

From Idea to Publication

Publishing for Researchers (PhD Level)



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2

QUIZ

BEFORE WE START PUBLISHING



Which statement is the **MOST** important for a good scientific paper?

- A** A paper should contain as many results as possible.
- B** A paper should explain everything in detail.
- C** A paper should communicate **one clear contribution**.
- D** A paper should sound scientific and complex.



Choose one answer and justify it.

PUZZLE TO START

Which title has the greatest potential?



2 minutes

Choose the best title
and briefly justify your choice.



CASE:

The team investigated the effect of adding fly ash on the durability of concrete in a sulfate environment. A series of concrete mixes was prepared, and strength and sulfate resistance tests were carried out.



GOAL:

Choose the title that best describes the work and attracts the reader's attention.



TIP:

A good title is specific, contains key elements, and clearly states what is new.



REMEMBER: Avoid vague and empty words ("study", "analysis", "assessment")

Which title do you choose?



Study of concrete with fly ash addition



Effect of fly ash on concrete strength



Effect of fly ash on sulfate resistance of concrete – experimental study



Durability of concrete in sulfate environment with fly ash addition



Assessment of durability and strength of concrete with fly ash in sulfate environment



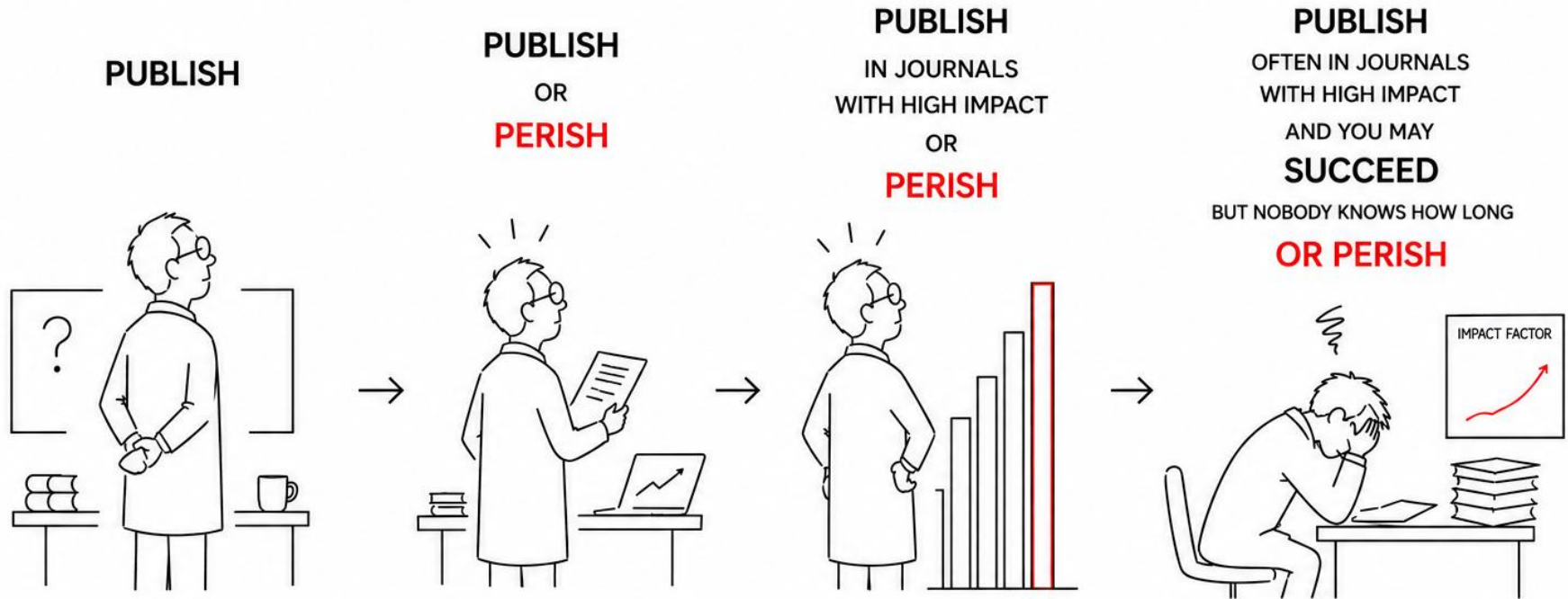
THINK ABOUT:

- 1 Which title contains the most information?
- 2 Which title best shows the research problem and approach?
- 3 Which title has the greatest potential to attract the reader?



Share your choice and justification!

Why do researchers need to publish?

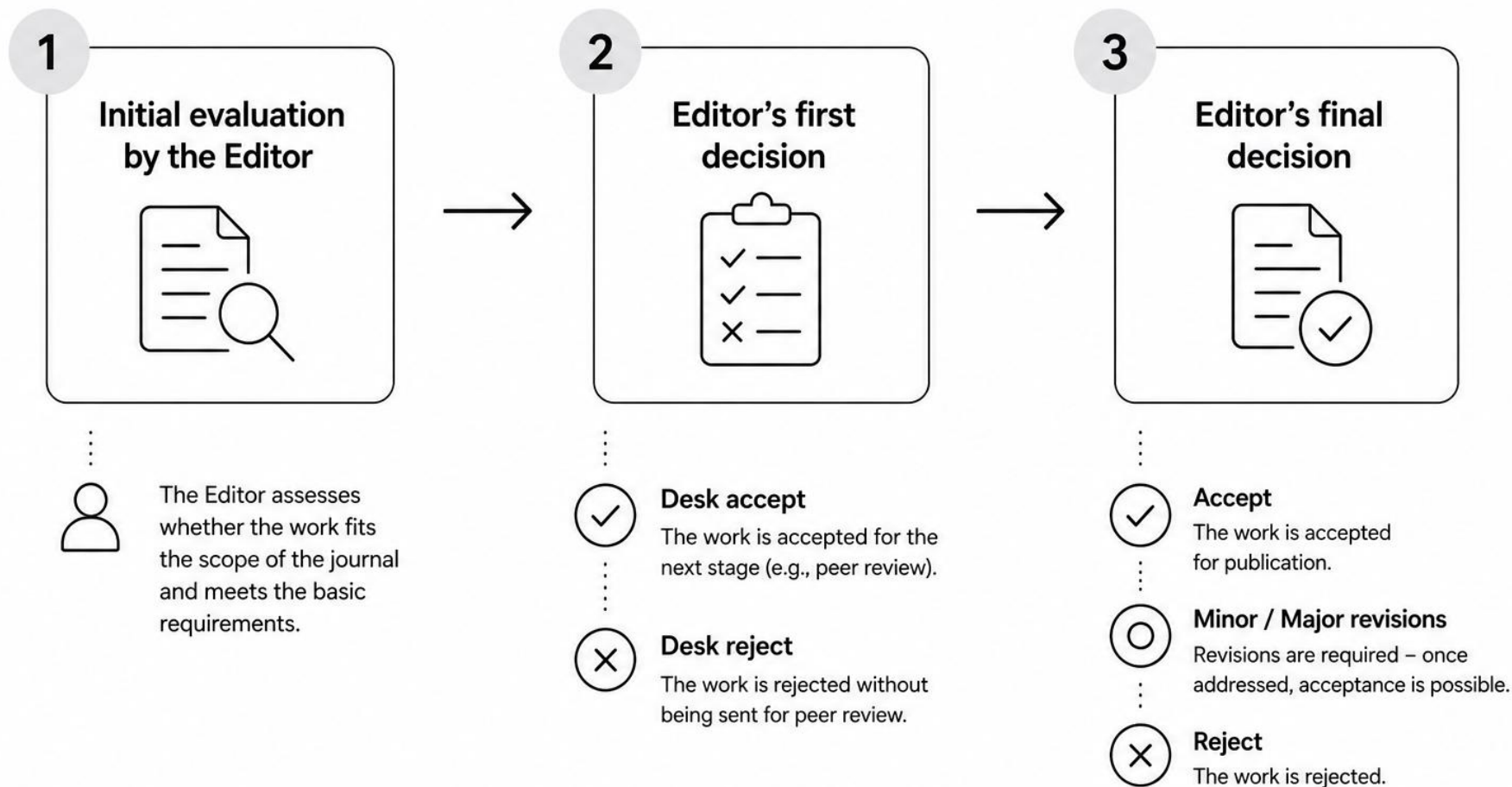


At which stage are researchers in Poland now?

Share your opinion!



What does the publication process look like?



THE LIFE OF AN ENGINEER-RESEARCHER

I build. I test. I publish. I **repeat**.

1 IDEA

This problem can be solved better!

COFFEE FUEL



2 EXPERIMENTS

PLAN:
1. IDENTIFY
2. DESIGN
3. PREPARE
...
5. PROFIT?

The hypothesis sounds good, but the concrete has the final say.



3 WRITING THE PAPER

Now I just need to improve the language, plots, tables, conclusions, life...



4 REVIEW

So... let's start with coffee.

COFFEE TO SURVIVE



5 PUBLICATION

Mission complete.

ACCEPTED!

WORTH IT

ONTO THE NEXT PROJECT!



WHAT DOES PUBLICATION GIVE YOU?



KNOWLEDGE

You create and share new knowledge.



IMPACT

Your results can change practice and solve real problems.



COLLABORATION

You meet people, projects and new opportunities.



RECOGNITION

You build your brand and reputation.



FUTURE

Better engineering for us all.



Don't look for excuses. Look for problems **worth solving**.



Good ideas deliver **more than a full drawer**.

THE HIGHEST MOTIVATION IS REJECTION.



It hurts.
It disappoints.
It's hard.



But it builds
resilience.



Keep going.
Your path is
still ahead.



Rejection is not the end.
It's the **beginning**
of **your story**.

THEY WERE REJECTED TOO



WALT DISNEY

Fired from a newspaper for "lacking imagination" and "having no good ideas".
He went on to create Disneyland and a global entertainment empire.



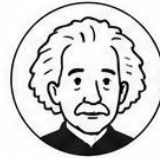
J.K. ROWLING

Her first Harry Potter book was rejected by 12 publishers.
Today, her books have sold over 500 million copies worldwide.



STEVE JOBS

After being ousted from Apple, the company he co-founded, he later returned and led it to extraordinary success.



ALBERT EINSTEIN

He didn't speak until age 4 and was thought to be "slow" as a child.
He went on to change our understanding of the universe.



SERENA WILLIAMS

Lost many early matches and was told she wasn't "good enough".
She became one of the greatest athletes in history.



COLONEL SANDERS

His recipe was rejected by 1,009 restaurants before one said yes.
He built a global brand – KFC – from persistence.



REJECTION IS REDIRECTION. One "no" today can lead you to your greatest "yes" tomorrow.



2 From idea to topic (20 min)



Goal: go from “I have some idea”
→ “I have a research problem”



Quick intro:

- a paper = an answer to a specific question
- it must have a gap + novelty (what's new?)



I HAVE
A TOPIC



RESEARCH
PROBLEM



PAPER
(ANSWER)

EXERCISE – each student

- 1** DESCRIBE THE AREA
(e.g., concrete, structures, materials)



- 2** WHAT IS ALREADY KNOWN?
(facts, previous studies, established solutions)



- 3** WHAT IS NOT KNOWN?
(gaps, limitations, open problems)



- 4** FORMULATE THE QUESTION
“WHAT IS MISSING?”
(what is missing in knowledge / in solutions?)



EFFECT:

→ the foundation of a strong Introduction
Problem + gap + research aim



A good research question
is the beginning of a good paper.

3

The title that works (20 min)

A good title gets attention from editors and readers.



REMEMBER:

The title is the promise of your paper.
It must be specific and informative.

PRINCIPLES OF A GOOD TITLE

12

KEEP IT SHORT

~12 words max.

Include key variables and the topic.



BE SPECIFIC

Avoid general terms
and empty words.



AVOID "INVESTIGATION OF..."

Don't start with methods,
analysis, evaluation, etc.



WHAT → HOW

Start with what (problem/effect),
then how (method/approach).



BE CONCRETE

Mention material, method,
effect, and conditions – if relevant.

EXERCISE – step by step

1

WRITE VERSION 1

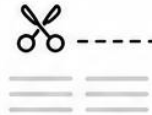
Your first,
working title.



2

CUT 30%

Remove what's
not essential.



3

REMOVE "EMPTY WORDS"

E.g., study, analysis,
investigation, evaluation,
research on...



4

ADD SPECIFICITY

Add key elements:
material, method,
effect, conditions.



EXAMPLES OF TRANSFORMATION

VERSION 1 (raw)



AFTER CUTTING (~30%)



AFTER REMOVING EMPTY WORDS



FINAL VERSION (specific)

Investigation of the mechanical
properties of concrete

Mechanical properties of concrete

Mechanical properties of concrete

Compressive strength of **recycled
concrete with fly ash**

Study on durability of steel
reinforced concrete in marine
environment

Durability of steel reinforced
concrete in marine environment

Durability steel reinforced
concrete marine environment

Chloride penetration in RC
exposed to marine environment

Analysis of the effect of fibers
on the behavior of concrete

Effect of fibers on behavior
of concrete

Effect fibers behavior concrete

Impact of **polypropylene fibers**
on concrete crack resistance



MINI FEEDBACK
(live)

Show 2–3 student titles.
We analyze together and improve them
according to the rules.



GOAL:

Create a title that clearly says
what you study, how, and why it matters.

4 Abstract as a “mini paper” (20 min)

A good abstract is a miniature of the whole paper.



REMEMBER:

An abstract answers in 4 steps.
Clear, specific, without fluff.

THE STRUCTURE OF A GOOD ABSTRACT



★ 5 RULES:

- ✓ Max. 150–250 words
- ✓ 1 paragraph
- ✓ Specific, numbers, effects
- ✓ No generalities and “water”
- ✓ Self-contained

EXERCISE – write 3 sentences for your abstract



YOUR MINI ABSTRACT

Combine the 3 sentences into 1 short abstract (1 paragraph).



NO FLUFF. NO GENERALITIES.

Be specific. Use facts, not slogans.



EXAMPLE (abridged)

Problem: The durability of concrete with fly ash in marine environments is still not fully understood.

What we did: We investigated the impact of three replacement levels of fly ash on chloride penetration and compressive strength.

What we found: Results show that 20% fly ash replacement optimizes concrete durability in marine environments.



MINI FEEDBACK (live)

We show 2–3 examples together, analyze, and improve.

5 How reviewers think (10 min)

Before a reviewer reads your paper, they ask themselves 3 key questions.



A REVIEWER ASKS SIMPLY:

“Is this paper worth my time and trust?”

3 KEY CRITERIA REVIEWERS USE



1. NOVELTY

What's new?

- ✓ Does the topic address a real gap in knowledge?
- ✓ Does it add something new to the literature?
- ✓ Does it have potential impact (theory, practice, society)?

➔ No novelty → rejection.



2. CORRECTNESS

Was it done well?

- ✓ Is the method appropriate and rigorous?
- ✓ Are the data credible?
- ✓ Do the conclusions follow from the results?

➔ Method flaws → lack of trust.



3. CLARITY

Is it clear and easy to understand?

- ✓ Are the title and abstract specific?
- ✓ Is the text clear and logical?
- ✓ Are the figures/tables/conclusions clear?

➔ Unclear → low impact.



QUESTION FOR YOU:



Does your topic make sense from the reviewer's point of view?



Shape your topic so the reviewer can answer: **YES.**

6 Summary + next step (10 min)

Not theory, just concrete.



WHAT DO YOU TAKE WITH YOU?

Everyone leaves with:

1

TOPIC



- Research problem
- What is “missing”?

2

TITLE



- Specific
- ~12 words
- **WHAT: HOW**

3

ABSTRACT OUTLINE



- Problem
- What you did
- What you found

MY CHECKLIST



PUBLISHING = ITERATIVE PROCESS

It's not linear.
To cycle, improve
and make it better.



FIRST VERSION IS ALWAYS WEAK

And that's normal.
Everyone goes through it.



THE MOST IMPORTANT: START

Action > perfection.
Improve later.
Create your first outline today.

WHAT'S NEXT?



Analyze feedback

Improve and refine your elements.



Do research

Find the literature that shows the gap
and supports your idea.



Develop a plan

From problem → method → results.
Step by step.



Take action

The first outline doesn't have
to be perfect. It just has to exist.



**A GOOD PAPER STARTS WITH A SMALL STEP.
MAKE THAT STEP YOURS.**





FINAL CHALLENGE



Think like a scientist and the author of a good paper!



Correct answers =
better paper, bigger impact!

1 TRUE OR FALSE?

Mark T (True) or F (False).

1. A good title should be specific and concise.
2. An abstract should include only the results.
3. The first version of the text is always perfect.
4. A reviewer looks for gaps in logic and method.
5. Publishing is a one-time activity.

T	F
T	F
T	F
T	F
T	F

2 WHAT DOESN'T FIT?

In each group, cross out the element that doesn't belong and explain why.



problem
method
results
conclusion



title
abstract
introduction
acknowledgements



novelty
correctness
clarity
length



3 SHORT ANSWER

What is the most important step to write a good paper?



BONUS

Choose words from the box and write one sentence – a mini abstract (1 sentence) that includes:

- problem + what you did + main result
- max. 20 words

concrete

fly ash

chloride

marine environment

durability

optimization

reduction

replacement

impact

compressive strength

4

REFLECTION

What did you learn today?

What will you apply in your next paper?



GREAT! NOW THINK LIKE AN AUTHOR.
WRITE. IMPROVE. SUBMIT. REPEAT.





Tasks for the Next Class

Prepare. Analyze. Share. [Improve.](#)

1



Present the best scientific article you have read so far and justify why this article is the **best**.

2



Present the worst scientific article you have read so far and argue why this article is the **worst**.

3



Analyze the speed of the review process and the position on the list of the Ministry of Higher Education in selected **10 scientific journals** in your field.

4



Select 3 scientific journals in your field with the **fastest review** process and the **highest number of points** from the Ministry of Higher Education.



Additional task for a higher grade:



Send your article to 1 of 3 selected scientific journals.
Discuss the review process and your experiences.



THANK YOU FOR PARTICIPATING!



A strong paper is a team effort.



Publishing is an iterative process.
The most important thing: **START.**



THANK YOU FOR YOUR ENGAGEMENT!

“

The first version is always weak
(and that's normal).

Publishing is an iterative process.

The most important thing: **START.**

CONTACT



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Keep going!

The next steps on your
journey to publication.