

INSTRUCTIONS FOR AUTHORS

General Information

The Collection of Papers “Problems of Radiation Medicine and Radiobiology” is publishing the original data and systematic reviews on contemporary issues in radiation medicine and radiobiology. Content of publications covers the topics of research results in the field of health in people who survived after the Chernobyl NPP accident or other nuclear accidents, assessment of health and demographic consequences of the Chernobyl NPP accident, dosimetry of internal radiation exposure in population of contaminated territories, medical and biophysical control of health and professional suitability of the “Shelter” unit staff, retrospective dosimetry in the framework of epidemiological studies, study of pathways of the direct and remote effects of ionizing and non-ionizing radiation impact on humans and animals, application of prophylactic arrangements focused on population health protection.

Authors should follow the provisions elaborated by editorial staff according to recommendations of the MH of Ukraine and Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals (ICMJE Recommendations, formerly the Uniform Requirements for Manuscripts); <http://www.icmje.org>.

Papers are published in two languages i.e. Ukrainian or Russian and English.

There are the tables of contents of the published issues, paper abstracts with keywords and authors' addresses, and full-text papers with figures, tables and references included in a free access at the editorial web-site (<http://radiationproblems.org.ua>).

The Collection of Papers is issued yearly.

Publications are free for the authors.

Manuscripts submission

Editorial review of manuscripts is launched upon submission of the following:

- 1) two copies of manuscript (printout) of the paper in Ukrainian / Russian or English signed on the last page by all the authors;
- 2) manuscript (printout) of the paper in English i.e. the authentic translation of Ukrainian / Russian version of the article;

3) information on all authors including the family name, first name and patronymic, scientific degree, academic rank, position and place of work (in Ukrainian / Russian and English);

4) the original of an expert opinion on the possibility of open publication of the paper;

5) the covering letter / petition from organization where the work was performed (or letter by the author);

6) a critical review by the well-known expert in the topical field of science; signature of reviewer is to be certified;

7) the CD with files:

- > electronic versions of papers in two languages fully identical to the printout; the file name is to be specified in Latin according to surname of the first author;

- > information about the authors;

- > figures in a graphical format.

Electronic versions of the article can be sent by e-mail to the editorial address: vkpand@ukr.net or tyanina@ukr.net.

Maximum length of the original articles should not exceed 10–12 pages, of the reviews – 15–20. A larger length of articles on the original research may be accepted on an individual basis by the decision of editorial board.

Editorial and/or Peer Review

All articles undergo a mandatory review according to the scientific research field by the members of the editorial board or independent experts. A review is conducted privately for both author(s) and for reviewers. The manuscript is sent to reviewers without specifying the names of the author(s) and institution(s).

Editorial board informs authors about the review results by e-mail.

If the reviewer concludes that paper can be published and there is no meaningful comments than the paper is accepted for the further work.

If the reviewer points at the required corrections in the manuscript then the author is provided with the review and a proposition to take into account the reviewer's recommendations in a new version or reject them otherwise with a reason. The corrected version of manuscript is then to be re-sent to the editorial board.

If all recommendations were taken into account the manuscript is admitted to further work.

If the reviewer concludes that paper cannot be published, the manuscript then undergoes a specific review by the Editorial Board and in the case of an agreement with the opinion of the reviewer is rejected as being inadequate to the level or profile of publications in the Collection. Rejecting the manuscript the editorial board leaves a copy of it on file.

Manuscripts of articles will not be returned.

The review originals are kept in editorial archive within one year from the date of publication.

Editorial board makes final decision about the feasibility of publishing the papers.

Manuscript Preparation and Submission Requirements

The submitted papers should be typed in MS Word for Windows (font Times New Roman, 12, spacing 1.5, paper size A4 (210 × 297 mm) page margins at all sides 2 cm, numbered pages). If the MS Word feature “Review” was used, then before saving the file one should cancel the “Review” function and then use the function “Accept all changes”.

Order of manuscript components should be the following:

- 1) UKK code
- 2) initials and surnames of authors
- 3) institution title (no any abbreviations) where the work was completed.
- 4) paper title
- 5) abstract
- 6) keywords in the language of the manuscript i.e. from 5 to 10 words or word groups corresponding to the paper content
- 7) paper text
- 8) references
- 9) initials and surnames of authors, institution title (no any abbreviations) where the work was completed and keywords in Russian if the paper is in Ukrainian or in Ukrainian if the paper is in Russian.

The paper title is to be as short as possible, conclusive with no acronyms.

If authors have different affiliations then each surname is to be marked at the end with a superscript figure indicating the respective affiliation. The corresponding author should be marked with an asterisk. The corresponding author should state clearly if his/her e-mail address could be shown in a published paper.

Order of manuscript components in the English version is to be the same.

Paper submitted in English is to mandatorily include the abstracts in two languages.

The surname, first name, patronymic, post and e-mail address, phone numbers (office, home or cell) of the corresponding author are to be denoted on the last page.

Abstract should mandatorily include the surnames and initials of all authors, institution title where the work was completed, and the full title of paper. A structured abstract is to be of no more than 300 words representing the headlines (sections) of the paper i.e. study objective, materials and methods, results, conclusions. Abstract of a review paper (up to 100-150 words) is unstructured.

Text. The paper should be carefully edited and verified by the authors. Corrections and notation in handwriting are not allowed. The content presentation should be clear, with no long introductions or repetitions.

All symbols and names of units of physical quantities must be states in accordance with the International System of Units (SI). If the research is carried out on the devices which give values in other units it is necessary to convert those in the SI submitting at that the non-system units in parentheses.

Book names and expressions must be given under the terms and concepts defined in the State sanitary regulations “Norms of Radiation Safety of Ukraine (NRBU-97)”, international anatomical and histological nomenclatures, rules of genetic nomenclature. Biochemical terms, abbreviations, and symbols taking into account the rules for their use are to be used as recommended by the Commission on biochemical nomenclature of the International Union of biochemical, names of diseases – according to the International classification of Diseases 10th revision, the names of pharmaceutical preparations – according to the International non-proprietary names (INN) naming system.

Abbreviations are not permitted, except common ones. Abbreviations (capital letters only) are included in the text only after the first mention with a complete decoding.

The data presented in the tables should not duplicate data graphics and text, and vice versa.

Authors are solely responsible for the content and the consistency/accuracy of data given in the paper.

Reports of Original Data should contain the following clearly delineated sections: 1) Introduction, 2) Objective of the study, 3) Materials and methods, 4) Results and discussion, 5) Conclusions, and 7)

References. **Review articles** may be unstructured or divided into sections.

Introduction. Problem set up in a general terms and its relationship with scientific and practical tasks, analysis of recent research and publications which discuss this issue and on which the author rests upon both with unsolved aspects of the problem, to which covers the paper are to be highlighted.

Objective of the paper (assigning the objective). Study objective or tasks or otherwise the hypothesis to be tested are stated.

Materials and methods. Study design and data analysis should be described briefly, but clearly, so that other researchers could reproduce the results of the study. References to conventional methods and a brief description with a link to a detailed manual of already published but not yet sufficiently known methods, description of new and substantially modified methods, with justifying of their use are provided here. Only the new methods are to be described in detail. The original names (with no translation) of devices, materials and reagents, companies/manufacturers should be submitted.

This section should clearly and thoroughly describe how the patients were selected for observation or animals for experiments (among them the control groups), including selection and exclusion criteria.

Species, sex and number of animals, methods of anesthesia for manipulation(s) or biological material sampling for laboratory tests, methods of euthanasia of animals in accordance with the "Rules of work with the use of experimental animals" should be described in experimental studies.

Clinical studies should be conducted in accordance with the standards of the "Good Clinical Practice" and principles of the Declaration of Helsinki. Study participants must have read and understood the purpose and main provisions of the study and then must sign the written consent to participate in the study. Authors should provide details of the procedures specified in the description of the study protocol and point out that the Committee on Medical Ethics has approved the study protocol.

At the end of section "Materials and Methods" a subsection "Data Management" is placed, where author describes the applied respective methods. Describing the study structure and statistical methods it should be pointed out what statistical package and computer software available for the average user were applied in statistical management of the results. If possible, we recommend to use the standard statistical

methods with reference to known manuals and textbooks. For the new or non-traditional statistical methods the relevant references should be denoted, where a detailed description of mathematical methods and algorithms is provided.

Authors of the review articles should include there a section with explanation of methods used for data search, selecting, obtaining and synthesis.

Results and discussion – presentation of the main content of research and explanation of scientific results.

Results. They should be presented in a logical sequence in the text, tables and figures. It is not necessary to repeat the data from tables and figures in the text, one should only discuss and compare them. When summarizing the quantitative data not only relative (e.g. per cents), but absolute values should be provided with specification of statistical methods used for analysis.

Discussion. Includes only the interpretation of results, and not repeat them. New and important aspects of the results of the study should be provided with an analysis of possible mechanisms or interpretation of the data and a possibility to compare with those from other researchers. Substantiated recommendations for practice and possible application prospects of the results of future studies can be included in discussion.

Conclusions. The results are to be represented on solving the problem stated in study/paper title and objective.

Expressing the gratitude (acknowledgements) is stated if necessary.

Illustrations. The figures should be clear, the photos – rich in contrast. The figures should be placed in the body text (added in separate files), names of pictures and descriptions should be submitted under the figures. All curves, letters, numbers and other symbols on figures should be described there. Links to the main text are permitted to avoid repetition and misreading. The magnification and staining should be specified in descriptions of photomicrographs.

Figures (diagrams, graphs, charts, pictures) are to be submitted in black and white, the diagrams - made as MS Word charts or in MS Excel format. They should contain all the necessary notation of coordinate axes, curves, and other details. All lines, curves, symbols denoting the axes should be clearly depicted (curved line being thicker than coordinate axes). All lettering on figures are to be in the language of article. Pictures with rendering and photos should be saved in TIFF or JPEG format.

Tables should be clear having the name and serial number and containing the necessary data in a compressed style. The dimensions and form of data presentation ($M \pm m$; $M \pm SD$; M_t ; M_o ; percentile, etc.) are to be specified. All figures, totals, and percentages in tables should be checked thoroughly and comply to the text content. Each table must be referenced in the text. All explanations, including expanding of abbreviations are given in the notes.

Formulas/equations are to be in the format of MS Equation labeled/enumerated in parentheses on the right. The long equations can be written in several lines. Symbols in mathematical formulas should be formatted in italic style, as uppercase and lowercase letters which hardly differ in their writing: P and p , C and c , K and k , etc.

References should not exceed 15 sources to the original papers and 50 sources to the reviews. Preference should be given to publications in the recent years. Sources of literature are to be placed in order of mentioning in the text. References in the text are denoted as Arabic numerals in square brackets. References to unpublished works are not permitted.

Author(s) are responsible for the accuracy of data given in the references.

List of references in Ukrainian/Russian-language version of the article is to be prepared in accordance with State Standard of Ukraine (DSTU GOST) 7.1:2006.

References in the English version of paper are provided in full, but all Ukrainian/Russian sources should be presented in a transliterated form. Name of the author and of magazine, collection, etc. are to be transliterated, and title of the article is to be translated into English. Transliteration of Ukrainian sources should be guided by the Decree No 55 of the Cabinet of Ministers of Ukraine from January 27, 2010 "On Regulation of Ukrainian transliteration in Roman letters of the alphabet". One can use the online service <http://www.translit.ru> For a convenience in transliteration of Russian sources.

To form the list of references it is advisable to use the standard "Uniform Requirements for Manuscripts Submitted to Biomedical Journals". The standard is based on the format recommended by the National Information Standards Organization - NISO, adopted by the National Library of Medicine (NLM) database (MEDLINE/PubMed Library database): <http://www.nlm.nih.gov/citingmedicine>. Titles of periodicals should be abbreviated according to the style adopted in the Index Medicus. Usually this form

of writing is accepted by the editorial board of periodical itself, and can be found on the site of publisher or in the list of abbreviations of Index Medicus.

Examples of the references:

Articles:

Rericha V, Kulich M, Rericha R, Shore DL, Sandler DP. Incidence of leukemia, lymphoma, and multiple myeloma in Czech uranium miners: a case-cohort study. *Environ Health Perspect.* 2006 Jun; 114(6):818–22.

More than six authors:

Hsu WL, Preston DL, Soda M, Sugiyama H, Funamoto S, Kodama K, et al. The incidence of leukemia, lymphoma and multiple myeloma among atomic bomb survivors: 1950–2001. *Radiat Res.* 2013 Mar; 179(3):361–82.

Organization as an author:

Diabetes Prevention Program Research Group. Hypertension, insulin. And proinsulin in participants with impaired glucose tolerance. *Hypertension.* 2002; 40(5):679–86.

With no author:

Radiation exposures in medicine: biological and public health significance. *Radiat Res.* 2011 Jan; 175(1):131–42.

Article in Russian/Ukrainian:

Pavlova OS, Kirillova EN, Luk'ianova TV, Oslina DS, Ryzhov VP. [Assessment of bronchopulmonary immunity status for Mayak PA workers at the late period after prolonged exposure]. *Radiats Biol Radioecol.* 2012 Nov–Dec; 52(6):582–92. Russian.

Books:

Author(s)

Zhuravlev VF. [Toxicology of radioactive substances]. Moscow: Energoatomizdat; 1990. 336 p. Russian.

Authors and editors:

Longo D., Fauci A., Kasper D., Hauser S. Harrison's Principles of Internal Medicine. 18th ed. New York: McGraw-Hill; 2011. 4322 p.

A section of the book:

Loganovsky K, Kovalenko O, Chuprovska N, Antipchuk C, Bomko M, Napreyenko V, et al. Early neuropsychiatric manifestations. In: Serdiuk A, Bebesko V, Bazyka D, et al., editors. Health effects of the Chernobyl accident – a quarter of century aftermath. Kyiv: DIA; 2011. p. 463–4. Napreyenko OK, Loganovsky KM, Petryna NYu. [Environmental psychiatry]. In: Napreyenko OK, editor. [Psychiatry and narcology]. Kyiv: VSV "Medytsyna"; 2011. p. 362–97. Ukrainian.

Conference proceedings:

[Proceedings of the 3rd International Symposium on Genetic Consequences of Extreme Radiation Situations, Dubna, 4–7 October 2005]. *Radiats Biol Radioecol.* 2006 Jul–Aug; 46(4):389–479. Russian.

Abstracts:

Buzinny M, Panasjuk N, Tsygankov N. LSC-based approach for water analyses around the Chernobyl NPP. In: Chalupnik S, Schonhofer F, Noakes JE, editors. LSC 2005, Advances in Liquid Scintillation Spectrometry: Proceedings of the 2005 International Liquid Scintillation Conference; 2005 Oct 9–13; Katowice, Poland. Tucson: RADIOCARBON, The University of Arizona; 2006. p. 312–16.

Thesis:

Lu H. Studies towards size-expanded genetic systems [dissertation]. Stanford: Stanford University, 2007. 188 p.

Electronic materials:

Rumyantseva GM. [Psychosomatic aspects of the development of mental disorders in the liquidators of the Chernobyl NPP accident]. *Psikhiatriia i psikhofarmacoterapiia* [Internet]. 2002 [cited 2002 Aug 12]; 4(1):[about 1 p.]. Available from: <http://www.consilium-medicum.com/psychiatry/article/10532/>. Russian.

Boyer NM, Laskey WK, Cox M, Hernandez AF, Peterson ED, Bhatt DL, et al. Trends in clinical, demographic, and biochemical characteristics of patients with acute myocardial infarction from 2003 to 2008: a report

from the American Heart Association get with the guidelines coronary artery disease program [Internet]. J Am Heart Assoc. 2012 Aug [cited 2012 Nov 15];1(4):e001206. Available from: <http://jaha.ahajournals.org/content/1/4/e001206.long>.

Ethical issues

Authorship. All persons designated as “authors” have to meet the criteria of this concept. Participation in the work of each participant should be sufficient to take responsibility for its content. The right of authorship is based on significant contributions to the conception and design of the study or to the analysis and interpretation of data, preparation of the text of the article or making fundamental changes, final approval of the version submitted for publication.

Participation only in providing the funding or selection of material for the paper does not justify the inclusion to the authors’ group. General management of the research team is also not considered sufficient for an authorship.

The order in which the authors are listed is defined by their joint decision.

All team members who do not meet the criteria of authorship should be listed with their consent in “Acknowledgements” section.

Editors have a right to enquire the authors for the contribution of each of them in paper writing and this information may be published.

Conflict of interests. A conflict of interest regarding a particular manuscript occurs when one of the participants of the review or publication process i.e. author, reviewer, or editor – has a commitment/obligation which could affect his or her opinion (even if it’s absent) through scientific competition, and intellectual preferences, personal or financial relationships.

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Participants of the review and publication process must disclose all conflicts of interest. Authors should indicate the names of those to whom in their opinion the manuscript should not be sent for reviewing usually due to the professional conflict of interests. Authors when submitting a manuscript are responsible for the disclosure of their financial and other conflicts of interest that can affect the work.

Reviewers must notify the editorial board of any conflicts of interest that may affect their opinion about the manuscript, and they have to refuse from reviewing of a specific article if consider it appropriate. In turn,

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The editors who make decisions about manuscripts must have no personal, professional or financial interest/participation in any matter they can be addressed.

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Publication of negative results. Many studies showing negative results are in fact incomplete/inconclusive. Possibility to publish the inconclusive research results is reviewed by editorial board in a special manner, as such papers often are of no not biomedical value.

Multiple publications. Editorial board does not accept the manuscripts submitted simultaneously for publication to other journals, as well as works that are foremost already published as articles or are a part of

another paper, provided or accepted for publication in other printed source or electronic medium. This does not preclude the reviewing of articles not accepted for publication by another journal, or a complete description provided after the publication of the preliminary results, i.e. abstracts or poster presentations presented at scientific conferences.

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