

Instruction for authors

1. Basic provisions

The scientific journal «*Computer Modeling: Analysis, Control, Optimization*» accepts original research papers, as well as review papers, dealing with theoretical and applied questions of computer modeling and applied problems related to the use of methods of computer modeling.

The editorial board accepts manuscripts that were not published in full or in part (in any language, in printed or electronic form) and which were not sent for possible publication to other editions in one of the languages – Ukrainian, English, Russian.

The volume of original research paper should be at least 5 pages of text, including tables, figures and references (A4 page format, designed in accordance with the rules below in the Microsoft Word editor). The volume of review papers is up to 25 pages.

To publish a **review paper**, authors should have sufficient experience, scientific publications in the relevant field of scientific knowledge and, usually, a doctorate degree. Review papers are usually submitted on the basis of a preliminary agreement with the editorial board of the journal.

All materials that are received by the editorial office and processed in accordance with the requirements of the journal are subject to mandatory preliminary examination. The editorial board reserves the right not to publish papers that do not correspond to the subject matter of the journal, do not contain new experimental and theoretical results, as well as papers containing plagiarism, regardless of the stage of their processing.

The editors reserve the right to amend texts of the articles to improve quality of their presentation in the journal.

Articles that do not comply with the above rules can be returned to the authors for revision, correction, and in exceptional cases rejected.

2. List of documents to be submitted to the editorial office

Authors should submit the following **documents (in hard copy)** to the editorial board:

- *manuscript of the article* **signed by all authors**;
- *consent* to the collection and processing of personal data. An example is given in Appendix 1.

These documents are sent by mail (to the address: «*Computer Modeling: Analysis, Control, Optimization*», Ukrainian State University of Chemical Technology, prospect Gagarina, 8, Dnepr, 49005, Ukraine) or given personally to Dr. Oksana Anatolyevna Liashenko, the executive secretary.

Simultaneously with the documents, the authors should send by email (cmaco@ukr.net or cmaco@udhtu.edu.ua) an electronic version of the materials containing the following files:

- *the text of the article* – a file named by last name of the first author LastName.doc;

- *each illustration in a separate file* (* .wmf, * .bmp, * .tif; filenames Figure1, Figure2);
- scan copy *CONSENT* for collecting and processing of personal data.

The content of electronic files and the corresponding printed documents must be identical!

3. Requirements for the content of the article, references, abstract and keywords

Structure of the article must be the following:

1. **UDC index.**
2. **Initials and surnames of authors.**
3. **Title of the article** (abbreviations are not allowed in the title).
4. **Full name of organization(s)** where the work was done, indicating the city. If there are several organizations, then «binding» of each author to the organization is indicated by putting upper indices ^a, ^b, ^c after the name of the author and before the name of corresponding organization.
5. **Abstract** of the article (not less than 1800 symbols) and keywords (5-10) in the language of the original article.
6. **The main text of the article**, in which it is necessary to separate the following sections:
 - *statement of the problem* in general form and its connection with important scientific or practical tasks;
 - *an analysis of the latest researches and publications*, which initiated the solution of this problem, and to which the author refers; identification of previously unresolved parts of the general problem to which this article is devoted;
 - *formulation of the objectives of the article* (statement of the problem);
 - *an outline of the main research material* with full justification of the obtained scientific results;
 - *conclusions* and prospects for further development in this direction.
7. **Gratitude** for the help in work and financial support (if necessary).
8. **References**, which should include **at least 5 sources** (for original research papers – no more than 15 sources, for review papers – without restrictions). It is recommended to include references to books, articles from periodicals and patents.
References to conference materials, non-recurrent publications (laws, regulations, etc.), electronic resources may only be used in exceptional cases. It is forbidden to refer to unpublished works.

Normally, not less than 2/3 of the total number of sources should have a publication date not earlier than 2005. References to the authors' works should not exceed 15% of the total number of references.

In the text of the article references are numbered in the same order as they are mentioned. Numbers of references are placed in square brackets.

9. **Information block in English.** An example of the design of the information block is given in Appendix 2.

10. **Information about authors.** An example is given in Appendix 3.

11. **Signatures of all authors** (in paper version).

The abstract should be informative (without general words and statements) and should briefly reproduce the structure of the article, reflect the relevance of the work, its goals and objectives, experimental and theoretical methods used, the main results of the research and conclusions (in explicit or implicit form). It is impossible to limit the abstract to the statement of the fact of carrying out certain research («*The work examines the influence of X on Y*»), it should be specified which specifically new dependencies, data, etc. are obtained (formulate their essence in general form). It is important to remember that the abstract can (and will) be published separately, in isolation from the main text, and therefore **should perform the function of an independent source of information!**

Information contained in the title of the article should not be repeated in the text of the abstract. Abbreviation and notation, except for commonly used ones, are used in the abstract only in exceptional cases (providing their decoding at the first mention). It is forbidden to provide any references in the abstract!

When selecting keywords, you should avoid common expressions. Do not use complex grammatical constructions, as well as abbreviations.

4. Requirements for articles

Text of the article should be prepared in the text editor Word (97-2003) (with the extension * .doc).

Font *Times New Roman*, 12 pt; line spacing – 1.0; without any indentation.

Margins – 2 cm on each side, page format – A4.

There should be no blank lines in the text, it is not allowed to use tab or more than one space between words.

Pages should be numbered from the first to the last (page number should be in the right bottom corner).

Figures should be numbered in the sequence that corresponds to their mention in the text. Captions (in the format «Fig. 1. Dependence ...») should be written in the main text of the article and inserted in the text, not the image file.

It is not allowed to duplicate data and results described in the text and in the figures and tables.

Tables should be created in the text editor Word and located directly in the text. Each table should have a number (without № sign) and a name; each table should be referenced in the text (Table. 1). The values mentioned in names of columns and rows

should be accompanied by the appropriate units of measurement (in abbreviated form: *cm*, *J/mol*).

Parameters for tables:

- *The width* of the table may be, cm: 8.25; 14.5; 17.75; 25.00.
- *Font* – Times New Roman, font size – 10 pt.
- *Paragraph*:
 - *alignment* – *centered* for headers and numbers in columns of a table;
 - *alignment* – *left* for text in the main part of a table;
- *line spacing* – single;
- all *indents* and *spacing* – 0 cm.

Formulas, terms, units

Elementary (one-line) formulas and symbols should be typed as main text. They can be created using different symbol format attributes (upper and lower indices), and also using symbol table (Insert / Symbol).

Multi-line formulas should be inserted directly into the text using Microsoft Equation editor with appropriate settings:

- menu “*Style*”→“*Define...*”: format characters are not allowed to use bold and italic font;
- menu “*Size*”→“*Define...*”: normal – 10 pt; large index – 8 pt; small index – 6 pt; large symbol – 12 pt; small symbol – 10 pt;
- menu «*Format*»→“*Interval ...*”: *distance to the sign* - 60%; *Clearance in the radical* - 1.5 pt.

Numbers of formulas are given in Arabic numbers in round brackets after two spaces right after the formula, for example: « $h_s = \frac{S_{\max}}{S_{sr}}$; (1)».

Physical, chemical, technical and mathematical terms, units and symbols used in the article should be common. Abbreviations for units should be given in accordance with the International System of Units (SI).

In the text, tables and figures integer part of the decimal numbers is separated by a comma if the article is written in Ukrainian or Russian, or by a dot in English-language articles.

5. Requirements for information block

Information block in English contains information on the article title, authors, name of organization (if there are multiple organizations, «binding» of each author to the organization should be indicated), city and country, abstract, keywords and full bibliography (all Ukrainian and Russian sources should be transliterated) in accordance with international standards for reference.

Examples of references to different types of publications are given below.

– *Article from journal* (all authors are listed, titles of magazines are given completely unabridged, DOI may be specified after numbers of pages):

Author1 A.A., Author2 B.B., Author3 C.C., Author4 D.D. Title of the paper. *Title of the Journal*, Year, vol. X, no. XX, pp. XXX-XXX.

– *Article from electronic source*:

Author1 A.A., Author2 B.B., Author3 C.C., Author4 D.D. Title of the paper. *Title of the Journal*, Year, vol. XX, no. XX. Available at: <http://www.xxx.xxx>.

– *Book*

Author1 A.A., Author2 B.B., Author3 C.C., Author4 D.D., *Book or Chapter Title*. Publishing company name, Publishing Place, Year. XXX p.

– *Patent:*

Author1 A.A., Author2 B.B., Author3 C.C., Author4 D.D., *Patent Title*. Country and number of the patent, Publishing Year.

– *Conference materials:*

Author1 A.A., Author2 B.B., Author3 C.C., Author4 D.D., Paper Title. *Conference Title*. Country, City, Year, pp. XX.

Non-Latin sources should be transliterated. Transliteration should be performed according to the ISO Standard (ISO 9:1995). Citations of non-English periodicals should also include the corresponding English translation (in square brackets).

If the language of original source is not English, its original language should be specified in the parenthesis in the end of its description ((*in Ukrainian*) or (*in Russian*)).

An example of information block is given in *Appendix 2*.

CONSENT
for collecting and processing of personal data

We (I), _____ (full names of all authors),
authors of the article _____ (title of the article),
which was sent for consideration to the editorial board of the journal «*Computer Modeling: Analysis, Control, Optimization*», by signing this text give our (my) consent to the editorial board of the journal «*Computer Modeling: Analysis, Control, Optimization*» for collecting and processing information about us (me) with restricted access in order to publish our article in the mentioned journal to the extent necessary to achieve the goal specified above.

Date «__» _____ 20__

Author _____ (Full name)

(signature)

Author _____ (Full name)

(signature)

(signatures of **all** authors are required)

Appendix 2

Information block

Kinetic regularities of deposition of Fe–ZrO₂ (+3% Y₂O₃) composite electrodeposits

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Kinetics and mechanism of the electrodeposition process of Fe–ZrO₂ (stabilized by 3% mol. Y₂O₃) composite coatings from a methanesulfonate electrolyte are investigated in this communication. The content of stabilized zirconia in coatings increases with an increase in the ZrO₂ concentration in suspension and with a decrease in the cathodic current density. Kinetics and mechanism of particles co-deposition are shown to obey the Guglielmi's model. The value of the adsorption coefficient is calculated for the adsorption of zirconia particles on the iron surface. The rate of the ZrO₂ (+3% Y₂O₃) particles adsorption on the iron surface is sufficiently higher than the rate of desorption. The surface coverage of the loose adsorbed zirconia particles is more than that of the strong adsorbed particles. The surface coverage of the loose adsorbed ZrO₂ (+3% Y₂O₃) particles is shown to increase with an increase in the concentration of the dispersed phase in solution. The rate of the ZrO₂ particles co-deposition is controlled by the transferred process of loose adsorption to strong adsorption. The analysis of the experimental results based on the Guglielmi's theory demonstrates that the Fe(II) ions adsorbed on the zirconia particles surface discharge slower than the solvated Fe(II) ions.

Keywords: composite coatings; iron; zirconia; electrodeposition; kinetics; adsorption.

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Appendix 3

Example of information about the authors

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2. (The according data should be given for all authors, postal address and e-mail may be given only for corresponding author).