



ASME 2018 TURBO EXPO

Turbomachinery Technical Conference & Exposition
Presented by the ASME International Gas Turbine Institute

CONFERENCE

June 11 – 15

EXHIBITION

June 12 – 14

Norges Varemesse
Lillestrøm, Norway

ASME IGTI TURBO EXPO JOURNAL & BEST PAPER EVALUATION GUIDELINES

What Constitutes an Archival Journal Paper?

A journal paper:

- is interesting,
- is original, making a unique, imaginative or innovative contribution to the field,
- contains a clear narrative from the introduction, through the work carried out to a clear expression of substantial conclusions and recommendations,
- is of sufficient significance and relevance to the gas turbine industry that it will be referred to by other workers in the field for years to come.

All of the above are required, whether the paper contains new work or is presenting previously published work in a new light. The requirement that the paper be interesting means that quite a few people will want to read it. The need for originality means that most or all of the research has not been published before in the same or a similar format. Originality can be met with new theoretical, computational or experimental techniques, new results or new interpretations or syntheses of existing results that lead to new discoveries, new research directions, new and useful methods, new design guidelines, new physical insight, new confirmations of ideas.

A clear narrative means that (1) there is an introduction that places the paper in the broader context as well as in the specific context, (2) the experimental/computational/theoretical techniques are clearly described, (3) care has been taken in choosing which results are presented, (4) there is a thorough analysis and discussion of all of the results, (5) there are explicit and substantial conclusions and recommendations and that these are based on the analysis and discussion, (6) the references are appropriate in number and are properly selected, (7) there is a clear and strong development of ideas as the reader progresses through the paper, and (8) the paper is free from the poor use of English and typographical errors.

That the paper is significant and relevant requires that (1) it contains [just] enough information to allow others to reproduce or verify the main conclusions independently, (2) the reported accuracies of experimental/computational/theoretical techniques are sufficient for the purpose of the paper, (3) there are explicit conclusions and/or recommendations and that these can be used to develop or create new ideas, tools, processes or products, (4) it makes a step forward in the “state of the art”, and (5) it will be referred to by other workers in the field for some years to come.

The better journal papers often, but not always, provide new physical insight into results obtained by a synergy of experiments, computation and theoretical analyses. They then present those results in a way that is useful not only to the researchers in the specific field but also to a much wider audience.

A paper that does not meet these standards is not acceptable for journal publication, although authors may be encouraged to rewrite or revise the paper when appropriate.

What Are the Appropriate Standards for an Archival Journal Paper?

The standard of a journal paper is not absolute. In effect, it is established by the average of the papers that the technical community find worth reading or are published in the journal. Using this standard, the Reviewer should be able to put the paper into one of the following categories:

1. Major results, very significant contribution, award quality (top 1%) – *publish*
2. Good, solid, interesting work; a definite contribution (next 10%) – *publish*
3. Minor but positive contribution to knowledge (next 10- 20%) – *publish with discretion*
4. Elegant and technically correct but useless relative to state-of-the-art – *don't publish*
5. Neither elegant nor useful, but not actually wrong – *don't publish*
6. Wrong or misleading – *don't publish*

What is the Best Paper Standard?

Per ASME IGTI standards best papers “will be recognized on the basis of outstanding writing quality, a high degree of originality, and they will constitute an unusual contribution to the science of engineering. A paper with profile components rated at this level would be presentable at an ASME meeting and meet the requirements for publication in an ASME journal.” As such, award worthy papers are in the top 1% and in category 1 above.