REQUIREMENTS FOR ARTICLE

IN DIGEST OF SCIENTIFIC WORKS
"INFORMATION PROCESSING SYSTEMS"

Manuscripts must be submitted in electronic form (Word-2003), prepared in accordance with the requirements given below. Authors can use Template for convenience.

Manuscript Volume. No less than 4 full pages in Ukrainian, English or Russian.

Page Size. A4 (21×29,7 cm).

Margins. Left – 2,25 cm; right – 2,25 cm; top – 2 cm; bottom – 2,5 cm.

The Main Font of the Article. Times New Roman, 10 pt, line spacing (multiplier) – 1,1.

Authors’ (co-authors’) Initials and Surnames. Times New Roman, 12 pt, left alignment.

Authors’ (co-authors’) Affiliations. Times New Roman, 12 pt, left alignment, italics.

Title of the Paper. Arial, 12 pt, centre alignment, boldface. The title of the article must not be longer than 3 lines and must not have abbreviations.

Abstract in the language of the Paper. Times New Roman, 10 pt, justified, italics. The abstract should briefly state the structure of the paper, be informative and let the reader understand whether it is necessary to read the whole text of the manuscript. The abstract should have no less than 550 printed characters without blanks, including keywords.

Keywords. Times New Roman, 10 pt, justified, italics, 4 – 7 keywords and (or) word combinations, which are separated by commas and precisely reflect the subject field of the research.

The text of the Paper. Times New Roman, 10 pt, line spacing (multiplier) – 1,1; indentation of the first line is 0,75 cm. The text of the manuscript must be structured according to the following sections: introduction, statement of basic materials, conclusions.

Introduction

General Problem Statement. The present state of the problem, its connection with the important scientific and practical tasks, topicality and the ways of solutions should be given.

Analysis of the Recent Research and Publications. The famous theoretical and practical results that were obtained by other authors in this sphere with the references to their works should be indicated. For example: “Methods which allow to consider …. are described in the works [1; 3–5]…”

Aim of the Research. The main idea of the paper, improvements, amendments or deepening of the known approaches should be given. The aim of the article is derived from the problem statement and the analysis of the last research and publications in the corresponding sphere.

Statement of basic materials

The main principles and results of the scientific research, personal ideas, regularities, connections, tendencies, the description of the experiment, the methods of obtaining the results, the analysis of the actual material, personal contribution to the achievement, realization of the main results etc. should be covered.

References to the used sources should be put in square brackets and include the indication of the number of the source, i.e. [1; 3–5], the names of the sources should be given at the end of the text (section – "References").

Equations. MS Equation Editor or Math Type must be used for equations. It is not allowed to use Formula editor Word 2007 – 2016 for equations of graphical objects and tables. For setting up MS Equation Editor or Math Type in menu "Style" – "Define" the fields "Character Style" should be empty, except "Vector-Matrix" – "Bold".

The size of equations should be set according to the Table 1.

<table>
<thead>
<tr>
<th>Name of Menu</th>
<th>Name of Settings</th>
<th>Value of Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>Full</td>
<td>10 pt</td>
</tr>
<tr>
<td></td>
<td>Subscript</td>
<td>8 pt</td>
</tr>
<tr>
<td></td>
<td>Sub-Subscript</td>
<td>7 pt</td>
</tr>
<tr>
<td></td>
<td>Symbol</td>
<td>14 pt</td>
</tr>
<tr>
<td></td>
<td>Sub-symbol</td>
<td>10 pt</td>
</tr>
</tbody>
</table>

For example. Effective echoing area is understood as a value which is determined with the help of the following equation:

\[
effective\text{\,echocing\,area} = \frac{\pi \times \text{length} \times \text{width}}{2}
\]
\[
\sigma = \lim_\mathrlap{R \to \infty} 4\pi R^2 \frac{\left| \mathbf{p}^\text{up} \cdot \mathbf{E}^\text{polec} \right|^2}{\left| \mathbf{p}^0 \cdot \mathbf{E}^0 \right|^2} \tag{1}
\]

where \( R \) – the distance from the object to the receiving aerial;
\( \mathbf{p}^\text{up}, \mathbf{p}^0 \) - unit vectors of receiving aerial and transmission antenna polarization respectively;
\( \mathbf{E}^\text{polec} \) - the field that is scattered by the object towards the receiving aerial.

Pictures and tables should be placed after the first reference to them in the text (Fig. 1 or Table 1).

Symbols which are used in the paper (equations, pictures, tables and text) should be identical; MS Equation or MathType Editors must be used.

It is allowed to place big pictures, equations and tables in one column (no more than 16,5 cm).

Conclusions

Conclusions should have brief summary of the results of the scientific problem (stated task) solutions, that were obtained in the process of analysis of the chosen material, estimation and generalization. It is necessary to emphasize independence, novelty, theoretical and (or) applied significance paying attention to the quantitative indicators of the obtained results.

The attention is paid to the introduction of the new facts, results, recommendations, and regularities to scientific sphere or clarification of the known facts that are not investigated enough. The information about authenticity and novelty of the results, which were obtained during the scientific research and which served as the basis of new theoretical approaches, regularities and determined ways of their application for specific practical needs should be indicated.

Reference List

At the end of a manuscript two reference lists should be no less than 12 sources, that were published during the last 10 years, should be given:

- reference list in the language of source, according to the State Standards of Ukraine DSTU 8302:2015 "Bibliographiche poslyannia: zahalni polozhennia ta pravyla skladannia" ["Bibliographic references: general statements and compilation rules"];
- "References" in the Latin alphabet (transliteration) and in English according to Harvard style British Standards Institution.

Authors self citation in the reference list should not be more than 15%.

Submitting the article author should guarantee actuality of the given sources and give them to the editorial board in case of necessity. If the source of information has digital object identifier DOI, it must be given at the end of the description, i.e. https://doi.org/10.30748/nitps.2017.26.01.

References

The references come as a separate section; they are listed in the order in which they were given in the first Reference List. Sources should be formatted according to the main rules of Harvard style BSI: British Standards Institution:

- bibliographic records should always start from the surname of the author, then, after comma, initials (there are no blanks between initials), the date of publication in brackets; two authors should be separated by "and" without commas; several authors would be separated by commas but the last surname should be separated by "and" without comma;
- extract from the publication, the title of the research papers from the journals, chapters in the books are given in "inverted commas";
- the title of the journal or the book is always given in italics;
- the name of a publisher is given before the place of publication;
- commas are used to separate the elements of the bibliographic records;
- for sources in Ukrainian or Russian, that are given in "References", titles of the papers from journals, chapters in the books should be given in Latin alphabet (transliteration) in "inverted commas" and with the translation in English in square brackets.

The examples of the Reference lists according to Harvard British Standards Institution

<table>
<thead>
<tr>
<th>Reference List (in original language)</th>
<th>References Harvard style BSI</th>
</tr>
</thead>
</table>

| Table 2 |

**Information about Authors (Table 3)**

In this section the following information in Ukrainian and English should be given:
- full name;
- scientific degree, academic title, position;
- affiliations (Institution, City, Country);
- ORCID (should provide Institution name, where the author works; scientific publications).

| Table 3 |

**Information about Authors in English**

<table>
<thead>
<tr>
<th>Scientific Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ступінь доктора філософії – doctoral degree / doctor’s degree / doctorate</td>
</tr>
<tr>
<td>Ступінь кандидата наук – candidate’s degree</td>
</tr>
<tr>
<td>доктор філософії</td>
</tr>
<tr>
<td>кандидат технічних наук</td>
</tr>
<tr>
<td>кандидат військових наук</td>
</tr>
<tr>
<td>кандидат наук</td>
</tr>
</tbody>
</table>
Ступінь доктора наук – doctorate’s degree

Ступінь доктора наук – Doctor of the Sciences
Ступінь доктор технічних наук – Doctor of Technical Sciences
Ступінь доктор військових наук – Doctor of Military Sciences
Ступінь доктор фіз.-мат. наук – Doctor of Physics and Mathematics,
Dr. Sc. (Phys.-Math.)

Academic Title

старший науковий співробітник – Senior Research
доцент – Associate Professor
професор – Professor

Position

завідувач кафедри – Head of Department
doцент – Senior Lecturer
старший викладач – Senior Instructor
викладач – Instructor
асистент – Assistant Lecturer

начальник науково-дослідного відділу – Chief of Scientific Research Department
начальник науково-дослідної лабораторії – Chief of Research Laboratory
провідний науковий співробітник – Lead Researcher
старший науковий співробітник – Senior Research Associate
науковий співробітник – Research Associate

The Name of University

Харківський національний університет Повітряних Сил ім. І. Кожедуба – Ivan Kozhedub Kharkiv National Air Force University

The Titles of Professional Journals of University

Наука і техніка Повітряних Сил – Science and Technology of the Air Force of Ukraine
Збройних Сил України – Information Processing Systems
Системи обробки інформації – Systems of Arms and Military Equipment
Збірник наукових праць Харківського національного університету Повітряних Сил – Scientific Works of Kharkiv National Air Force University
Системи озброєння і військова техніка – Systems of Arms and Military Equipment

Abstracts

The language and volume of abstract that is presented at the end of the manuscript are determined depending on the language of the main text of the manuscript:
- if the main language of the paper is Ukrainian or Russian, abstract in English should be extended and have no less than 1800 printed characters including keywords;
- if the main language of the paper is English, abstract in Ukrainian should be extended and have no less than 1800 printed characters including keywords.

Abstract should cover:
- subject, topic, aim of the research;
- research methods;
- results of the research;
- conclusions and scope of research results.