General guidelines for good scientific writing

Prior to submitting your final report, regardless of the format, you are advised to go through the following checklist and make the necessary corrections.

1. **Proof read:** grammar, sentence structure, spelling and punctuation. Much of this can be done through the appropriate Word functions.

2. **Be succinct:** this is the hallmark of all scientific papers and the majority or review or opinion articles. Until you become familiar with this writing style, you will need to proof read numerous times, in order to identify and correct areas of redundancy or “wordiness”.

3. **Avoid the use of:** first person pronouns in the text, informal styles (i.e. non-scientific, colloquial or slang terms) and excessive abbreviations (when used, they should be first identified in full, with the abbreviation you plan to use in brackets after the full term).

4. The adoption of some **numbering system** (e.g. 1.2, 3, etc., for major sections; 1.1, 2.2, 1.3, etc., for main sections) can improve the readability of the report.

5. **Formatting of sections:** each major section should carry the title in italics, bold-faced or otherwise highlighted. The adopted practice should be followed throughout. Minor section headings are best given in normal type at the margin. Sub-section headings of a minor section are given in normal type at the margin and are immediately followed on the same line by the text. A new page should not be used for each major or minor section.

6. **Tables and Figures:** all tables (numbered as Table 1, 2, etc.) and figures (numbered as Figure 1, 2, etc.) must carry a self-explanatory heading or legend, so that the reader can interpret the figure without having to refer to the main text. Both the data presented and the legend should make sense to the readers by themselves, and together would allow the reader to repeat the work. For tables, additional experimental information may be included in a footnote.

7. **Units of measurement:** Use the standard rules for SI Units giving commonly used industrial terms, if any, in parenthesis.

8. **Footnotes:** except in the description of tables and figures, should be kept to a minimum.

9. **In-text citations:** a) Give surnames (no initials) and year of publication, e.g. Smith and Jones, 2001. b) If the same authors have more than one paper in a year, distinguish them with letters a, b etc after the year, e.g. Smith and Jones, 2002a; Smith and Jones, 2002b. c) When the author list includes 3 or more names, second and subsequent authors are abbreviated *et al.* e.g. Smith *et al.* 2003. d) When citation occurs without mention of the name, the names and year are enclosed in parentheses: e.g. “Cells were isolated by standard methods (Smith and Jones, 2001)”. e) When the authors are specifically mentioned in the body of the text, only the year need be in parentheses: e.g. “These results contradict the findings of Smith and Jones (2002a)”.

10. **References section:** a) Citations are listed in alphabetical order of author's names. Names are given with initials following the surname. The abbreviation *et al.* is not used in the reference list, and all names are given in full (exceptions may be made if there are more than 10-15 authors). b) Format of journal reference: Name(s). Year. Title of paper. Abbreviated name of journal, Volume (italicized or underlined): start page - end page. Standardized abbreviations for journals should be used. c) Format of reference from a
book consisting of a collection of separate articles: Name(s). Year. Title of article. *In* Name of book. Edited by name(s) of editor(s). Publisher, City, State or Province or Country. pp. (start page)-(end page). d) Format of reference to an item in an authored book: Name(s). Year. Name of book. Publisher, City, State or Province or Country. pp. (start page)-(end page).

11. **Types of cited sources**: try to use the primary literature or recent review articles as much as possible. Secondary sources may include textbooks, industry guidelines and websites. Textbooks are only appropriate when discussing very basic, well-known information (e.g. *E. coli* is a Gram negative bacterium that has a heterotrophic metabolism…). Restrict the use of websites to reputable sites such as those from a government or educational body or one maintained by or for the specific industry in which you were working. Reputable websites should cite references to the original source of information. When using a website, you must include the date you accessed the website, as these sometimes become obsolete.

12. **Unpublished information**: with the relevant party’s permission, you may cite someone else’s unpublished data (give the name in the text; this does not go in the references section), manuscript in preparation (cited in text as you would the published paper; this does not go in the references section) or *in press* (cited in text as you would the published paper and in the references section just providing the journal in which the paper will appear).