Guidelines of the Optica Publishing Group Concerning Ethical Practices in the Publication of Research

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PREAMBLE

One of the ways the Optica Publishing Group serves the optics profession is by publishing journals which present the results of scientific and engineering research. Optica Publishing Group has the responsibility of establishing and maintaining guidelines for selecting and accepting papers submitted to its journals. Emphasis is given to the ethical practices expected of persons engaged in the publication of research in its journals, specifically, of editors, authors, and manuscript reviewers. Publication of these guidelines reflects the conviction that the observance of high standards is so vital to the whole scientific enterprise that a definition of these standards should be brought to the attention of all concerned.

It is a basic policy of the Optica Publishing Group that all those involved in the publication process should give unbiased consideration to all manuscripts offered for publication, judging each on its merit as a contribution to research without regard to race, gender, religious belief, ethnic origin, citizenship, political philosophy, institutional affiliation and position of the author(s).

GUIDELINES

These guidelines are based to a great extent on the "Ethical Guidelines to Publication of Chemical Research" of the American Chemical Society and "Guidelines to Publication of Geophysical Research" of the American Geophysical Union and the "Statement of ethics and responsibilities of authors submitting to AIP journals" of the American Institute of Physics. The Optica Publishing Group appreciates the permission of the American Chemical Society, the American Geophysical Union, and the American Institute of Physics to quote extensively from these documents. The guidelines concern original research papers although many aspects are also pertinent for tutorial and review papers.

Obligations of Authors

- An author's central obligation is to present a concise, accurate account of original research performed as well an objective discussion of its significance. A research paper should contain sufficient detail and reference to public sources of information to permit the author's peers to repeat the work.
- 2. Adequate information should be provided with numerical data to allow comparison with other research. Specifically, data should include sources and magnitudes of uncertainties, and graphs representing numerical data should display error bars where appropriate. Fabrication

- of data is an unacceptable departure from the expected norms of scientific conduct, as is the selective reporting of data with the intent to mislead or deceive, as well as the theft of data or research results from others.
- 3. Proper acknowledgment of the work of others used in a research project must always be given. Authors should cite publications that have been influential in determining the nature of the reported work and that will guide the reader quickly to earlier work essential for understanding the present investigation. Information obtained privately, as in conversation, correspondence, or discussion with third parties, should not be used or reported in the author's work without explicit permission from the investigator with whom the information originated. Information obtained in the course of confidential services, such as refereeing manuscripts or grant applications, cannot be used without permission of the author of the work being used.
- 4. Authors must obtain permission for use of any previously published materials from the original publisher. Proof of permission must be provided before manuscripts containing previously published material can be published. Proper credit lines for all previously published material must be included in the manuscript.
- 5. Fragmentation of research reports should be avoided; brief reports in letters journals of incremental progress should particularly be avoided. Authors who have done extensive work in an area should organize publication so that each report gives a complete account of a particular aspect of the general research.
- 6. It is unethical for an author to publish manuscripts describing essentially the same research in more than one journal of primary publication. Submitting the same manuscript to more than one journal concurrently is unethical and unacceptable. The manuscript must contain significant new content not previously published or submitted elsewhere for simultaneous consideration. An author should inform the editor of related manuscripts that the author has under consideration or in press, and indicate the relationship between the manuscripts. Copies of those manuscripts should be supplied to the editor upon request.
- 7. An author should make no substantial changes to a paper after it has been accepted. If there is a compelling reason to make changes, the author is obligated to inform the editor directly of the nature of the desired change. Only the editor has the final authority to approve any such requested changes.

- 8. Criticism, even severe criticism of the published work of another researcher may sometimes be justified in a manuscript. In no case is personalized criticism considered acceptable. Manuscripts that are predominantly criticism should be published as Comments with the opportunity for simultaneous publication of an appropriate rebuttal. Both the Comment and the rebuttal should be reviewed.
- All collaborators share some degree of responsibility for any paper they coauthor. Any individual unwilling or unable to accept appropriate responsibility for a paper should not be a coauthor.
- 10. Authorship should be limited to those who have made a significant contribution to the concept, design, execution. or interpretation of the research study. All those who have made significant contributions should be offered the opportunity to be listed as authors. Other individuals who made less significant contributions to the study should be acknowledged, but not identified as authors. Some coauthors have responsibility for the entire paper as an accurate, verifiable report of the research. These include, for example, coauthors who are accountable for the integrity of the critical data reported in the paper, carry out the analysis, write the manuscript, present major findings at conferences, or provide scientific leadership for junior colleagues. Other coauthors may have responsibility mainly for specific, limited contributions to a paper.
- 11. The author who submits the paper for publication accepts the responsibility of having included on the paper all appropriate coauthors and no inappropriate coauthors. The corresponding author also attests that all coauthors have seen the final version of the paper, agree with the major conclusions, and have agreed to its submission for publication.
- 12. Large Language Models (LLMs) and Artificial Intelligence (AI) tools (including generative AI chatbots) cannot accept the varied responsibilities required of authors (as outlined above) and therefore cannot be listed as authors on papers. Any use of such tools must be disclosed in the paper and must include the type of tool used (including the name, model, and version) and the purpose(s) the tools were used for (such as for the production of text or graphics). Additionally, and especially in the case of the use of chatbots, authors are responsible for reviewing and appropriately citing content produced by these tools. As a condition of authorship, authors certify that all materials in the paper, including those produced by these tools, are accurate and free of plagiarism.
- 13. The sources of financial support for the project should be disclosed. The authors should reveal to the editor and to the readers any potential and/or relevant competing financial or other interest that might be affected by publication of the results contained in the authors' manuscript.

- Authors should submit responses to reviews and requests from editors promptly. In their response, authors should avoid unsupported assertions and subjective comments.
- 15. When an error is discovered in a published work, it is the obligation of all authors to promptly retract the paper or correct the results.
- 16. Plagiarism constitutes unethical scientific behavior and is never acceptable. Authors should not engage in plagiarism—verbatim or near-verbatim copying, or very close paraphrasing, of text or results from another's work. Authors should not engage in self-plagiarism (including duplicate publication)—unacceptably close replication of the author's own previously published text or results, even a few sentences, without proper citation. Optica Publishing Group applies a "reasonable person" standard with deciding whether a submission constitutes self-plagiarism/duplicate publication.
- 17. Any unusual hazards inherent in the materials, equipment, or procedures used in an investigation should be clearly identified in the manuscript reporting the work.
- 18. It is the expectation of the Optica Publishing Group that research using animals and human subjects reported at the meetings and in the publications of Optica, the Society advancing optics and photonics worldwide, will have been conducted in accordance with internationally recognized principles regarding the ethical conduct of biomedical research. Authors must include a brief statement within the manuscript identifying the institutional and/or licensing committee (i.e. Institutional Review Board, Institutional Animal Care and Use Committee) that approved the experiments. Experiments involving animal subjects are expected to be consistent with the Guide for the Care and Use of Laboratory Animals (published by U.S. National Academy of Sciences, ISBN 0-309-05377-3). Experiments involving human subjects are expected to conform to the principles expressed in the Declaration of Helsinki. For such experiments, authors must also include a statement confirming that informed consent was obtained from all subjects.

Obligations of Journal Editors

The editor or topical editor to whom a manuscript is assigned has complete responsibility and authority to accept a submitted paper for publication or to reject it. The editor generally seeks an evaluation from reviewers or other editorial board members prior to making this decision. However, manuscripts may be rejected without peer review if considered by the editors to be inappropriate for the journal. Such rejections may be based on the failure of the manuscript to fit the scope of the journal, to be of current or sufficiently broad interest, to provide adequate depth of content, to be written in acceptable English, or other reasons.

- 2. An editor should give prompt and unbiased consideration to all manuscripts offered for publication. Editors should avoid situations of real or perceived conflicts of interest. Such conflicts include, but are not limited to, handling papers from present and former students, from colleagues with whom the editor has recently collaborated, and from those in the same institution. When a manuscript is too closely related to the research of an editor, the editor should arrange for some other qualified person to take editorial responsibility for that manuscript.
- An editor should respect the intellectual independence of authors.
- 4. The editor and the editorial staff should not disclose information about a manuscript under consideration to any one other than those from whom professional advice sought. Unpublished information, arguments, or interpretations disclosed in a submitted manuscript should not be used in an editor's own research except with the consent of the author.
- An editor should not reveal the name of a reviewer to someone who is not an Optica Publishing Group editor. However after consultation with the editor, a reviewer may reveal their name.
- Editorial responsibility and authority for any manuscript authored by an editor and submitted to the editor's journal should be delegated to some other qualified person, such as another editor of that journal.
- 7. An editor presented with convincing evidence that substance or conclusions of a published paper are erroneous should facilitate publication of a correction or retraction. The correction may be written by the person who discovered the error or by an original author.

Obligations of Reviewers of Manuscripts

- Review by independent scientists provides advice to editors of scientific journals concerning the publication of research results. It is an essential step in the publication process, thus all scientists have an obligation to do a fair share of reviewing.
- A chosen reviewer who feels inadequately qualified or lacks the time to judge the research reported in a

- manuscript should discard it promptly and notify the editorial office.
- 3. A reviewer of a manuscript should judge the quality of the manuscript objectively and respect the intellectual independence of the authors. In no case is personalized criticism appropriate. Reviewers should explain and support their judgment adequately so that editors and authors may understand the basis of their comments.
- 4. Privileged information or ideas obtained through peer review must be kept confidential and not used for competitive gain. Reviewers must disclose conflicts of interest resulting from direct competitive, collaborative, or other relationships with any of the authors, and avoid cases in which such conflicts preclude an objective evaluation. If in doubt, the reviewer should discard the manuscript promptly without review, advising the editor of the possible conflict of interest or bias.
- 5. A reviewer should treat a manuscript sent for review as a confidential document. It should neither be shown to nor discussed with others except, in special cases, to persons from whom specific advice may be sought; in that event, the identities of those consulted should be disclosed to the editor. The reviewer should inform the editor of others who make significant contributions to a review.
- 6. Reviewers should point out relevant published work that has not been cited by the authors. Any statement that an observation, derivation, or argument has been previously reported should be accompanied by the relevant citation.
- 7. A reviewer, if aware of such, should call to the editor's attention any substantial similarity between the manuscript under consideration and any paper submitted to or published in a journal or other widely accessible form of publication. The editor's attention should also be directed by the reviewer to perceived fragmentation of publication by the author(s).
- 8. After consulting with the editor, a reviewer may voluntarily reveal their identity to the author.
- Reviewers should not use or disclose unpublished information, arguments, or interpretations contained in a manuscript under consideration, except with the consent of the author.