

IAS publication review process and impact factor – New policies

The IAS Board has decided a number of steps to further improve the ranking of its publications, particularly that of the Transactions on Industry Applications. This section of the Society News is aimed at authors, reviewers, and associate editors, who are encouraged to get acquainted with these new policies. There is no intention here to significantly change the way the Transactions function, and have functioned for almost 50 years, to everyone's benefit. However, minor adjustments, detailed below, are expected to go a long way in helping the Transactions last for another 50 years or more, in an increasingly global, diverse, and competitive environment.

## Background:

Whether we think it is desirable or not, the reality is that IAS publications are increasingly measured and compared with other publications, in a number of ways. Various metrics have been proposed over the years, and the most widely used is called the Impact Factor. It was created by Thomson ISI in 1975, and is now calculated and tabulated, along with several other publication metrics, in the biannual Journal Citation Report published by Thompson Reuters, Inc. (a private company headquartered in New York). The Impact Factor is defined as the average number of citations of articles in a given journal (say, Transactions on Industry Applications), over a two-year period, divided by the number of articles published in that journal over the same period.

In 2011, the Transactions on Industry Applications ranked 66<sup>th</sup> out of 244 worldwide journals in the electrical and electronics engineering category. In the narrower "multidisciplinary engineering category", the ranking is 11 out of 90 worldwide journals (and 1<sup>st</sup> among IEEE Journals). There is another, although less used, metrics where the IAS clearly shines, which is the "half-life" of its transactions, which is consistently over 10 years. This means, in a nutshell, that IAS papers are still read after 10 years. Only 11 IEEE publications have such longevity (out of a total of 106). Taken together, there is a clear sign of long lasting quality. However, it may be argued that the shorter term metrics do not accurately reflect, to the outside observer, what practioners in the field of IAS know of the Transactions. It is for these reasons that the IAS Board has taken the following steps.

## Decisions:

As is clear from the definition of the impact factor, there are two ways to improve this metrics: One is to make sure the papers accepted for publication draw significant readership, and the other is to see that IAS papers are properly referenced. Accordingly, authors, reviewers, and editors should:

- Ensure that papers fall well within the scope of the IAS. One way of showing relevance is by reviewing the content of previous papers appearing in IAS publications, and including them as reference when appropriate.
- IAS Transactions papers were always previously presented at a conference. It is critical, before a paper goes to print in the Transactions, to update any reference to an IAS conference paper with the newer, peer-reviewed version published in the Transactions or Magazine, if it is available.
- Special issues as well as survey papers will be strongly encouraged. Such papers and issues, with their exhaustive bibliographies, are very popular with the readership.
- Engage more guest editors in order to attract quality papers and improve the review process.
- Encourage committee leaders and others to invite high-quality papers from IAS conferences for publication in the Transactions or Magazine.

Importantly, all these measures, although encouraged, will remain voluntary. It is not the intent of the IAS to place a new, artificial burden on prospective authors. Rather, the goal is to further enhance the professional quality of the IAS Transactions, built over time by our predecessors, for the benefit of the next generation of engineers.

If you have any questions or comments, or are looking for further clarification, please contact the IAS Publications chair, Ahmed Rubaai, at arubaai@howard.edu.

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