

# Preparation of a Formatted Technical Paper for the Bulletin of Micro and Nanoelectrotechnologies

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**Abstract** - This document is itself an example of the desired layout (inclusive of this abstract) and can be used as a template. The document contains information regarding desktop publishing format, type sizes, and typefaces. Style rules are provided explaining how to handle equations, units, figures, tables, abbreviations, and acronyms. Sections are also devoted to the preparation of acknowledgments, references, and authors' biographies. The abstract is limited to 150 words and cannot contain equations, figures, tables, or references. It should concisely state what was done, how it was done, principal results, and their significance.

**Index Terms** - The author shall provide up to 10 keywords (in alphabetical order) to help identify the major topics of the paper and to be enough referenced.

## I. INTRODUCTION

This document provides an example of the desired layout for a published MNE technical paper and can be used as a Microsoft Word template. It contains information regarding desktop publishing format, type sizes, and typefaces. Style rules are provided explaining how to handle equations, units, figures, tables, abbreviations, and acronyms. Sections are also devoted to the preparation of acknowledgments, references, and authors' biographies.

## II. TECHNICALWORK PREPARATION

Please use automatic language check for your spelling. Additionally, be sure your sentences are complete and that there is continuity within your paragraphs. Check the numbering of your graphics (figures and tables) and make sure that all appropriate references are included.

### A. Template

This document may be used as a template for preparing your technical paper. When you open the file, select "Page Layout" from the "View" menu (View | Page Layout), which allows you to see the footnotes. You may then type over sections of the document, cut and paste into it (Edit | Paste Special | Unformatted Text), and/or use markup styles. The pull-down style menu is

at the left of the Formatting Toolbar at the top of your Word window (for example, the style at this point in the document is "Text"). Highlight a section that you want to designate with a certain style, and then select the appropriate name on the style menu.

### B. Format

If you choose not to use this document as a template, prepare your technical work in single-spaced, double-column format, on paper A4 (21x29.7 centimeters). Set top, bottom margins and right margins to 15 millimeters and left margins to about 20 millimeters. Do not violate margins (i.e., text, tables, figures, and equations may not extend into the margins).

### C. Typefaces and Sizes

Please use a Times New Roman font. (See your software's "Help" section if you do not know how to embed fonts.) Table I is a sample of the appropriate type sizes and styles to use.

TABLE I. Table name will be written in Times New Roman font.

Micromotor Code	b [mm]	a [mm]	h [mm]	Material
MPR33	33	25	20	PZT 5
MPR27	27	18	9	PZT 5
MPR15	16	10	10	PZT 5

### D. Section Headings

A primary section heading is enumerated by a Roman numeral followed by a period and is centred above the text.

A primary heading should be in capital letters and bolded. The standard text format is considered times new roman 12.

The paper title should be in times new roman 20 uppercase and lowercase letters, not all uppercase.

Author name is set to times new roman 12, institution and contact address (E-mail) are set to times new roman 10.

Financial support should be acknowledged below the author name and institution. Example:

This work was supported in part by the U.K. Department of Defence under Grant TX123.

A secondary section heading is enumerated by a capital letter followed by a period and is flush left above the section. The first letter of each important starting word is capitalized and the heading italicized.

Tertiary and quaternary sections are accepted only in special cases, so usually must be avoided in order to keep a clear article structure. If required, a tertiary and quaternary section heading must be italicized and enumerated by adding an Arabic numeral after each letter.

### E. Figures and Tables

Figure axis labels are often a source of confusion. Try to use words rather than symbols. As an example, write the quantity "Torque," or "Torque, *M*," not just "*M*." Put units in parentheses. Do not label axes only with units. As in Fig. 1, write "Torque (cNm)" not just "(cNm)". Do not label axes with a ratio of quantities and units. For example, write "Current (A)," not "Current/A." Figure labels should be legible, approximately 10-point type.

Large figures and tables may span both columns, but may not extend into the page margins. Figure captions should be below the figures; table captions should be above the tables. Do not put captions in "text boxes" linked to the figures. Do not put borders around your figures.

All figures and tables must be in place in the text centered and written with times new roman 10. Use the abbreviation "Fig. 1" in sentence and for each figure name. Each table must be defined as „TABLE 1”, with capital letters and roman numbers.

Digitize your tables and figures. To insert images in Word, use: Insert | Picture | From File.

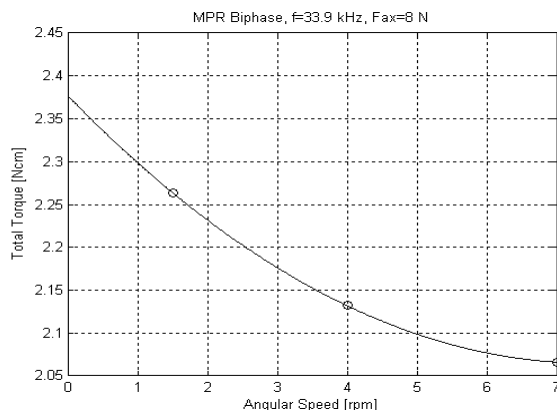


Fig. 1. Total torque function of angular speed. (Note that "Fig." is abbreviated and there is a space after the figure number.)

### F. Numbering

Please number reference citations consecutively in square brackets [1]. The sentence punctuation follows the brackets [2]. Multiple references [2], [3] are each numbered with separate brackets [1]-[3]. Refer simply to the reference number, as in [3]. Do not use "Ref. [3]" or "reference [3]" except at the beginning of a sentence: "Reference [3] shows....".

Number footnotes separately with superscripts (Insert | Footnote). Place the actual footnote at the bottom of the column in which it is cited. Do not put footnotes in the reference list. Use letters for table footnotes.

Check that all figures and tables are numbered correctly. Use Arabic numerals for figures and Roman numerals for tables.

Appendix figures and tables should be numbered consecutively with the figures and tables appearing in the rest of the paper. They should not have their own numbering system.

### G. Units

Metric units are preferred in light of their global readership and the inherent convenience of these units in many fields. In particular, the use of the International System of Units ("Système International d'Unités" or SI Units) is advocated. This system includes a subsystem of units based on the meter, kilogram, second, and ampere (MKSA). British units may be used as secondary units (in parentheses). An exception is when British units are used as identifiers in trade, such as 3.5-inch disk drive.

### H. Abbreviations and Acronyms

Define less common abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract. Standard abbreviations such as SI, CGS, AC, DC, and *rms* do not have to be defined. Do not use abbreviations in the title unless they are unavoidable.

### I. Math and Equations

Use either the Microsoft Equation Editor or the *MathType* commercial add-on for MS Word for all math objects in your paper (Insert | Object | Create New | Microsoft Equation *or* MathType Equation). "Float over text" should *not* be selected.

To make your equations more compact, you may use the solidus ( / ), the exp function, or appropriate exponents. Italicize symbols for

quantities and variables. Use a long dash for a minus sign or after the definition of constants and variables. Use parentheses to avoid ambiguities in denominators.

The number of each equation must be consecutively added in parentheses and arranged at the right margin, as in (1). Be sure that the symbols in your equation have been defined before the equation appears or immediately following.

Don't use "Eq. (1)" abbreviation instead of "equation (1)", in a sentence.

$$L_m = \frac{m}{A^2} \quad (1)$$

with  $m$  - mechanical mass,  $A$  - force factor,  $L_m$  - electromechanical inductance.

### III. ACKNOWLEDGMENT#

The following is an example of an acknowledgment.

The authors gratefully acknowledge the contributions of Mircea Ignat and Puflea Ioan for their work on the original version of this document.

### IV. APPENDIX

Appendixes, if needed, appear after the acknowledgment.

### V. REFERENCES

References are important to the reader; therefore, each citation must be complete and correct. There is no editorial check on references, only the format Times new roman 10 must be considered.

[1] Satanobu J., Lee D.K., Nakamura K., Ueha S., "Improvement of the Longitudinal Vibration System for the Hybrid Transducer Ultrasonic Motor", IEEE Trans. On Ultrasonic ferroelectrics and Frequency Control, vol. 47, no. 1, January 2000, pp. 216-220.

[2] Morita T., Yoshida R., Okamoto Y., Kurosawa M., "A Smooth Impact Rotation Motor Using a Multi-Layered Torsional Piezoelectric Actuator", IEEE Trans. On Ultrasonic ferroelectrics and Frequency Control, vol. 46, no. 6, November 1999, pp. 1439-1446.

### VI. BIOGRAPHIES

A technical biography for each author must be included. It should begin with the author's name (as it appears in the byline). Please do try to finish the two last columns on the last page at the same height. The following is an example of the text of a technical biography:

**Mircea Ignat** was born in Bucharest on March 4, 1953.

He graduated at 1977 and he received Ph.D. degrees in electrical engineering from Bucharest Polytechnic University in 1999.

His employment experience included the National Institute for Research and Development in Electrical Engineering ICPE-CA, coordinator of the "Alexandru Proca Center for the Youngsters Initiation in Scientific Research".

The research preoccupation includes: the synchronous generators and the high speed electric machines. He is member of IEEE.

