

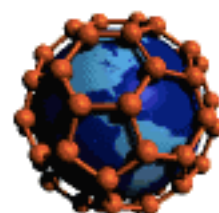
# Integrity, ethics & trust in scientific research literature

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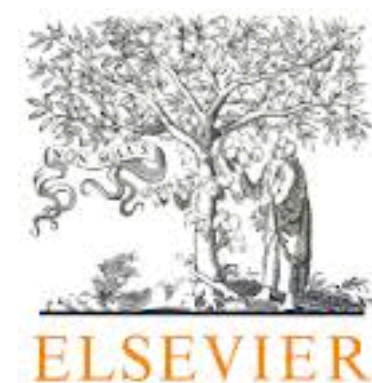


**“I’d like you to do a presentation on business ethics. If you don’t have time to prepare something, just steal it off the Internet.”**

# First, a little about me



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The World Wide Club for the Chemical Community



# Integrity. Ethics. Trust

integrity |ɪn'tɛɡrɪti|

- 1 the quality of being **honest** and having strong **moral** principles.
- 2 the state of being whole and undivided.

ethics |'ɛθɪks|

- 1 [ usu. treated as pl. ] **moral principles** that govern a person's behaviour or the conducting of an activity.

# Integrity. Ethics. Trust

trust |trʌst|

**1** firm belief in the **reliability**, truth, or ability of someone or something: *relations have to be built on trust | they have been able to win the trust of the others.*

- acceptance of the truth of a statement without evidence or investigation: *I used only primary sources, **taking** nothing **on trust**.*
- the state of being responsible for someone or something: *a man in a position of trust.*
- [ count noun ] literary a person or duty for which one has responsibility: *rulership is a trust from God.*





Scholarly journal editors in 2015 find themselves in the midst of a profoundly changing landscape.

- Online publishing is virtually ubiquitous,
- submission and publication volumes are rising year on year,
- reviewers and editors report substantial challenges in handling workflow,
- online tools allow for easy plagiarism,
- easy manipulation of figures,
- ease of duplicate submission,
- easy forging of identities – especially of reviewers.

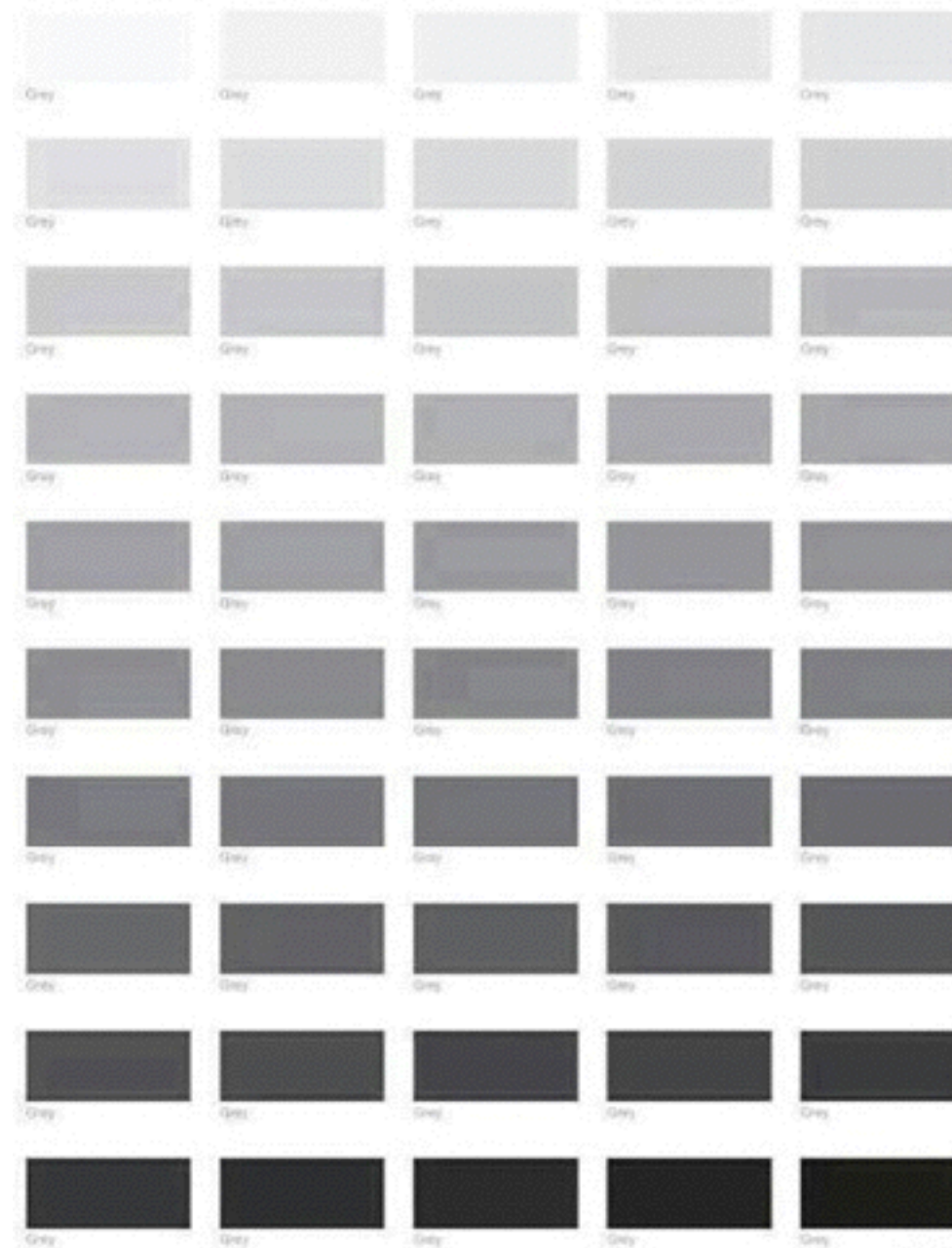




So there is a continuum of misconduct, from error to fraud.

Some is intentional, and some unintentional.

We don't always do a good job of distinguishing between these cases.



# Publication ethics issues happen at all journals

## The COPE Top Three:

- Plagiarism
- Authorship
- Conflicts of Interest

## Misconduct in Research

## Misconduct in Publication

Non-ethical research

Plagiarism

Data fabrication

Redundant publication

Data falsification

Authorship abuse

Image manipulation

Misconduct of reviewer/editor

Why does it happen?

Because there are a perverse set of incentives  
which distinguish between rewarding publication  
and rewarding research



# Divergent interests (1 of 2)

To be a good scientist...	To be a good academic...
Be skeptical of your results	"Sell" your results
Interpret conclusions carefully	Highlight/exaggerate importance
Publish negative results	Publish "strategically"
Ignore social prestige	Use impact factors to make writing decisions
Challenge authority	Cite authority. Make friends.
Replicate. Replicate.	Replicate... if you must
Novel exciting results are less likely to be true. Double-check them.	Publish novel exciting results before you get scooped.

# Divergent interests (2 of 2)

To be a good scientist...	To be a good academic...
P=0.06	P=0.04
Help others replicate and find flaws in your work	Have a “territory”
Be clear	Sound smart
“Science is a marathon, not a sprint”	Funded work must be “transformative”
Natural history is crucial for biological understanding	Natural history is “low impact”
Long-term goals for important truths	Short-term results with high impact
Build a consensus.	Hot controversial topics are higher impact

# **Publish AND perish**

Getting caught is increasingly likely and leads  
to the swift end of one's career



**KEEP  
CALM  
AND BE THE  
CHANGE YOU WANT  
TO SEE IN THE WORLD**

# Everyone

- **General awareness of the problems** - some great work done here recently by all major publishers, including ACS, RSC, Springer, Elsevier, Wiley
- Be aware that ethics and integrity can be affected by things you can't see as well as things you can.

## Ethical Guidelines to Publication of Chemical Research

*The guidelines embodied in this document were revised by the Editors of the Publications Division of the American Chemical Society in June 2015.*

### Preface

The American Chemical Society serves the chemistry profession and society at large in many ways, among them by publishing journals which present the results of scientific and engineering research. Every editor of a Society journal has the responsibility to establish and maintain guidelines for selecting and accepting papers submitted to that journal. In the main, these guidelines derive from the Society's definition of the scope of the journal and from the editor's perception of standards of quality for scientific work and its presentation.

An essential feature of a profession is the acceptance by its members of a code that outlines desirable behavior and specifies obligations of members to each other and to the public. Such a code derives from a desire to maximize perceived benefits to society and to the profession as a whole and to limit actions that might serve the narrow self-interests of individuals. The advancement of science requires the sharing of knowledge between individuals, even though doing so may sometimes entail forgoing some immediate personal advantage.

With these thoughts in mind, the editors of journals published by the American Chemical Society now present a set of ethical guidelines for persons engaged in the publication of chemical research, specifically, for editors, authors, and manuscript reviewers. These guidelines are offered not in the sense that there is any immediate crisis in ethical behavior, but rather from a conviction that the observance of high ethical standards is so vital to the whole scientific enterprise that a definition of those standards should be brought to the attention of all concerned.

We believe that most of the guidelines now offered are already understood and subscribed to by the majority of experienced research chemists. They may, however, be of substantial help to those who are relatively new to research. Even well-established scientists may appreciate an opportunity to review matters so significant to the practice of science.

### Guidelines

#### A. Ethical Obligations of Editors of Scientific Journals

1. An editor should give unbiased consideration to all manuscripts offered for publication, judging each on its merits without regard to race, religion, nationality, sex, seniority, or institutional affiliation of the author(s). An editor may, however, take into account relationships of a manuscript immediately under consideration to others previously or concurrently offered by the same author(s).
2. An editor should consider manuscripts submitted for publication with all reasonable speed.
3. The sole responsibility for acceptance or rejection of a manuscript rests with the editor. Responsible and prudent exercise of this duty normally requires that the editor seek advice from reviewers, chosen for their expertise and good judgment, as to the quality and reliability of manuscripts submitted for publication. However, manuscripts may be rejected without external 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.
4. The editor and members of the editor's staff should not disclose any information about a manuscript under consideration to anyone other than those from whom professional advice is sought. (However, an editor who solicits, or otherwise arranges beforehand, the submission of manuscripts may need to disclose to a prospective author the fact that a relevant manuscript by another author has been received or is in preparation.) After a decision has been made about a manuscript, the editor and members of the editor's staff may disclose or publish manuscript titles and authors' names of papers that have been accepted for publication, but no more than that unless the author's permission has been obtained. If a decision has been





# Author responsibilities

Ethical guidelines and code of conduct for authors

## Journals, books & databases

[About our journals](#)

[Journal authors &  
reviewers](#)

This section provides general guidance to authors on their responsibilities and the code of conduct they should follow when submitting to a Royal Society of Chemistry journal. It also describes what are considered to be conflicts of interest, and outlines our policy on human and animal welfare.

### On this page

- [Authorship](#)
- [Code of conduct & conflicts of interest](#)
- [Authenticity & professionalism](#)

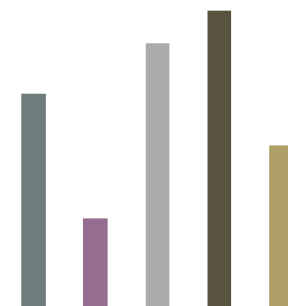
# Editors

- Deal with submissions quickly and fairly. Unbiased decisions free from economical considerations.
- Should conflicts arise, seek help
- Publish your editorial workflows and complaints procedures on journal homepage. Transparency guidelines on COPE website.
- Preserve the scientific record by retracting or correcting articles which require it
- Be aware that as submissions and publications increase, so are breaches of ethics codes

We need a culture of responsibility  
for the integrity of the literature...  
it's not just the job of editors.

Ginny Barbour

COPE Chair, Tokyo, Japan, 2015



# Authors

- Be driven by research, not publications
- Don't falsify, exaggerate or 'spin' your results
- Be aware of the responsibilities of 'Authors' - try to fulfil political obligations through the Acknowledgements section, not with guest authorship
- Don't be afraid of admitting to mistakes to clear the scientific record
- Publish EVERYTHING

# Reviewers

- Only review papers you are expert in
- Respect confidentiality of peer review process
- Declare all conflicts of interest
- Be constructive and objective in reviews
- Not be swayed by author's nationality, race, gender, or political beliefs

# You're not alone

COPE was set up in 1997 and now has >10,000 members

COPE provides advice to editors and publishers on all aspects of publication ethics and, in particular, how to handle cases of research and publication misconduct. It also provides a forum for its members to discuss individual cases.

COPE has produced an eLearning course for new editors. Eleven modules in total, the course currently includes: An Introduction to Publication Ethics, Plagiarism, and Authorship among others

Also, sample letters, flowcharts, guidelines, database of previous cases.





# Promoting integrity in research publication

COPE is a forum for editors and publishers of peer reviewed journals to discuss all aspects of publication ethics. It also advises editors on how to handle cases of research and publication misconduct. [Read more about COPE...](#)



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## Principles of Transparency and Best Practice in Scholarly Publishing: revised and updated

In early 2014, COPE, together with Directory of Open Access Journals (DOAJ), Open Access Scholarly Publishers Association (OASPA), and

CASE

Revoked parental consent  
13th Jul 2015

CASE

Author disagreement regarding article corrections  
13th Jul 2015

CASE

Ethics committee approval  
13th Jul 2015

CASE

Authorship dispute  
13th Jul 2015

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## Cases search

Showing 1–25 of **517** results.

Order by: Date

All of the cases COPE has discussed since its inception in 1997 have been entered into a searchable database. This database now contains over 500 cases together with the advice given by COPE. For more recent cases, the database also includes follow-up information and about outcome, and podcasts are available for most of the newer cases. We hope this database will provide a valuable resource for editors and those researching publication ethics.

You can search by classification or keyword using either the search field (top left) or by filtering your inquiry using the years and classifications/keywords listed below. A more detailed explanation of the classifications and keywords can be found on the [COPE Case Taxonomy page](#).

We encourage members to look at the database before submitting a case to the Forum to see if similar cases have already been discussed and to see the format used for presenting cases. However, please note that advice from the COPE Forum meetings is specific to the particular case under consideration and may not necessarily be applicable to similar cases either past or future.

COPE accepts no liability for any loss or damage caused or occasioned as a result of advice given by them or by any COPE member. Advice given by COPE and its members is not given for the purposes of court proceedings within any jurisdiction and may not be cited or relied upon for this purpose.

### Possible omission of information essential for conclusions in a research paper

CASE NUMBER: 14-11

YEAR: 2014

RESOLUTION: On-going

Data Data, selective/misleading reporting/interpretation

Whistleblowers Whistleblowers

Possible self-plagiarism and/or prior publication

### Submit a case

Case name (optional)

Any year

Search

### Search by classification

Questionable/unethical research (166)

Redundant/duplicate publication (113)

Data (104)

Misconduct/questionable behaviour (96)

Authorship (94)

Correction of the literature (80)


Conflict of interest (61)

Miscellaneous (54)

Plagiarism (54)

Peer review (53)

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Code of Conduct

Flowcharts

Guidelines

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standards for  
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GrantResources and  
Further Reading

The flowcharts are designed to help editors follow COPE's Code of Conduct and implement its advice when faced with cases of suspected misconduct. They can be downloaded individually or as a complete set.

The flowcharts are the copyright of COPE but we allow their reuse with appropriate accreditation for no charge. To apply for permission to reuse the flowcharts, contact the Administrator [here](#).

The complete set of 16 is here ([Download PDF, 476 kb](#)).

## Translations

Some or all of the flowcharts have been, or are the process of being, translated by COPE members into: Croatian, Japanese, Korean, Turkish, Arabic, Brazilian Portuguese, [Italian](#), [Spanish](#), [French](#), [Chinese](#) and [Persian](#) (14 flowcharts) are now available here on the website.

We are currently reformatting the remaining translated versions but if you would like a PDF, please [contact](#) the COPE Administrator. We are always looking for new translations. If you are able to translate the flowcharts into a language not yet represented, please contact the Administrator [here](#).

## Individual flowcharts

### What to do if you suspect redundant (duplicate) publication

- Suspected redundant publication in a submitted manuscript ([Download PDF, 60 kb](#))
- Suspected redundant publication in a published article ([Download PDF, 84 kb](#))

### What to do if you suspect plagiarism

- Suspected plagiarism in a submitted manuscript ([Download PDF, 80 kb](#))
- Suspected plagiarism in a published article ([Download PDF, 76 kb](#))

### What to do if you suspect fabricated data

- Suspected fabricated data in a submitted manuscript ([Download PDF \[84kb\], revised May 2011](#))
- Suspected fabricated data in a published article ([Download PDF \[84kb\], revised May 2011](#))

### Changes in authorship

- Corresponding author requests addition of extra author before publication ([Download PDF, 52 kb](#))
- Corresponding author requests removal of author before publication ([Download PDF, 52 kb](#))
- Request for addition of extra author after publication ([Download PDF, 60 kb](#))
- Request for removal of author after publication ([Download PDF, 68 kb](#))
- Suspected guest, ghost or gift authorship ([Download PDF, 76 kb](#))
- Advice on how to spot authorship problems ([Download PDF, 64 kb](#))



All flowcharts - English version  
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