University of St Andrews SaintScience Journal

STYLE GUIDE

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Contents

1 Introduction

This document is intended for authors, peer reviewers, editors and proof-readers as a standard for written content featuring on the Journal's webpages, issues and posts uploaded to social media. The style guide should help maintain consistency in all SaintScience publications.

This guide is regularly updated, and we welcome suggestions and comments on changing usage. Contact the Editor-in-Chief (cg281@st-andrews.ac.uk) for any queries on the house style or suggestions.

2 Permissions and copyright

Permissions and copyright apply to all content that has been published previously within or external to the University. The University's policy on **Good Academic Practice** (GAP) applies to all content written and submitted, and cases of intentional academic misconduct shall be investigated and reported. Content may include images, figures, published text or quotations, artwork and maps. Quotations of fewer than 400 words may be used without permission, insofar as full and correct referencing as discussed in 3 below be used. It is the author's responsibility to secure permission for any published content before submission to their school's editorial board. Any subsequent copyrighted content added by members of the editorial board must have permissions secured before returning the preprint to the author. If permission is required to cite or republish, the author should insert a copy of the permission letter with the copies of the source material in the submission form.

Please review the guide on photograph captions and correct referencing in Section 4 for more detail. Briefly, every photo used needs a caption and the photographer's name and affiliation (or source, if from a photo library or website). And every figure, table, or map should reference the source material if external to the research being published. Where possible, figures should either be redrawn or extracted in their entirety from the source material, with a legend referencing the pages of the source material where the figure(s) was extracted.

Creative Commons and Wikimedia Image content extracted from a Creative Commons source, including Wikipedia's repository of media, Wikimedia, must reference the creator(s) of the photos or artwork where given. If absent, or a pseudonym given, the caption should say 'unknown creator'.

Internally captured photographs All photos taken by student members of the Journal should be referenced in the caption of the photo(s).

3 References, citations and bibliographies

3a References

A reference is an allusion to content that is not yours originally, including previously published text, quotes and graphic media. When such content appears in the text, an in-text citation should follow with an EndNote link to the reference in the Bibliography, the comprehensive list of all references made throughout the text.

The Journal uses the Institute of Electrical and Electronics Engineers (IEEE) referencing style, a derivative of the Chicago theme, throughout its written content. Further information on its usage can be found here: https://www.bath.ac.uk/publications/library-guides-to-citing-referencing/attachments/ieee-style-guide.pdf

Nota bene to authors – you are free to use referencing software like Mendeley or EndNote to format your references. Please just ensure that the output from these software reflects the content of the source material, provided that some sources are not formatted correctly.

3b In-text citations –

- The IEEE theme uses a numerical referencing system where citations are numbered in square brackets [1], [2], etc. according to first appearance in the text. Once source material has been cited, the same index is used for repeat citations thereunder
- Each square bracket should be placed at the end of the clause or sentence before an article of punctuation. A space should be placed between the left square bracket and any preceding text (e.g. temperatures exceeding 21^oC place stock-eye salmon under great stress [1])
- For referencing multiple sources, all index entries are placed in a pair of square brackets and separated by commas (e.g. [1,3,5]). If the indices are continuous, i.e., 1 up to 4, the range is given in square brackets with a **dash**, and not a hyphen, between the minimum and maximum (e.g. [1–4]). This format is combined with the one above where there is a continuous range and separate source (e.g. [1–4, 6])
- Where a quote is given, the in-text citation should also include the page number of the source material inside the square bracket (e.g. [3, p. 2], multiple pages are given as pp.)
- If deciding to mention the referenced author(s) in-text, then the surnames should be given with an 'and' conjunction for two authors followed by the reference in square brackets (e.g. Fushiki [3] or Fushiki and Haeckel [4]). Where greater than two authors have contributed to the source, the lead author's surname should be followed by '*et al.*' and the reference in square brackets, noting the use of italics and an abbreviation point following *al* (e.g. Fushiki *et al.* [9])

3c Bibliography

Below are the standard formats for different content you might encounter. A key principle is that a reference should offer as much information as possible on the source's metadata, accessibility and publication details.

Books –

[Citation index]   Author's initials. Author's Surname, Book Title, edition (if not first). Place of publication: Publisher, Year.

eBooks –

[Citation index]   Author's initials. Author's Surname. (Year, Month Day). Book Title (edition) [Type of medium]. Available: URL [date of access given as month year]

Journal article –

[Citation index]   Author's initials. Author's Surname, "Title of article," Title of journal abbreviated in Italics, vol. number, issue number, page numbers, Abbreviated Month Year.

Dissertations –

[Citation index]   Author's initials. Author's Surname, "Title of thesis," Designation type, Abbrev. Dept., Abbrev. Univ., City of Univ., State if USA, Year.

Websites –

[Ref number]   Author's initials. Authors Surname. (Year, Month. Day). Title of web page [Online]. Available: URL [date of access given as month year]

If author is not visible, simply giving the corporate identity or title of website is acceptable. Alternatively, Anon. for anonymous may be given

4 Spelling, grammar and punctuation

- The Journal uses the UK spelling and grammar conventions exclusively

- Use –ize endings for words where acceptable in UK English, e.g. organization, specialize, modernize; but there are exceptions, such as analyse, incise, advertise. Please consult the Concise Oxford English Dictionary or AskOxford.com (http://www.askoxford.com/) if you are unsure about a word

- Bullet-point lists should not have a full-stop at the end

4a Quick guide to the Journal's style

	Written as	Notes
Abbreviations	i.e. /e.g. /etc./ ibid./op. cit.	Written with full points
Acronyms	UNICEF, USA, etc.	Written without full points. Spell out unfamiliar acronyms when first used.
Commas	Do not use before and in lists of nouns and phrases, but use in strings of clauses.	
Colons	Only use to elaborate or expand on a statement.	Colons should never be used in lists or at the end of non-statements: i.e., 'Jupiter: it weighs 1.898 × 1027kg [1]' is not acceptable since Jupiter alone is not a statement.
Currencies	$ not US$	Unlessdealing also with Australian, Canadian, Hong Kong, Malaysian, NZ, or Singaporedollars (respectively A$, C$, HK$, M$, NZ$, and S$).
	'$bn' not 'billion' '$m'not 'million'	Use the abbreviations bn and m for currencies,(but 'billion'/'million' whenwriting about people).
	€1,000,000 or €1m or one million euro	Use 'euro' for both singular and plural, in lower case. For the symbol '€': switch on the number lock, hold down 'alt', and use the keypad to type 0128
Dates	7 June 1992 'two to three	Day/month/year, in this form only
Decades	Use 1990s	Not 'the '90s', or 'the nineties', or 'the 90's'.

Foreign words	Should be italicised (unless they are words that have been subsumed into English and are widely understood)	Give English translationin brackets, unless the word would be internationally recognised.
Fractions	2/3 and 9/10	Written numerically. Do not mix fractions and percentages in the same sentence
Measurements	'one hectare' 100kg, 5km, 20mm, 25m, 50bn	not '2.5 acres' Use metric measures always, not imperial. No 's' when used in the plural. No space after the number. All measurements given in the text should have SI units or a widely accepted standard of measurement for that datum
Numbers	One to nine: written in words. Ten and above: written in numbers.	Any number at the beginningofa sentence: written in words.
Percentages	Written as two words:'per cent' 'Ten per cent of Qatari women are …' 'Ten per cent of the desert area is …'	Use '%' only in tables or graphs. Plural verb for countable nouns, singular verb for uncountable nouns. Do not mix percentages with fractions in the same sentence.
Quotation marks	'In the Arabic language, the word Islam means "surrender" or "submission"—submission to the will of God.'	Use single quotation marks as a rule. Use double marks for quotes within quotes.

4b Preferred spelling and usage

Correct/preferred spelling	*Notes*
acknowledgement	With an 'e' in the middle
dependant	Noun ('She has six dependants')
dependent	Adjective ('She has six dependent children')
email	Not 'e-mail'
focused/focusing	One 's', not two

fulfil	Not fulfill
licence	Noun ('a licence to export arms')
license	Verb ('licensed to export arms')
ongoing	Not 'on-going'
online	Not 'on-line'
practice	Noun ('enriching the practice of teaching')
practise	Verb ('practising the art of teaching')
the North, the South	Use upper case when referring to global hemispheres
timeframe	Not 'time-frame'
under way	Not 'underway'
well-being	Not 'wellbeing'
while	Not 'whilst'

5 Article formats

The Journal supports four main article formats: comment/opinion, review and minireview, research digests and novel undergraduate research. Journal issues will typically comprise reviews, research digests and research while its online content encapsulates all written content.

While the Journal is fully committed to free speech and open opinion, any content deemed derogatory, racist or otherwise offensive shall be rejected at *prima facie* and the author reported to the relevant faculty staff in the school for disciplinary action.

5a Comment/Opinion pieces

Comment and opinion articles broadly address topical issues in a chosen scientific field and offer a reasoned argument for a position. These articles may be a discussion of a scientific topic and its current relevance, or a socio-political article addressing a scientific issue in the author's chosen area of interest and its impact on humanity more widely.

Consequently, comment pieces are typically, well informed and provoking articles raising awareness for a particular topical issue relevant to some piece of scientific research and its social or ethical repercussions. The author might provide a reasoned solution to the problem or highlight a route to solving the problem.

Alternatively, opinion pieces are typically a presentation of a personal or collective view on a relevant scientific topic and its ramifications, likewise with the goal of raising awareness of a topic, but with the view to persuade the reader to the line of argument.

As a firm guide, all comment/opinion pieces must be thoroughly evidenced; content found to be spurious, indefensible or unjustified will be flagged during the peer review process. Depending on the extent of 'weasel statements' – statements without evidence given *a priori* throughout the article, the editorial board may choose to reject the article or return it to the author.

Comment/Opinion formatting –

- Please use the submissions template found on the website under the Submissions tab
- Your **title** should be fewer than 20 words and aim to be pithy and precise
- Comment pieces have a strict maximum word limit of **800 and a minimum of 500** excluding the bibliography, though depending on whether the piece might feature in an issue, this length may change and would be communicated by the deputy editor(s) of their editorial boards to interested authors
- Your bibliography should not exceed **15 references** of any referenced material
- The writing style should be academic but engaging. A benchmark for the comment/opinion writing style can be found in the *NewScientist.* Paragraphs should be no more than 150 words each
- Jargon terminology should be avoided at all costs or explained when first introduced. Comment/opinion pieces are aimed at a wide readership and should therefore assume no prior professional training on the scientific topic
- The first person IS acceptable in this article format when used sparingly. For instance, if the author were giving a personal anecdote to hook the reader to the article, this is acceptable. However, in an opinion piece, procedural statements like 'I think…' or 'I believe…' should be used minimally
- Subheadings should not be used. The article should be continuous prose
- Between 2-5 keywords should be given at the end of the article before the bibliography following the guide in Section 6

5b Review/Minireview pieces

A review article, in contrast to comment/opinion pieces, provides a balanced summary of a specific scientific topic, synthesising recent and past findings and putting them into context. Review articles are a core aspect of scientific development by extracting the most salient advances made within a scientific field and presenting the findings accessibly.

SaintScience considers two formats for review pieces: the full review and minireviews, shorter and more bitesized. Review articles should be entirely unbiased and holistic. These articles are more extensively peer reviewed than the comment/opinion pieces with more bidirectional flow between the author and the editorial board.

Format for minireview –

- Please use the submissions template found on the website under the Submissions tab
- Your **title** should be fewer than **25 words** and aim to be pithy and precise
- Comment pieces have a strict maximum word limit of **1000 and a minimum of 600** excluding the bibliography,
- Your bibliography should not exceed **30 references** of any referenced material
- The writing style should be academic and formal, while remaining accessible to the scientific reader
- Jargon terminology should be explained briefly when first introduced. An assumption of some training in the scientific topic can be made for minireviews

- The first person IS NOT acceptable in this article format
- The following sub-headings are required for a minireview:
    - **Abstract –** maximum 100 words
    - **Introduction –** maximum 200
    - **Discussion** – maximum 250

    An additional **two** subheadings may be given in the main body of text following the introduction and before the discussion. Subheadings should be a maximum of **5 words** each

- Between **4-10 keywords** should be given at the end of the article before the bibliography following the guide in Section 6. These are not included in the main word limit

Format for review –

- Please use the submissions template found on the website under the Submissions tab
- Your **title** should be fewer than **25 words** and aim to be pithy and precise
- Comment pieces have a strict maximum word limit of **2000 and a minimum of 1200** excluding the bibliography,
- Your bibliography should not exceed **60 references** of any referenced material
- The writing style should be academic and formal, while remaining accessible to the scientific reader
- Jargon terminology should be explained briefly when first introduced. An assumption of training in the scientific topic can be made for reviews
- The first person IS NOT acceptable in this article format
- The following sub-headings are required for a review:

    - **Abstract –** maximum 100 words
    - **Introduction –** maximum 400
    - **Discussion** – maximum 500

    An additional **four** subheadings may be given in the main body of text following the introduction and before the discussion. Subheadings should be a maximum of **10 words** each

- Between **4-10 keywords** should be given at the end of the article before the bibliography following the guide in Section 6. These are not included in the main word limit

5c Research digests

Research digests are an opportunity to explore the breadth of research being undertaken at the University. Digest pieces are summaries of the latest cutting-edge findings of a particular lab or research group, put into a rigorous but accessible format for a wide readership. The goal with research digests is better vertical integration of academic research with undergraduate students and a broader appreciation for the array of questions the University is researching.

Due to the sensitivity of some high-impact content, close contact at every stage is required with the relevant member(s) of staff whose research is being summarised. It is therefore the responsibility of the author, whether a formal member of the journal – a journalist – or a general member of the University, to secure the written permission of the lead staff member involved in the research. Submissions that secure permission will undergo extensive peer review and bidirectional feedback from the author. Before submission, the article preprint is sent to the lead researcher for their approval on the accuracy of the summary.

Depending on the level of discretion required, research digests may be one of two formats: Impact article or Full digest article. The Impact article highlights the main findings in broad detail with some or little reference to the primary data. Alternatively, Impact articles might summarise the current goals of a particular lab more generally and its current relevance to the reader, rather than a specific research paper. For protection of intellectual property, details on methodology should not be given in this article where this raises concerns for the lead member of staff.

Full digest articles are more transparent and enable a fuller contextualisation of the researchers' methodology, quantitative findings and impact for recent research published or conducted in the past two months. Crucially, both Impact and full digests should highlight the impact factor of the research with a discussion of future directions.

Format for Impact digests –

- Please use the submissions template found on the website under the Submissions tab
- Your **title** should be fewer than **25 words** and aim to be pithy and precise
- Comment pieces have a strict maximum word limit of **800 and a minimum of 600**, excluding the bibliography
- Your bibliography should not exceed **20 references** of any referenced material
- The writing style should be academic and formal, while remaining accessible to the scientific reader
- The following sub-headings are required for an Impact digest:
  - **Abstract –** maximum 100 words. Brief background and findings
  - **Introduction** – maximum 150 words. More in-depth background knowledge, questions left unanswered and the focus of the research
  - **Discussion** – maximum 200 words. Broad discussion of the findings or results with next steps

Format for Full digests –

- Please use the submissions template found on the website under the Submissions tab
- Your **title** should be fewer than **25 words** and aim to be pithy and precise
- Comment pieces have a strict maximum word limit of **1500 and a minimum of 800**, excluding the bibliography,
- Your bibliography should not exceed **20 references** of any referenced material

- The writing style should be academic and formal, while remaining accessible to the scientific reader
- The following sub-headings are required for an Impact digest:
  - **Abstract –** maximum 100 words. Brief background and findings
  - **Introduction** – maximum 200 words. More in-depth background knowledge, questions left unanswered and the focus of the research
  - **Methods** and **Results** optional – maximum 300 words each
  - **Discussion** – maximum 400 words. Broad discussion of the findings or results with next steps

5d Novel Undergraduate Research

A central aim of the Journal is maximising awareness of the calibre of undergraduate contributions to research at every level of the academic cycle. Publishing undergraduate research is an opportunity for students to showcase their work to the rest of the University community and give insight to prospective students on what to expect as St Andrews students in the sciences.

For undergraduates interested in publishing their research to SaintScience as undergraduate research articles, it must meet the following criteria:

- It cannot have been published in another journal and/or is ineligible for publication in an indexed journal
- Your research supervisor has given written permission for the research to be published in SaintScience
- The research is high-quality and complete and does not breach GAP

Literature-based research or research reviews conducted by undergraduates are entirely open for submission. Research review articles conducted as part of novel research would be categorised as 'undergraduate research' and 'review article', though review articles should still conform the format given above in 5b, unless permission is acquired from the editorial board for a longer piece.

Format for Undergraduate Research –

- Please use the submissions template found on the website under the Submissions tab
- Your **title** should be fewer than **25 words** and aim to be pithy and precise
- Undergraduate research pieces have a strict maximum word limit of **5000 and a minimum of 3000**, excluding the bibliography,
- Your bibliography should not exceed **100 references** of any referenced material
- The writing style should be academic and formal, while remaining accessible to the scientific reader
- The following sub-headings are required for an Impact digest:
  - **Abstract –** maximum 150 words. Brief background and findings
  - **Introduction** – maximum 850 words. More in-depth background knowledge, questions left unanswered and the focus of the research

- o **Methods and Materials –** maximum 1000 words. The tools used, approach to answering the research question, details on cell or animal lines for instance
- o **Results –** maximum 1500. The research findings by applying the methods discussed above
- o **Discussion and conclusions** – maximum 1500 words. Broad discussion of the findings and results put in context with next steps

- Graphical abstract. This should be a concise, pictorial overview of the research that represents some aspect of the findings or methods used in the research. Please use a ratio of 500x200 with a minimum resolution of 300dpi

6 Keywords

To standardise keyword usage across the website, please use this guide to formatting novel keywords

Format

- Always use lowercase unless the phrase is an acronym or abbreviation
- All keywords should conform to the spelling guidelines listed in this document
- Only nouns should feature as keywords. Verbs should be nominalised if used as keywords, i.e. deforest is converted to deforestation
- Simple phrases consisting of two words max should be used

Content

- Only add a keyword if that word/phrase features in the article or refers to the subject area of the article. For instance, an article on arctic tundral melting might use the keywords 'arctic tundra', 'climate change' or 'climatology'
- Check if a similar keyword has been used before on published content