

# Checklist for Writing Scientific Papers

The checklist below lists should help you eliminate some common problems in writing scientific papers. Please check the following items as you write your paper.

## BEFORE STARTING TO WRITE:

- Make an Outline to construct the basic structure of the paper.
- Decide who you are writing for & aim at that level.
- Form a "thesis statement" - a short (1-3 sentence) statement of what you want the reader to understand as the most important point in your paper. This statement may end up appearing in the abstract or introduction.

## WHILE WRITING & MAKING REVISIONS TO THE PAPER

- Double space your paper.
- Check organization of the paper. Make sure it is consistent with the format requested.
- See Checklist on page 126 of VEM.
- Make sure that the text in each paragraph agrees with the opening sentence of the paragraph.  
Break the paragraphs by logical divisions.
- Be careful of plagiarism in following the structure of another book too closely. (See VEM, pp. 18-19).
- Reference any material, including any figures or tables, which are not your own or is not "common knowledge." Use a standard and consistent style for references (see VEM for examples).
- All graphs, pictures, drawings, diagrams, sketches, etc. must be called a "Figure."
- All Figures & Tables must be numbered (in order of appearance) and include a 1-3 sentence caption.
- All Figures & Tables must be referred to, by number, in the text.
- All Figure captions appear *below* the figure.
- All Table captions appear *above* the table.
- All numeric values should have units and errors (if appropriate). Check significant figures.
- Make sure your conclusions logically follow from the analysis and discussion in the paper.
- Carefully read and re-read the whole paper!

## PROOF READING OF PAPER (At the Sentence/Paragraph level)

- Carefully read the whole paper again!
- Check the spelling. Be careful of correctly spelled words that are not correct (such as "than" instead of "that" or "excepted" instead of "accepted")
- Avoid the contractions (wasn't, didn't, ...) whenever possible in scientific papers.
- If a sentence is longer than about 2-3 lines, make sure it is not run-on or that you shouldn't rewrite it.
- Check tense of verbs and remain consistent: Past Tense (was, were) Present Tense (is, are).
- Check noun/verb agreement (singular/plural): The coil's diameter were measured ...
- Check punctuation.
- Avoid unnecessary words (replace phrases like "due to the fact that" with "because" or "in order to" with "to") .
- Carefully read the whole paper still again!
- While you are at it, carefully read the whole paper one more time!