Appendix A

FILE TEMPLATE FOR A SHORT SINGLE-COLUMN REPORT OR PAPER

Filename: BasicTemplate.doc

Description: This template designed for simple manuscripts (up to 20 pages or so), written in single-column format, with one-level numbering of figures and tables.

Technical Writing for Teams: The STREAM Tools Handbook, by Alexander Mamishev and Sean Williams

BasicTemplate.doc

Technical Writing for Teams: The *STREAM Tools* Handbook

Version 1.0.0
May 2009

Abstract

This template document is designed for generating uniform reports and papers using principles of effective document formatting described in the book *Writing for Research Teams: STREAM Tools* by Alexander V. Mamishev and Sean D. Williams. The main purpose of this template is to enable multiple co-authors to write documents using the automatic formatting features of Microsoft Word. When each co-author uses the same formatting for each element of their manuscript, features such as numbering and cross-referencing of headings, figures, equations, and references becomes much easier. In addition, this approach allows easy reuse of portions of material in different documents.

Table of Contents:

You can update the Table of Contents at any time by pressing **Ctrl-A** (this selects the entire document), then releasing it, and then pressing **F9**. In short: **Ctrl-A, F9**. The Table of Contents is self-generated. The appearance of the Table of Contents can be changed by clicking **Insert, Index and Tables**.

If you need more lists, for example, the List of Figures or the List of Tables, you can insert them and then use similar steps. Better yet, switch to the ThesisOrBook.doc template to have more features needed that you might need for long documents.

1. Introduction

This template contains preformatted elements of a typical report: table of contents, headings, figures, tables, equations, and literature citations. In order to guarantee seamless integration of all documents generated by a group of writers, each writer should be careful in preserving format settings for all basic elements.

There is one main principle of this approach: in order to create a new entry, the writer should copy and paste an existing entry into a new location, and then overwrite the content at the new location.

2. Implementation (Heading level 1)

2.1 Heading level 2

2.1.1 Heading level 3

2.1.1.1 Heading level 4

Four levels of headings are provided as an initial template. In order to update numbering of all automated entries, click **Ctrl-A, F9**. All figures and tables should be numbered.

To create a new figure, copy the existing figure template (with the attached caption) and paste it to a new location. The figure template is designed in such a way that the caption stays with the image.

In order to cross-reference a figure click **Insert, Reference, Cross-Reference, Figure, Only label and number**, then select the figure you want to cross-reference from the list.

An example of auto-formatted text:

Figure 1 shows the conceptual representation of the Electrostatic Air Pump (EAP) technology.

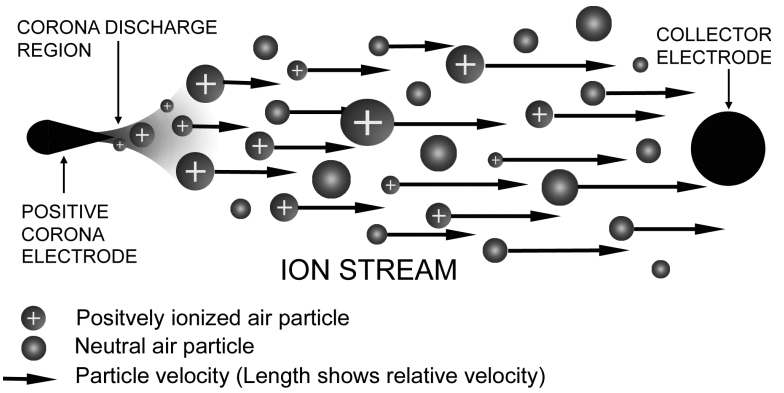

Figure 1. Schematic diagram of ion stream generating from a DC electrohydrodynamic ionic wind pump, where a high voltage is applied between the corona and the collector electrodes [1].

Table 1. This is the template for a table.

a	b	cde
1	2	34

In order to create or cross-reference a table, use the same command sequences as those for figures.

New equations should be created by copying the equation line template below and altering it in a new location. MathType software is recommended for editing equations. MathType is superior to Microsoft Word's built-in equation editor because it has more features and allows exporting to LaTeX.

Example. According to (1), Coulomb's force $\mathbf{f}_C$ acting on an unpaired charge q in electric field **E** is equal to

$$\mathbf{f}_C = q \cdot \mathbf{E} \tag{1}$$

To cross-reference an equation, you first have to create a bookmark by highlighting the equation number, clicking **Insert, Bookmark**, and giving that a unique identifier. For consistency, all equation identifiers should start with "eq". For example, equation (1) is bookmarked as "eqColoumbForce".

Several software packages are available for managing literature citations in Microsoft Word. This template relies on software called EndNote. The citations should conform to the requirements of your field or the specific publication source. For example, in the IEEE style, citations should be enclosed in square brackets and look like this [2]. Citations should also be numbered in the order readers encounter them in the text.

References:

[1] C. P. Hsu, N. E. Jewell-Larsen, I. A. Krichtafovitch, S. W. Montgomery, J. T. Dibene II, and A. V. Mamishev, "Miniaturization of Electrostatic Fluid Accelerators," *IEEE/ASME Journal of MEMS*, 2007.

[2] J. H. Jeans, *Electricity and Magnetism*, 5th ed., New York, Cambridge University Press, 1927.