



5.3.1: Publications Ethics and Responsibility Policy

Purpose: This policy articulates the expected behavior of authors

Applies to: MRS Community

MRS Policy on Publication Ethics and Responsibilities

One of the objectives of the Materials Research Society is to disseminate information relevant to the interest of the materials community. *MRS Bulletin*, *Journal of Materials Research*, *MRS Communications*, *MRS Energy & Sustainability*, and *MRS Advances* fulfill part of this mission by publishing the results of original scientific research and overviews of the field. The policy below has been endorsed by MRS to ensure that the information has been generated, processed, and published using the highest ethical standards.

The policy adopts and builds on the Statement of Ethics and Responsibilities of Authors Submitting to AIP Journals published by the American Institute of Physics. We thank AIP for permission to use the statement as the basis of our policy. We gratefully acknowledge the contributions to the development of this statement by AIP, the American Physical Society, the American Geophysical Union, and the American Chemical Society.

I. Original Research Articles

Research Results: The results of research should be recorded and maintained in a form that allows analysis and review, both by collaborators before publication and by other scientists, for a reasonable period after publication. Exceptions may be appropriate in certain circumstances to preserve privacy, to assure patent protection, or for similar reasons.

Fabrication of data is an egregious departure from the required 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.

Publication and Authorship Practices: The authors' central obligation is to present a concise, accurate account of the research performed as well as an objective discussion of its significance. A paper should contain sufficient detail and references to public sources of information to permit others to judge the work and even to repeat the work. Authors should avoid unnecessary fragmentation of papers, wherein one complete work is split into two or more papers for publication, for example as a series or "Part I" and "Part II" where significant parts of the content are repeated. At the time of manuscript submission, authors are required to inform the editor of any similar manuscripts under consideration for publication in another journal. Copies of related manuscripts should be provided upon request of the editor.

Proper acknowledgment of the work of partners, competitors, and predecessors used in a research account—whether an article or a presentation—must always be given. Authors should cite

publications that have been influential in determining the nature of the reported work. Information obtained privately, as in conversation, correspondence, or discussion with third parties, should not be used or reported 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. Preliminary reports of results in symposia, conference proceedings, preprint servers, research blogs such as Wikipedia, or other journal articles should be cited. Re-use of figures from a previous publication should be accompanied by a citation and a statement indicating that permission has been obtained from the copyright holder.

Authorship should be limited to those who have made a significant scientific contribution to the concept, design, execution, or interpretation of the research study. All those so defined should be offered the opportunity to be listed as authors. Other individuals who have contributed to the study should be acknowledged, but not identified as authors. Contributions such as:

- sponsoring the research,
- obtaining the funds for the research,
- contributing important samples or materials,
- training co-authors in certain methods,
- collecting and assembling data,
- directing an institution or working unit in which the publication originates,

while significant, are not by themselves sufficient to justify authorship.[1]

The sources of financial support for the project should be disclosed.

The manuscript should clearly describe any unusual hazards inherent to the performance of the work in the experimental procedures section, such as the use of hazardous chemicals, procedures or equipment. Analytical software should be cited. If the work involved the use of live animals or human subjects, a statement that all experiments were performed in compliance with the relevant laws and institutional guidelines should be included. For studies involving human subjects, a statement should be included indicating that informed consent was obtained. Referees may be asked to comment on cases in which hazardous materials should be noted.

Misconduct: Plagiarism is defined as the act of using the work of another and representing it as one's own. Such behavior constitutes unethical scientific behavior and is never acceptable. It is also unethical to publish essentially the same research more than once. Manuscripts based on meeting proceedings should significantly build and expand on the research previously reported and should therefore reference the previously published proceedings paper. Concurrent submission of the same manuscript to more than one journal is never allowed. Priority is determined by submission timestamp.

When an error is discovered in a published work, it is the obligation of all authors promptly to retract the paper or correct the results.

Individuals who think that these policies have been violated for a specific paper are obliged to contact the editor in writing for advice and possible adjudication. When an editor is suspected of misconduct, notice should go to the Executive Director of the MRS.

Collaborations: All collaborators share some degree of responsibility for any paper they coauthor.

The author who submits the paper for publication should ensure that all appropriate coauthors and no inappropriate coauthors are included on the paper, and that all coauthors have seen the final version of the paper and have agreed to its submission for publication.

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.

Any individual unwilling or unable to accept appropriate responsibility for a paper should not be a coauthor.

Peer Review: Review by independent scientists provides advice to editors of scientific journals concerning the publication of research results. It is an essential component of the scientific enterprise, and all scientists have an obligation to participate in the process.

Privileged information or ideas obtained through peer review must be kept in confidence 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.

Reviewers should judge objectively the quality of the research reported and respect the intellectual independence of the authors. In no case is personal criticism appropriate. Reviewers should explain and support their judgments in such a way that editors and authors may understand the basis of their comments.

Except under special circumstances, MRS publications are in English and must be clear enough to communicate results. Reviewers may reject a manuscript, with explanation to the editor, when the presentation is not readily understandable even when the manuscript appears to be scientifically correct.

Reviewers should point out relevant published work that has not been cited by the authors. Any statement that an observation, derivation, or argument had been previously reported should be accompanied by the relevant citation. A reviewer should also call to the editor's attention any substantial similarity between the manuscript under consideration and any published paper or manuscript under review by another journal.

A reviewer should treat in confidence a manuscript sent for review. 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.

Reviewers should not use or disclose unpublished information, arguments, or interpretations contained in a manuscript under consideration, except with the consent of the author.

Editorial Responsibilities The editor of a journal has complete responsibility and authority to accept or reject a submitted paper for publication. The editor may confer with associate editors or reviewers for an evaluation to use in making this decision.

An editor should give prompt and unbiased consideration to all manuscripts offered for publication, judging each on its merits without regard to race, gender, religious belief, ethnic origin, citizenship, or political philosophy of the authors, and respecting the intellectual independence of the authors. Situations that may lead to real or perceived conflicts of interest should be avoided.

The editor and the editorial staff should not disclose any information about a manuscript under consideration to anyone other than reviewers and potential reviewers. 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 presented with convincing evidence that the substance or conclusions of a published paper are erroneous should promote the publication of a correction or retraction. If an editor suspects or receives an allegation of misconduct, he/she has an obligation to investigate and take necessary remedial action.

Where appropriate, editors will follow the Committee on Publication Ethics (COPE) guidance (<http://www.publicationethics.org>) for handling cases of research and publication misconduct.

An editor as an author of a paper submitted to the journal the editor edits or with other vested interests in a submitted manuscript should disclose this information; editors should also recuse themselves from any associated editorial function. The MRS policy for editors as authors is available at <http://www.mrs.org/editor-manuscripts/>.

II. Review Articles

Research and Authorship Practices: By its nature a review article does not have the originality feature of an original research paper. Thus, the policy elements that refer to the conduct of original research in Part I do not apply. However, all other elements do apply.

Authors of review articles should explicitly state the topical scope of their review. Within that scope they should reference the most relevant and influential published papers, and provide an objective discussion of their content.

III. Implementation

MRS editors and publications leadership will implement practices to support this policy.

MRS editors will be responsible for leading and/or commissioning investigations of misconduct covered by this policy.

It is the responsibility of authors to be aware of and comply with the standards set forth in this policy, as well as additional requirements imposed by their institutional policies, funding agency regulations, and government regulations (e.g., U.S. Federal Regulations on Research Misconduct), as well as commonly available standards for publication ethics (e.g., Committee on Publication Ethics (COPE) guidance (<http://www.publicationethics.org>))

MRS editors and publications leadership will consider publically available ethical standards from COPE and other governing bodies in taking action in incidents of publication and research misconduct.

[1] These examples are from: "Vorschläge zur Sicherung guter wissenschaftlicher Praxis / Proposals for safeguarding good scientific practice", Wiley-VCH, Weinheim 1998.

Deliverables: N/A; Review every three years or as needed

Who: Publications Committee Chair

When: At least 8 weeks before the Board meeting at which amendments should be considered.

To: Board

Policy first adopted: 11/11/05

Last modified: January 2020; August 2020

Last reviewed: December 2019; August 2020

Enacting Legislation: Board Motion B:2005:38; B:2013:40 (Consent Agenda); B:2016:38; B:2019:38; B:2020:22 (SPM20 Consent Agenda)

Policy created by: OpsCom Party responsible for this policy: PubsCom