

## February 2018, PSU-Phuket.

#### Workshop on How to Publish Papers in International Journals

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## Getting Started and How to write the Introduction.



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# What this Workshop is about

- The aim of this workshop is to teach students and staff how to publish papers in international journals rather than simply writing
- in English. A good guidebook is Day (1998).
- The complete procedure of getting a paper published will be gone through step by step. Most of the content is about conceiving the paper, getting organized, writing the different parts of the paper, how to use references and choosing the most suitable journal. This workshop is not about writing English. The problem of nefarious journals will be discussed including the use of Beall's List and the Thomson-Reuters ISI rating to identify journals which you should not submit papers to. 2

# The core of the workshop will consist of:

- Authorship issues need to be carefully considered.
- Choosing a Journal that you judge to be suitable. Having a target journal from the start is a good idea.
- How to write the **Introduction**.
- How to write the Materials and Methods.
- The **Results** consists of Text, Graphs, Tables and Captions for Figures. You have to write **Text** about all the **Tables**, **Graphs and Figures**.
- How to write a proper Discussion of your Results and their implications and how they compare to what was already known.
- I will emphasize the critical importance of using references correctly and making sure that all references are included, all references are mentioned in the text and ensuring that the references are in the format used by a journal. •The final step of preparing the manuscript is writing the **Abstract**.

# **Getting Started**

- The Science is pointless unless it is published and published in the right place. Do not bury your work in obscure places.
- The first requirement to be able to successfully publish scientific papers is to have the confidence to write one and submit it.
- Delicate sensitive types will never get anywhere in science.

You need to have a thick hide like an elephant.

#### Important Questions:

Do you have enough data for a scientific paper? Do you understand your results? (That is not a stupid question!) Are the aims of your study clear to you as well as to others? Did your research have a clear outcome?

• And remember. What one fool can do another can.

#### Appropriate Journal

Care is needed in selecting the appropriate journal. Consider:

- Do you think they will publish your work?
- Have they published similar work?
- ISI rating and its importance. Never send a paper to a journal that does not have a Thomson-Reuters Institute for Scientific Information (ISI) rating (check). Prince of Songkla University will not give you any money for publishing a paper in a Journal on Beall's List a list of disreputable journals. Most Funding Bodies, including TRF (Thailand Research Fund) will not give you credit for publications in a Beall's List journal.
- Beall's List of disreputable journals is on the Internet. There are hundreds of them. Nearly all have no scientific credibility. They generally charge US\$ 1000 (35,000 Baht) or more to publish. If you send a paper to them by mistake they charge \$300 to \$500 to withdraw the paper. The journal websites look just like respectable journals and often quote a **false journal ISI ranking** and use the **ScholarOne for electronic submission system**.<sup>5</sup>

When you start writing a paper it is a good idea to have a **Target Journal** in mind. If a journal has published papers like yours before there is a good chance they will consider your paper. Sending a paper to the wrong journal means discouraging and rude rejection letters from the editor, wasted time and wasting time reformatting a paper. In this example, the obvious target journal for this manuscript is **Aquatic Botany**.





This paper was on magnetic stimulation of germination of seeds. Most plant biology journals rarely publish papers on biological effects of magnetic fields. It was anticipated that this paper would be hard to publish in a plant biology or agricultural journal.

International Agrophysics is a journal biologists hardly ever read and has an ISI of only 1.1. Bioelectromagnetics has an ISI of 1.7. Try Bioelectromagnetics first. 7

#### **Do Not Publish in Mickey-Mouse (Minor) Journals**

You have identified a potential target journal based on the frequency of citation of that journal in your manuscript. The next consideration is the status of the journal.

- <u>Never</u> send a paper to a Beall's List journal even if papers from such a journal are cited several times in your paper.
- The most frequently cited journal might <u>not necessarily</u> be the best choice for your manuscript. You need to check the status of the journal. Use ISI (Institute of Scientific Information) Rating as a guide. Who do you want to read your paper?
- <u>Never</u> send a paper to a journal that is not ISI rated.
- Send your paper to a journal that is cited in your manuscript but has the more favourable ISI rating. However, in general the higher the ISI rating the harder it is to publish in that journal. This Fact-of-Life does not make much sense when you realise that journals focusing on similar topics use the same referee's but it has **much** to do with the **Ego of the Editor**.

The Importance of ISI.

Do not take the magnitude of the ISI too seriously, just check that the journal has an ISI rating.

For Example: In scientific research on photosynthesis there are two key journals. You try one journal and then the other.

Photosynthesis Research – ISI 3.502 – Springer-Verlag

Photosynthetica – ISI 1.409 – Springer-Verlag

I have published in both journals. They publish the same sorts of papers. Same publisher. Your papers are sent to the same referee's so why the big difference in ranking?

Photosynthesis Research is run by the efficient Germans. Photosynthetica is run by the Czechs.

#### Considering the ISI Rating of Candidate Target Journals

Marine Botany Paper		Magnetic Effects Paper	
Journal Name	ISI	Journal Name	ISI
Aquatic Botany	1.61	International Agrophysics	1.12
Botanica Marina	1.40	Bioelectromagnetics	1.705
Journal of Experimental Marine Biology and Ecology	2.475	Electro-magnetic Biology & Medicine	1.194
Plant Physiology	6.841	Journal of Plant Physiology	2.557
Estuarine and Coastal Marine Science	2.057	Environmental and Experimental Botany	3.359
Conclusion: Try <b>Aquatic</b> <b>Botany</b> as logical first choice because of high citation. <b>Plant</b> <b>Physiology</b> has too high an ISI for a minor seagrass paper.		Conclusion: Try <b>Environmental</b> <b>and Experimental Botany</b> as first choice. ISI of <b>International</b> <b>Agrophysics</b> is too low even though cited many times.	

## Authorship

• The person that did most of the work is always first author. <u>Never</u> allow any argument on this point. If you did the work you are in the drivers seat. Everyone else is a **passenger**.

- Never give your work to someone else to write up. Writing up is part of the job. It is irresponsible and causes trouble.
- My experience has been that if possible it is best to write a paper by yourself or with a single coauthor.
- The paper with the student or post-doc as the first author (the junior scientist) with their lord and master (their supervisor) as last author is a standard model that dates back centuries. It is still common today because it works. For example, my fist paper was Ritchie (1982) but numbers 2 and 3 were Ritchie and Larkum (1982a, b). I am still publishing papers with my old PhD supervisor (Ritchie and Larkum 2012, Ritchie, Larkum & Ribas, 2017, Larkum, Ritchie & Raven 2018).
- Try and get a definite agreement on the number of authors.<sup>11</sup>

#### **Authorship Problems**

Once you start writing a paper people start taking you seriously. That has **good** and **bad** points. You will find that most people are very encouraging. On the downside it is a little bit like inheriting a fortune from a rich uncle. Suddenly you find you have more friends than you thought you had. Hence you need to be careful. Your paper is valuable material. It can be stolen. Do not put somebody's name on the paper just because you think it might help to get it published. This is not how the world works. Nominal authorship is a very bad idea. Only put people down as authors if they actually have made a contribution to the paper. It is difficult to <u>remove</u> authors. · Make sure people do contribute. If you find that one of your coauthors does not do anything useful it is very hard to get their names off a paper. They may do nothing but they still want their name on it. Lesson – the careful who you put on a paper.

• Be professional. A manuscript is a confidential document.

#### Authorship Problems and Commercialisation

- Almost nothing I have ever done has had any commercial value and so I have never been in difficulties about patents and intellectual property (IP) rights but have heard a lot of horror stories from colleagues.
- Once you publish something in an International journal it becomes public knowledge and so generally *cannot* be patented. <u>Patent first</u>.
- IP rights can prevent you from publishing your work. Ask for legal advice from the Research Office. For example, if you sign a contract with a prawn farm company to work on their prawn food they can stop you from publishing it. The confidential report you spent months writing for them does nothing for your career. Even years later they may still not release it for publication.

## **Formal Agreements over Authorship**

 As I have said I have never been involved in writing a paper where there were questions over commercialisation and intellectual property rights. In the case of most scientific papers authorship questions can be settled by having a meeting of the authors of a paper and questions resolved by mutual agreement. However, if the first author is young and inexperienced they may need advice and help from a trusted senior co-author – usually their supervisor.

 If authorship is a complex issue it could lead to trouble. You might need a signed agreement. But legalism can backfire and generate ill feeling.

#### The Introduction should include:

- You must have a clear statement of what is the problem your paper is addressing and why it is important.
- A clear outline of what the paper is about is needed which shows that that you understand the problem.
- Make the aims of the paper clear in the last paragraph. You can even put in a single sentence about what your paper has shown.
- The Introduction is not intended to be an exhaustive review of the subject but it needs to be fully referenced to demonstrate that you are familiar with the literature. This is important.
- Use scientific journals and books as your sources, references and authorities (**Primary Literature**). **Avoid other literature**.

#### What not to say in the Introduction:

• You do not bring up issues in the **Introduction** that you do not deal with in the paper. **It makes your paper look incomplete.** 

- If your own work does not shed light on an aspect of a topic do not bring it up.
- When you have finished the **Discussion** you need to re-evaluate the **Introduction**. Topics brought up in the **Introduction** but not dealt with in the paper can be either removed or added to the **Discussion** as suggestions about future avenues of research in the light of your findings. Talking about new avenues of work in your **Discussion** improves the look of your paper.
- You may need to say what your paper is not about.
- For example "Extrasolar planets have been found orbiting G, K and M stars but here we do not discuss planets of K stars because so few are documented".

#### Your First Scientific Paper:

- You are joining the big school now. Take yourself seriously.
- Do not make your paper read like it is simply a glorified

laboratory report on a project assigned by your supervisor.

- Use good scientific papers you have read as a model.
- This workshop is **not** about writing in English. Reading scientific papers you will quickly notice that they are written using a form of English that is very different to common spoken English and is not like TV and Movie English either. **97%** of all science today is written in **English**, I have never needed a translation.
- <u>But 80% of people reading your paper are using English as</u> <u>a second language</u>. Write simple, short, explicit sentences.

# The Introduction should demonstrate clear evidence that you <u>critically</u> read the literature and identified the problem.

#### Some amusing quotes from Willingham (2007)

"Critical thinking is not a set of skills that can be deployed at any time, in any context. It is a type of thought that even 3-yearolds can engage in—and even trained scientists can fail in."
Some brilliant scientists can be very credulous and remarkably easy to fool, especially if they are told what they want to hear.

• "Knowing that one should think critically is not the same as being able to do so. That requires domain knowledge and practice."

Very true, you do need practice to understand science and you do need to learn to be sceptical. However, scepticism is not denial. Do not ignore evidence simply because you do not like it. One of the more comical things about Science is that commentators on Science usually have no scientific experience themselves and hopelessly confuse "Training" and "Education". In general, training in the sciences is necessary but is not sufficient to be a good scientist.

#### Some more amusing quotes from Willingham (2007)

- "Teaching content alone is not likely to lead to proficiency in science, nor is engaging in inquiry experiences devoid of meaningful science content."
- "Subjects who started with more and better integrated knowledge planned more informative experiments and made better use of experimental outcomes."
- Wow! The more general your level of science knowledge the better. Read news items in New Scientist, Nature and Science regularly.
- Of course the Americans think you have to organise a course to teach critical thinking but I doubt if it necessarily works.

#### When you have finished. Submitting a Paper:

When submitting a paper it is critical to write a proper Cover Letter.
 Remember that an Editor can reject your paper without sending it out to referees. Be very polite. Usually trying to argue with an Editor is futile.
 <u>Their</u> journal is <u>their very own little empire</u> and they do what they please.

- Submitting a paper using ScholarOne/Editorial Manager will be described and the standard journal procedures after you submit a paper will also be described.
- ScholarOne/Editorial Manager is not very user friendly and every journal tailors it to their own preferences and so until you open it and look you may find that they ask for things you did not expect. I think it is very important for students to know about how to use ScholarOne/Editorial Manager so they can submit papers themselves rather than rely on their supervisor.

#### What happens next?

- Some journals ask for a list of suggested referees. **Do not put down a list** of non-entities in ScholarOne/Editorial Manager.
- Do not put down people obviously connected with the research such as co-authors of papers you have published on closely related topics.
- Some journals allow you to list people you do not want to referee the **paper.** It is best to put in this list people you have shown the paper to and people you have worked for in the past 5 years etc. A known enemy can be listed but be polite about the reasons: "Conflict of interest" usually covers it.
- When your manuscript is submitted through the ScholarOne/Editorial **Manager** systems you get an automatic acknowledgement of receipt. •The **Editor** will usually quickly look over your paper and if they are not impressed they will reject it out of hand. If they think it is worthwhile they will send it out to referees (usually 2 or 3).

#### Editor's and Referees Responses to your Paper.

• It is important to carefully respond to referees comments and do it with a cool head. No matter how inane the comments might seem. Most papers do get published - **eventually**. How to respond to referee's comments will be discussed using examples of responses I have written for papers which I resubmitted to Journals and were subsequently accepted and published.

- It is typical to have two referees that think your paper is OK and one who does not. Do not get upset if you have this experience.
- When a paper is accepted you get a **Printer's Proo**f. You need to learn how to check a **Printer's Proof**. Publishers make all sorts of mistakes.
- Throughout the workshop ethical practices will be discussed including plagiarism, self-plagiarism and the very difficult topic of double publication.
- Students and interested staff will be encouraged to talk about their own manuscripts for publication over the duration of the course.

Note the value of proof-reading **SCIENTIFIC** 

Research, Graduate Studies and Academic Services Unit, Faculty of C

#### "Scientic writing Workshop" Let's Play the Game

#### March 3-4, 2016 : at 09.00 a.m. - 04.00 p.m. Seminar Room, Faculty of Science, PSU

"We would like to invite graduate students, young researchers to joi<u>n the workshop"</u> Make sure Publicity uses a good picture of you. This is not a good picture of me.

#### Facilitator : Dr. Raymond Ritchie Faculty of Technology and Environment, PSU.

Topics

- Searching journals related to the subject.
- Choosing a Arget Journal.
- Scientic papers : Abstract, Introduction, Material & Methods, Results and Discussion.
- Abstract or Summary
- Submitting a Paper to an International Journal
- Responding to referee's comments
- on your manuscript.

#### Please bring your First draft

Contact :

Research, Graduate Studies and Academic Services Unit e-mail : thanyaporn.bopsu.ac.th, tel :(074) 28 8075

Registration Deadline - February 29, 2016 (Registration Free : Lunch and coffee break are provided.)

30 persons Only !!

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