

## INSTRUCTIONS TO AUTHORS

*Advancements of Microbiology* (*Postępy Mikrobiologii*) publishes review articles from all areas of microbiology that have not previously been published in other journals. We also print methodological reviews, and, in the section New Releases, reviews of new books in the field of microbiology and related sciences. Articles and illustrations printed in *Advancements of Microbiology* cannot be published in other periodicals without the consent of the Editorial Office.

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### 1. Formal requirements

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*Advancements of Microbiology* editorial policy is based on Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals (ICMJE) at [www.icmje.org](http://www.icmje.org). The details are presented in the Ethical Policy Statement. According to our editorial policy, upon submission of the manuscript the authors are requested to submit a Declaration of Conflict of Interest (available in supplementary information section). To ensure fast and efficient cooperation with the Editorial Office, the submitted manuscript should be formatted according to details listed below and accompanied by a cover letter.

Articles are subjected to fees. Upon acceptance of a manuscript, Authors will be contacted by the Editorial Office and requested to pay fee **100 USD + 23% VAT** (if applicable). The fee for members of Polish Society of Microbiologists is reduced.

### 2. Preparation of the manuscript

#### 2.1. Cover letter

The manuscript should be accompanied by a cover letter (it will take significantly longer to process submissions without the cover letter) that should contain:

- A title and Authors' names;
- Significance of the selected topic;
- Brief summary and highlights of the review;
- Description of what special features and new information the submitted work contains in comparison to the current reviews (published within 2 last years)
- Statement that all Authors read and accepted the manuscript and the statement about conflict of interests;
- Statement that the manuscript has not been published elsewhere, or is not in processing by any other journal;

To ensure fast manuscript review, Authors should present a list of five potential reviewers with their affiliations and e-mail addresses. Authors are requested to choose experts in their field. Preselected reviewers should not be co-authors within last five years or share Authors' affiliation.

#### 2.2. Text

The manuscripts should be sent to the Editorial Office in the form of editable text files (.doc or .docx), as an e-mail attachment. The volume of work should not exceed, along with the literature and illustrations, 30 pages (font size 12, space between lines 1.5). There should be no dots after titles. On a separate page (title page) Authors should include the title of the work, below which should be: the names and surnames of the authors, addresses of authors and affiliations, telephone numbers and e-mail of the corresponding author, table of contents (titles of individual chapters) and no more than five key words, in alphabetical order. A summary of the work (maximum 250 words) should be attached in a file with the title page. The manuscript should end with a short summary containing the most important elements of the content. The text of the thesis should be in accordance with the detailed instructions to the authors.

In the case of works addressed to the "Methodological Publications and Standards" section, works prepared according to the above-mentioned guidelines and detailed guidelines presented in the second part of the manual should be sent to the Editorial Office. Documents sent to the Editorial Office should be written in correct English. Authors who are unsure of proper English usage should have their manuscripts checked by someone proficient in the English language or use a professional language editing service.

#### 2.3. Figures and tables

Tables and figures should be sent as separate files. The maximum size of drawings and tables planned in the article in one column should not exceed 82 mm in width, and planned in the area of two columns: 169 mm. The allowed graphics height is 246.6 mm.

In the manuscript, leave no space for tables, drawings, graphs and photos, only mark the place where they should be placed in the text, e.g.:

- tab. I; fig. 1

The number of tables should be kept to a minimum. Tables and drawings should be placed together with the description in a separate file. Tables should be marked with consecutive Roman numbers, and figures (photos, graphs, diagrams) with Arabic numerals. Each table should have a heading describing its content (title), and explanations should be placed below. Explanations to be placed under charts and drawings; photos should be sent in a separate file. Digital files containing illustrations accepted for printing should be prepared in accordance with the editors' recommendations. Illustrations in the initial version of the article for reviewers can be provided as any graphic or text files, but, in the final version for printing, should be provided in the required resolution, as TIFF or EPS files. Graphics should be sent in their natural, planned format, so that there is no need for the publisher to enlarge or reduce them. The minimum resolution used in the illustrations should be 300 dpi for grey and colour photos, 600 dpi for letters and 1,200 dpi for lines in graphs. Colour illustrations must also remain in the CMYK system as CMYK TIFF images, with a resolution of 300 dpi. The publisher charges a fee for

printing colour illustrations in accordance with the fee information attached at the end of the manual. Files from a Microsoft Office programme (Power Point, Word) are accepted only in the black and white version. All drawings (except black and white from MS Office) exported to the bitmap format must be saved in grayscale or CMYK (cyan, magenta, yellow, black). Do not use the recording in the RGB system (red, green, blue). Tonal images (densities or shades) must be in grayscale (do not use a bitmap). Editors do not accept coloured illustrations made in Microsoft Office, because they are stored in the RGB system. All final inscriptions or markings must be entered in the drawings. Each drawing must be attached as a separate file, and multi-panel drawings must be given in one file. To avoid a problem with different fonts, the editors recommend using the following fonts: Times New Roman, Times New Roman Pl, Arial, Arial Pl and Symbol. For detailed information, please send an inquiry by e-mail to the editors' address.

#### 2.4. References

The cited literature should be entered separately as the final pages of the manuscript, listing the items in alphabetical order. The list should include: ordinal number, author's name, first letters of names, surnames of co-authors and first letters of their names (in the order given in the cited work), full title of the cited work, shortened journal title, volume, page numbers and year of publication (in brackets). A list of used journal names and abbreviations can be found in the Journal Title Abbreviations Web of Science. If the full name of the periodical is used, please insert the comma after the name [1], and the dot after each shortened word of the journal name [2].

1. Adams G.M., Blumenthal R.M.: Gene *pvuIIW*: a possible modulator of PvuII endonuclease subunit association. *Gene*, **157**, 193–199 (1999)
2. Beld J., Woycechowsky K.J., Hilvert D.: Diselenides as universal oxidative folding catalysts of diverse proteins. *J. Biotechnol.* **150**, 481–489 (2010)

If the number of co-authors of work exceeds 10 (the publication quoted below is the work of 42 authors), please provide the names and initials of the first and last co-author, and then add *et al.*, eg:

1. Tomb J.F. & Venter J.C. *et al.*: The complete genome sequence of the gastric pathogen *Helicobacter pylori*. *Nature*, **338**, 539–543 (1997)

Citing publications from magazines published only on the Internet should contain the following data: ordinal number, author's name, first letters of the names, names of co-authors and first letters of their names (in the order given in the cited work), full title of the cited work, shortened title of the journal, volume, page (or its equivalent [1]), and year of publication (in brackets). If the publisher does not use page numbering [2], please enter the DOI number.

1. Esberg A., Muller L.A., McCusker J.H.: Genomic structure of and genome-wide recombination in the *Saccharomyces cerevisiae* S288C progenitor isolate EM93. *PLoS One*, **6**, e25211 (2011)
2. Stachowiak R., Łyżniak M., Budziszewska B.K., Roeske K., Bielecki J., Hoser G., Kawiak J.: Cytotoxicity of bacterial metabolic products, including Listeriolysin O, on leukocyte targets. *J. Biomed. Biotechnol.* DOI:10.1155/2012/954375 (2012)

For citing non-periodicals, the following should be given: name and first letters of the names of the author and co-authors, title of the work, publishing house, place and year of publication [1]. In the case of referring to an article in a collective work, e.g. a chapter in a book [2], the title of this work should also be given and the name of its editor, publishing house, place of publication, year, volume and, finally, page numbers.

1. Boulton R.B., Singleton V.L., Bisson L.F., Kunkee R.E.: Principles and practices of winemaking. Chapman Hall, New York, 1996
2. Portnoy D.A., Sun A.N., Bielecki J.E.: Escape from the phagosome and cell-to-cell spread of *Listeria monocytogenes* (in) Microbial Adhesion and Invasion, Ed. M. Hook, L. Świtalski, Springer, New York, 1992, p. 85–94

References to the publications of the quoted literature in the text are made by mentioning the reference number in brackets, e.g. [10], [10–12], [10, 25]. Due to the possibility of changes in the literature during the reviewing of articles, the Editorial Office allows the use of temporary references. Inside square brackets, you can take a round reference in any format, e.g. [(Adams *et al.*)]. After obtaining the acceptance of the article, the formatting of links should be properly adjusted. Editors recommend the use of reference managing programmes. You can get files with a formatting style for selected programmes from the supplementary information section. The number of citations in the literature cannot exceed one hundred items.

#### 2.5. Websites citations

It is preferred that authors cite information from original works published and recognized in the scientific community and peer-reviewed journals. A prerequisite for using information from the website is to check and update the information record on the WEB website on the day of sending the file. In the event of an incorrect address and the inability to recover information from the computer network, the work will be returned to the authors. Quoting the information published on the websites should appear in the following order: authors (if known [1]) or the name of the organization [2] (publisher of the page), title of the article, page name (if not already provided), date of publication (if provided [3]), www address, date of last address access.

1. Harmon K.: Ancient "Fossil" virus shows infection to be millions of years old. Scientific American, <http://www.scientificamerican.com/article/fossil-virus-bird-genome> (31.12.2015)
2. World Health Organization: Poliomyelitis, <http://www.who.int/mediacentre/factsheets/fs114/en> (06.03.2014)
3. World Health Organization: What we know about transmission of the Ebola virus among humans. Ebola situation assessment, 06.10.2014, <http://www.who.int/mediacentre/news/ebola/06-october-2014> (31.12.2015)

#### 2.6. Methodological Publications and Standards

In the Methodological Publications and Standards section, review articles of a methodological nature, from many fields of microbiology, are published. The editors of *Advancements of Microbiology (Postępy Mikrobiologii)*, in agreement with the main board of PSM, have determined that no more than four articles in this category will be published per year.

The editor responsible for the manuscript, text editing and final acceptance of the paper is Prof. Stefania Giedrys-Kalemba (address: Malinowa 11, 72-003 Wołczkowo, tel. +48 605 031 324, e-mail: kalemba@mp.pl).

Methodical manuscripts are reviewed by experts appointed by the editor of this section.

The title page of each article will be provided with information that the work belongs to the Methodological Publications and Standards and each time will be given the date of upload of the manuscript as well as the date of its acceptance for printing.

#### Instructions for authors:

##### Submission:

Please send the manuscript directly to the editor of the Methodological Publications and Standards section. Enter the address of

the publication authors; please select the correspondence author except for the address, telephone number and fax. It is obligatory to provide the e-mail address of the correspondence author.

### Manuscript preparation:

The manuscript should be prepared in accordance with the Information for Authors, including the following changes:

- The manuscript volume, including references and illustrations, must not exceed twenty pages.
- The number of citations in the references should not exceed fifty items.
- Only manuscripts printed in scientific journals should be in the references. It is unacceptable to place bibliographic data on advertising prospects or pharmaceutical companies.

### Recommendations and additional notes:

To avoid surreptitious advertising, please pay special attention as to how commercial products or methods developed by the producers have been presented. The authors are also obliged to disclose any connections (fees, grants, paid expertise or other forms of obtaining personal benefits) between the authors and the company whose product is important in the submitted manuscript. For this purpose, authors must submit a statement of work originality, a statement of copyright and a statement of conflict of interest. A conflict of interest occurs when the author or the author's Company has financial or personal relationships with other persons or institutions that may influence its actions and decisions. The declaration template can be downloaded from the tab of the downloads section.

The Editorial Office have the final decision on the acceptance of the manuscript to be printed in the section the Methodological Publications and Standards.

### 3. Detailed recommendations

Excerpts of instructions for authors from journals published by the American Society for Microbiology used in *Advancements of Microbiology* with the permission of the Journals Departments of ASM.

#### 3.1. Nomenclature of microorganisms

Binary names, consisting of a generic name and a specific epithet (e.g., *Escherichia coli*), should be used for all microorganisms. Names of categories at or above the genus level may be used alone, but specific and subspecific epithets may not. A specific epithet must be preceded by a generic name, written out in full the first time it is used in a paper. Thereafter, the generic name should be abbreviated to the initial capital letter (e.g., *E. coli*), provided there can be no confusion with other genera used in the paper. Names of all bacterial taxa (kingdoms, phyla, classes, orders, families, genera, species, and subspecies) are printed in italics and should be italicized in the manuscript; strain designations and numbers are not. Vernacular (common) names should be in lowercase roman type (e.g., streptococcus, brucella). For *Salmonella*, genus, species, and subspecies names should be rendered in standard form: *Salmonella enterica* at first use, *S. enterica* thereafter; *Salmonella enterica* subsp. *arizonae* at first use, *S. enterica* subsp. *arizonae* thereafter. Names of serovars should be in roman type with the first letter capitalized: *Salmonella enterica* serovar Typhimurium. After the first use, the serovar may also be given without a species name: *Salmonella* Typhimurium, *S. Typhimurium*, or *Salmonella* serovar Typhimurium. For other information regarding serovar designations, see Antigenic Formulae of the *Salmonella* Serovars, 9<sup>th</sup> ed. (P.A.D. Grimont and F.-X. Weill, WHO Collaborating Centre for Reference and Research on Salmonella, Institut Pasteur, Paris,

France, 2007. For a summary of the current standards for *Salmonella* nomenclature and the Kaufmann-White criteria, see the article by Brenner *et al.*: *J. Clin. Microbiol.* **38**: 2465–2467 (2000), the opinion of the Judicial Commission of the International Committee on Systematics of Prokaryotes: *Int. J. Syst. Evol. Microbiol.* **55**: 519–520 (2005), and the article by Tindall *et al.*: *Int. J. Syst. Evol. Microbiol.* **55**: 521–524 (2005).

According to the ICTV (International Committee on Taxonomy of Viruses) recommendation, the full, official names of the viruses should be written in italics, for example: *Influenza A virus*, *Human Immunodeficiency Virus*, *Human Papillomavirus*. Common names and abbreviations, such as influenza virus, HIV, HPV, are written using a standard font.

#### 3.2. Genetic nomenclature

The genetic properties of the strain are described in the terms: phenotype and genotype. The phenotype describes the observed properties of the organism. The genotype defines the genetic structure of the organism, usually referring to the wild strain. The above-mentioned terms are explained in more detail in the work of Demerec *et al.*: *Genetics*, **54**, 61–76 (1966).

- The phenotypic determination of the organism properties is used when mutant loci have not been identified and mapped. It can also be used when a gene product is identified, e.g. an OmpA protein. The phenotype record consists essentially of three letters; they cannot be written in italics; the first letter should always be a capital letter. Roman or Arabic numerals are preferred for the designation of twin phenotypes, e.g. Pol1, Pol2, Pol3, etc. The wild type can be saved with an additional plus sign (Pol +); in contrast, the minus sign will determine the mutant phenotype (Pol–). The characteristic properties of the organism can be saved using letters, e.g. Str<sup>s</sup>. The phenotypes of plasmid-induced resistance are determined by a two-letter code, e.g. Ap<sup>r</sup>, and a chromosomal code – a 3-letter code, e.g. Amp<sup>r</sup>.
- Genotype designations are similar to phenotypic – in both cases a set of three letters is used; the genotype is always written in small letters and italics, eg *ara*, *his*, *rps*. The promoter, terminator and operator are marked with letters: *p*, *t* and *o*, e.g. *lacZp*, *lacZt*, *lacZo*; Bachman B.J., Low K.B.; *Microbiol. Rev.* **44**, 1–56 (1980).
- The wild type of alleles can be marked by entering an additional plus sign over the gene designation, e.g. *ara*<sup>+</sup>, *his*<sup>+</sup>, but the mutant alleles are not marked with a minus sign.
- Mutation sites are determined by inserting a number of consecutive isolations (the number of alleles) following the mutant locus symbol (e.g., *araA1*, *araA2* etc.). In the case where only one such locus exists, or when it is not known in which next locus a mutation was created-after the gene designation, a dash is inserted in the place of a capital letter designating the locus, and the number of isolations (e.g. *ara-23*) is given further.
- The genotype description can be enriched with other symbols, as plus for wild type-you can enter mutation designations, e.g. Amber (Am) mutation, thermosensitive mutant (Ts), constitutive mutant (Con), low temperature sensitive mutant (Cs), hybrid protein (Hyb) e.g. *araA230*(Am), *his D21*(Ts). The introduction of other enrichments should be preceded by an appropriate explanation in the text.
- Additional markers can also be used when it is necessary to distinguish the same gene found in different organisms or strains of the same species, e.g. *his*<sub>*E. coli*</sub> or *his*<sub>*K-12*</sub>. Additional designations are also used to distinguish between genetic elements of the same name, e.g. promoters of the *gln*, *glnA*, *i glnA*<sub>2</sub> operon.
- The deletion is marked with the symbol, D located in front of the name of the deleted gene or region, e.g. D *trpA432*, D (*aroP-aceE*)419, or D *his*(*dhuA his*) *hisQ*1256. The fusion

of the *ara* and *lac* genes can be represented in the same way – F (*ara-lac*)1256. Similarly, F (*araB*<sup>-</sup>*-lacZ*<sup>+</sup>) (Hyb) means that the fusion occurred between the *araB* and *lacZ* genes. Inversion is determined as follows: IN (*rrnD-rrnE*)1. The insertion of *his E. coli* gene into plasmid pSC101 at the 0 base position (0 kb) is written as follows: pSC101 W (0kb::K-12*hisB*)4. The determination of the presence of the episome consists in providing its symbols in brackets after the name of the parent strain, e.g. W3110/F '8 (*gal*<sup>+</sup>).

### 3.3. Chemical nomenclature

Additional explanations are not required in cases of using:

- names of measures and weights regulated by Systeme International de Unites (SI), generally accepted units such as: bp, kb, Da, mass, particle size,
- chemical names such as: DNA, cDNA, RNA, rRNA, RNase, DNase, mRNA, tRNA; AMP, ADP, ATP, dATP, ddATP, GTP, ATPase, NAD<sup>+</sup>, NADH, NADPH, NADP<sup>+</sup>, poly(A), poly(dT), etc.,
- names of commonly used molecular biology techniques, e.g. PCR, SDS-PAGE, names of generally known cell lines, e.g. HeLa, J774,
- names of commonly used biological units, e.g. PFU (Plaque Formation Unit), CFU (Colony Forming Unit), MIC (Minimum growth Inhibitory Concentrations), etc.

The principles of shaping the nomenclature of restriction endonucleases and methyltransferases have been published in *Nucleic Acids Res.* 31, 1805–1812 (2003). When writing works, please use the information contained there.

### 3.4. Reporting numerical data

Standard metric units are used for reporting length, weight, and volume. For these units and for molarity, use the prefixes m,  $\mu$ , n, and p for 10<sup>-3</sup>, 10<sup>-6</sup>, 10<sup>-9</sup>, and 10<sup>-12</sup>, respectively. Units of temperature are presented as follows: 37°C and the content of substances in a given unit (concentration) in the form of g/ml.

### 3.5. Isotope-labelled substances

If a single molecule is labelled in a chemical compound, the name of this compound should be written as follows: <sup>14</sup>CO<sub>2</sub>, <sup>3</sup>H<sub>2</sub>O, H<sub>2</sub><sup>35</sup>SO<sub>4</sub>. The same method of recording is used when the radioactive molecule is not present in the natural form of the labelled compound, e.g. <sup>32</sup>S-ATP or when the isotope symbol is associated with the nonspecific name of the compound, e.g. <sup>14</sup>C amino acids, <sup>3</sup>H-ligands, etc. For some specific chemical compounds, square brackets may be used that include the symbols of a radioactive molecule in front of the chemical name of the compound, e.g. [<sup>14</sup>C] urea, L- [*methyl*-<sup>14</sup>C] methionine, [*g*-<sup>32</sup>P] ATP.

## 4. Manuscript processing

Manuscripts sent to the Editorial Office for publication in *Advancements of Microbiology* are double-rated: scientific value (reviews) and editorial correctness (layout, language, attachments, statements of the authors). All received manuscripts are subject to pre-screening by the Editorial Office and can be rejected at submission stage. At this stage, all manuscripts are checked by the anti-plagiarism system and can be rejected if plagiarism or auto-plagiarism is detected. The journal uses blind peer-review process: after passing the pre-screening stage the manuscripts are assigned to one of the section Editors and sent to at least two qualified outside experts, but the Editors themselves may also act as reviewers, if they are experts in the presented topic. The reviews are made on specially prepared sheets, available in the downloads section. Evaluation process takes three months on average.

Upon acceptance of a manuscript, Authors will be requested to pay fee and sign: Open Access Agreement and Statement of Conflict of Interest prior to publication. The articles are generally available online in no more than three months after returning the corrected version and obtaining its final acceptance. Before publication, proofs will be e-mailed (as .pdf file) to the submitting Author. The corrections can be added as notes in .pdf file (available in the newest versions of pdf readers) or described in doc file.

The Editorial Office reserves the right to make minor grammatical and other changes to any accepted manuscript at any stage before publication to warrant clarity and accuracy of the article to be published in *Advancements of Microbiology*. The Author may appeal against decision to the Editorial Office in the case of a negative review of the manuscript by the Reviewer or rejection of the reviewed manuscript, or its significant re-editing. In this situation, the Editor appoints an additional Reviewer.

## 5. Article submission

The manuscript files should be sent to the Journal e-mail address: e-mail: post.mikrobiol@biol.uw.edu.pl

Before submitting a manuscript, please check the compatibility of the text with the Instructions for Authors. We recommend using the manuscript template and reading the FAQ file to avoid the most common mistakes.

Send files according to the following list:

1. Cover letter
2. Title page with summary (title, affiliations, table of contents, abstract and keywords)
3. Manuscript (main body of the manuscript containing the title and article text)
4. Figures (if applicable)
5. Description of figures (if the manuscript contains figures)
6. Tables (if applicable)

Instructions for Authors and for Reviewers and template files can be found in the SUPPLEMENTARY INFORMATION web-page section.

In the case of manuscript addressed to The Methodical Publications and Standards Section, the review manuscript should be prepared in accordance with the general “the Instructions for Authors” and with information compatible with the Methodical Publications and Standards Section. The manuscript should be sent in an electronic version to the editor’s department address:

Prof. Stefania Giedrys-Kalemba  
e-mail: kalemba@mp.pl

## 6. Additional comments

The Editorial Office reserves the right to make modifications and corrections that do not affect the content of the work. In case of necessity to introduce changes in the content, the author sends the manuscript of the work in order to make corrections. Works that do not meet the requirements of the editors will be sent back to the authors without any substantive consideration. Sending a set of signed statements is required to initiate the editorial procedure. The date of receipt of the work in the form compliant with the instructions for authors is taken as the date of submission. As the date of acceptance for publication, the day on which the Editorial Office notifies the authors that the work has been qualified for publication Pursuant to the decision of the main board of the Polish Society of Microbiologists, fees for work accepted for publication in *Advancements of Microbiology* are charged. Posting the transfer on the account of the Polish Society of Microbiologists is a prerequisite for starting the publishing procedure by the Editorial Office.