Requirements for Manuscripts Published in RTU ECCE Journal

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RTU ECCE reviewing is anonymous. Do not indicate names in reviewable version!!

Abstract – Outline of your research in a short text abstract (150...200 words) and place it in the beginning of your paper. Use this document as a template if necessary or follow the instructions below to compose your manuscript. Keep the IMRAD (Introduction, Methods, Results and Discussion) structure in your abstracts, as well as in your paper. Pay special attention to the conclusions (discussion). Choose 3...5 keywords or key-phrases and locate them in alphabetical order just after the abstract of your paper, separated by semicolon. Capitalize the keywords. The keywords have to be taken from http://www.ieee.org/documents/taxonomy_v101.pdf. Besides, it is advantageous to compose the title of the paper of the keywords from the mentioned IEEE taxonomy list.

Keywords – Publishing activities; IEEE indexing; Indexes; Information analysis; Printing.

I. INTRODUCTION
This document provides instructions for preparing manuscripts for publishing in The Scientific Journal of Riga Technical University on Electrical, Control and Communication Engineering (RTU-ECCE). The journal does not have article processing charges (APCs) nor article submission charges. The document can also be used as a template for manuscripts.

The full text of the articles published in RTU-ECCE is included in EBSCO information products. The open access to the papers is provided through “DeGruyter” online publishing. Articles from selected series of the journal and abstracts of all articles published in RTU-ECCE are also included in ProQuest and in VINITI information products.

The articles sent to the Editorial Board are published directly from the manuscripts submitted in an electronic format. Therefore it is very important that the authors observe precision and correctness of language. The authors bear responsibility for all language mistakes.

The copyright for the articles is transferred to “DeGruyter” publishing house. The Editorial Board of the series has the right to edit the submitted articles. If due to the request of the Editorial Board, the author makes amendments to the manuscript, the Editorial Board evaluates it anew.

The language of all papers, tutorials and other materials published in RTU-ECCE, as well as the language of reviews and RTU-ECCE correspondence is only English.

II. GENERAL REGULATIONS
The manuscript should be submitted to the Editorial Board in an electronic format. Use this file as a template if necessary. Prepare the manuscript with Microsoft Word (not older than MS Word 2000). The size of the manuscript has to be from 6 to full 12 pages including information about its authors, abstract and images. Write the text in two column layout. Left and right justify the columns. Use Times New Roman as the main font.

<table>
<thead>
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<th>Table I</th>
<th>TYPE SIZES, SPACES AND INTERVALS</th>
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<td>Figures [RTU - Figures (in)]</td>
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<td>Figure captions [RTU - Figures (Captions)]</td>
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<td>Table captions [RTU - Tables (captions)]</td>
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<tr>
<td>Equations [RTU - Equations]</td>
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<td>Programs and codes [RTU - Programs and Codes]</td>
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<td>Author’s biographical notes [RTU - Biography]</td>
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<tr>
<td>References [RTU - References]</td>
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</tbody>
</table>
On the last page adjust the length of the columns so that they are equal. Use hyphenation only if it is necessary. Use spell-checking. The Roman numerals used to number the sections are optional. If you do use them, do not number ACKNOWLEDGMENT and REFERENCES, but still number CONCLUSIONS. Identify subheadings with letters.

A. Identification of Authors

The authors of the paper, their current status and institution are indicated just after the paper title formatted with “RTU - Author's Names” style or “Time New Roman 12pt” font. Place the status and institution in parenthesis and apply italic style. The first mention of the institution has to be complete while the others have to be abbreviated. Choose one of following status options: 1) student, bachelor student, master student or doctoral student; 2) lecturer, docent or associate professor; 3) engineer, researcher or leading/senior researcher; 4) professor. The status can be omitted if not found in this list. Do not split the data related to the same author onto two lines.

B. Page Layout

Use the following page setup options: paper size A4 (height =29.4cm; width = 21 cm); left and right margins = 1.1 cm; top and bottom margins = 2.66 cm; gutter = 0.51cm. Use option “multiple pages” with value “mirror margins” (in the “Page” field). Use two-column layout with column width 8.89cm and spacing 0.51cm. Do not number the pages. Leave the header and footer blank. Footnotes and endnotes are not allowed.

C. Type Sizes

Follow the type sizes specified in Table I (1 point is about 0.35 mm - the size of the lowercase letter “j” will give the point size). Times New Roman is the preferred font.

III. OBJECTS

Place figures and tables at the top or bottom of page. Avoid placing them in the middle. Try to place them before their first mention in the text. Most graphs and tables are one column wide. However, large objects may span across both columns.

A. Figures

Place figures and photographs “in line with text” (“Layout” option from the pop-up menu “Format Picture” or “Format Object”) or use style “RTU – Figures (in)”. Number the figures consecutively in Arabic numerals. Long figure captions should be placed below the figures and justified. One line figure captions has to be centered.

If your figure has two parts, incorporate the labels “(a)” and “(b)” in the figure, but do not incorporate captions. Do not put captions in “text boxes” linked to the figures. Do not put borders around the outside of your figures. Use the abbreviation “Fig. 1” even at the beginning of a sentence.

Figure axis labels are often a source of confusion. Use words rather than symbols. For example, write “Magnetization,” or “Magnetization, M,” not just “M.” Put units in parentheses. Do not label axes only with units. In the example write “Magnetization (A/m)” or “Magnetization (A m⁻¹).” Do not label axes with a ratio of quantities and units. For example, write “Temperature (K),” not “Temperature/K”.

Multipliers can be especially confusing. Write “Magnetization (kA/m)” or “Magnetization (10³ A/m).” Figure labels should be legible, about 10-point type.

B. Tables

Recommended style for the tables is “RTU – Tables (in)”. However, some deviations from this style are possible. For example centered text is often preferable in the tables. Table captions and titles should always be centered and placed above the tables. Please verify that the tables you mention in the text actually exist (this regards your figures as well). Tables are numbered consecutively in Roman numerals and have reference in the main text. Do not abbreviate “Table.”

C. Images

Preferable options for graphic images and photographs are: 300 dpi resolution, 8 bits per pixel, grayscale. The papers will be printed using grayscale printing technology with the number of distinctly printable grayscale halftones is 6...8 (including pure white and black). For this reason using the photographs is not encouraged. At least avoid using low contrast photographs and images. The mentioned printing technology is the reason why using colors is not encouraged too. Authors themselves must take care about the legibility of their color images in grayscale representation (remember that the maximal number of printable grayscale halftones is 8).

D. Equations

Use the Microsoft Equation 3.0 or MathType to create equations and select “RTU - Equations” style to format them. In MS Word 2007 (or newer) use “Insert → Object → Microsoft Equation 3.0” item not “Insert → Equation”. Place one tab before short equations to center them and one or two tabs after them to put equation’s number flush with the right margin, as in (1). Number the equations consecutively. Punctuate equations with commas or periods when they are a part of a sentence, as in

\[ \Delta V_{C(0\rightarrow \infty)} = \frac{1}{C} \int_{0}^{\infty} i_C(t) \, dt. \] (1)

Please confine equations to one column width and break equations at appropriate algebraic symbols. Short, one line equations, for example (1), have to be vertically center aligned with the corresponding numbering text and punctuation signs (as it is defined in “RTU - Equations” style).
The punctuation and numbers of longer equations that occupy two or more lines, like (2), must be vertically centered with the last line of the equation. Use font option “Position” with value “Lowered”+number to provide such alignment (applied to number and punctuation only). The parts of the longer equations must be horizontally left aligned in the equation editor. An exception from this rule is the last line that has to be right aligned with the longest of the previous lines (use spaces to do that). Do not split long equations in order not to place their parts in different columns and on different pages.

$$L_{\text{coaxial}} = \frac{\mu_0}{2\pi} \ln \frac{q}{p} + \frac{\mu_0}{\mu} \left( \frac{r^4}{(r^2-q^2)^2} \ln \frac{r}{q} - \frac{1}{2} \frac{r^2}{r^2-q^2} \right)$$ \hspace{1cm} (2)

The size of basic symbols in equations should correspond to the letter size of the main text (10 pt). To do that, modify size definitions of the equation editor in “Size/Define” toolbar (Fig. 2). Use the solidus (/), the exp functions (e^x) etc. to make your equations more compact in height. Italicize Roman symbols for variables (T might refer to temperature, but T is the unit [Teslas]). Do not italicize Greek symbols. Use an en dash (–) rather than a hyphen (-) for a minus sign. Use parentheses to avoid ambiguities in denominators.

Symbols in the equations should be defined before the equation appears or immediately following. Use “(1)” not “Eq. (1)” or “equation (1),” except at the beginning of a sentence, for example, “Equation (1) is …”

IV. OTHER RECOMMENDATIONS

A. Programs and Codes

If necessary, include parts or entire texts of your programs following the “RTU – Programs and Codes” style or using “New Courier” font.

```c
void main(void)
{
    WDTCTL = WDTPW + WDTOHOLD; //Stop watchdog
    P3DIR |= 0x01; //P3.0 - output
    for (;;) {
        unsigned int i;
        i = 50000; do i--; while (i != 0); //SW Delay
        P3OUT ^= 0xFF; } //Toggle P3.0
}
```

Try to fit program code in one column. However, wide program code may span across both columns. If so, place it at the top or bottom of the page. Number of symbols in one line is then limited to 108. Avoid placing extensive program code.

B. Abbreviations and Acronyms

Define abbreviations and acronyms the first time they are used in the text, even if they have been defined in the abstract. Abbreviations such as IEEE, SI, MKS, CGS, sc, dc, and rms do not have to be defined. Do not use abbreviations in the title unless they are unavoidable.

C. Miscellaneous Recommendations

Avoid dangling participles, such as, “Using (1), the potential was calculated.” Write instead, “The potential was calculated using (1),” or “Using (1), we calculated the potential.” Use a zero before decimal points: “0.25,” not “.25.” Use “cm²,” not “cc.” Do not mix complete spellings and abbreviations of units: “Wb/m²” or “webers per square meter,” not “webers/m².” Spell units when they appear in text: “…a few henries,” not “…a few H.” Try to ensure that the paper is proofread.

D. Format of References

Follow reference requirements using “RTU – References” style when preparing your list of references. Number the 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]. When citing a section in a book, please give the relevant page numbers [1]. In sentences, 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 …” Please do not use automatic endnotes in Word, rather, update your reference list following the samples provided at the end of this document for:

- a book with a single author [1], [2], with more than one author [3] and with three or more authors [4];
- Conference proceedings [5];
- Technical report [6];
- Patent/Standard [7];
- Papers presented at conferences (unpublished) [8];
- Thesis or dissertation [9];
- Chapters or parts of edited works included in collections or textbooks [10] – [11];
- Journal articles [12];
- Internet documents [18] – [19];
- Non-book and other formats [20].

Papers that have been accepted for publication, but not yet specified for an issue should be cited as “to be published”. Papers that have been submitted for publication should be cited as “submitted for publication”. For papers published in translation journals, please give the English citation first, followed by the original language citation.

Use of Mendeley Desktop is recommended.
V. UNITS

Use either SI (MKS) or CGS as primary units. (SI units are encouraged.) English units may be used as secondary units (in parentheses). An exception would be the use of English units as identifiers in trade, such as “3.5-inch disk drive”. Avoid combining SI and CGS units, such as current in amperes and magnetic field in oersteds. If you must use mixed units, clearly state the units for each quantity that you use in an equation.

VI. EXTENDED SUMMARY

The Editorial Board may ask the authors to prepare an extended summary of the publication. The extended summary should be prepared in English as a separate file and sent to the Editorial Board (Latvian and Russian summaries are also welcome). The size of English version should be about 1800 characters (no spaces). The summary should not be a repetition of the abstract from the beginning of the paper.

VII. SOME COMMON MISTAKES

The word “data” is plural, not singular. The subscript for the permeability of vacuum μ0 is zero, not a lowercase letter “o.” In American English, periods and commas are within quotation marks, like “this period.” A parenthetical statement at the end of a sentence is punctuated outside of the closing parenthesis (like this). (A parenthetical sentence is punctuated within the parentheses.) A graph within a graph is an “inset,” not an “insert.” The word alternatively is preferred to the word “alternately” (unless you mean something that alternates). Do not use the word “essentially” to mean “approximately” or “effectively.” Be aware of the different meanings of the homophones “affect” and “effect,” “complement” and “compliment,” “discreet” and “discrete,” “principal” and “principle.” Do not confuse “imply” and “infer.” The prefix “non” is not a word; it should be joined to the word it modifies, usually without a hyphen. There is no period after the “et” in the Latin abbreviation “et al.” The abbreviation “i.e.” means “that is,” and the abbreviation “e.g.” means “for example.” An excellent style manual for science writers is [7].

VIII. MANUSCRIPT REVIEWING

The submitted articles are peer-reviewed. The Editorial Board of each series of The Scientific Journal of Riga Technical University asks two or three experts of the respective field to review manuscripts. The author of the manuscript may ask the Editorial Board for anonymous copies of the reviews. If the author is asked by the Editorial Board to revise the manuscript it is reviewed anew.

REFERENCES


First A. Author and other authors should provide a short (500…800 characters, no spaces) biography. The first paragraph should contain information about the author’s educational background, scientific degrees and the years they have been earned. The author’s major field of study should be lower-cased. The second paragraph should list work experience. The current job must have a location, while previous may be listed without one. Job titles are capitalized. Current and previous research interests end this part. The third paragraph lists memberships in professional societies and awards. If a photograph is provided, the biography will be indented around it. The photograph (3cm × 4cm) is placed at the top left of the biography (use “Format Picture” – “Layout” – “Square” option). Align the photograph and the first line of the biography even if the last one is shorter. Author’s contact data are placed at the end of the biography.

Postal address: a valid detailed postal address of institution of each author has to be added at the end of his biography. Please identify the most topical address if several are available.

Reviewing is anonymous. Omit the biographies in reviewable version!!!