



## How to write an abstract

### Why the abstract is important

Nowadays, the search for scientific publications has moved almost exclusively to the internet. However, on-line publication databases typically contain only abstracts. The abstract serves the function of '**selling**' your work, so it is vital to write a complete but concise description of your work to entice readers into purchasing your article or listening to your presentation.

### Parts of an abstract

Despite the fact that the abstract should be brief it must include the following sections, which are typically single sentences:

#### Motivation:

**Why do we care** about the problem and the results?

This section should include the importance of your work, the difficulties of the research area, and the impact it might have if successful.

#### Problem statement:

**What problem** are you trying to solve?

State here what the scope of your work is (a generalized approach or for a specific situation). However be careful here to not use too much jargon.

#### Approach:

**How** did you go about solving or making progress on the problem?

Describe your methodology (simulation, analytical approach, prototype, experiment, etc) and its most important parameters.

#### Results:

**What is the answer?**

Put the results here in numbers when possible. Avoid vague expressions such as 'very', 'small' or 'significant' using instead orders-of-magnitude, etc.

#### Conclusions:

**What are the implications** of your answer?

Tell to the reader if it is going to change the world, be a significant step forward or simply serve as a road sign indicating that this path is a waste of time (all those results are useful). State also if your results are general or specific to a particular case.

**Important!** According to the motto "*Illuminating the World - Driving industry innovation through impactful research*" we would like to motivate you to think how your current research may be



driving industry innovation. To this end, we want to motivate presenters to highlight challenges that have to be overcome. This may include challenges that are tackled within their own PhD research but also extend towards challenges that may lie outside of their field.

- Please include a small paragraph explaining the future benefits once your research and knowledge is implemented to the society. (Approx 50 words.)

### **Additional tips**

- Think about search phrases and **keywords to your work** and use them in your abstract.
- PhD students who just started their projects and do not yet have results may write their abstract based on the first three sections, namely: motivation, problem statement and planned approach
- Count your words! The word limit for the Empa PhD Symposium is **250 words**, which is a commonly used prescription. Please make sure that the abstract does **not exceed the limit**.
- We strongly encourage to add **one picture** along with your abstract if you think it is important for explaining your project. This could include a method or a result.

All PhD Students are welcome to send an abstract to [PhD-Symposium@empa.ch](mailto:PhD-Symposium@empa.ch) before **10<sup>th</sup> January 2024**. Please name your file "*LastName\_FirstName*".