



Academic Writing in English

Mgr. David Konecny / RECETOX

Abstract!

Research Paper Components

› Title page

› Results

› **Abstract**

› Discussion

› Introduction

› Acknowledgments

› Method

› References

What is an abstract?

- [Abstracts] are normally found in peer-reviewed journal articles, where they act as a kind of summary **to enable researchers to decide if it is worth reading the full article.**
- A short summary of the **aims and scope** of a journal article.
 - Stephen Bailey: *Academic Writing: A Handbook for International Students*



What is an abstract?

- Prepare an **interesting** and **self-contained** abstract: The abstract usually gets more attention than any other section of your article; in fact, it is often the only part readers are prepared to read. Therefore, the abstract should pique the readers' curiosity and **encourage them to read the complete article**. However, the abstract must never contain any information that is not detailed in the main part of the paper.
 - Silvia M. Rogers: *Mastering Scientific and Medical Writing*

Abstract

- **The abstract is an advertisement for your article.**
- The abstract must be interesting enough to make your customers (= readers) buy your product (= read your article).
- This may be the only part of your paper a journal committee will ever read.

Abstract > TO DO!

- Write the abstract when the manuscript is completely ready from Introduction to References.
- Select an abstract format according to journal requirements: structured or unstructured
- If you have not yet decided about the target journal, write a structured abstract.
 - Easy to convert into an unstructured abstract
 - Remove the headings and combine everything into one paragraph

Abstract > TO DO!

- Organize your abstract like your article
- Provide a brief background, state the purpose of the study, briefly describe the methods, and give the main results followed by the principal conclusions.
- Use the present tense to report what is known in the field.
- Use the past tense to report what you showed and did in the study.

Abstract > TO DO!

- Remember that journals always provide Instructions for Authors
- **Read the guidelines** given in the Instructions for Authors **thoroughly**
- **Follow the instructions** given in Instructions for Authors **meticulously**
 - Stick to the word limit given for the abstract. A range of $\pm 5\%$ of the word count is acceptable.

Abstract > DO NOT!

- Do not cite references in the abstract.
- **Do not copy and paste the exact text from introduction, methods and conclusion to make the abstract!**
Always write it as a separate new section!

Abstract > Writing Tips

- Write a preliminary draft of the abstract that answers the following questions:
 - What was the question?
 - What is the evidence?
 - What are the conclusions?
- This will help focus you during the writing process.
- Once again: finalize your abstract only when the manuscript is complete!

Title – Keywords – Abstract

- Title: Calculating Stress: from Entropy to a Thermodynamic Concept of Health and Disease
- Key words: stress, calculation, entropy, thermodynamics, allostasis
- To date, contemporary science has lacked a satisfactory tool for the objective expression of stress. This text thus introduces a new – thermodynamically derived – approach to stress measurement, based on entropy production in time and independent of the quality or modality of a given stressor or a combination thereof. Stress response is expressed here on the basis of stress entropic load (SEL), a variable we introduced previously; the mathematical expression of SEL, provided here for the first time, now allows us to describe the various states of a living system, including differentiating between states of health and disease. The calculation of stress response regardless of the type of stressor(s) in question is thus poised to become an entirely new tool for predicting the development of a living system.

Reading (Abstracts) like a Writer!

- Read the abstract and identify the following:
 - **Background position**
 - **Aim and thesis of article**
 - **Method of research**
 - **Results of research**

Reading (Abstracts) like a Writer!

- To date, contemporary science has lacked a satisfactory tool for the objective expression of stress. This text thus introduces a new – thermodynamically derived – approach to stress measurement, based on entropy production in time and independent of the quality or modality of a given stressor or a combination thereof. Stress response is expressed here on the basis of stress entropic load (SEL), a variable we introduced previously; the mathematical expression of SEL, provided here for the first time, now allows us to describe the various states of a living system, including differentiating between states of health and disease. The calculation of stress response regardless of the type of stressor(s) in question is thus poised to become an entirely new tool for predicting the development of a living system.

Highlights

- Highlights are a short collection of bullet points that convey the core findings and provide readers with a quick textual overview of the article.
- Three to five bullet points describe the essence of the research (e.g. results or conclusions) and highlight what is distinctive about it.

Highlights

- Common requirements:
 - **3 to 5 highlights**
 - Maximum of **85 characters** per highlight
 - Only the **core results** of the paper should be covered!

