# Peer Review 

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## Tetsuro Majima

- D. Eng., Osaka Univ. (1980)
- Research Associate, Dept. Chem., Univ. Texas at Dallas
(1980-1982)
- Researcher, The Inst. Phys. \& Chem. Res. (RIKEN) (19821994)
- Assoc. Prof., The Inst. Sci. \& Ind. Res. (SANKEN), Osaka Univ. (1994-1997)
- Prof. (1997-present)
- Research focused on beam-induced molecular chemistry based on photo- and radiation-induced chemistry

Authored / Co-authored more than 500 articles

Contributions to International Journals

- 2007.1-2014.12, Senior Editor, Langmuir, ACS.
- 2008.10-2014.12, Editorial Advisory Board, ACS Applied Materials \& Interfaces, ACS.
- 2011.9-present, Int. Editorial Board, Rapid

Communication in Photoscienece, Korean Society of Photoscience.

- 2011.9-2015.12, Editorial Board, ChemPlusChem, union of 16 European Chemical Societies, Wiley VHC.
- 2012.5-present, Associate Editor, Photochemistry and Photobiology, Wiley VHC.
- 2015.4, Editor of a special issue, Rapid Communication in Photoscienece, 2015, 4(1).
2016.1- Co-Chair, ChemPlusChem, union of 16 European

Chemical Societies, Wiley VHC.

## Peer Review

## -What It Is, How It Works, and Why It Matters!

## What is peer review?



Most scientists regarded the new streamlined peer-review process as 'quite an improvement.'
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## What is peer review ?

- Improves the quality of scientific research
- Maintains standards
- Provides a measure of credibility
- Helps an Editor decide what qualifies as "publishable science"
$\checkmark$ What's original ?
$\checkmark$ What' s scientifically important ?
$\checkmark$ What's within the journal's scope ?


## Who are the players?



Associate


## Reviewer <br> 3




## Reviewer

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## Why is it important?

The peer-review system protects the community from illfounded reports.
J. C. Polanyi, Nobel laureate (Globe\&Mail, Oct. 3, 2011) said,

- Such censorship is hazardous, hence subject to constant scrutiny by the scientific community.
- The objective is
a) to flag what's important
b) to set aside what's pedestrian, and
c) to abjure what's fraudulent.
- That's a tall order, but the health of science depends on it.


## What is the role of peer-review in scholarship?

$\checkmark$ Ensure scientific integrity
$\checkmark$ Ensure relevance
$\checkmark$ Ensure the quality of the transmission of scientific information
$\checkmark$ It's meant to make your work BETTER!

## Peer-Review in Practice (1)

- The Editor-in-Chief receives a manuscript, examines it, and then:

1) Transmits it to an Associate Editor who has the proper expertise - OR -
2) Decides to decline to publish
$\checkmark$ Inappropriate topic for the journal' s readers
$\checkmark$ Poor quality (written in poor English, incorrect formatting)
$\checkmark$ Blatant lack of novelty (in view of previous articles)

## Peer-Review in Practice (2)

- The Associate Editor may:

1) Evaluate on a similar basis - OR -
2) Transmit the manuscript to Reviewers for further evaluation

- Editors evaluate the Reviewer comments and decide to accept the manuscript, return it for revision, or decline to publish.


## How might an Editor come to a decision?

- Read each Reviewer report carefully, and examine the manuscript.
- Assess the concerns of the Reviewers.
- If questions still remain, the Editor may request the comments of another scientist.
- Transmit the decision to the Authors, often with an explanation, especially in cases of rejection or request for major revisions.


## How should Authors handle Reviewer comments?

- Reviewers are trying to help!
$\checkmark$ Their feedback is important and invaluable.
- Authors must read the Reviewers' comments
$\checkmark$ Carefully
$\checkmark$ Understand the nature of the critique
$\checkmark$ Evaluate their importance
$\checkmark$ Revise according to the critique
If an Author chooses not to address some of the critique, the Author must indicate why he/she is taking that course of action.


## What are the most-common mistakes Authors make when replying to Editors and Reviewers?

- Lack of attentiveness
$\checkmark$ Authors need to thoroughly examine the critique in each review.
- Incomplete revisions
$\checkmark$ Failure to explain why some changes were not made. Each comment by a Reviewer should be examined and addressed point by point whether or not the Author actually makes the requested change.
- Becoming EMOTIONAL
$\checkmark$ Reviews are not personal—do not take them as such.


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