
Steps prior to writing a paper

Have a story to tell...

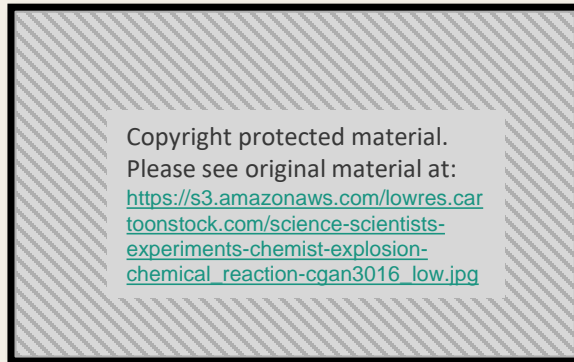


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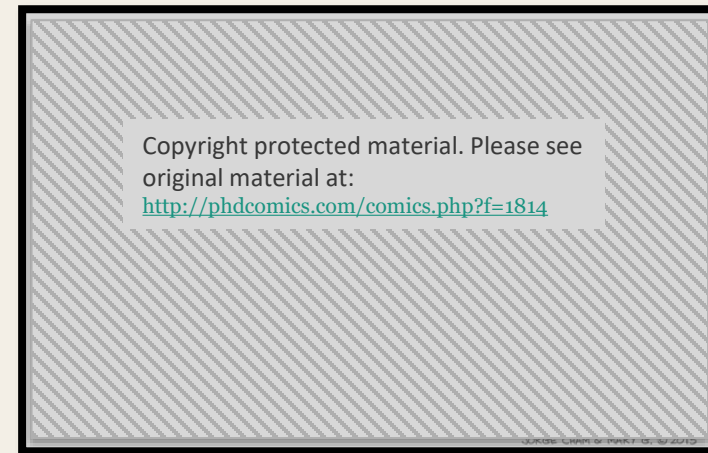
Where to start?

1. Results

- Do not publish just to publish
- Negative results can be published, wrong results not!



2. Figures



3. Structure of the paper: titles & subtitles

4. Discuss with supervisors & co-authors – make a plan

5. Read journal's guide for authors

(e.g., <https://www.elsevier.com/journals/learning-and-instruction/0959-4752/guide-for-authors>)

Figure 1: ...



Figure 2:...

Article's structure and content

- Title
 - Short & attractive

➔ Which title is concise but also includes sufficient information to make the paper stand out?

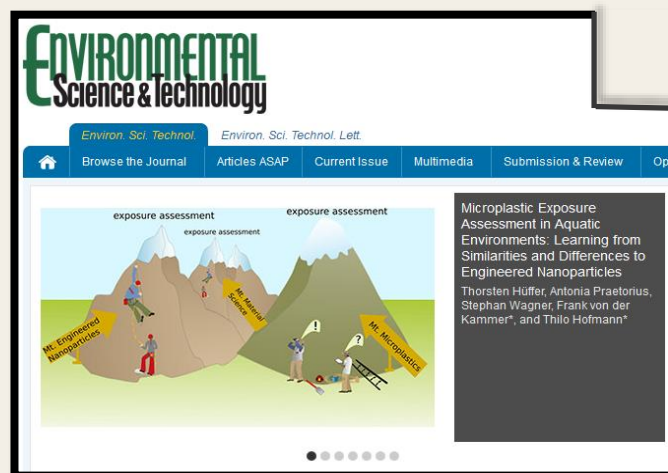
1. Characterization of a landfill using geophysical data
2. Characterization of a heterogeneous landfill using geophysical data
3. **Characterization of a heterogeneous landfill using seismic and electrical resistivity data**
4. Characterization of a heterogenous landfill using seismic and electrical geophysical data.

Article's structure and content

- Authors – Affiliation
 - Who should be your co-author? Who should be the first author?
(e.g., <https://www.psi.ch/integrity/dokumente>)
 - Use correct affiliation (incl. present address)
- Keywords
 - General words (e.g., landfills)
 - Specific to your research (e.g., MASW)
- Highlights
 - Short sentences which describe the main findings and motivation of your research

Article's structure and content

- Abstract
 - Attract the interest of the reader, do not simply summarize your study
 - Three main components:
 - a) What is the problem and what is the focus of your paper?
 - b) What are the main methods you used?
 - c) What are the results? - Simply mention them with no explanation
- Graphical abstract
 - An innovative figure to get the interest of the reader



Article's structure and content

- Introduction
 - What is the **problem**? Explain in detail and use specific phrases to make your point clear.
 - «There is an increasing need to...»
 - «It is critical to understand the...»
 - What has been done till now and why is this not enough (**gap**)?
 - Provide **clear objectives** of your article. Explain why your paper is innovative.
 - «The objectives were to investigate the following:...»
 - «The first goal of our paper is...»
 - In the end, shortly **summarize** the content of your paper.

Article's structure and content

- Main body
 - Laboratory/field measurements, theory, models, results
 - Explain your measurement (theory/model), procedure (parameters) chronologically
 - Add information such as time & place
 - Describe the figures – be specific in both the main text and the figure caption
 - Provide a detailed description – do not assume things are self-explanatory

Article's structure and content

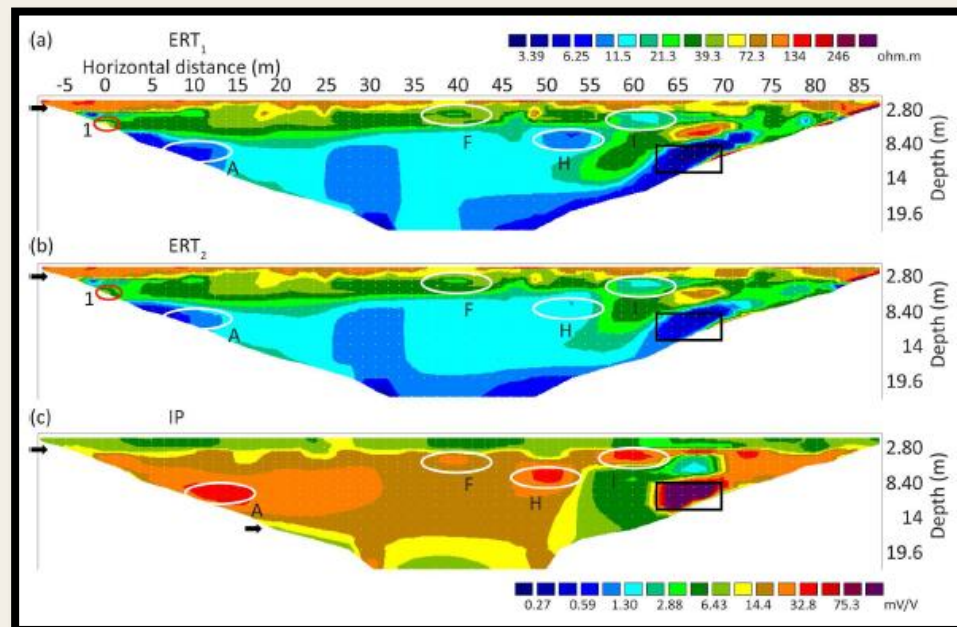
- Discussion
 - **Yes** or no?
 - Criticism of your own work can help in the reviewing process
 - Opportunity to point out other applications of your work
 - Do not refer to future work you will do
 - Do talk about the difficulties you had, but only if you are already planning a way to solve them.
 - «There were difficulties in...»
 - «The results will be much better if...»
 - Helps to connect with your next article:
 - «In Konstantaki, et al., 2014 we found that...The goal of this paper is to further investigate....»

Article's structure and content

- Conclusions
 - Short & precise
 - «We studied the...»
 - «We investigated the potential...»
- Acknowledgements
- References
 - Use a reference management software (Module 1 & Module 5)
 - Do not cite just to cite
 - Avoid too many self-citations
 - Read the papers you cite

Article's structure and content

- Figures
 - Follow the instructions in the authors' guide
 - When using figures from other authors, check the copyright (Module 3)
 - Compare same things
 - Be careful with the color scale



Picture from: Kontantaki, 2016. Doctoral Thesis

Exercise 1

- Describe your research in one or two sentences (elevator pitch)

Some good examples:

https://graduateschool.nd.edu/assets/76988/elevator_pitch_8_28_2012.pdf

<https://academicpositions.be/career-advice/how-to-write-an-elevator-pitch>