

IFAC Awards Committee Guidelines

Update 2017

Acknowledgement

These guidelines were first put together by the IFAC Awards Committee for the 1996-1999 triennium, by the Awards Chair Laszlo Keviczky, and have been revised and edited by subsequent Awards Chairs Abraham H. Haddad (July 2005), Masayoshi Tomizuka (May 2008), Georg W. Irwin (September 2011), Tohru Katayama (August 2014), and Paul Van den Hof (2017).

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Introduction

Introduction

These guidelines regulate the operation of IFAC's Awards Committee. The responsibilities of the Awards Committee comprise the following:

1. Manage the IFAC Awards Programme including awards planning and procedures, recommendations for initiating and terminating each award and awards funding.
2. Update on a regular basis the Awards Guidelines, specifying the selection and awarding criteria for each award.
3. Recommend to Council award winners.
4. Chair the Award Ceremony at the triennial World Congress for delivering the Journal Awards, Congress Awards and Textbook prize.
5. Submit annually a report on its work to the Executive Board.

The relevant articles from the IFAC Constitution and By-Laws related to the operation of the Awards Committee are included in Appendix A.

Composition of the Awards Committee

The Awards Committee is composed as follows:

- Chair of the Awards Committee
- Chairs of Selection Committees of Major Awards:
 - Quazza Medal
 - Nichols Medal
 - Manfred Thoma Medal
 - Industrial Achievement Award
 - High Impact Paper Award
- Chair of the IFAC Fellow Selection Committee
- Chair of the Harold Chestnut Control Engineering Textbook Selection Committee
- Chairs of Selection Committee of IFAC Journal Awards:
 - Automatica Paper Prize
 - Control Engineering Textbook Paper Prize
 - Journal of Process Control Paper Prize
 - Engineering Applications of Artificial Intelligence Paper Prize
 - Mechatronics Paper Prize
 - Nonlinear Analysis: Hybrid Systems Paper Prize
 - Journal of Systems and Control Paper Prize (*starting 2017*)
- Chairs of Selection Committees of IFAC Congress Awards:
 - Applications Paper Prize
 - Young Author Award
 - Interactive Paper Prize

The Chairs of the Major Awards Search Committee and of the Fellows Search Committee are invited as guests to the Awards Committee meetings.

Procedures concerning appointment of Awards Committee Members and Selection Committee Members					
		Nominated by	Appointed by		
Chair Awards Committee		Elections Committee / Council	General Assembly		
Selection committees		Chair nominated by	Chair appointed by	Members nominated by	Members appointed by
Major IFAC Awards					
Quazza Medal		Elections Committee / Outgoing EB	Incoming EB / Incoming Council	Selection Committee Chair	President on behalf of the council
Nichols Medal		Elections Committee / Outgoing EB	Incoming EB / Incoming Council	Selection Committee Chair	President on behalf of the council
Manfred Thoma Medal		Elections Committee / Outgoing EB	Incoming EB / Incoming Council	Selection Committee Chair	President on behalf of the council
Industrial Achievement Award		Elections Committee / Outgoing EB	Incoming EB / Incoming Council	Selection Committee Chair	President on behalf of the council
High Impact Paper Award		Elections Committee / Outgoing EB	Incoming EB / Incoming Council	Selection Committee Chair	President on behalf of the council
IFAC Fellows					
IFAC Fellows		Elections Committee / Outgoing EB	Incoming EB / Incoming Council	Selection Committee Chair	President on behalf of the council
Textbook prize					
Harold Chestnut Control Engineering Textbook Prize		Elections Committee / Outgoing EB	Incoming EB	Selection Committee Chair	Awards Chair on behalf of the Council
IFAC Journal Awards					
Automatica Paper Prize		Elections Committee / Outgoing EB	Incoming EB	Selection Committee Chair	Awards Chair on behalf of the Council
CEP Paper Prize		Elections Committee / Outgoing EB	Incoming EB	Selection Committee Chair	Awards Chair on behalf of the Council
JPC Paper Prize		Elections Committee / Outgoing EB	Incoming EB	Selection Committee Chair	Awards Chair on behalf of the Council
EAAI Paper Prize		Elections Committee / Outgoing EB	Incoming EB	Selection Committee Chair	Awards Chair on behalf of the Council
Mechatronics Paper Prize		Elections Committee / Outgoing EB	Incoming EB	Selection Committee Chair	Awards Chair on behalf of the Council
Nonlinear Analysis: Hybrid Systems Paper Prize		Elections Committee / Outgoing EB	Incoming EB	Selection Committee Chair	Awards Chair on behalf of the Council
IFAC Congress Awards					
Young Author Award		Elections Committee / Outgoing EB	Incoming EB	Selection Committee Chair	Awards Chair on behalf of the Council
Application Paper Prize		Elections Committee / Outgoing EB	Incoming EB	Selection Committee Chair	Awards Chair on behalf of the Council
Interactive Paper Prize		Elections Committee / Outgoing EB	Incoming EB	Selection Committee Chair	Awards Chair on behalf of the Council
Non-official members (operation is monitored by the awards committee):					
Major Award Search Committee		Elections Committee / Outgoing EB	Incoming EB / Incoming Council	Selection Committee Chair	President on behalf of the council
Fellows Search Committee		Elections Committee / Outgoing EB	Incoming EB / Incoming Council	Selection Committee Chair	President on behalf of the council

Table 1: Nominating and appointing bodies for Awards Committee and Selection Committee

The nominating and appointment procedures for the members of the Awards Committee, as well as of the members of the Selection Committees are listed in Table 1. It has to be noted that these procedures are not specified in the IFAC Constitution or By-Laws, but have common to follow.

Decision on Council Awards, including IFAC Fellows, are being made in the Council meeting of the year preceding the World Congress. All other awards are decided upon around three months before the Congress at which the awards will be presented. Table 2 lists the timeline as well as the decision making body for every award, and also lists who is informing the winners, and the finalists in case of the Congress Awards.

Timeline and Decisions on IFAC Awards			
	Time of decision	Decision made by	Winners are informed by
Major IFAC Awards			
Quazza Medal	One year before Congress	Council	President
Nichols Medal	One year before Congress	Council	President
Manfred Thoma Medal	One year before Congress	Council	President
Industrial Achievement Award	One year before Congress	Council	President
High Impact Paper Award	One year before Congress	Council	President
IFAC Fellows			
IFAC Fellows	One year before Congress	Council	Secretariat
Textbook prize			
Harold Chestnut Textbook Prize	Three months before Congress	Selection Comm. and Awards Chair	Selection Committee Chair
IFAC Journal Awards			
Automatica Paper Prize	Three months before Congress	Awards Chair and Publisher	Awards Chair and Publisher
CEP Paper Prize	Three months before Congress	Awards Chair and Publisher	Awards Chair and Publisher
JPC Paper Prize	Three months before Congress	Awards Chair and Publisher	Awards Chair and Publisher
EAAI Paper Prize	Three months before Congress	Awards Chair and Publisher	Awards Chair and Publisher
Mechatronics Paper Prize	Three months before Congress	Awards Chair and Publisher	Awards Chair and Publisher
NAHS Paper Prize	Three months before Congress	Awards Chair and Publisher	Awards Chair and Publisher
IFAC Congress Awards			
			Finalists are informed by
Young Author Award	During Congress	Selection Comm. and Awards Chair	Selection Committee Chair
Application Paper Prize	During Congress	Selection Comm. and Awards Chair	Selection Committee Chair
Interactive Paper Prize	During Congress	Selection Comm. and Awards Chair	Selection Committee Chair

Table 2: Timeline and Decision Authorities for IFAC Awards.

Duties of the Awards Committee Chair

The Awards Committee chair has the task to coordinate the activities of the Awards Committee. It is his/her role to liaise with the Chairs of the Selection Committees, to offer support and advice where required, to co-ordinate the overall selection process, to guard the high standards that IFAC wishes to comply to in its Awards Selection process, to organise and chair an annual meeting, to report annually to Executive Board, to update the Guidelines at the end of the triennium and to chair the presentation of Textbook prize, Journal Awards and Congress Awards at the Congress.

Duties of the Selection Committee Chairs

The Selection Committee Chairs have the task to nominate the members of their Selection Committee, taking account of having a well-balanced composition of the committee in terms of regional and gender distribution, and –wherever appropriate- a distribution over expertise areas. They have to guard that the selection procedure is fair and that the appropriate selection criteria are being applied. The recommendations made by the Selection Committees should be made after discussion among the committee members, and preferably be based on consensus. In case of disagreement, the Chair will prepare a recommendation that has solid support from the committee members.

General principles for Awards Committee procedures

IFAC aims at transparent procedures for nominating and selecting Award winners, so as to secure a fair and unbiased selection process. To this end the following principles are implemented:

- IFAC aims at a clear separation of nomination and selection procedures for the different awards. Nominators do typically not take part in the process of selecting the winners.
- No person that is involved in the decision process of an award can act as a nominator or can be eligible for the award. For the Council Awards this applies to Selection Committee members, Council members, Search Committee members and Awards Chair. For the Journal and Congress Awards this applies to Selection Committee members and Awards Chair.

What follows is an overview of descriptions, procedures and criteria for the different IFAC Awards.

Major Awards

Quazza Medal

(Created 1979)

The Giorgio Quazza medal recognizes outstanding lifetime contributions of a researcher and/or engineer to conceptual foundations in the field of systems and control. This IFAC award, created in 1979, is a memorial to the late Giorgio Quazza, a leading Italian electrical and control engineer who served IFAC in many capacities in a most distinguished manner. The medal is presented by the President at each IFAC Triennial Congress. A prize is presented to the recipient together with the medal.

Nomination Procedure

No later than 18 months before the start of the Congress at which the awards are presented, the IFAC Secretary publishes and distributes a Call for Nominations through the IFAC website, IFAC Newsletter and direct communication with NMOs and TCs.

Each nomination has to be made by a nominator who is responsible for the information provided about the candidate. Self-nominations are not allowed.

Nominations should contain:

- Summary of the contributions
- a Curriculum Vitae
- List of publications
- Supporting letters
- Suggested citation

Any person is eligible to serve as a nominator with the exception of members of the IFAC Council, Quazza Medal Selection Committee, Major Medal Search Committee and IFAC Officers.

Nominations and reference letters should be sent to the IFAC Secretariat. Only nominations of which full nomination packages, including reference letters, are received before the published deadline are taken into account.

Eligibility

Members of the Quazza Medal Selection Committee, the Major Medals Search Committee and the IFAC Council, as well as the Awards chair are not eligible.

Selection Criteria

The award is given in technical fields covered by IFAC. The contributions should be manifested in technical publications. A nominee should have served IFAC in some capacity, formally or informally. The selection is based on:

- Quality of publications
- Impact of publications
- Engineering significance
- Service to IFAC
- International recognition

Selection Committee

A Selection Committee is formed that consists of five to seven distinguished individuals, appointed by the President on behalf of the Council, normally more than 24 months prior to the IFAC Congress at which the awards are to be presented.

Council members as well as members of the Major Medals Search Committee are not eligible as members.

Selection Procedure

The nominations are evaluated by the Selection Committee. After careful evaluation of candidates and possibly through a dialogue among the committee members, a recommended winner is selected and forwarded to the IFAC Council through the President. The winner is decided upon by a vote of the Council, normally 12 months prior to the Congress at which the awards are to be presented.

Comments

The Selection Committee has found it useful to establish a list of strong candidates that is kept and transferred to the next triennium. It has also been a good tradition that several of the Selection Committee members are former awards winners, as well as that the members typically serve for a few three year periods.

Nichols Medal

(Created 1996)

This is an IFAC award that recognizes industrial leadership, outstanding contributions of an individual to design methods, software tools and instrumentation, or significant projects in major applications and advancement of control engineering. It is named after **Nathaniel B. Nichols**, a leading contributor in the USA to control engineering and applications. The medal is presented by the President at each Triennial IFAC World Congress. A prize is presented to the recipient together with the medal.

Nomination Procedure

No later than 18 months before the start of the Congress at which the awards are presented, the IFAC Secretary publishes and distributes a Call for Nominations through the IFAC website, IFAC Newsletter and direct communication with NMOs and TCs.

Each nomination has to be made by a nominator who is responsible for the information provided about the candidate. Self-nominations are not allowed.

Nominations should contain:

- Summary of the contributions
- a Curriculum Vitae
- List of publications
- Supporting letters
- Suggested citation

Any person is eligible to serve as a nominator with the exception of members of the IFAC Council, Quazza Medal Selection Committee, Major Medal Search Committee and IFAC Officers.

Nominations and reference letters should be sent to the IFAC Secretariat. Only nominations of which full nomination packages, including reference letters, are received before the published deadline are taken into account.

Eligibility

Members of the Nichols Medal Selection Committee, the Major Medals Search Committee and the IFAC Council, as well as the Awards chair are not eligible.

Selection Criteria

The award is given in technical fields covered by IFAC. The contributions should be manifested in technical publications, patents or reports documenting completed projects or developed products.

The selection is based on:

- Quality of publications
- Impact of publications
- Innovation level of patents
- Impact of patents
- Engineering significance of products and projects
- International recognition

Selection Committee

A Selection Committee is formed that consists of five to seven distinguished individuals, appointed by the President on behalf of the Council, normally more than 24 months prior to the IFAC Congress at which the awards are to be presented.

Council members as well as members of the Major Medals Search Committee are not eligible as members.

Selection Procedure

The nominations are evaluated by the Selection Committee. After careful evaluation of candidates and possibly through a dialogue among the committee members, a recommended winner is selected and forwarded to the IFAC Council through the President. The winner is decided upon by a vote of the Council, normally 12 months prior to the Congress at which the awards are to be presented.

Comments

The Selection Committee has found it useful to establish a list of strong candidates that is kept and transferred to the next triennium. It has also been a good tradition that several of the Selection Committee members are former awards winners, as well as that the members typically serve for a few three year periods.

Manfred Thoma Medal

(Created 2015)

This IFAC award recognizes outstanding contributions of a young researcher and/or engineer under the age of 40 to the field of systems and control in its widest sense. It is named after **Manfred M. Thoma**, a leading contributor to the field of control and to IFAC, and supporter of the careers of many young scientists. The medal is presented by the President at each Triennial IFAC World Congress. A prize is presented to the recipient together with the medal.

Nomination Procedure

No later than 18 months before the start of the Congress at which the awards are presented, the IFAC Secretary publishes and distributes a Call for Nominations through the IFAC website, IFAC Newsletter and direct communication with NMOs and TCs.

Each nomination has to be made by a nominator who is responsible for the information provided about the candidate. Self-nominations are not allowed.

Nominations should be submitted on a Nomination Form and include a formulation of the outstanding contributions of the candidate and a suggested citation. Additionally reference letters have to be submitted by three to five international referees, who are aware of the candidate's contributions.

Any person is eligible to serve as a nominator or referee with the exception of members of the IFAC Council, Manfred Thoma Medal Selection Committee or Major Medal Search Committee.

Nominations and reference letters should be sent to the IFAC Secretariat. Only nominations of which full nomination packages, including reference letters, are received before the published deadline are taken into account.

Eligibility

In order to be eligible, candidates should be under the age of 40 at 31 December of the year preceding the year of the IFAC World Congress at which the award is to be presented.

Members of the IFAC Council, the Manfred Thoma Medal Selection Committee and the Major Medal Search Committee as well as the Awards chair are not eligible.

Selection Criteria

Candidates are assessed by their scientific and technical contributions to the field of systems and control. Involvement in IFAC is not part of the criteria.

Selection Committee

A Selection Committee is formed that consists of three to five distinguished individuals, appointed by the President on behalf of the Council, normally more than 24 months prior to the IFAC Congress at which the awards are to be presented. Council members as well as members of the Major Medals Search Committee are not eligible as members.

Selection Procedure

The nominations are evaluated by the Selection Committee. After careful evaluation of candidates and possibly through a dialogue among the committee members, a recommended winner is selected and forwarded to the IFAC Council through the President. The IFAC Secretariat will request evidence of the recommended winner that he/she complies with the age criterion. The award cannot be shared.

The winner is decided upon by a vote of the Council, normally 12 months prior to the Congress at which the awards are to be presented.

Industrial Achievement Award

(Created 2000)

This is an IFAC award to an individual, or a team of individuals, who has made a significant contribution to industrial applications of control. The award, together with a certificate, is presented by the President at each Triennial IFAC World Congress. A prize is presented to the recipient together with the award.

Nomination Procedure

No later than 18 months before the start of the Congress at which the awards are presented, the IFAC Secretary publishes and distributes a Call for Nominations through the IFAC website, IFAC Newsletter and direct communication with NMOs and TCs.

Each nomination has to be made by a nominator who is responsible for the information provided about the candidate. Self-nominations are not allowed.

Nominations should contain:

- Summary of the contributions
- a Curriculum Vitae
- Supporting letters
- Suggested citation

Any person is eligible to serve as a nominator with the exception of members of the IFAC Council, Industrial Achievement Award Selection Committee, Major Medal Search Committee and IFAC Officers. Nominations and reference letters should be sent to the IFAC Secretariat. Only nominations of which full nomination packages, including reference letters, are received before the published deadline are taken into account.

Eligibility

Members of the Industrial Achievement Award Selection Committee, the Major Medals Search Committee and the IFAC Council, as well as the Awards chair are not eligible.

Selection Criteria

The award is given in technical fields covered by IFAC. The selection is based on industrial achievements measured in terms of:

- Inventions in the control area
- Engineering significance of products and projects
- Industrial leadership
- Promotion of control technology in industry
- Impact of patents
- International recognition

The award may be given to a team of engineers for joint achievements. There is no requirement that the nominated candidates must have been involved in IFAC. The award can be given to a single achievement (an invention or a leadership of a major project) or a record of achievements over a period of time. The IAA award should favour the industrial team effort as a basic criterion for selecting the award recipients. Lifetime contributions by an individual to industrial control problems would be more appropriate to the Nichols Medal than the IAA.

Selection Committee

A Selection Committee is formed that consists of five to seven distinguished individuals, appointed by the President on behalf of the Council, normally more than 24 months prior to the IFAC Congress at

which the awards are to be presented.

Council members as well as members of the Major Medals Search Committee are not eligible as members.

Selection Procedure

The nominations are evaluated by the Selection Committee. After careful evaluation of candidates and possibly through a dialogue among the committee members, a recommended winner is selected and forwarded to the IFAC Council through the President. The winner is decided upon by a vote of the Council, normally 12 months prior to the Congress at which the awards are to be presented.

Comments

The Selection Committee has found it useful to establish a list of strong candidates that is kept and transferred to the next triennium.

High Impact Paper Award

(Created 2009)

This is an IFAC award to acknowledge the impact of a paper, published in any of the official IFAC Journals, on the broad areas of Automatic Control theory and application. At most two such awards will be made in any triennium. The award, together with a certificate, is presented by the President at each Triennial IFAC World Congress. A prize is presented to the recipient together with the award.

Nomination Procedure

No later than 18 months before the start of the Congress at which the awards are presented, the IFAC Secretary publishes and distributes a Call for Nominations through the IFAC website, IFAC Newsletter and direct communication with NMOs and TCs.

Each nomination has to be made by a nominator who is responsible for providing full and accurate information. Self-nominations are not allowed.

Nominations should contain:

- A statement specifying the number of citations, as obtainable from either (or both) the engineering databases: Thompson ISI's Web of Science and Elsevier's SCOPUS.
- Excerpts of technical papers documenting work and progress made possible because the contributions of the nominated paper. Papers (co)authored by one of the authors of the nominated paper cannot be used for this purpose.
- A description (if appropriate) of industrial achievements made possible because the contributions of the nominated paper.
- Up to three letters of reference.

Any person is eligible to serve as a nominator with the exception of members of the IFAC Council, High Impact Paper Award Selection Committee, Major Medal Search Committee and IFAC Officers.

Nominations and reference letters should be sent to the IFAC Secretariat. Only nominations of which full nomination packages, including reference letters, are received before the published deadline are taken into account.

Eligibility

Eligible papers must have been published in any of the official IFAC Journals (Automatica, Control Engineering Practice, Annual Reviews in Control, Journal of Process Control, Engineering Applications of Artificial Intelligence, Mechatronics, Nonlinear Analysis: Hybrid Systems), in the period between 8 and 30 years prior to the year in which the Congress is held at which the awards are to be presented. Papers (co-) authored by members of the High Impact Paper Award Selection Committee, the Major Medals Search Committee and the IFAC Council, as well as the Awards chair are not eligible.

Selection Criteria

The award(s) are given in all the technical fields covered by IFAC and should acknowledge impact upon the progress of control science and/or upon the practice of control engineering. The Selection Committee will evaluate and rate the impact of the nominated papers on the basis of the following information, to be provided by the nominator:

- Evidence of a high number of citations, as obtainable from either (or both) of the engineering databases: Thompson ISI's Web of Science and Elsevier's SCOPUS.

- Evidence that the work under consideration has been actually used by others in their research/professional activity, consisting of a detailed description of all research and/or industrial achievements made possible by the contributions of the nominated paper.
- Opinions expressed by (no more than three) referees from internationally reputed experts in the field, who are personally aware of the contributions of the nominated paper.

Selection Committee

A Selection Committee is formed that consists of five to seven distinguished individuals, appointed by the President on behalf of the Council, normally more than 24 months prior to the IFAC Congress at which the awards are to be presented.

Council members as well as members of the Major Medals Search Committee are not eligible as members.

Selection Procedure

The nominations are evaluated by the Selection Committee. After careful evaluation of candidates and possibly through a dialogue among the committee members, a recommended winner is selected and forwarded to the IFAC Council through the President. The winner is decided upon by a vote of the Council, normally 12 months prior to the Congress at which the awards are to be presented.

Fellow Awards

IFAC Fellow Award

(Created 2005)

The IFAC Fellow award provides a distinction of excellence in the Federation and is conferred on a small number of outstanding scientists or engineers by the IFAC Council, based on the proposal of the Fellow Selection Committee. With the appointment as an IFAC Fellow, IFAC honors outstanding contributions with a high impact in the fields of interest of IFAC in the role as a Scientist, Engineer, Technical Leader or Educator. These contributions may be technical publications, patents, control solutions, products, software, and leadership in research, development and education. Fellows Awards are presented by the President at each triennial IFAC World Congress. The award consists of a framed certificate and an IFAC Fellow Pin.

Nomination Procedure

Not later than 18 months before the start of the Congress at which the awards are presented, the IFAC Secretary publishes and distributes a Call for Nominations through the IFAC website, IFAC Newsletter and direct communication with NMOs and TCs.

Any person is eligible to serve as a nominator with the exception of members of the IFAC Council, Fellow Selection Committee or Fellow Search Committee. The nominator is responsible for the information provided about the candidate. Self-nominations are not allowed.

Nominations should be submitted on the Nomination Form. Additionally reference letters have to be submitted by three to five international referees, who are aware of the candidate's contributions.

Referees need not be IFAC Fellows themselves. Members of the IFAC Council, Fellow Selection Committee or Fellow Search Committee are not eligible to act as referees.

Nominations and reference letters should be sent to the IFAC Secretariat that makes sure that the nomination material is complete and requests additional material if necessary. Only nominations of which full nomination packages, including reference letters, are received before the published deadline are taken into account.

Eligibility

Any control scientist or engineer can be a candidate for an IFAC Fellow Award, with the exclusion of current members of the IFAC Council, Fellow Selection Committee and Fellow Search Committee.

Selection Criteria

Candidates are assessed by technical excellence. Past involvement in IFAC activities, publications and events is desirable and an asset but not absolutely mandatory. The award is given in technical fields covered by IFAC. The contributions should be manifested in technical publications. Each triennium the number of new Fellows that is being elected is targeted at a maximum of 25.

Fellow Selection Committee

A Fellow Selection Committee is formed that consists of six to ten distinguished individuals, appointed by the President on behalf of the Council, normally more than 24 months prior to the IFAC Congress at which the awards are to be presented.

Council members as well as members of the Fellow Search Committee are not eligible as members.

Selection Procedure

The nominations are evaluated by the Fellow Selection Committee. Each member makes an individual assessment of the candidates and sends his choice to the chair. After careful evaluation of candidates and possibly through a dialogue among the committee members, a final list of selected candidates is prepared, and a final report is forwarded to the IFAC Council through the President. The Council votes on the whole slot of candidates, thereby basically verifying that all procedures have been executed according to plan. The Council vote is taken normally 12 months prior to the Congress at which the awards are to be presented.

Announcements

The announcement of newly elected Fellows will be made shortly after the completion of the vote taken by the IFAC Council in the year preceding the Congress. The IFAC Secretariat will inform all successful candidates and their nominators of the election results by e-mail and first class mail. Nominators of unsuccessful candidates will be notified by e-mail. The newly elected IFAC Fellows will be honored in a ceremony at the IFAC World Congress.

Textbook Prize

Harold Chestnut Control Engineering Textbook Prize

(Created 1986, renamed in 2002)

This IFAC Award recognizes the author(s) of the best Control Engineering Textbook, that is judged to have contributed most to the education of control engineers. It is named after Harold Chestnut, the first President of IFAC. The award, together with a certificate, is presented by the President at each Triennial IFAC World Congress. A prize is presented to the recipient(s) together with the award.

Nomination Procedure

No later than 10 months before the start of the Congress at which the awards are presented, the IFAC Secretary publishes and distributes a Call for Nominations through the IFAC website, IFAC Newsletter and direct communication with NMOs and TCs.

Each nomination has to be made by a nominator who is responsible for providing full and accurate information. Any person is eligible to serve as a nominator with the exception of members of the IFAC Council and the selection committee. Self-nominations are not allowed.

Nominations should include:

- a) A nomination letter that states the full title, name(s) and address of the author(s), name of the textbook, date of publication, and name and address of the publisher;
- b) Evidence of the contribution/s of the textbook to the education of control engineers; and
- c) Any additional information that may support the Judging Process, as per the selection criteria listed below. It is important to note that only those book reviews in IFAC journals (Automatica, Control Engineering Practice, Engineering Applications of Artificial Intelligence, Journal of Process Control, Mechatronics), journals of IFAC NMOs, and other reputable academic journals (e.g. IEEE Transactions) will be considered.

Eligibility

Eligible books must have been written in any of the official IFAC Journals languages, while their first edition must have been published in the period between nine and three years prior to the IFAC Congress at which the award is to be presented.

No more than one IFAC Control Engineering Textbook Prize may be given for any particular textbook. Textbooks (co-) authored by members of the selection committee and by the awards chair are not eligible.

Selection Criteria

All nominations will be evaluated using the following selection criteria:

- Originality and innovation
- General content in terms of the topics covered
- Clear applications to real problems
- Style: presentation, readability and clarity in relation to the content
- Meeting educational objectives:
 - Clear statement of what students should be able to do
 - Worked examples and exercises
 - Software support
 - Multi-disciplinary examples (cross-boundary applications of control)
 - Use by practicing engineers

Selection Committee

A Selection Committee is nominated by the Selection Committee Chair and appointed by the Chair of the Awards Committee on behalf of the Council. The TC on Control Engineering Education is invited to nominate a Vice-Chair and the Automatica Book Review Editor is an ex-officio member of the Committee. The committee should consult as widely as possible to secure nominations.

Selection Procedure

The nominations are evaluated by the Selection Committee. After careful evaluation of all eligible nominations, and possibly through a dialogue among the committee members, a recommended winner is selected and forwarded to the Awards Committee Chair, copied to the Secretariat, accompanied by a short citation about the book selected.

The winner will be informed by the Selection Committee Chair two months before the Congress. He/she should be obliged not to inform anyone prior to the IFAC Congress (in particular, not to inform the publisher).

Journal Awards

Automatica Paper Prize

(Created 1979)

The prize is given for outstanding contributions to the theory and/or practice of control engineering or control science, documented in a paper published in the *IFAC Journal Automatica*.

In each triennium, three such prizes are given, with funds provided by *Elsevier*, the publisher of *Automatica*. The prizes are presented to the authors of the three selected papers at each triennial IFAC World Congress.

Nomination Procedure

A call for nominations will be posted on the website of IFAC, the journal website of Elsevier and in the IFAC Newsletter. The nomination process and the cut-off date will be clearly indicated. Each nomination will consist of a letter to the chair of the selection committee, identifying the nominated paper, describing the contribution of the paper, and making a case for its nomination. Any person is eligible to serve as a nominator with the exception of members of the selection committee. Self-nominations are not allowed.

In addition, *Automatica* Editors will be asked to identify and nominate eligible papers in their respective domains.

Eligibility

Eligible papers must have been published in an issue of *Automatica* during the three calendar years immediately preceding the IFAC World Congress where the awards are to be presented. Papers authored by members of the Selection Committee and by Editors of the journal are not eligible.

Selection Committee

A Selection Committee is nominated by the Selection Committee Chair and appointed by the Chair of the Awards Committee on behalf of the Council.

Selection Procedure

The nominations are evaluated by the Selection Committee. After careful evaluation of all eligible nominations, and possibly through a dialogue among the committee members, the recommended winners are selected and forwarded to the Awards Committee Chair, who sends them to the Publisher for approval.

The Chair of the Awards Committee informally informs the successful candidates. The Publisher writes formally to the recipients telling them of their success, and inviting them to attend the Awards Ceremony at the Congress.

Control Engineering Practice Paper Prize

(Created 1993)

The prize is given for outstanding papers on the practical application of control techniques and advanced control theory, documented in a paper published in the *IFAC Journal Control Engineering Practice*. In each triennium, three such prizes are given, with funds provided by *Elsevier*, the publisher of the journal. The prizes are presented to the authors of the three selected papers at each triennial IFAC World Congress.

Nomination Procedure

A call for nominations will be posted on the website of IFAC, the journal website of Elsevier and in the IFAC Newsletter. The nomination process and the cut-off date will be clearly indicated. Each nomination will consist of a letter to the chair of the selection committee, identifying the nominated paper, describing the contribution of the paper, and making a case for its nomination. Self-nominations are not allowed.

In addition, *Control Engineering Practice* Editors will be asked to identify and nominate eligible papers in their respective domains.

Eligibility

Eligible papers must have been published in an issue of *Control Engineering Practice* during the three calendar years immediately preceding the IFAC World Congress where the awards are to be presented. Papers authored by members of the Selection Committee and by Editors of the journal are not eligible.

Selection Criteria

Selected papers should meet the following criteria: high-quality application paper, practically relevant results based on profound theory, supported by strong industrial results. Simulation studies are only acceptable if it is demonstrated that the simulation model is representative of a genuine industrial application.

Selection Committee

A Selection Committee is nominated by the Selection Committee Chair and appointed by the Chair of the Awards Committee on behalf of the Council.

Selection Procedure

The nominations are evaluated by the Selection Committee. After careful evaluation of all eligible nominations, and possibly through a dialogue among the committee members, the recommended winners are selected and forwarded to the Awards Committee Chair, who sends them to the Publisher for approval.

The Chair of the Awards Committee informally informs the successful candidates. The Publisher writes formally to the recipients telling them of their success, and inviting them to attend the Awards Ceremony at the Congress.

Journal of Process Control Paper Prize

(Created 2002)

The prize is given for outstanding contributions to the theory and/or practice of process control engineering, documented in a paper published in the *IFAC Journal of Process Control*.

In each triennium, three such prizes are given for papers in the following categories:

1. Survey
2. Theory/Methodology
3. Application

The prizes are presented to the authors of the three selected papers at each triennial IFAC World Congress. Funds are provided by *Elsevier*, the publisher of the journal.

Nomination Procedure

Each *Journal of Process Control* Regional Editor and the Reviews Editor will be requested to point out the best papers in his/her respective areas from those published in the *IFAC Journal of Process Control* in the past triennium. This procedure should give a set of approximately 12 nominated papers.

Eligibility

Eligible papers must have been published in an issue of *Journal of Process Control* during the three calendar years immediately preceding the IFAC World Congress where the awards are to be presented. Papers authored by members of the Selection Committee and by Editors of the journal are not eligible.

Selection Criteria

Selection criteria are the same as those for reviewing papers submitted to the Journal.

Selection Committee

A Selection Committee is nominated by the Selection Committee Chair and appointed by the Chair of the Awards Committee on behalf of the Council.

Selection Procedure

The nominations are evaluated by the Selection Committee, which ranks the papers in the different categories. After careful evaluation of all eligible nominations, and possibly through a dialogue among the committee members, the recommended winners are selected and forwarded to the Awards Committee Chair, who sends them to the Publisher for approval.

The Chair of the Awards Committee informally informs the successful candidates. The Publisher writes formally to the recipients telling them of their success, and inviting them to attend the Awards Ceremony at the Congress.

Engineering Applications of Artificial Intelligence Paper Prize

(Created 2002)

The prize is given for outstanding contributions to the theory and/or practice of process control engineering, documented in a paper published in the *IFAC Journal Engineering Applications of Artificial Intelligence*.

In each triennium, two such prizes are given for papers in the following categories:

1. Theory
2. Application

The prizes are presented to the authors of the two selected papers at each triennial IFAC World Congress. Funds are provided by *Elsevier*, the publisher of the journal.

Nomination Procedure

The journal Editor-in-Chief and Deputy Editor will be requested to provide a listed of nominated papers from those published in the *IFAC Journal Engineering Applications of Artificial Intelligence* in the past triennium, and forward this to the Selection Committee.

Eligibility

Eligible papers must have been published in an issue of *Engineering Applications of Artificial Intelligence* during the three calendar years immediately preceding the IFAC World Congress where the awards are to be presented. Papers authored by members of the Selection Committee and by Editors of the journal are not eligible.

Selection Criteria

Selection criteria are the same as those for reviewing papers submitted to the Journal.

Selection Committee

A Selection Committee is nominated by the Selection Committee Chair and appointed by the Chair of the Awards Committee on behalf of the Council.

Selection Procedure

The nominations are evaluated by the Selection Committee, which ranks the papers in the different categories. After careful evaluation of all eligible nominations, and possibly through a dialogue among the committee members, the recommended winners are selected and forwarded to the Awards Committee Chair, who sends them to the Publisher for approval.

The Chair of the Awards Committee informally informs the successful candidates. The Publisher writes formally to the recipients telling them of their success, and inviting them to attend the Awards Ceremony at the Congress.

Mechatronics Paper Prize

(Created 2002)

The prize is given for outstanding contributions to the theory and/or practice of mechatronics and control, documented in a paper published in the *IFAC Journal Mechatronics*.

In each triennium, three such prizes are given, with funds provided by *Elsevier*, the publisher of the journal. The prizes are presented to the authors of the three selected papers at each triennial IFAC World Congress.

Nomination Procedure

The journal Editors and Associate Editors will be requested to identify and nominate eligible papers from those published in the *IFAC Journal Mechatronics* in the past triennium, and forward this to the Selection Committee.

Eligibility

Eligible papers must have been published in an issue of *Mechatronics* during the three calendar years immediately preceding the IFAC World Congress where the awards are to be presented. Papers authored by members of the Selection Committee and by Editors of the journal are not eligible.

Selection Criteria

Selection criteria are the same as those for reviewing papers submitted to the Journal.

Selection Committee

A Selection Committee is nominated by the Selection Committee Chair and appointed by the Chair of the Awards Committee on behalf of the Council.

Selection Procedure

The nominations are evaluated by the Selection Committee. After careful evaluation of all eligible nominations, and possibly through a dialogue among the committee members, the recommended winners are selected and forwarded to the Awards Committee Chair, who sends them to the Publisher for approval.

The Chair of the Awards Committee informally informs the successful candidates. The Publisher writes formally to the recipients telling them of their success, and inviting them to attend the Awards Ceremony at the Congress.

Nonlinear Analysis: Hybrid Systems Paper Prize

(Created 2014)

The prize is given for outstanding contributions to the theory and/or practice of control engineering or control science within the domain of Hybrid Systems, documented in a paper published in the IFAC Journal *Nonlinear Analysis: Hybrid Systems*.

In each triennium, two such prizes are given, with funds provided by *Elsevier*, the publisher of the journal. The prizes are presented to the authors of the selected papers at each triennial IFAC World Congress.

Nomination Procedure

A Nominating Committee is composed by the Editor-in-Chief and the Senior Editors of *Nonlinear Analysis: Hybrid Systems*. Nominations may arise from:

- Authors of papers published on *Nonlinear Analysis: Hybrid Systems* during the triennium. Instructions and a request for nominations will be included in each final acceptance message.
- Reviewers of papers published on *Nonlinear Analysis: Hybrid Systems* during the triennium. Instructions and a request for nominations will be included in each final thank you message.
- Associate editors of *Nonlinear Analysis: Hybrid Systems*. The Editor-in-Chief will invite them to submit nominations.

The nominations will be received by the Editor-in-Chief of the journal and based on them the Nominating Committee will prepare a shortlist of candidate prize papers. To be shortlisted, a paper must be endorsed by at least one member of the committee.

The shortlist of candidate prize papers will be forwarded to the Selection Committee, which makes the final ranking and decision.

Eligibility

Eligible papers must have been published in an issue of *Nonlinear Analysis: Hybrid Systems* during the three calendar years immediately preceding the IFAC World Congress where the awards are to be presented. Papers authored by members of the Selection Committee and the Nominating Committee are not eligible.

Selection Criteria

Selection criteria are scientific quality, originality, clarity and potential impact on practical applications or theoretical foundations of control.

Selection Committee

A Selection Committee is nominated by the Selection Committee Chair and appointed by the Chair of the Awards Committee on behalf of the Council.

Selection Procedure

The nominations are evaluated by the Selection Committee. After careful evaluation of all eligible nominations, and possibly through a dialogue among the committee members, the recommended winners are selected and forwarded to the Awards Committee Chair, who sends them to the Publisher for approval.

The Chair of the Awards Committee informally informs the successful candidates. The Publisher writes formally to the recipients telling them of their success, and inviting them to attend the Awards Ceremony at the Congress.

Congress Awards

Applications Paper Prize

(Created 1986)

The prize is given for outstanding technical contributions at an IFAC Congress in the area of control applications. This includes, but is not limited to, case studies, design and implementation of control systems and optimization of operations in a full-scale application. For work of a simulation or laboratory scale nature it should be convincingly shown that it has high impact on real-world applications. The prize and a certificate are awarded at each Triennial IFAC World Congress.

Nomination Procedure

Nominations are prepared by TC-chairs who select candidate papers after the review round that has led to the selection of papers for the program of the IFAC World Congress. To support this selection, reviewers have the opportunity to indicate on the paper review forms that a particular paper is recommended for the Application Paper Prize. The prize is also announced on the IFAC Congress website. TC-chairs are requested to forward their nominations to the Selection Committee Chair, accompanied by the reviewers' scores of the papers.

Eligibility

Eligible papers must be presented at the considered IFAC World Congress.

Selection Criteria

Selected papers should describe a case study, design and implementation of a control system, optimization of a process, or other "real" working application. Papers which only present simulation or laboratory results are not considered to be strong candidates for this prize. In addition, selected papers should be clearly written and well presented.

Selection Committee

A Selection Committee is nominated by the Selection Committee Chair and appointed by the Chair of the Awards Committee on behalf of the Council. It is recommended that each Coordinating Committee with strong links with technology is represented in the Selection Committee.

Selection Procedure

The nominations are evaluated by the Selection Committee. After careful evaluation of all eligible nominations, and possibly through a dialogue among the committee members, a set of finalists is selected (typically 5 or less), on the basis of the paper evaluation. These finalists are informed about their selection. The final winner is selected by the Selection Committee after the presentation of the paper at the World Congress. All finalists receive a certificate.

Young Author Award

(Created 1986; changed 2016)

The prize is given for outstanding technical contributions at an IFAC Congress by an author that is younger than 30 years. The prize and a certificate are awarded at each Triennial IFAC World Congress.

Nomination Procedure

Nominations can be made by any supervisor or senior person, through a nomination procedure that is available in PaperCept after the submission deadline for regular contributions to the IFAC World Congress. A nomination consists of a nomination letter that motivates the outstanding contribution of the candidate and certifies that he/she satisfies the age criterion. No self-nominations are allowed.

Eligibility

Eligible candidates are all authors that are first and presenting author of a paper that is presented at the IFAC World Congress, and that satisfy the age criterion of being younger than 30 years by the first of the month in which the IFAC World Congress starts. For the age criterion motivated exemptions can be taken into account to compensate for gender and cultural differences.

Selection Criteria

Selected criteria are the highest technical quality and a good presentation of the results.

Selection Committee

A Selection Committee is nominated by the Selection Committee Chair and appointed by the Chair of the Awards Committee on behalf of the Council.

Selection Procedure

The nominations are evaluated by the Selection Committee. After careful evaluation of all eligible nominations, and possibly through a dialogue among the committee members, a set of finalists is selected (typically 5 or less), on the basis of the paper evaluation. These finalists are informed about their selection. The IFAC Secretariat will request evidence of the finalist authors that they comply with the age criterion. The final winner is selected by the Selection Committee taking into account the presentation of the paper at the World Congress. All finalists receive a certificate.

Interactive Paper Prize

(Created 1986)

The prize is for the best interactive paper accepted and presented at the IFAC Triennial World Congress. The prize and a certificate are awarded at each Triennial IFAC World Congress.

Nomination Procedure

All interactive papers that are accepted from the IFAC World Congress are considered by the Selection Committee, preferable pre-screened on the basis of reviewer ratings.

Eligibility

Eligible papers are all interactive papers that are presented at the IFAC World Congress.

Selection Criteria

Selected criteria are the highest technical quality and a good presentation of the results.

Selection Committee

A Selection Committee is nominated by the Selection Committee Chair and appointed by the Chair of the Awards Committee on behalf of the Council.

Selection Procedure

The nominations are evaluated by the Selection Committee. After careful evaluation of all eligible nominations, and possibly through a dialogue among the committee members, a set of finalists is selected (typically 5-10), on the basis of the paper evaluation. These finalists are informed about their selection. The final winner is selected by the Selection Committee taking into account the presentation of the paper at the World Congress. All finalists receive a certificate.

Outstanding Service Award

Outstanding Service Award

(Created 1990)

This IFAC Award recognizes IFAC officials for long term service to IFAC in senior offices. The award, consisting of a lapel pin, is presented by the President at each Triennial IFAC World Congress.

Nomination and Selection Criteria

The Award is presented to any IFAC Official that has served three three-year terms (9 years), not necessarily consecutive, in any of the following offices:

- Council member
- Executive Board member
- Technical Board member
- Editor-in-Chief of IFAC Journals
- Secretary

In addition to the above, the IFAC President has the authority/discretion to bestow the Outstanding Service Award on a candidate or candidates other than those who are in the above-mentioned offices but which he/she feels is/are deserving of the award. In this case the candidate's service to IFAC should also cover the same three three-year term (9 years).

Selection Procedure

The candidates are announced by the IFAC Secretariat based on their records.

Search Committees

Search committee for IFAC Major Award Nominations

The objective of this Search Committee is to identify high-potential candidates for IFAC Major Awards as well as appropriate nominators to prepare nominations for them.

Membership

The committee is open to all members of the control community. Special emphasis will be given to those holding senior positions in Academia or Industry. Also, some preference will be given to winners of previous IFAC Major Awards.

Appointment

Members are appointed by the Council or the President on behalf of the Council.

Mode of Operation

- **Confidentiality**

Under no circumstances should members of the committee reveal to others the content of discussions, people who may or may not be under consideration etc. The only caveat on this ruling is where a person has been identified as being suitable for nomination. In this case, the Chair will contact a suitable nominator. The Chair will make it clear to the potential nominator that the Search Committee has no influence on the selection process and thus makes the suggestion without any prejudice or suggestion that a person so targeted would actually be selected.

- **Communication with Selection Committee Chairs**

- Selection Committee Chairs will be asked to provide a list of present files under consideration
- The Search Committee will not otherwise communicate with Selection Committees since this has the potential to influence Selection Committee deliberations.

- **Number of Suggested Candidates**

The Search Committee will restrict the number of people suggested to a maximum of two people in anyone triennium for each major award so as to avoid the potential for unrealistic expectations of success.

- **Criterion to be Used**

The suggested candidates will be based solely on their expertise, qualifications and impact. However, in selecting candidates the Committee will consider a wide spectrum of possibilities so as to have an inclusive view of region, research field and gender.

Reporting

The Major Award Search Committee Chair will report yearly to the Awards Committee Chair, without specifically referring to individual candidate cases.

Search committee for IFAC Fellow Nominations

The objective of this Search Committee is to identify high-potential candidates for IFAC Fellowships as well as appropriate nominators to prepare nominations for them.

Membership

The committee is open to all IFAC Fellows. Membership of the current Council and of the current Fellow selection committee are precluded to be members of this Search Committee.

Appointment

Members are appointed by the Council or the President on behalf of the Council.

Mode of Operation

- **Timetable**

The committee begins the work four months before the deadline for submission of nominations, does all the work in one month and then solicits nominators within a period of one month, so that potential nominators have at least two months to complete their work.

- **Confidentiality**

Under no circumstances should members of the committee reveal to others the content of discussions, people who may or may not be under consideration etc. The only caveat on this ruling is where a person has been identified as being suitable for nomination. In this case, the Chair or a member of the Search Committee (on behalf of the Chair) will contact a suitable nominator. The Chair will make it clear to the potential nominator that the Search Committee has no influence on the selection process and thus makes the suggestion without any prejudice or suggestion that a person so targeted would actually be selected.

- **Communication with Selection Committee Chairs**

The Search Committee will not communicate with the Selection Committee since this has the potential to influence Selection Committee deliberations.

- **Number of Suggested Candidates**

There will be no restriction on the number of people suggested.

- **Criterion to be Used**

The suggested candidates will be based solely on their expertise, qualifications and impact. However, in selecting candidates the Committee will consider a wide spectrum of possibilities so as to have an inclusive view of region, research field and gender.

Reporting

The Search Committee Chair will report to the Awards Committee Chair at the end of its work, without specifically referring to individual candidate cases.

Appendix

A: Relevant excerpts from the Constitution and By-Laws

CONSTITUTION

SECTION 5 - OFFICERS

...

Article 16

...

(b) The **appointed** officers of IFAC shall be

...

2. The chair of the Awards Committee

...

...

Article 21

(a) The Council shall appoint the Chair of the Awards Committee,...

(b) The Chair of the Awards Committee,.....will normally serve from the conclusion of a Triennial Congress to the conclusion of the next. They may be reappointed for one additional three year term not necessarily consecutive....

SECTION 7 - BOARDS AND COMMITTEES

...

Article 32

(a) The Executive Board shall comprise a Chair,.....the Chair of Awards Committee,...

...

Article 33

...

(b) The Awards Committee shall comprise a Chair and the Chairmen of the Selection Committees of the various awards as members.

...

Article 34

...

(b) The Awards Committee shall regulate and control all award-related activities. It shall report to the Council on its work each year.

BY-LAWS

COUNCIL

...

No 10

(a) The Election Committee will also prepare the slate of candidates to those offices that fall within the direct competence of the Council,...

...
- the Chair of the Awards Committee

...

No. 12

... the Executive Committees, with the exception of their Chairmen, ex-officio members and any member of the Council selected to serve on such Committees, will be appointed by the incoming Executive Board, after it has taken office, upon the recommendation of the outgoing Executive Board.