



AGU Scientific Integrity and Professional Ethics

A large, 3D geometric graphic at the bottom of the page. It consists of several overlapping, semi-transparent red and grey rectangular blocks arranged in a complex, angular shape. The blocks are oriented in various directions, creating a sense of depth and movement. The red blocks are more prominent, while the grey blocks provide a structural framework.

2013

AGU Scientific Integrity and Professional Ethics

Table of Contents

<u>Scientific Code of Conduct and Professional Ethics</u>	2
A. AGU Volunteer Leaders Section, AGU Code of Conduct	4
<u>Scientific Misconduct</u>	5
<u>Ethical Guidelines for Publication of Scientific Research</u>	7
A. Ethical Obligations of Editors of Scientific Journals	7
B. Ethical Obligations of Authors/Contributors	8
C. Ethical Obligations of Reviewers of Manuscripts	9
D. Ethical Obligations of Authors Publishing for the Public	10
E. Ethical Obligations of AGU toward its Editors	10
<u>AGU Process for Investigating Scientific Misconduct</u>	12
A. General Process for Allegations of Scientific Misconduct	12
Section 1. Scope of the Process	12
Section 2. Involved Parties	12
Section 3. Responsibilities	13
Section 4. Procedure	13
Section 5. Sanctions	16
Section 6. Appeals	17
Section 7. Interactions with Other Institutions	17
Section 8. Conflict of Interest	18
B. Allegations of Scientific Misconduct during Submission and Review for AGU Publications	18
Section 1. Scope of the Process	18
Section 2. Involved Parties	18
Section 3. Responsibilities	19
Section 4. Process	19
Section 5. Sanctions	19
Section 6. Appeals	19
C. Independent Action by the Board of Directors	19
D. Closure and Double Jeopardy	19
E. Tracking of Allegations and Decisions	20

Scientific Code of Conduct and Professional Ethics¹

Preamble

The value and benefits of research are dependent on the integrity of the research and researcher. Members will place quality and objectivity of scientific and scholarly activities and reporting results ahead of personal gain or allegiance to individuals or organizations. Members as scientists and AGU members will act with the highest level of professional ethics and scientific integrity.

Principles

Excellence, integrity, and honesty in all aspects of research

Personal accountability in the conduct of research and the dissemination of the results

Professional courtesy and fairness in working with others

Unselfish cooperation in research

Good stewardship of research on behalf of others

Legal compliance in all aspects of research, including intellectual property

Humane approach in evaluating the implications of research on humans and animals

Responsibilities

1. Integrity: Members will act in the interest of the advancement of science and take full responsibility for the trustworthiness of their research and its dissemination.
2. Adherence to Law and Regulations: Members will be aware of and adhere to laws and regulations related to the conduct of research as well as AGU policy on publications, peer review, scientific integrity, and professional ethics.
3. Research Methods: Members will employ research methods to the best of their understanding and ability, base conclusions on critical analysis of the evidence, and

¹ Principles and code have been adapted with permission from the following sources:

- The Singapore Statement of the World Integrity Conference (<http://www.singaporestatement.org/statement.html>).
- The Department of Interior Scientific and Scholarly Integrity Policy (<http://www.doi.gov/scientificintegrity/index.cfm>).
- The Nuremburg Principles that have guided scientific integrity discussion since 1949.
- The Belmont Report on Biomedical Research in 1979 (<http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html>).

AGU Scientific Integrity and Professional Ethics

report findings and interpretations fully, accurately, and objectively, including characterization of uncertainties.

4. **Research Records:** Members will maintain clear, accurate records of research in ways that will allow verification and replication of their work by others.
5. **Research Findings:** Members will share data and findings openly and promptly, as soon as they have had an opportunity to establish intellectual property rights, if appropriate. Members will respect the intellectual property rights of others.
6. **Responsibility:** Members will take responsibility for the integrity of their contributions to all publications, funding applications, reports, and other representations of their research. Author credit should be given only to those who have made meaningful contributions to publications. Members will abide by AGU Guidelines to authors (<http://www.agu.org/pubs/authorguide/>).
7. **Acknowledgement:** Members will acknowledge the names and roles of those who made significant contributions (such as ideas and scientific discussion) to the research.
8. **Peer Review:** Members will adhere to AGU review policy and provide fair, impartial, prompt, and rigorous evaluations and will respect confidentiality when reviewing others' work. Members will welcome constructive criticism and be responsive to peer review.
9. **Conflict of Interest:** Members will disclose financial, personal, professional, and other conflicts of interest that could compromise the trustworthiness of their work on AGU committees, publications, research proposals, meeting presentations, and public communications as well as in all review activities.
10. **Public Communication:** Members, when representing AGU, will limit professional comments to their areas of scholarly expertise when engaged in public discussions about the application and importance of research findings and will clearly distinguish professional comments from their opinions based on personal views.
11. **Reporting Irresponsible Research Practices:** Members will report suspected research misconduct, including fabrication, falsification, or plagiarism, and other irresponsible research practices that undermine the trustworthiness of research to the AGU following the procedures of this policy.
12. **Environment:** AGU members work to maintain an environment that allows science and scientific careers to flourish. AGU members will not engage in dishonesty, fraud, misrepresentation, coercive manipulation, censorship, or other misconduct that alters the content, veracity, or meaning of research findings or that may affect the planning, conduct, reporting, or application of science.

AGU Scientific Integrity and Professional Ethics

13. Societal Considerations: Members have an ethical obligation to weigh the societal benefits of their research against the costs and risks to human and animal welfare and impacts on the environment and society. Members need to be aware of legal requirements in this area.

AGU Volunteer Leaders Section, AGU Code of Conduct

AGU volunteer leaders are the public face and ambassadors of AGU. They have unique responsibilities to uphold ethical and professional standards of conduct as individuals when participating in AGU affairs and/or representing AGU in an official capacity². In addition to adhering to the AGU code of conduct for its members, AGU volunteer leaders are expected to do the following:

1. Hold themselves to the highest standard of professional behavior, with honesty and integrity, and treat others fairly and with respect.
2. Conduct themselves in a professional and ethical manner when participating in AGU meetings and events and when representing AGU in an official capacity.
3. Act in the best interest of AGU rather than in furtherance of personal or third-party interests.
4. Comply with all laws and regulations in conducting AGU work and comply with all laws and regulations in their professional work that, if violated, could damage the reputation and credibility of AGU.
5. Understand and comply with AGU conflict of interest and whistle blower policies and procedures.
6. Understand and comply with AGU bylaws and governing policies and procedures.
7. Understand and comply with the codes of conduct that pertain to their service as members of the AGU Board, Council, or committees.
8. Report any suspected violations of the AGU code of conduct by an AGU volunteer using the procedures established in this policy.
9. Act solely within the authority granted by virtue of their AGU volunteer position.
10. Maintain the confidentiality of any proprietary or privileged information about the AGU, its members, AGU partners, or other constituents.

² The ethical conduct for AGU staff is explicitly defined in the AGU Employee Handbook.

Scientific Misconduct³

All AGU members, as a condition of membership, will abide by the scientific codes of conduct and professional ethics set forth in this policy. Engaging in activities counter to this policy can directly damage the integrity of the research process and of AGU and affects the public trust in science. Damage to the process of advancing Earth and space science is harmful to all who are engaged in this pursuit and is harmful to the fundamental purposes of AGU. The Union will undertake investigation and appropriate action when an allegation of scientific misconduct (1) is directly connected to an AGU activity, (2) may impact AGU's reputation or integrity, or (3) may impact the credibility of the Earth and space sciences.

The term "scientific misconduct" used in this policy includes violations of the scientific codes of conduct and professional ethics as provided in this policy and the formal definition of research misconduct from the Federal Policy on Research Misconduct defined below:

- **Fabrication** is making up data or results and recording or reporting them.
- **Falsification** is manipulating research materials, equipment, or processes or changing or omitting data or results such that the research is not accurately represented in the research record.
- **Plagiarism** is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.

A finding of scientific misconduct requires that:

1. There is a significant departure from accepted practices of the relevant research community; and
2. The misconduct be committed intentionally, or knowingly or recklessly; and
3. The allegation must be proven by a preponderance of evidence.

New methodologies or innovative approaches are not considered significant departures from accepted practice. Scientific misconduct does not include errors of judgment; honest errors in the recording, selection, or analysis of data; or differences in opinions involving the interpretation of data. Fabrication does not include documented use of modeling or statistical techniques.

In AGU activities, scientific misconduct also extends to the following actions: covering up or concealing scientific misconduct, reprisals against those who report scientific misconduct, malicious allegations of scientific misconduct, and violations of due process protections in handling allegations of scientific misconduct.

³ Adapted from the AGU Policy on Misconduct with additional text from the Federal Policy on Research Misconduct (<http://www.aps.org/policy/statements/federalpolicy.cfm>) and the Department of Interior Scientific and Scholarly Integrity Policy (<http://www.fws.gov/science/pdf/DOIScientificIntegrityPolicyManual.pdf>).

AGU Scientific Integrity and Professional Ethics

When representing AGU in an official capacity, members and officers will uphold all laws and regulations and abide by the highest standards of professional and personal conduct. Therefore, AGU also considers the following behavior with respect to AGU activities to be so serious that violations will be considered a breach of professional ethics and investigated utilizing the procedures in this policy:

1. Misrepresenting oneself as an official of the Union or as having authorities or honors conferred by the Union beyond those one actually possesses.
2. Misuse of AGU's name, funds, activities, or resources for nonapproved purposes.
3. Unauthorized solicitation of funds or resources under the auspices of AGU.
4. Using AGU funds and resources without proper authorization and attribution or in a manner not commensurate with AGU corporate and organizational relationship policies.

All AGU members will disclose as appropriate the financial, personal, professional, and other conflicts of interest that could compromise the trustworthiness of their work on AGU committees, publications, research proposals, meeting presentations, and public communications as well as in all review activities. Conflict of interest is defined as any financial or nonfinancial interest that conflicts with the actions or judgments of an individual when conducting scientific activities because it

1. could impair the individual's objectivity,
2. could create an unfair competitive advantage for any person or organization, or
3. could create the appearance of either item listed above.⁴

⁴NOAA Administrative Order on Scientific Integrity (2011), http://www.corporateservices.noaa.gov/ames/administrative_orders/chapter_202/202-735-D.html.

Ethical Guidelines for Publication of Scientific Research⁵

Overview

AGU aspires to select and publish, through peer review, the highest quality Earth and space science research. To achieve this, the peer review process must be objective, fair, and thorough. The ethical basis for this aspiration is absolute trust and honesty among Editors, authors, researchers, reviewers, and funding agencies. Decisions about a manuscript should be based only on its importance, originality, clarity, and relevance to the journal's scope and content.

Every Editor of an AGU journal has the responsibility to establish and maintain guidelines for selecting and accepting papers submitted to that journal. Every submitting author, coauthor, and reviewer has specific responsibilities in these activities, as well as the overall responsibility as members of the profession for respecting codes of conduct. Lastly, the AGU Board and Council have responsibility to ensure the independence of the Editors and provide agreed-upon support so that the quality of publications is not compromised.

In Earth and space science, the growth of global collaborations, the public immediacy of many research results, and the implications for individuals and societies result in major ethical responsibilities for Editors, authors, reviewers, and the AGU Board and Council. These guidelines outline respective common sense ethical guidelines to ensure and sustain the trust of the public and the scientific community in the integrity of the science and of the published works in AGU journals.

Guideline A. Ethical Obligations of Editors of Scientific Journals

To uphold integrity in the AGU publishing process, AGU Editors are expected to do the following:

1. Provide unbiased consideration to all manuscripts offered for publication, judging

⁵ This section draws on the following:

- Statement by publisher Taylor and Francis UK, http://www.tandf.co.uk/journals/pdf/announcements/tmp_h_guidelines06.pdf.
- Publication Ethics for Medical Journals of the World Association of Medical Editors, <http://www.wame.org/resources/ethics-resources/publication-ethics-policies-for-medical-journals>.
- The Council of Scientific Editors White Paper on Promoting Integrity in Scientific Journal Publications by CSE Editorial Policy Committee 2008-9, http://www.councilscienceeditors.org/files/public/entire_whitepaper.pdf.
- The Committee on Publication Ethics at http://www.publicationethics.org/resources/flowcharts_and http://www.publicationethics.org/files/Code_of_conduct_for_journal_editors_Mar11.pdf.

AGU Scientific Integrity and Professional Ethics

each on its merits without regard to personal bias, race, religion, politics, nationality, gender, seniority, or institutional affiliation of the author(s).

2. Process all manuscripts promptly.

3. Take full responsibility for acceptance or rejection of a manuscript, working in the best interest of science and excellence and utilizing the recommendations of peer reviewers. Manuscripts may be rejected without review if considered inappropriate for the journal, and Editors may consult with Associate Editors or reviewers to aid in this decision.

4. Ensure the peer review process is objective, fair, and thorough. Be vigilant in avoiding conflict of interest among reviewers and authors.

5. Never disclose information about a manuscript under consideration to anyone other than those from whom professional advice is sought. An Editor may disclose manuscript titles and names of authors of papers that have been accepted for publication.

6. Respect the intellectual independence of authors. Results that are at variance with the dominant paradigm, as well as null results, should be given full and equal consideration based upon the criteria of importance, originality, clarity, and relevance.

7. Fully delegate responsibility of a manuscript to another Editor or Associate Editor to avoid conflict of interest. This includes manuscripts authored by the Editor, manuscripts authored by scientists with whom the Editor has a close relationship, or when a manuscript is so closely related to the research of an Editor as to create a conflict of interest.

8. Never use unpublished information or interpretations from a submitted manuscript for their own or a reviewer's own research, except with the consent of the author.

9. Quickly facilitate publication of errata to correct erroneous information in a published report.

Guideline B. Ethical Obligations of Authors/Contributors:

To contribute the highest quality science to AGU publications, authors are expected to do the following:

1. Present a precise and accurate account of the research performed and a clear, objective discussion of its significance.

2. Include sufficient detail and reference to sources of information in a manuscript to permit the author's peers to repeat the work. Limitations on use of or access to data must be clearly identified.

AGU Scientific Integrity and Professional Ethics

3. Identify sources of all information and cite those publications that have been influential in determining the nature of the reported work and that guide the reader quickly to the primary and other earlier work essential for understanding the present investigation. Information obtained privately, as in conversation or correspondence, should not be used or reported without explicit permission from the source.
4. Carefully document methodology, assumptions, and uncertainty.
5. Follow the appropriate procedures in force in their countries that govern the ethics of work done with human or animal subjects.
6. Never plagiarize the work of others or your own work. Always provide appropriate citation.
7. Avoid unnecessary fragmentation or redundant publication of research reports to artificially increase the number of publications.
8. Never include personal criticism in a written piece of work.
9. Report to the Editor any changes made to the manuscript after acceptance.
10. Include as coauthors only those persons who have made significant scientific contributions to the work, and determine order of authorship in a manner appropriate to the contribution. All coauthors share responsibility for the quality and integrity of the submitted and published manuscript.
11. Reveal to the Editor any potential conflict of interest that might be affected by publication of the results contained in a manuscript or in the development of the research.
12. In the role of corresponding author, ensure that all coauthors are fully cognizant of the steps and changes in the manuscript during the review and that all authors agree to the final version of the manuscript.

Guideline C. Ethical Obligations of Reviewers of Manuscripts

To ensure the highest quality science to AGU publications, reviewers are expected to do the following:

1. Provide clearly written, unbiased feedback in a timely manner on the scholarly merits and scientific value of the work, together with a documented basis for the reviewer's opinion.
2. Thoroughly address all review criteria provided by the journal.
3. Decline to review manuscripts for which the reviewer lacks sufficient time, is not

AGU Scientific Integrity and Professional Ethics

qualified, or has a conflict of interest with any of the authors, including personal or competitive relationships.

4. Explain and support judgments adequately so that Editors and authors may understand the basis of their comments. Any statement by a reviewer on an observation, derivation, or argument that has been previously published should be accompanied by the relevant citation.

5. Provide citations to relevant work by other scientists as appropriate.

6. Alert the Editor to any significant similarity between the manuscript under consideration and any other published paper or manuscript submitted concurrently to another journal. Report any plagiarism or the appearance of plagiarism.

7. Never use or disclose unpublished information, arguments, or interpretations contained in a manuscript under consideration, except with the consent of the author.

8. Never include personal criticism of the author in reviewing a manuscript.

Guideline D. Ethical Obligations of Authors Publishing for the Public

Scientists have the same basic obligation to be accurate in reporting observations and unbiased in interpreting them when writing for the public. Authors writing for the public are expected to do the following:

1. Maintain accuracy of the science when using common words or simplifying concepts to be understood. Avoid unwarranted sensational or unsubstantiated results and conclusions.
2. Never proclaim a discovery to the public unless the experimental, statistical, or theoretical support for it is of sufficient strength to warrant publication in the scientific literature, and ensure submittal of such work as quickly as possible.
3. Use analogies that are scientifically accurate rather than ones based on purely emotional or popular credence.

Guideline E. Ethical Obligations of AGU Toward Its Editors

To maintain honesty and trust in the AGU publishing process, the officers and staff of AGU are expected to do the following:

1. Fully inform AGU journal Editors of their responsibilities, authorities, terms of appointment, and mechanisms for resolving conflict.

AGU Scientific Integrity and Professional Ethics

2. Never interfere in the evaluation, selection, or editing of individual articles, and respect that Editors have authority over the editorial content of the journal, generally referred to as “editorial independence.”

3. Support editorial decisions made on the basis of the clarity, originality, importance, and relevance to the journal’s audience including manuscripts that are critical of the current paradigm or that may be contrary to the published statements of AGU.

4. Protect the editorial, peer review, and publishing process from influence of commercial interest, personal self-interest, political influence, or other nonscientific influences.

5. Responsibly use the right to appoint and terminate Editors. Cause for dismissal should be for substantial reasons such as scientific misconduct, irresponsible decisions, or personal behavior contrary to the ethical standards of the profession or if they are not fulfilling their responsibilities as Editors.

AGU Process for Investigating Scientific Misconduct

A. GENERAL PROCESS FOR ALLEGATIONS OF SCIENTIFIC MISCONDUCT

SECTION 1. SCOPE OF THE PROCESS

Allegations of scientific misconduct may be submitted to AGU when the alleged action is directly connected to a program operated under the direction of the Union including its publications, presentations, and meetings. When an allegation received by AGU also involves federally funded research and meets the federal definition of research misconduct (included in this policy), AGU will follow the reporting requirements of the Policy on Federal Research Misconduct.

AGU recognizes that an allegation of scientific misconduct is not, in and of itself, proof of scientific misconduct. AGU recognizes that an allegation does, however, bear the potential to damage professional credibility and cast doubt on the entire career of an accused party. Whenever possible, AGU will observe strict confidentiality when an allegation of scientific misconduct by a member is reported, up until the investigation process has been completed and a ruling by the governing body has been made, at which point confidentiality may or may not be preserved, depending on the case and the findings.

This process also supports the authority of the Editors and the Publication and Meetings committees who have the primary responsibility to ensure that the AGU publication record reflects appropriate standards and best practices in scientific scholarship in the Earth and space sciences.

It is the intent of this AGU process to determine whether a violation of the principles outlined here has occurred and to decide on appropriate sanctions. It is not the intent of this process to correct poor research or poor scholarship except to the degree that the AGU published record may need to be corrected.

SECTION 2. INVOLVED PARTIES

The *Chair of the Ethics Committee* coordinates AGU's investigations of scientific misconduct. The past Past President of AGU will serve as the Chair.

The *Ethics Committee* reports to the Board of Directors and is responsible for investigating allegations that are deemed by the Chair of the Ethics Committee to be substantial and thereby require investigation. The Ethics Committee will consist of members involved in outreach, meetings, and publications, and additionally, one Editor from the following three categories: AGU Editors in Chief, Editors, and Associate Editors. Additional members may

AGU Scientific Integrity and Professional Ethics

be added to a specific investigation to provide subject matter expertise pursuant to the allegation. The Chair will name one of the Committee members as the Vice Chair to assist and serve as Chair in the event of conflict of interest or if the Chair cannot serve for other reasons. Members will serve for two years and will be nominated from their respective committees and the community of Editors. Because of their other substantial responsibilities, committee chairs should not be considered for nomination. The AGU President will work with the Chair of the Ethics Committee to review nominations and finalize the membership of the Ethics Committee.

The *Board of Directors* has the final authority to determine what actions will be taken if an allegation of scientific misconduct is found to be substantiated.

The *Complainant* is the individual who registers the allegation with AGU. The complainant need not be an AGU member.

The *Respondent* is the individual(s) against whom the allegation is made. The Respondent must be an AGU member or, an author of an AGU publication or presentation, or an AGU meeting attendee.

SECTION 3. RESPONSIBILITIES

The Chair of the Ethics Committee serves as the point of contact for receiving allegations of scientific misconduct. The Chair will conduct an initial evaluation of the allegation in consultation with the Committee and the AGU President to determine if a full investigation is required. If so, the Chair will coordinate with the Committee to conduct an investigation, the results and recommendations of which will be forwarded to the Board of Directors for final action. The Chair will ensure that all procedures and due process as described in Section 4 are followed.

The Board of Directors will review the findings and recommendations and make a final determination of what to do.

If the allegation of scientific misconduct is substantiated, the Board of Directors will determine whether and under what circumstances other organizations need to be informed of the infraction and AGU's response to it.

SECTION 4. PROCEDURE

A. Reporting an Allegation

Allegations regarding scientific misconduct by AGU members or authors in connection with AGU activities (publications, presentation, and other official duties) must be submitted in writing either directly to the Chair of the Ethics Committee or to ethics@agu.org. The Chair will consider the allegations and determine if a full investigation by the Ethics Committee is

AGU Scientific Integrity and Professional Ethics

warranted. All parties will be bound to treat all documents and information with the highest degree of confidentiality throughout and after the process. Failure to do so is deemed a serious breach of these guidelines.

The allegation must contain the following information:

1. The name and affiliation of the person(s) submitting the allegation and the name and identifying information of the person(s) alleged to have committed the scientific misconduct.
2. A description of the allegation that includes the date and circumstances of the alleged misconduct.
3. Any documents or other relevant items (such as data, scientific papers, memos, etc.) with annotation showing specifically how the item relates to the allegation.
4. An explanation of how the allegation relates to scientific as defined in this policy.
5. A statement explaining any conflict(s) of interest the person making the allegation has with the subject(s), entity(ies), or situation(s) named in the allegation. A conflict of interest does not preclude the filing of an allegation.

Allegations may be returned if they do not contain the above information. Allegations may be submitted via e-mail to ethics@agu.org or in writing to the following:

Chair of the AGU Ethics Committee and the
AGU Director of Science
2000 Florida Avenue NW
Washington, DC 20009-1277, USA

B. Procedure for Preliminary Investigation

Upon receipt of an allegation, the Chair of the Ethics Committee (or the Vice Chair if the Chair recuses themselves) will notify the President, Executive Director, and the members of the Ethics Committee within 10 business days. The Chair will also acknowledge receipt of the allegation to the complainant within 10 business days.

The Chair of the Ethics Committee will review the material and recommend whether the allegation

- a) does not constitute scientific misconduct as defined by AGU and no further action is warranted or
- b) appears to constitute scientific misconduct as defined by AGU and may be forwarded to the Ethics Committee for further investigation.

A recommendation of either item a or item b must be made in writing to the AGU President and the Ethics Committee within 15 business days of receipt of the allegation. The AGU President and Ethics Committee will respond within 10 business days on whether they concur.

AGU Scientific Integrity and Professional Ethics

If the AGU President and Ethics Committee agrees that the allegation does not constitute scientific misconduct as defined by AGU, then the complainant will be notified immediately by the Chair of the Ethics Committee and the allegation dismissed.

If the President of AGU and/or the Ethics Committee believe that the allegation may constitute scientific misconduct, then the allegation will be forwarded to the Ethics Committee who will provide notification to the respondent and complainant and begin an investigation. If the respondent admits to the scientific misconduct at any time during the procedure, the investigation will be halted and the Ethics Committee will prepare recommendations to the Board of Directors for actions and or sanctions to be taken.

If the allegation involves federally funded research, meets the federal definition of research misconduct provided in this policy, and AGU determines there is sufficient evidence to proceed to an investigation by the Ethics Committee, the home institution will need to be notified and a mutual determination made if the investigation will be carried out by the home institution, AGU, or jointly.

C. Procedure for Investigation

The Committee has 90 days to complete their action and may ask for an extension of time from the AGU President if needed. If the internet and conference calls are to be used as part of the panel operations, adequate security and confidentiality of the proceedings must be taken. Additional members may be added to a specific investigation to provide subject matter expertise pursuant to the allegation.

1. The Chair of the Ethics Committee will consult with the Committee as a whole to determine the schedule of the investigation and make assignments with regard to specific actions to be undertaken by the Committee members. All procedures will be conducted under strict confidentiality.
2. The Chair of the Ethics Committee will formally notify the complainant and respondent in writing that an allegation has been received and will be investigated and will provide an approximate timetable and description of the investigation.
3. Collection of information, evaluation of the allegation, and interaction with the Complainant and the Respondent will be conducted. A teleconference or a face-to-face meeting may be held at AGU HQ (or other mutually agreed upon location) of the full Committee. Both the Complainant and the Respondent will be invited to the meeting and travel supported by AGU. The Complainant and Respondent may also attend by teleconference or internet. All information that has been collected by the committee will be forwarded to both the Complainant and the Respondent no later than 5 business days before the meeting such that it can be evaluated by all parties. The Complainant and Respondent may also provide written statements from themselves or others as part of the proceedings 5 business days before the meeting. During the meeting
 - a) the Complainant will summarize the allegation and associated evidence of scientific misconduct, and

AGU Scientific Integrity and Professional Ethics

- b) the Respondent will be given the opportunity to respond to the allegations. The Committee, in Executive Session, will then consider all of the evidence presented, make a finding as to whether scientific misconduct has occurred, and recommend a response by AGU.
4. The finding and recommendation of the Ethics Committee will be forwarded to the Board of Directors in a report prepared by the Ethics Committee and submitted by the Chair. The report should be a clear, complete, and final determination of all charges. At a minimum the report will include the following: (1) summary of the alleged scientific misconduct, (2) summary of the fact finding activities of the committee, (3) discussion and conclusion as a result of the fact finding, (4) recommendations for actions and or sanctions to be taken as a result, and (5) appendices as needed containing supporting documents and written statements.

A Respondent may retain the services of an attorney at their own cost. AGU may also retain services of an attorney if it deems this necessary. If an attorney is needed, as determined by the Ethics Committee, the Board of Directors should ensure adequate resources are available to secure the necessary legal services.

D. Review by the Board of Directors

The Board of Directors in Executive Session will review findings and recommendations submitted by the Ethics Committee. The Board of Directors may accept or reject the Ethics Committee's recommendations of actions to be taken, but may not reject the conclusions (findings) of the Ethics Committee. The Board however can request additional investigation for which the Ethics Committee will have up to 90 days to conduct. The action by the Board of Directors will be summarized in a report for the record and a copy forwarded to the Ethics Committee. The Board will then notify the Chair and the Respondent and the Complainant of its decision within 10 business days of the Executive Session.

SECTION 5. SANCTIONS

If a finding of scientific misconduct has been made, the Board of Directors will decide the action to be taken. These may include appropriate sanctions, correction of the publication record, and/or recommendations for education or training. Sanctions, in increasing severity, may include but are not limited to the following:

- a. Written reprimand or warning.
- b. Removal from AGU volunteer position.
- c. Publication of "errata" notices.
- d. Withdrawal/retraction of presentations, publication, or posters.
- e. Placement of an author or reviewer on an AGU Editor's watch list.
- f. Suspension from publishing in AGU journal(s) for a specific period, including permanently.

AGU Scientific Integrity and Professional Ethics

- g. Suspension from making presentations at AGU sponsored meeting(s) for a specific period, including permanently.
- h. Temporary suspension of membership.
- i. Permanent expulsion from AGU.
- j. Notification to respondent's home institution.
- k. Notification to other journals.
- l. Publication/notification to members of incident in *Eos* or other AGU publication.
- m. Public statement regarding the scientific misconduct.

SECTION 6. APPEALS

Once the Board of Directors has made a decision with respect to actions to be taken against the Respondent, the Respondent has sixty (60) days to file an appeal of the sanction and/or the finding. An appeal must be based on new evidence or reconsideration of evidence and include a narrative justification for the appeal. The Board of Directors will meet in Executive Session at its next scheduled meeting to review the appeal and sustain or revise its decision on the sanction or refer the appeal to the Ethics Committee for reconsideration of the finding. That action will be documented for the record and will be communicated to the Respondent and the Ethics Committee within 10 working days following the Board of Directors meeting. The Ethics Committee may then have up to 90 days to reconsider the finding and any new evidence from the Respondent and may ask the Board for an extension of time for gathering additional information.

SECTION 7. INTERACTIONS WITH OTHER INSTITUTIONS

It is recognized that AGU members may be governed by the ethical and scientific integrity policies of other institutions (such as professional societies, governmental agencies, research institutions) or by governmental laws such as the Federal Research Misconduct Policy. When reporting, investigating, or resolving instances of scientific misconduct, members and the AGU Ethics Committee should consider the following:

- a) Other institutions may need to be notified or involved in resolving the allegation. When an allegation involves federally funded research, meets the federal definition of research misconduct provided in this policy, and AGU determines there is sufficient evidence to proceed to an investigation by the Ethics Committee, then the home institution must be notified and a mutual determination made if the investigation will be carried out by the home institution, AGU, or jointly.
- b) If the same allegation is already being investigated by a Respondent's home institution, AGU may wait until the previous investigation is complete and the issue has been resolved before undertaking its own action if necessary, or may partner with the other institution in the investigation.

AGU Scientific Integrity and Professional Ethics

- c) Notification of an institution, an external (non-AGU) journal, or the public of a finding of scientific misconduct should be considered only in the most serious of violations or when required by law.

SECTION 8. CONFLICT OF INTEREST

Real or apparent conflicts of interest must be avoided in all actions by the Ethics Committee, the Ethics Committee Chair, the subject matter experts retained by the Committee, and the Board of Directors during an investigation. To this end, members of the relevant committee must recuse themselves from participation in the investigation if they are from the same institution (for institutions with multiple campuses this applies only to the same physical campus), have worked closely with, have a personal relationship with, or are related to either the Complainant or Respondent.

B. ALLEGATIONS OF SCIENTIFIC MISCONDUCT DURING SUBMISSION AND REVIEW FOR AGU PUBLICATIONS

SECTION 1. SCOPE OF THE PROCESS⁶

Editors have an important role in the prevention and remediation of scientific misconduct during the editorial process. During the review of a manuscript, allegations of scientific misconduct may arise. These allegations may deal with plagiarism, misrepresentation, fabrication of data or results, and falsification of data and results. Some of these allegations may be more readily handled within the editorial process by the Editor such as allegations of plagiarism brought by a peer reviewer that can be readily resolved by working with the author. Other cases may need to be brought to the attention of the Ethics Committee, for example, an allegation from an author surrounding bias in peer review or rejection of a manuscript. At any time, an Editor, peer reviewer, or author may bring an issue of scientific misconduct to the Ethics Committee when they feel it cannot be resolved through the editorial process.

SECTION 2. INVOLVED PARTIES

The editorial structure of AGU journals may include the Editor-in-Chief, Editors, and Associate Editors. Authors are those listed on the publication and include the senior authors as well as coauthors. Reviewers are those requested by the editorial structure of a journal to review a manuscript that has been submitted for publication to an AGU journal. The Publications Committee is an AGU committee that is responsible for oversight of AGU publications⁷.

⁶ http://www.agu.org/pubs/authors/policies/dualpub_policy.shtml;
http://www.agu.org/pubs/authors/manuscript_tools/journals/pub_guidelines.shtml;
http://www.agu.org/pubs/authors/usage_permissions.shtml#web;
http://www.agu.org/pubs/authors/usage_permissions.shtml#repository.

⁷ See <http://www.agu.org/pubs/authors/policies/> and http://www.agu.org/about/governance/committees_boards/publications.shtml.

SECTION 3. RESPONSIBILITIES

All Editors, authors, and peer reviewers are responsible for maintaining the highest standards of ethics and integrity in the writing, editing, and publication process. The responsibilities of Editors, authors, and peer reviews are defined by the Publications Committee in detail.⁸

SECTION 4. PROCESS

Ethical guidelines for the publication of scientific research and the obligations of Editors, authors, and reviewers are provided in this policy. To the extent possible, issues of scientific misconduct should be resolved amongst the author, the journal editorial structure, and the reviewers. This does not preclude the submission of a formal allegation to AGU using the process described in Section A of this policy by a member of the editorial structure, an author, or a reviewer. An author may also file an allegation if he or she feels the allegations of an Editor or peer reviewer are unfounded.

Once a manuscript has been published, any allegations of scientific misconduct related to the publication should be dealt with by the Ethics Committee.

SECTION 5. SANCTIONS

Editors should work with authors and reviewers to resolve allegations where possible. If the Editor finds that an allegation is true, they may reject the manuscript and/or refer the allegation to the Ethics Committee.

SECTION 6. APPEAL

An author may appeal the decision by an Editor to reject a manuscript on the basis of scientific integrity or professional ethics to the Ethics Committee.

C. INDEPENDENT ACTION BY THE BOARD OF DIRECTORS

In cases where the Board of Directors believes that immediate action must be undertaken because of the seriousness of the incident or where the reputation of AGU is at stake, they may act independently of the Ethics Committee. Whatever action is taken and sanctions levied must be documented for the record and a copy forwarded to the Ethics Committee.

D. CLOSURE AND DOUBLE JEOPARDY

⁸ See also

http://www.agu.org/pubs/authors/manuscript_tools/journals/pub_guidelines.shtml.

AGU Scientific Integrity and Professional Ethics

Once action has been taken by AGU with respect to an issue of scientific integrity or professional ethics, that issue is considered closed with the exception of a single appeal. The same issue may not be pursued independently through another AGU process or entity after a decision is made or after an appeal is concluded.

E. TRACKING OF ALLEGATIONS AND DECISIONS

Editors and the Ethics Committee will be responsible for recording allegations and decisions in a secure AGU database with access limited to their use and that of the Board of Directors. The record will include the allegation and relevant reports and decisions. Reports that did not result in a finding of scientific misconduct will be destroyed at the end of one year.