Guidelines for Writing Scientific Articles

Article Title. The title of the article should be concise (not more than 12 words), informative, and reflect the subject matter addressed in the article.

The title must not contain jargon.

Abbreviations should be avoided in the title of the article; if necessary, only widely accepted abbreviations may be used.

Remember that the title should attract the reader's attention and encourage further reading.

Abstract. The abstract is a brief summary of the article that should clearly convey its essence, relevance, and scientific novelty. It should include the research objective, the methods used, the results obtained, and the conclusions (the abstract should be as specific as possible).

In search systems, the abstract may be published independently of the main text; therefore, it should be understandable without reference to the full article.

Remember that the abstract is the primary source of information in national and international databases indexing the Collection of scientific articles. It also serves as a "promotion" of your article; therefore, it should be comprehensive and engaging, encouraging the reader to consult the full text.

Length: not less than 1,800 characters (including spaces).

Recommendation: The abstract should be written last, after the research described in the article has been completed.

Keywords. Keywords are placed after the abstract and should include 5 to 8 words or phrases. Remember that keywords are used for indexing and summarizing; they identify the article's topic and should not duplicate the title.

Structure of the Article. The article should be logically structured and include the following sections (which may be presented as separate headings):

- Introduction.
- Problem Statement.
- Main Body.
- Results and Discussion.
- Conclusions.

Introduction. The introduction should present an analysis of the current state of the scientific problem addressed in the article. It is essentially a literature review,

with a justification of the topic's relevance, supported by references. Publications from the last 5–10 years are recommended for review.

The introduction should begin with a description of the global problem or broader trends in the field, and then transition to the specific issue addressed in the article. Next, you need to point out previously unresolved aspects of this problem in the research and connect them to the article's goals and relevance. That is, you need to outline the tasks or unresolved issues that exist in this field and analyze what has been done before your work.

The review should not use references that are not related to the work and should not include inappropriate judgments about your own achievements in previous works.

Recommended length: 250–300 words.

Problem Statement. This section should justify the research motivation (e.g., the development of a new method, the acquisition of new experimental data, or the optimization of processes), clearly define the study's objective, and outline the research tasks.

Recommended length: approximately 200 words.

Methods and Materials. This section should describe the research hypothesis, methodology, and materials used.

Methods should be clearly and properly described.

The research methodology should be briefly described, including references to methodological concepts taken as a basis (with references to specific works).

If a mathematical model is proposed, it should be described in detail, including assumptions, derivations, and final equations.

For experimental studies, the purpose of the experiment, the equipment used, and the procedures applied should be clearly described, followed by data processing.

General scientific methods (e.g., comparative analysis, synthesis, literature analysis) should not be mentioned. Only specific details should be provided: criteria used, time periods analyzed, data sources, and software tools employed.

This section may be divided into thematic subsections to improve clarity.

If examples are provided, the input data used for calculations should be clearly indicated.

Results/Discussion. This section presents the scientific novelty of the article. The results should be analyzed (e.g., the proposed mathematical model) and should align with the article's stated objectives and tasks.

The main requirements for this section include completeness, clarity, and logical consistency. Numerical data should be supported by figures and tables for better visualization.

If theoretical models are presented in the article, experimental validation should be provided.

Results should be compared with similar studies to identify similarities or differences.

General statements should be avoided in this section, and references to other sources should be minimized, focusing instead on the author's own findings.

Recommended length: 300–600 words.

Conclusions. The conclusions should briefly summarize the study's most significant findings. They should highlight the research's scientific and practical significance, as well as its potential applications. Attention should be paid to the problems that have arisen. It is also desirable to outline the prospects for further research.

The conclusions should not repeat the abstract. While the abstract provides an overview of the article, the conclusions summarize the results.

Recommended length: up to 300 words.

References. The reference list should preferably include up to 15 sources, with at least five published within the last five years. It should contain key scientific publications on which the article is based. Excessive referencing and self-citation should be avoided.

All references listed must be cited in the text.

DOIs (if available) are mandatory elements of references.

Recommendation: Authors should thoroughly review the cited sources rather than relying on excerpts.

Bibliographic descriptions should comply with DSTU 8302:2015 ***Bibliographic Reference. General Provisions and Rules***.

Article Length. The article should be at least 5 pages long, including references and appendices.

Writing Style. Use clear and concise sentences. Short sentences are more professional, while long sentences may confuse readers. The average sentence length in modern scientific writing is approximately 12–17 words. Each sentence should convey one idea or piece of information. Avoid combining multiple statements in a single sentence.

Graphs and tables should be used to summarize data. They must be clear, informative, and easy to interpret (very often, readers only look at the graphs and do not read the article). Captions must be understandable.

Do not duplicate data in the text that is already presented in tables or figures.

Extensive computational materials may be included in appendices.

Listings of computational programs and additional material necessary for understanding the main text of the article can also be included in the article's appendix.

Author Information. Provide the last name, initials, academic degree, academic title, place of work, and email of each author. ORCID identifiers must also be included.

The corresponding authors should additionally provide their mobile phone numbers.