

## Communicating... why?

Research is, *in fine*, a collaborative construction of knowledge. Not/badly communicating research findings deems them to be *ignored*—and later *rediscovered*.

But communication has even more objectives:

- Quality check, testing, improvements
- Development of collaborations
- Awards, citations, individual recognition

Communication is advertising.

## Communicating... what?

Not everything can/should be published. Through a **peer-review** system, journals try to ensure that are published only results that are

- important and timely
- technically sound
- novel

## Communicating... how?

Communication is essentially done by

- publishing in scientific (peer-reviewed) journals
- presenting at scientific conferences
- visiting other fellow researchers
- making demos for visitors
- advertising research work on the internet (website, online demos)

Journal publication is traditionally the most highly considered.

# How to write a paper?

A scientific paper is constituted of

- Title, abstract and keywords
- Introduction, conclusion and references
- The main body of the article

## Title, abstract and keywords

These are the **advertising** part of the article. This is because they are going to be indexed in *research databases*.

### Title

Should be short and punchy, or intriguing/surprising.

### Keywords

Should be chosen meaningful, descriptive and complete.

### Abstract

Should concentrate on the main *selling* point of the paper and avoid jargon.

## Introduction, conclusion and references

The *introduction* is what peer-reviewers will read in detail. This is the most “diplomatic” part of a paper.

The introduction must

- *set the problem* in prospect with the current literature
- heavily *cite* others' people work (even remotely connected)
- state clearly the *methodology* used and the results
- state clearly the *organization* of the paper

The introduction is the key for having a paper accepted.

## Introduction, conclusion and references

Readers will also look in detail at the *reference* list: usually to find their own names. Peer-reviewers will check there if the literature survey is wide enough.

The conclusion must

- *recapitulate/synthesize* the results of the paper
- outline the *limitations*
- indicate orientations for *future* work

**Tip:** in order to increase the chances of getting a specific reviewer, cite him in the article.

## Main body

It is usually the most personal part of the article. But it has to be written **pedagogically**.

The main body of the paper should

- contain figures, tables and graphs
- severely restrict the use of jargon
- severely restrict the use of acronyms

Figures and graphs should always be labelled and legible.

# Main body

## Tips and advises

- check the *English* writing: Reviewers might reject a paper simply because it is too difficult to understand.
- choose carefully the *notations*: they should be “natural”.
- severely restrict the use of *jargon*
- Do not send a *draft* to a journal: it is not the work of the reviewers to write your paper!
- Leave some work for the others: your papers will be shorter, easier to read, and will generate new publications by others (and citations)