**Guide for Authors**

The Journal of *Advanced Materials & Technologies (AM&D)* is a periodical publication that appears in a new edition on a regular schedule. The language of publications is English. All articles are published free of charge.

**The Scope of the Journal**

The journal publishes the results of fundamental and applied research in the field of development and processing of nanomaterials, polymer and ceramic materials, composite materials used in mechanical engineering, medicine, construction industry and power engineering.

**The Journal Subject Headings**

The journal welcomes analytical and experimental studies, covering the following **topics**:

* *theoretical bases of technologies for creating and processing of nano- and composite materials for structural and functional purposes*;
* *solid-phase technology and structural macrokinetics;*
* *physical and mechanical properties of materials;*
* *methods and tools of experimental research into materials properties, control and management of their development and processing;*
* *mathematical modeling of developing and processing of nano- and composite materials.*

The journal is intended for scientists, engineers and technical staff of research institutes, design bureaus and companies involved in aviation and aerospace industry, chemical engineering, power engineering, construction industry, etc., as well as undergraduate and graduate students of higher educational institutions.

**Publication Ethics**

Publication of articles in peer-reviewed journal is an integral part of the development of a network of knowledge and is a direct reflection of the quality of authors and institutions that support them. It is therefore important to agree on standards of ethical conduct for all parties involved in the publication: authors, editors, reviewers, and publisher.

The Editorial Board of the journal "Advanced Materials & Technologies" is guided in its work by international ethical rules of scientific publications, including issues related to integrity, confidentiality, standards of objectivity, resolution of possible conflicts of interest, and others. The ethics statements for the journal Advanced Materials & Technologies are based on the Committee on Publication Ethics (COPE) Code of Conduct guidelines, and rely on the valuable experience of reputable international journals and publishing houses.

Authors reporting results of original research should present an accurate account of the work performed as well as an objective discussion of its significance. Underlying data should be represented accurately in the manuscript. A paper should contain sufficient detail and references to permit others to replicate the work. Fraudulent or knowingly inaccurate statements constitute unethical behavior and are unacceptable.

The authors should ensure that they have written entirely original works, and if the authors have used the work and/or words of others that this has been appropriately cited or quoted.

An author should not in general publish manuscripts describing essentially the same research in more than one journal or primary publication. Parallel submission of the same manuscript to more than one journal constitutes unethical publishing behavior and is unacceptable.

Proper acknowledgment of the work of others must always be given. Authors should also cite publications that have been influential in determining the nature of the reported work.

Authorship should be limited to those who have made a significant contribution to the conception, design, execution, or interpretation of the reported study. All those who have made significant contributions should be listed as coauthors.

Where there are others who have participated in certain substantive aspects of the research project, they should be named in an Acknowledgement section. The corresponding author should ensure that all appropriate coauthors (according to the above definition) and no inappropriate co-authors are included in the author list of the manuscript, and that all co-authors have seen and approved the final version of the paper and have agreed to its submission for publication. All co-authors must be clearly indicated at the time of article submission.

**Copyright**

Upon acceptance of an article, authors will be asked to complete “Journal Publishing Agreement”. Acceptance of the agreement will ensure the widest possible dissemination of information. An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a “Journal Publishing Agreement” form.

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Authors (or their employers or institutions) have certain rights to use the materials of the publication.

The journal "Advanced Materials & Technologies" offers Russian and foreign students, graduate students, doctoral students, teachers, researchers, organizations, and all the authors an opportunity to share their scientific findings in the field of advanced materials and production technologies with the global scientific community, and expand professional contacts. The printed and electronic versions of the journal are available.

Although the journal "Advanced Materials & Technologies" is not included in the list of journals reviewed by the Higher Certification Commission, articles published in the journal are regarded as peer-reviewed publications for the defense of dissertations and obtaining academic titles.

Full bibliographic description of the journal articles is presented in the Scientific Electronic Library (elibrary.ru).

The journal is indexed in the following databases:

Chemical Abstract (USA)

Ulrich's Periodicals Directory (USA)

Google Scholar (USA)

Open Academic Journals Index (Russia)

Russian Science Citation Index (RISC)

Scientific Electronic Library eLIBRARY.RU (Russia)

**Paper Submission Requirements**

Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who require information about language editing and copyediting services please contact the Editorial Board for more information.

Submission to this journal proceeds totally online. Use the following guidelines to prepare your article. Via the homepage of this journal you will be guided stepwise through the creation and uploading of various files.

**Formatting**

Please submit your article as \*.doc file. The size of the article should not exceed 18-20 pages (including figures and tables) typed in Times New Roman, Font size 14, spacing 1.5.

**Title**

Paper title must be concise. Please place it at the top of the first page typed in upper case, bold. Avoid abbreviations and formulae where possible.

**Author names and affiliations**

Make sure you provide full names of all authors, their scientific titles and full names of their affiliations. Present the authors’ affiliation addresses (where the work was done) below their names and the e-mail address of the corresponding author.

**Abstract and keywords**

All papers must include an abstract (up to 2000 symbols) and keywords (up to 7 words, listed in alphabetical order).

A concise and factual abstract is required. It should summarize the problem, the method, the results, and the conclusions. It is advisable not to include references to figures or tables, or citation of the reference in the abstract.

Authors are invited to submit keywords associated with their paper.

**Article structure**

**Introduction**

The introduction should be brief and clearly state the problem being investigated, the background that explains the problem, and the reasons for conducting the research. You should summarize relevant research to provide context, state how your work differs from published work and importantly what questions you are answering. Explain what findings of others, if any, you are challenging or extending. Briefly describe your experiment, hypothesis(es), research question(s), and general experimental design or method.

**Methods and Materials**

The key purpose of this section is to provide the reader enough details so they can replicate your research. Explain how you studied the problem, identify the procedures you followed, and order these chronologically where possible. If your methods are new, they will need to be explained in detail; otherwise, name the method and cite the previously published work, unless you have modified the method, in which case refer to the original work and include the amendments. Identify the equipment and describe materials used and specify the source if there is variation in quality of materials. Include the frequency of observations, what types of data were recorded. Be precise in describing measurements and include errors of measurement. Name any statistical tests used so that your numerical results can be validated. It is advisable to use the past tense, and avoid using the first person.

**Results**

In this section you objectively present your findings, and explain in words what was found. Please be clear and lay out your findings in a logical sequence. Raw data are rarely included in a scientific article; instead the data are analyzed and presented in the form of figures (graphs), tables, and/or descriptions of observations. The results section should follow a logical sequence based on the table and figures that best presents the findings that answer the question or hypothesis being investigated. Tables and figures are assigned numbers separately, and should be in the sequence that you refer to them in the text. Figures should have a brief description (a legend), providing the reader sufficient information to know how the data were produced. It is important not to interpret your results - this should be done in the Discussion section.

**Discussion**

In this section you describe what your results mean, specifically in the context of what was already known about the subject of the investigation. You should link back to the introduction by way of the question(s) or hypotheses posed. You should indicate how the results relate to expectations and to the literature previously cited, whether they support or contradict previous theories. Most significantly, the discussion should explain how the research has moved the body of scientific knowledge forward. It is important not to extend your conclusions beyond what is directly supported by your results, so avoid undue speculation. It is advisable to suggest practical applications of your results, and outline what would be the next steps in your study.

**Acknowledgments**

This section should be brief and include the names of individuals who have assisted with your study, including, contributors, reviewers, suppliers who may have provided materials free of charge, etc. If your paper is part of grant research, please provide details of the project grant and indicate it as such (\*).

**References instructions**

References are placed at the end of the paper in the order as they appear in the text. Please refer to the reference number and page number, as in [1, p. 25].

Last name and initials of all authors, full title, publishing house, place and year of publication, and number of pages must be provided. For journal articles also include number of volume and issue. Please DO NOT include unpublished sources in the list of references.

References are listed in the language of the original without abbreviations. References to resources in Russian must be transliterated and translated into English as in the examples below.

**The examples of how to reference printed and electronic resources**

*Journal article*

Author A.A., Author B.B., Author C.C., Author D.D. Title of article. *Title of Journal*, 2005, Vol. 10, Issue 2, pp. 49-53.

*Electronic journal article*

Kontorovich A.E., Korzhubaev A.G., Eder L.V. [Forecast of global energy supply: Techniques, quantitative assessments, and practical conclusions]. *Mineral'nye resursy Rossii. Ekonomika i upravlenie*, 2006, no. 5. Available from: <http://www.vipstd.ru/gim/content/view/90/278/> (accessed 22.05.2012). (Rus)

*Journal article with DOI*

Zhang Z., Zhu D. Experimental research on the localized electrochemical micro-machining. *Russian Journal of Electrochemistry*, 2008, Vol. 44, Issue 8, pp. 926-930. doi: 10.1134/S1023193508080077

*Conference proceedings*

Usmanov T.S., Gusmanov A.A., Mullagalin I.Z., Muhametshina R.Ju., Chervyakova A.N., Sveshnikov A.V. [Features of the design of field development with the use of hydraulic fracturing]. *Trudy 6 Mezhdunarodnogo Simpoziuma “Novye resursosberegayushchie tekhnologii nedropol'zovaniya i povysheniya neftegazootdachi"* [Proc. 6 th Int. Symp. “New energy saving subsoil technologies and the increasing of the oil and gas impact"]. Moscow, 2007, pp. 267-272. (Rus)

*Books*

Lindorf L.S., Mamikoniants L.G., eds. *Ekspluatatsiia turbogeneratorov s neposredstvennym okhlazhdeniem* [Operation of turbine generators with direct cooling]. Moscow, Energiia Publ., 1972. 352 p. (Rus)

*Online sources*

Kondrat'ev V.B. *Global'naya farmatsevticheskaya promyshlennost'* [The global pharmaceutical industry]. Available from: <http://perspektivy.info/rus/ekob/globalnaja_farmacevticheskaja_promyshlennost_2011-07->18.html. (Accessed 23.06.2013). (Rus)

*Dissertations and theses abstracts*

Semenov V.I. *Matematicheskoe modelirovanie plazmy v sisteme kompaktnyi tor.* Diss. dokt. fiz.-mat. nauk [Mathematical modeling of the plasma in the compact torus. Dr. phys. and math. sci. diss.]. Moscow, 2003. 272 p. (Rus)

or

Semenov V.I. *Matematicheskoe modelirovanie plazmy v sisteme kompaktnyi tor.* Dokt, Diss. [Mathematical modeling of the plasma in the compact torus. Doct. Diss.]. Moscow, 2003. 272 p. (Rus)

**All pages in the article should be numbered.**

**Formulae**

Please use Equation 3.0 and submit math equations as editable text and not as images. Present simple formulae in line with normal text where possible and use solidus (/) instead of a horizontal line for small fractional terms, e.g., X/Y. Variables in Latin are to be presented in italics, variables in Greek are to be presented as normal. Do not italicize variables in upper and lower cases.

**Artwork**

* Figures must be submitted as separate files (*DOC, XLSX, TIFF, PDF, JPEG,* resolution 600 dpi). Maximum width of figures and diagrams should not exceed 186 mm.
* Graphs and diagrams should be submitted as Word or Excel files.
* Make sure that figures are readable. Please submit figure in black-and-white for printing purposes. Color versions can be submitted for reproduction on the Web.
* Provide captions to illustrations separately. A caption should comprise a brief title and a description of the illustration.
* Number the illustrations according to their sequence in the text.
* Submit tables as editable text and not as images. Number tables as they appear in the text. Make sure that data in the tables do not duplicate the results described elsewhere in the article. Please avoid using vertical rules.

**Submission Checklist**

**Ensure that the following items are present:**

One author has been designated as the corresponding author.

E-mail address

Full postal address

Telephone and fax numbers

All necessary files have been uploaded.

Manuscript has been spell-checked and grammar-checked.

References are in the correct format for this journal.

All references mentioned in the Reference list are cited in the text, and vise versa.

Permission has been obtained for use of copyrighted material from other sources.

Black-and-white versions of figures are supplied for printing purposes.

**Acceptance**

All papers submitted to the Editorial Board are reviewed.

For inquiries relating to the submission of the articles please visit this journal’s homepage. You can track accepted articles at email: sdvoretsky@mail.tstu.ru

Contact details for questions arising after acceptance of your article will be provided by the publisher.

Papers that do not meet the standards of the journal may be rejected by the editor.

Please note submissions are not returned to the author.

Coeditor-in-Chief Stanislav Dvoretsky,

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