

NEW INSTRUCTIONS TO AUTHORS

Medical Physics publishes articles (which may be experimental or theoretical) broadly concerned with the relationship of physics to medicine and biology.

Submissions may be in the form of a (1) Review Article, (2) Research Article, (3) Technical Report, (4) Technical Note, (5) Letter to the Editor, (6) Point/Counterpoint “Debate,” (7) Editorial, (8) Ph.D. Thesis Abstract, (9) Educational Treatise, (10) Task Group Report.

(1) A Review Article, Educational Treatise, or Task Group Report is intended to be an authoritative review of a subject of significance to the field of medical physics. It may be either invited or proffered, but will be refereed as usual.

(2) A Research Article constitutes the major category in *Medical Physics* for the reporting of original experimental or theoretical research. Authors should keep in mind that attention to *clarity and conciseness* facilitates the review process and also the impact of the published article.

(3) A Technical Report will often be a report of an extensive series of measurements, usually involving display in the form of tables or graphs, with text describing precisely the conditions and procedures of measurement. Formulations of quality assurance procedures, including educational criteria, are appropriate in this category. The criteria for Technical Reports emphasize validity and utility.

(4) A Technical Note. This is a concise description of a specific development, procedure or device which should be a solution to a specific problem and have sufficient relevance to be useful to some members of the readership. It should be sufficiently significant not to be trivial. It should be concise and occupy no more than two printed pages in *Medical Physics*.

(5) Letters to the Editor normally address a scientific point in connection with a previous publication in *Medical Physics*.

(6) Point/Counterpoint “Debate.” This is a concise article pro and con selected controversial scientific or technical issues. These are typically “invited” rather than “volunteered”: the Editor invites authors to submit articles addressing a specific topic, one for each side of the argument. Readers who wish to volunteer to debate a controversial issue should contact the Point/Counterpoint Editor for instructions.

(7) An Editorial is a brief (usually one page or less) article of general interest to readers. It may be either invited or proffered.

(8) A Ph.D. Thesis Abstract is a half page Abstract giving the important details of a Ph.D. research project of a recent graduate.

Manuscripts are normally reviewed by an Associate Editor and by two independent referees chosen by the Associate Editor. Suggestions by authors of appropriate reviewers are always welcome. Referee comments are both general and specific. It is important for the author to respond to all specific comments or suggestions. Final review is undertaken by the Editor, whose decision is final.

The author submitting the manuscript is the corresponding author and is assumed to represent the interests of all authors, and all correspondence will be carried out with this author.

Submission of a manuscript indicates that it has not been published previously nor concurrently submitted for publication elsewhere, and this should be stated during the submission process. A formal letter of submission giving the corresponding author’s full address, e-mail address and telephone number must be sent with each manuscript. Commercial names should not appear in the title, abstract or keywords. They may appear in the text or as footnotes.

Authors should use the same form of their names in the byline of all *Medical Physics* submissions. This practice makes indexes more useful and less confusing.

MANUSCRIPT PREPARATION

1. Style: Authors are expected to follow the conventional writing, notation, and illustration style prescribed in the American Institute of Physics (AIP) *Style Manual*. A free copy is available at <http://www.aip.org/pubservs/style/4thed/toc.html> or by clicking on “General Information for Authors from AIP” at the bottom of pages in the online submission system. Authors should also study the form and style of material recently printed in *Medical Physics*.

Abbreviations, symbols, units, etc., should correspond with the suggestions in the AIP *Style Manual*. Authors are required to use SI units. There are some modifications, such as for specification of brachytherapy sources, as specified in AAPM Report No. 21. Where common laboratory practice employs conventional units, these may be employed with the SI units in parentheses.

2. Abstracts: An abstract must accompany all articles (except Letters to the Editor, Editorials, and Point/Counterpoint “debates”). The abstract should be submitted both separately and at the front of the complete manuscript (Article File). It should state, in not more than 500 words (100 words for Technical Notes), the main conclusions of the article and should include briefly, the principal numerical results. Because an abstract is usually reprinted in its entirety in AIP abstract journals, every care should be used in writing it.

Keywords useful in bibliographic searching and indexing, must be included with each manuscript. A Ph.D. Thesis Abstract should be submitted just as if it were a regular manuscript, with the Abstract submitted as both the Abstract and the Article File.

3. Format: Manuscripts must be in English, and must be submitted online via the PeerX-Press system accessible at <http://medphys.peerx-press.org>. If an author cannot possibly submit online, an original plus one hardcopy may be submitted to the Manuscripts Office, but these must be accompanied by a digital version. Specific instructions for online submissions are available at the PeerX-Press website (<http://medphys.peerx-press.org>).

4. Mathematics: Mathematical expressions should be formatted as completely as possible. Do not use mathematical derivations that are easily found elsewhere in the literature; merely cite the references.

5. Tables: Extensive numerical material should be presented in tables rather than in the body of the text. Each table must have a caption that makes the data in the table intelligible without reference to the text. Avoid complicated column headings. If necessary, use symbols that are explained in the caption. Long tables should be avoided if possible.

6. Supplementary materials: Supplementary material that is associated with an article but is not intended to be published with the manuscript but might be useful to reviewers may be submitted (under the tab “Supplemental Material”). If this material will be of use to some readers but is too limited an interest to warrant the number of pages required to publish it in full, it may be deposited and made available to readers through the Physics Auxiliary Publications Service of the AIP in electronic (EPAPS) format. Authors interested in this service can obtain detailed information by clicking on “General Information for Authors from AIP” at the bottom of pages in the online submission system.

7. References: References should be assigned consecutive numbers as they occur in the body of the text. They should then be listed in the same order on a separate sheet. Titles of articles, complete lists of authors, and inclusive pagination must be included. References must be in the accessible, archival literature. “Private Communications” and commercial identifications and manuals are not appropriate for the reference list, but can be identified as footnotes to the text. References should be submitted in the following formats:

¹A. E. Burgess, “High level visual decision efficiencies,” in *Vision: Coding, and Efficiency*, edited by C. Blakemore (Cambridge University, New York, 1990), pp. 431–440.

²C. E. Metz and L. E. Fencil, “Determination of three-dimensional structure in biplane radiography without prior knowledge of the relationship between the two views: Theory,” *Med. Phys.* **16**, 45–51 (1989).

³H. E. Johns and J. R. Cunningham, *The Physics of Radiology*, 4th ed. (Thomas, Springfield, IL, 1983).

A list of standard abbreviations for journal names appears in the *AIP Style Manual*.

Authors are urged to exclude unnecessary and/or incomplete references.

8. Illustrations: Please adhere to the following guidelines when preparing your illustrations for submission:

- **Number figures in the order in which they appear in text.**
- **Ensure a minimum of 8-point type size [2.8 mm (1/8 in.) high] and 1-point line width within illustrations** (a 3-point line width if reduction is required). Avoid inconsistencies in lettering within individual figures, and from one figure to the next. Lettering and symbols cannot be handwritten. Avoid small open symbols that tend to fill in if any reduction is necessary.
- Color photographs and illustrations can be published only by arrangement with the Manuscripts Office and require a special charge. Figure and Table captions should be submitted on separate sheets.

9. Address for submission of hardcopy manuscripts if online submission is impossible: New manuscripts should be submitted to:

Medical Physics Journal
American Association of Physicists in Medicine
One Physics Ellipse
College Park, MD 20740-3846
(301) 209-3352

10. Proofs: Authors will be sent an e-mail message to view, correct, and approve proofs online.

Responsibility for detecting errors rests with the author.

The quality of all figures should be checked by the author. The quality of the illustration on the proof is essentially the same as in the published journal.

Excessive alteration due to imperfections of the manuscript or to changes introduced by the author in proof will be charged to the author.

To avoid incurring charges or prolonging processing of contributions, authors are encouraged to follow the preceding instructions carefully.