SOME TIPS FOR BEGINNER:

▪ **Writing well:**
Short and concise is always better than long and vague.

▪ **Verb tense:**
Past & present tenses.

▪ **Introduction & Discussion:** Present tense.

▪ **Abstract, Materials/Methods and Results**:
Past tense, because you are describing your own work.

▪ **When you refer to other people**: you may use the past tense: "*Apiwat found that this bacterium is highly sensitive to pH*".

▪ **Tables, Figures of your own paper:** present tense: "*Figure 1 illustrates that …*".

▪ **All tables and figures should be numbered and referenced in the text. They should also have brief captions explaining their contents.**

▪ Start drafting your paper **when you decide to conduct the investigation** or, set up the equipment or input files.

▪ Start drafting the paper from the section that **you feel most comfortable and confident with.**

▪ **Use active voice, avoid passive.**

▪ **Avoid repetition.**

▪ **Design the tables even before conducting your experiment** and fill in your data when the results are obtained.

▪ **Check all information** appearing in the paper **at least three times**. If you have a co-author, have him/her check the information as well.
  ▪ References, names of scientists.
  ▪ Equations, symbols.
  ▪ Figures caption, Tables.
  ▪ Basis set specifications.
  ▪ Beware! Any factual statement is the author's responsibility if it is not ascribed to somebody else through a citation. "…et al." is acceptable in the text, but not as a reference
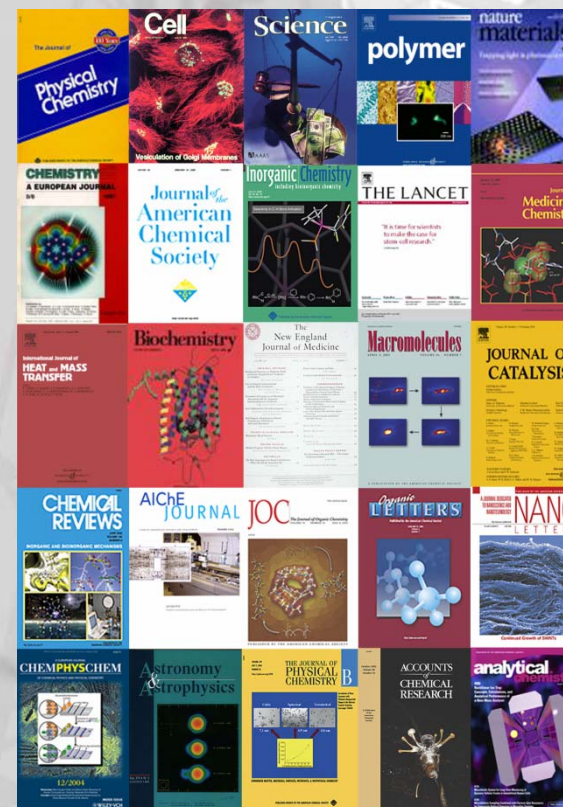 ▪ Etc.,

Conclusion:

Once you have identified your favorite research areas and investigated them in detail, you can begin to control them.

Talent is a gift that many people have. It is our intention to identify such talent in young people and assist them in making the best out of it.

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T R F

Guidelines for writing a good scientific paper

Editor/Reviewer's View

Peer Review: *What does an editor/reviewer look for when he/she reviews a manuscript ?*

Is it **ORIGINAL**?
Is it **CORRECT/ACCURATE**?
Is it **INTERESTING**?
Are the data **REPRODUCIBLE**?
Are previous works properly CITED?

Tips for writing a good scientific paper

TITLE: Should be informative and "specific"

VAGUE: Chemical reactions of CNTs
SPECIFIC: Diels-Alder cycloadditions of single-wall carbon nanotubes with electron-rich dienes: a combined experimental and theoretical study.

Introduction

Writing rules: NO cookbook recipe:
Begin by answering the following Q's:

- What is new and why is your work important?
- Familiarize the reader by summarizing pertinent works in the field.
- What is already known about the system that you are investigating? Reference the most important experimental/theoretical previous work.
- How is your research significantly different from those described in the other papers?
- The contribution that your paper will have to the advancement of science and technology in general.
- What are the major objectives of your paper?

One of the most difficult sections for the very beginner.
It is the place where your work is put into the proper perspective. A clearly written section builds the foundation for keeping the interest of the reader.

Methodologies

- Use specific, informative language and include precisely what you have done. This assists other scientists in reproducing your results.
- Omit unwanted information: the reader is not interested in superfluous details or asides. These waste space and raise printing costs.
- If you modified the method, say exactly what the difference of your results is from what the original method would have given, even if it is a minor one.

Results and discussion

It is likely that most scientists who read your work will study the figures. *Ensure that your figures are legible and are presented in an eye-catching format that will convince readers to follow up by studying the rest of the paper.*

Do not assume that your readers are as familiar with your results as you are.

Results:

- Summarize and illustrate your findings.
- Integrate quantitative data with the text.

Discussion:

- Interpret your findings and support your conclusions with solid evidence (DO NOT speculate).
- Refer to your data, citing tables and figures where necessary; *use these materials as evidence to support your major arguments.*

Recommended: *Consider using figures instead of tables. "One picture is indeed better than a thousand words".*

Remarks:

- Are your findings consistent with those of other researchers?
- How do your results fit into the bigger picture? (defined in the Introduction).
- Do not present every conceivable explanation.
- Recognize the importance of "negative" results.
- Cases that do not conform to the expected pattern might represent something "breaking a new ground".
- No section or subsection of the paper should be more than five pages long, around a total of 15 pages. You need to help the readers find the material they want.
- Papers have to end up with a section called "Conclusions".

Conclusion   3'Rs

Restate: *your findings more concisely*

Recap: *give a summary of the main points of the discussion*

Recommend & benefit: e.g.,
The results derived in the present study suggest that the KU-method yields an accurate and practical model for exploring the reaction mechanisms of nanostructured zeolite catalysts.

Abstract
The most important section but can be the last to be written. *Make it informative and brief.*

- *Briefly state the problem or purpose of the research.*
- *Indicate the theoretical or experimental plan used.*
- *Summarize the major findings and point out major conclusions.*