

# OA-ICC news stream methodology

## Summary

This guide details the format, stylistic content instructions and data management tools that the OA-ICC uses to store and present OA research and information via its [ocean acidification news stream](#) and bibliography (ADD LINK) The OA-ICC Style Guide may continue to evolve and should be updated as changes are made to preserve the clarity of style decisions.

## Background

The OA-ICCocean acidification news stream was started in 2006 by Dr. Jean-Pierre Gattuso, as a personal project to share the latest in ocean acidification research with his colleagues. Similarly, the bibliography was a project he started to store publications for personal use as a record of the accumulation of knowledge around the subject. Between 2008 and 2012, the news stream and bibliography were maintained as part of the EU project EPOCA (European Project on Ocean Acidification).

In 2012 after the OA-ICC was created to be a center for OA science within the IAEA environment laboratories, the blog and news stream were transferred to the OA-ICC. It has since gone through some revisions, such as with the addition of new keywords, but has largely maintained its style and content management since its creation, thereby maintaining continuity over 15 years of OA scientific advances.

## Audience

The news stream and bibliography are principally maintained for the international community of OA scientists who benefit by being connected to the work of their colleagues. The news stream also serves to collect all available digital publications related to OA, which may inform policy makers, NGO's and the public at large about the totality of events connected to OA science. The bibliography serves the research community through its collection of citable articles, metadata on authors, institutions, and more as well as keywords which help users rapidly identify content of interest.

## PANGAEA biological response data

OA papers investigating the biological response of organisms to ocean acidification are characterized by specific keywords describing the nature of the biological response. As part of a partnership with [Xiamen University](#) data is extracted from the biological response papers or solicited from authors. The associated carbonate chemistry data is recalculated and archived in a standardized format to facilitate data comparison and meta-analyses. This data is stored in a data compilation hosted at [PANGAEA](#) Data Publisher for Earth and Environmental Science (add specific link to OA-ICC data base) Data sets included are linked to

in the bibliography (doi of data set is mentioned when available). The data is visualized in an online data portal. LINK TO <http://oa-icc.ipsl.fr/>.

## OA-ICC News Stream

### Introduction

The news stream is designed to create a regular flow of information about news, research, events, jobs, and more related to OA. Relevant information is added five days a week. The news stream follows many stylistic rules for citations, and publishing formats to maintain the continuity and visual style of the blog.

### Method Overview:

#### Find new OA science content

- Search for relevant ocean acidification related content daily by checking your news alerts. If needed, also do a daily search for “ocean acidification” on Science Direct, Frontiers and google to find content. Read the title, abstract, search for the word “acidification” and CO<sub>2</sub> to determine the presence of substantial OA content. Articles which only mention OA, for example in the introduction, are not posted.
- As needed, check the blog if content has already been posted by searching for the title, part of the title, and/or author last names.

#### Create a blog post

- Make a new post on the blog and enter the title, abstract or article body and any photos
- Check the format to make sure the title capitalization is changed (we do not capitalize the title), links in the articles open a new tab, species names only are italicized and there are no headings or other misplaced formats
- Add a break, a citation, a category to the article
- Determine the keywords to add: Read the abstract and methods, check figures for key results
- Add the keywords
- Check work

### Searching for content

Monday through Friday new content must be added to the blog before 3:00pm CET. Automatically an email and social media posts will go out to our subscribers, with the posts for that day. The email generally is processed and sent by 3:45pm. It is important that we always find new content to add to the blog, even if just one or two articles.

**General recommendations and rules:** Save an article or two on days with lots of content to assure supply for the next day. Never post articles after 3:00pm on a Friday as that will cause an email to be sent to subscribers on Saturday, which we must avoid. Occasionally try searching other sources for missed content. Be aware that many news stories about science, are often reposted or lightly modified from other news websites. We try to publish the original

source and do not publish multiple, similar news stories about the same science article or event.

### Relevant content

Content for the blog must contain enough OA related information to be relevant to our readers. The standard is one that you must get a feel for and will learn to recognize. In general, a news article must contain at least two paragraphs discussing ocean acidification in a way that is more than just a general description of what ocean acidification is. There must be substantial information that we can draw from the article. A scientific article follows similar standards. Generally scientific articles will be investigating the state or effect of ocean acidification. Some content may be about a separate but related topic like global warming but will have a section on ocean acidification. If the part on OA is substantial it will go on the blog.

For laboratory or field research, the article must contain observation or experimental examination of two of the four carbonate system parameters. Those are:

*pH, pCO<sub>2</sub>, total alkalinity (TA) and dissolved inorganic carbon (DIC)*

A paper with only one of these four measurements should not be considered for the blog, unless the one measurement is pH and the paper is also substantially about ocean acidification.

Content searching will not be perfect, and you may occasionally come across content from several days or weeks ago that has not yet been added to the blog. For media coverage, the rule of thumb is if it's more than one month old don't post it. Scientific articles can be posted even if they are several months old (up to 9 months or so, to be determined on a case-by-case basis).

### News Alerts

#### Google Scholar Alerts:

- ocean acidification
- acidification | acid | acidic| pH | CO<sub>2</sub> | "carbon dioxide" ocean | sea

#### Google Alerts:

- ocean acidification

#### Biogeosciences (through account with Copernicus):

- Biodiversity and Ecosystem Function: Marine,
- Biodiversity and Ecosystem Function: Microbial Ecology & Geomicrobiology,
- Biodiversity and Ecosystem Function: Paleo,
- Biogeochemistry: Air - Sea Exchange,
- Biogeochemistry: Coastal Ocean,

- Biogeochemistry: Environmental Microbiology,
- Biogeochemistry: Greenhouse Gases,
- Biogeochemistry: Land - Sea Coupling,
- Biogeochemistry: Limnology,
- Biogeochemistry: Modelling, Aquatic,
- Biogeochemistry: Open Ocean,
- Biogeochemistry: Rivers & Streams,
- Biogeochemistry: Sediment,
- Earth System Science/Response to Global Change: Climate Change,
- Earth System Science/Response to Global Change: Models, Holocene/Anthropocene,
- Paleobiogeoscience: Marine Record,
- Paleobiogeoscience: Proxy use, Development & Validation

ScienceDirect (set as weekly email alert, through Elsevier account)

- ocean acidification

WebOfScience

- ocean acidification

Frontiers (no news alerts, just weekly search)

- ocean acidification

### 1.1.1. Blog cross-referencing

Cross reference new content with the blog using the search bar to see if the content you have found has previously been posted. This is true for any titles one recognizes or for articles appearing in the news alerts on Web of Science and google scholar, which are often slow to deliver new articles. Articles which are not recognized, having publication dates within 2 days may not need to be searched in the blog first. However, in the journal Biogeosciences, articles will appear as updates to previous discussion articles, sharing the same title. For this journal it is best to always search if the article is already present in the blog. If it is the final version, we add “(update)” after the title.

### Blog style guide

All blog posts must have a citation for the source of the content, and the written content must be formatted in a consistent way. This subsection details those formatting requirements. It is always a good idea to refer to past blog posts to gain a sense of the style requirements. To aide with formatting it's important to recognize global style rules which apply to all posts, and category specific rules that depend on the type of content shared. Blog posts also have a section where one must specify the category, and those categories will align with the categories below. More on categories in the next subsection.

### 1.1.2. Global style rules

Below is a list of global style rules that apply to all articles.

- Only the first word and [proper nouns](#) in a blog title are capitalized.
- There should be no headings (large bold text) in the article.
- No copied adds.
- All links should open to a new tab (new window).
- There must be a break present after the abstract (if science article) or 2-3 paragraphs after the start of any other post.
- All and only scientific species names are italicized (except in the title).  
Example: *Emiliana huxleyi* (Prymnesiophyceae)
- Any code, or copy errors, like symbology which does not copy correctly will be corrected to its closest approximation.
- Layout of an article, including any photos should follow the original article as much as possible.
- If any content, including a scientific article is in another language, add the language in parenthesis at the end of the title in the blog (and not in the citation).
  - **Example:** Made up title (in Spanish)

### 1.1.3. Scientific articles

Below is a list of style rules for scientific articles. Scientific articles include review papers, short communications, discussion papers, as well as regular articles.

#### Article format rules

- Immediately beneath the title, add the abstract
- If there are highlights (Science Direct articles usually) add those as well
- Almost always don't add any other content other than the abstract and highlights
- Add a break beneath the abstract
- Add the citation after the break
- In the post tab (settings, right hand side of screen) select the category "science"

#### 1.1.3.1. Citation rules

- Authors names are always written Last Name, space, then initials separated by a space. For multiple names post the two last names, fully spelled.
- If the first name is hyphenated cite with the initials with the hyphen and period.  
**Example:** M.-L.
- If the last name is hyphenated include the hyphen.
- Last two names are separated by an & symbol.
- Author names are separated from each other by a comma.
- After the authors place a comma, then the year of publication or the words, *in press* or *in review*, followed by a period. Articles will always have a date but may not be published yet if the article is an early release or not yet peer reviewed. Any article

lacking a volume number and article number should be considered in press, unless it is a thesis. Always look for the words *in press* or *in review* on the journal website. Sometimes when the page number starts at the first page also write in press, as this may just be a placeholder. *In press* means the article has not yet been finalized in a published journal. *In review* means the article has not yet completed the peer review process and may not be published by the journal.

- After the year, the title is written, using the same format as the article title. Only first word and proper nouns capitalized. The article title is followed by a period.
- After the title journal name is written in *italics*.
- The volume number is written after the journal name.
- If there is an issue number, the issue number is added in () immediately after the volume number, no space.
- A colon ":" follows the issue number
- If only an article number is given (no volume, no issue number, no page numbers), then a colon ":" is added between the journal's title and the article number.
- The page numbers or article number is written, followed by a period. Some articles do not have page numbers and will give the article a unique ID. This may take the form of a sequence of numbers, sometimes with characters, and may be a few digits or many.
- IF THERE ARE NO PAGE NUMBERS, the doi is added in the following format: doi: "enter doi here".
- The word "Article" receives a hyperlink to the DOI web address, not the website address. We check to make sure the doi web address works as sometimes they don't. If the doi doesn't work, then we use the general web address for the article as the link.
- If the article is open access a period after "Article" is placed. If it is not open access, write "(subscription required)."

#### 1.1.3.2. Article Examples

##### **Articles with page number, not open access**

Wang Q. A. C., Kawahata H., Manaka T., Yamaoka K. & Suzuki A., 2017. Potential influence of ocean acidification on deep-sea Fe–Mn nodules: results from leaching experiments. *Aquatic Geochemistry* 23(4): 233–246. Article (subscription required).

##### **Article with page number, open access**

Wang Q. A. C., Kawahata H., Manaka T., Yamaoka K. & Suzuki A., 2017. Potential influence of ocean acidification on deep-sea Fe–Mn nodules: results from leaching experiments. *Aquatic Geochemistry* 23(4): 233–246. Article.

##### **Article with article number, not page numbers, and open access**

Jacob D. E., Wirth R., Agbaje O. B. A., Branson O. & Eggins S. M., 2017. Potential influence of ocean acidification on deep-sea Fe–Mn nodules: results from leaching experiments. *Nature Communications* 8: 1265. doi: 10.1038/s41467-017-00955-0. Article.

**Sometimes there will be a volume number without an issue or page number, but there will be an article number, making it clear that the article is not 'in press.'**

Schmidt M., Windisch H. S., Ludichowski K.-U., Seegert S. L. L., Pörtner H.-O., Storch D. & Bock C., 2017. Differences in neurochemical profiles of two gadid species under ocean warming and acidification. *Frontiers in Zoology* 14: 49. doi: 10.1186/s12983-017-0238-5. Article (subscription required).

#### **In press**

Wäge J., Rotchell J. M., Gambi M.-C. & Hardege J. D., in press. Target gene expression studies on *Platynereis dumerilii* and *Platynereis cfr massiliensis* at the shallow CO<sub>2</sub> vents off Ischia, Italy. *Estuarine, Coastal and Shelf Science*. Article (subscription required).

#### **In press but still providing page numbers and future date of publication**

Sampaio E., Lopes A. R., Francisco S., Paula J. R., Pimentel M., Maulvault A. L., Repolho T., Grilo T. F., Pousão-Ferreira P., Marques A. & Rosa R., 2021. Ocean acidification dampens physiological stress response to warming and contamination in a commercially important fish (*Argyrosomus regius*). *Science of The Total Environment* 618: 388-398. Article (subscription required).

### 1.1.4. Books

Books follow a different format than article numbers, as shown here:

#### **Chapter in a book**

Zimmerman R. C., 2017. Systems biology and the seagrass paradox: adaptation, acclimation, and survival of marine angiosperms in a changing ocean climate. In: Kumar M. & Ralph P. (Eds.), *Systems biology of marine ecosystems*, pp 167-188. London: Springer, Cham. Chapter (restricted access).

#### **Edited book**

Gattuso J.-P. & Hansson L. (Eds.), 2011. *Ocean acidification*, 352 p. Oxford: Oxford University Press.

Liu G. (Ed.), in press. *Ocean acidification and marine wildlife: physiological and behavioral impacts (1st edition)*, 216 p. Elsevier: Academic Press. [Book](#) (restricted access)

#### **Chapter in edited book**

Gattuso J.-P. & Hansson L., 2011. Ocean acidification: background and history. In: Gattuso J.-P. & Hansson L. (Eds.), *Ocean acidification*, pp. 1-20. Oxford: Oxford University Press.

## **Instructions**

- Author name, year. Title (first letter capitalized and proper nouns). In: name of editors (separate last two editors with an & symbol) (Eds.), *Name of book*, page numbers. Publisher. Chapter (restricted access).
- (restricted access) is added to the end, only if the chapter is not open source. This is generally the case, but not always. Restricted access is for things like theses/dissertations to which one cannot subscribe.
- If a new book has been published on OA, we check the book for all relevant chapters.
- If a whole book on ocean acidification is published, we format the book as you would an article, listing editors as authors, publisher has journal, and dropping the page numbers, including the doi if available.
- Publish each chapter of the book separately if the book contains multiple chapters with OA content.

### **1.1.5. Reports**

We generally publish OA reports, such as those issued by governments or NGOs, known as grey literature. These have a special keyword to designate this status in the bibliographic database, more on that in section 2.

#### **Report**

Wright G., Schmidt S., Rochette J., Shackeroff J., Unger S., Waweru Y. & Müller A., 2017. Partnering for a sustainable ocean – the role of regional ocean governance in implementing Sustainable Development Goal 14. IDDRI, IASS, TMG & UN Environment. Report.

### **1.1.6. Events (including virtual meetings and conferences)**

Events will be copied from the website and formatted using the general formatting rules. Any content not related to the event should not be included. Following an event, we simply write the name of the publisher of the event in italics, and “More information”.

More information should include a hyperlink to the website.

When OA-relevant session from event is excerpted from larger event then we copy-paste relevant general/introductory information about the conference and then we copy-paste just the relevant OA session(s).

We put the video title in parentheses; videos, especially from YouTube, can often be embedded directly in WordPress by simply pasting the link.

#### **When posting a video with accompanying text**

Peter Zampa, *Gray DC*, 18 January 2018. Text and video.

#### **When posting just a video**

Peter Zampa, *Gray DC*, 18 January 2018. Video.

**Note:** Video (or Text and video) will have a hyperlink to the video web address.

### 1.1.7. News

News are any non-scientific content about science, including media coverage, announcements, journal press releases, interviews, and explanatory pieces. We do not generally publish announcements about awards, scholarships, grants, or funding highlighting individuals. We do not publish any news that does not have substantial content on OA.

There are different kinds of news that will be tagged as distinct categories. These are detailed below.

#### 1.1.7.1. Media coverage

Media coverage is any coverage about OA science or research by a local, regional, national, or international news agency, journal, radio etc.

Citation should be: First name Last name of writer if available (if not nothing), *name of source (journal, radio etc.)*, day month (spelled out) year. Article (with hyperlink).

Trevor Eakes, *Trevor Times*, 2 February 2021. [Article](#).

#### 1.1.7.2. Press releases

Press releases are any article that details and summarizes the findings of a recent science article. Press releases must always be published after (in time) the actual article which it covers. If an article for a press release is not available, we wait for the science article to be published first.

Press releases may not begin with the article but should generally cite the article they are referring to at the end of the press release. They are often written by university press teams and sent to publishing websites like Phys.org

#### Press release

Zachary Boehm, *Florida State University*, 5 January 2018. Press release.

#### Press release from Phys.org [there are a lot of these]

*Woods Hole Oceanographic Institution (via Phys.org)*, 29 January 2018. Press release.

#### Press release from EurekAlert!

*California Sea Grant (via EurekAlert!)*, 31 January 2018. Press release.

#### Press release from Science Daily

*California Sea Grant (via sciencedaily.com)*, 31 January 2018. Press release.

#### 1.1.7.3. Websites and blog

Websites and blogs may include NGO websites, university websites, bloggers, and other not-official press sources of news, among other. It's a broad category that can often be used when content does not fit into the other categories. We use the same format as for media coverage for articles on websites and blogs.

#### 1.1.8. Thesis

They may not have a DOI based web link and will often be restricted access. We do not generally publish undergraduate thesis. If the thesis is in another language you will note that in the title by writing in language in parathesis (in Spanish).

##### **PhD thesis**

Miller C. E., 2018. *Environmental influences on synthetic and biogenic calcium carbonate in aragonite-calcite sea conditions*. PhD thesis, University of Glasgow. 55 p. Thesis (restricted access).

##### **Master's thesis**

Wingert C. J., 2017. *The effects of ocean acidification on growth, photosynthesis, and domoic acid production by the toxicogenic diatom Pseudo-nitzschia australis*. MSc thesis, San Francisco State University, 67 p. Thesis (restricted access).

### 1.2. Posting

#### 1.2.1. Categories

Every article in the news stream must be categorized. Generally, an article will only receive one category, unless it is a textbook, policy document, or clearly crosses multiple categories.

- <b>Art:</b>	Artist projects with no expository content about OA, but which meaningfully feature OA within the art.
- <b>Courses and training:</b>	Self-explanatory. Can coincide with events that are training or teaching events.
- <b>Education:</b>	Textbooks, K-12 teaching materials, college teaching materials. Education events for the public.
- <b>Events:</b>	Any event. May coincide with other categories.
- <b>Jobs:</b>	Self-explanatory.
- <b>Media coverage:</b>	See 1.4.7.1
- <b>Meetings:</b>	Events that are specifically scientific conferences, or other professional gatherings.
- <b>Newsletters and reports:</b>	Any newsletters or technical reports which are not peer reviewed, and do not contain significant amounts of stats.

- Press releases:	See 1.4.7.2
- Projects:	Only if the word project is specifically mentioned as a subject in the announcement, such as with the creation of a new program on OA monitoring.
- Science:	Any scientific article, book, or thesis. See 1.4.2 and 1.4.3. <b>NOTE: This category is very important, since Yan will filter according to this category when searching for datasets to include in the data compilation in Pangaea.</b>
Defunct Categories (we don't really use these anymore): <b>Blogroll, Marketplace, Presentations, Program, Uncategorized.</b>	

### 1.2.2. Keywords

Keywords will autocomplete in WordPress. Over time many incorrect versions of these keywords have accumulated, which is why it is important to always be very careful if using autocorrect so as to avoid accidentally adopting one of these errors. Entering keywords correctly into the blog is very important because that is what we will rely on when entering key words into the bibliography.

### 1.2.3. Helpful tips

Below is a list of helpful tips which you may expand on that will guide you in posting to the news stream.

- There is often an image of an unlocked lock or an explicit mention of ‘open access’ when the article is open access.
- All articles from the journal *Biogeosciences* are open-access. Likewise, with *Frontiers* (open-access journals).
- Double check the formatting and content for errors of every post after you have finished writing the post or before publication.
- View the draft on the post before posting to look for any invisible layout and photo issues.
- For citations of major news outlets like the BBC, “BBC News” is sufficient; it need not be “British Broadcasting Corporation.”
- Make sure you have added a category and keywords.
- Use the control F function on your keyboard to search for words like “acidification” on a website or article.
- Review many blog articles to get a sense of what counts as relevant content (during a handover period of several weeks you will send content to the person doing the handover with you, so to crosscheck that you receive the same alerts and identify the same content to be posted).
- Avoid interruptions while writing a post as this can cause mistakes.

- In order not to forget anything, create a step by step process, starting with the title, moving down through the article, finishing at keywords.
- Always double-check that links are working and opening up in a new window.
- Schedule articles to be published for 3:00pm. Schedule priority articles to be scheduled for 3:01 pm.

## Special rules

### Order of publications

Content from members of GOA-ON, collaborating scientists, and those who email us announcements for publications should be published last in time, which will cause them to appear first on the email.

By convention all press releases must be published after (in order of time) than the scientific articles for which the press release covers.

### Other notes

#### New years

A special end of the year post is generally shared on the news stream. Search the news stream for posts on January 1st, 2020 or 2021 for the latest examples.

#### Sharing OA-ICC content

We occasionally share OA-ICC announcements and announcements from our partners like the Ocean Foundation on the blog to publicize important information. OA-ICC content should be discussed with the team before sharing.

#### April's fools

There is also a tradition to post an April fools joke on 1 April. Care is needed for this to be politically correct and approval is needed from SH Radioecology and Dir-NAEL.

#### Others

We very rarely post information from climate change deniers (typically a website called “CO2Science”, and when we do, always with a comment from an OA expert added immediately after. Example: <https://news-oceanacidification-icc.org/2016/08/25/two-views-of-ocean-acidification-which-is-fatally-flawed/>.

If an article mentions ‘acid’, ‘acidic’ or similar we post a specific comment available on the Wordpress interface.

#### Article – “provisionally accepted”

When the term “provisionally accepted” is shown in the article (usually papers in Frontiers) we don’t post them. Instead, we sign up through the ‘notify me’ and post as soon as the final

paper is published. This is because there is only an abstract available for the provisionally accepted articles, not the whole paper.