical accomplishments and have the ability to address the accomplishments in some detail. Broad generalities may serve to weaken your nominee's nomination.

It is encouraged to select references from outside the nominee's own organization when possible, or to minimize the number from within. The impartiality of the references may be questioned if most are from the nominee's organization. Also, the perception of the nominee's distinction may be questioned. However, if the nominee's contributions consist primarily of product advancements known only within his own organization, it is acceptable for many of the references to come from that source, so that the appropriate level of detail may be cited. For instance, the knowledge of an internal source might be especially important in the case of an individual's particular contribution in a group effort.

**Note**: References will not be shared with the IEEE Society/Technical Council Fellow Evaluating Committee reviewing the nomination.

# h. ENDORSEMENTS

A maximum of three endorsements will be accepted. An endorsement of a nominee is optional. However, the submission of such material will contribute to the evaluation process and should not be overlooked. An endorsement will strengthen a nomination if it contains information on specific contributions that, in the opinion of the endorser, qualify the nominee for the IEEE Fellow grade.

An IEEE Section, Chapter, Committee, or Board to which the nominee has contributed time and talents, may endorse the nomination through its executive body.

A non-IEEE organization or individual may also provide an endorsement.

**Note**: Endorsements will be shared with the IEEE Society/Technical Council Fellow Evaluating Committee reviewing the nomination.

# i. EVALUATION BY IEEE SOCIETY/TECHNICAL COUNCIL

Choose an IEEE Society/Technical Council that best reflects the Nominee's field of technical Interest.