

REVIEWER'S GUIDE FOR MANUSCRIPT EVALUATION

These instructions have been adopted specifically for the review of manuscripts submitted for publication in the NIM B Special Issue devoted to the 19th International Workshop on Inelastic Ion-Surface Collisions (IISC-19) to be held in Frauenchiemsee, Germany from 16 – 21 September 2012. Therefore, they may differ slightly to those sent to reviewers of regular papers submitted to "Beam Interactions with Materials and Atoms - Nuclear Instruments and Methods in Physics Research, Section B" (NIM B).

It is our intention as guest editors that reviewing of papers submitted to the workshop is of the same high standard as that of regular papers submitted to NIM B.

Before starting, please indicate if there is a financial or other conflict of interest between your work and that of the authors.

For your information, the Instructions for Authors are available at the IISC-10 web site (www.ipp.mpg.de/iisc-19). In particular we encourage you to read the quote from the 2009 NIM B Editorial, cited at the end of this document, before you start your review.

I) Please provide an overview of the quality of the paper by replying to the question "To what extent does the article meet this criterion?" with a numerical assessment between 0 and 3 according to the following scale:

- 0 Fails by a large amount
- 1 Fails by a small amount
- 2 Succeeds by a small amount
- 3 Succeeds by a large amount

The subject addressed in this article is worthy of investigation [0 1 2 3]

The information presented was new [0 1 2 3]

The conclusions were supported by the data [0 1 2 3]

II) Please give a short frank account of the strengths and weaknesses of the article. This account will not be made available to the authors.

III) Please provide a report, suitable to be sent to the authors, explaining the reasons for your recommendation.

In your report, please try to address the following issues

Is the paper free of basic logic and scientific faults?

Is the paper well structured and clearly written? Is the title appropriate? Does the abstract provide a good indication of the contents of the paper? Is the introduction adequate and of appropriate length? Does the conclusion adequately reflect the content of the paper? Is the English of good quality? Would the paper be accessible to scientists not highly specialized in the topic of the paper?

Are all the figures relevant and necessary? Could the paper be significantly improved by additional figures? Are the figures easily readable and uncluttered? Are the axes properly labeled and units properly indicated? Are plotted symbols easily identifiable? Are the captions adequate?

Do the authors properly acknowledge previous work through references?

Have the authors used SI units throughout?

Have the authors fully referenced any simulation software, and the sources of important data that they have used?

In isolated cases, plagiarism (including self-plagiarism) may occur. Please use your knowledge of the field to try and pick up clear cases of plagiarism.

IV) Please provide a clear recommendation :

- a. Accept without modification
- b. Accept after Minor Revision. This implies that you do not require to see the revised manuscript: the Editor will judge whether the responses and/or modifications made by the authors satisfy your comments.
- c. Re-assess after Major Modification. This implies that you wish to see the Revised Manuscript and Author's responses before making a further recommendation.
- d. Reject outright.

Quote from the NIMB 2009 Editorial

'We encourage authors and reviewers to make stronger efforts to ensure that reference lists in submitted manuscripts are sufficiently complete. Not only is complete referencing important for setting priorities, but now that statistics based on referencing are increasingly being taken into account for the decisions of science administrators and fund-granting bodies, you do the journal, the field of beam-matter interactions and yourself a common service through being very meticulous in fully citing all the relevant references, be they in NIMB or other journals.

Correct acknowledgement of effort is also important when considering authorship. We remind you that all significant contributors to the work should be included as authors, and it is important that all authors listed on submitted manuscripts have in fact contributed significantly to the work, and have given approval for their authorship prior to submission. It is important to note that responsibility for the content of a manuscript is shared jointly and equally by all the co-authors.

In 2009 we intend to make stronger efforts to ensure that whenever significant results from calculation by a computer program are given, the name and version of the code, and the origin of underlying data such as stopping powers or cross sections are given in sufficient detail to enable an independent check of the calculation. Authors and reviewers are encouraged to pay particular attention to reporting this aspect of methodology.'