

## Formatting Rules for Articles for Publication in the Journal «Medical Radiology and Radiation Safety»

1. Papers on all areas of medical radiology and radiation safety are acceptable for publication. Papers can be experimental, clinical, theoretical or conceptual ones as well as reviews of literature of discussible, historical or chronicle character and information on issues of medical radiology and radiation safety; overviews or chronicles are acceptable too.

2. Editorial board uses electronic documents. Articles should be sent by the e-mail: medradiol@yandex.ru, medradiol@fromru.com.

3. The word processor software of *Word for Windows* is recommended, save as Version Document Word 97–2003 (via the command save as -> select the desired extension from the drop-down menu); the font of *Times New Roman 12 regular* and 1.5 line spacing are recommended. The paragraph spacing of 0.6 cm should be pre-established applying “Format – Paragraph – Paragraph Spacing”. The left margin levelling of the page text should be done without word's breaks; document margins are 2 cm. Dots at the end of headers (including author family names) as well as at the end of separate sentences (headers of tables, pictures, picture inscriptions etc.) should not be placed.

4. The first page of the paper (no number) should be started from initials and family names of authors (this very order); the endpoint dot is absent and the bold font is used. If co-authors are affiliated by different institutions, the footnote 1, 2 etc. should be put at the end of co-author family name with correspondent link number at the beginning of the institution name. In one line spacing, the upper case letters should be used to print the TITLE OF THE PAPER. The next items (in one line spacing) are initials and family names of authors (in English) and (after one more line spacing) the title of paper (in English) written in upper case letters. All the words in English title, except prepositions, ligaments and articles, should start with capital letters. Then (after three lines spacing) keywords (in Russian and then in English) should be provided:

Keywords: [in light *italic* font] (in Russian)

In the bottom of page the name(s) of institution(s) and the e-mail address of the author in-charge should be provided (obligatory for all employees).

In connection with the forthcoming inclusion of the journal in the Scopus bibliographic database it is necessary additionally to write name of each author, position, academic degree, academic title, membership in international professional associations and organizations.

For example:

L.K. Petrov – Deputy Director, Corr. Member of RAS, Prof., D. Sc. Med., UNSCEAR Member

At the bottom of the page the author communication information should be provided to solve the editorial issues: mail address (including post index), numbers of telephone (including home telephone number), facsimile and e-mail address. This information is only for the editorial board.

5. On the second page (with page number) the Russian language abstract should be placed.

ABSTRACT

Purpose:

Material and methods:

Results:

Conclusion:

The names of abstract parts should be underlined. After the colon the text should start from Upper case letter. The abstract should contain the essence of work done as well as the major numerical information; the size of the abstract should be less than one page (1.5 line spacing). Any abstracts exceeding the word limit will be sent back for adaptation.

6. On the third page there is the English text:

1) surname and initials of authors;

2) name of article in lower-case type (all words in the English name of articles should be named with an uppercase except prepositions, links and articles);

3) three lines below – key words in English:

Keywords: [in light *italic* font] (in English)

4) Abstract in English and literal compliance between Russian and English abstracts are not required.

ABSTRACT

Purpose:

Material and methods:

Results:

Conclusion:

5) Name of each author, position, academic degree, academic title, membership in international professional associations and organizations. For example:

L. K. Petrov – Deputy Director, Corr. Member of RAS, Prof., D. Sc. Med., UNSCEAR Member

6) Name of the institution

7. The paper body text should be started at page 4. As a rule, papers of experimental, clinical and theoretical conceptual character should not exceed a total of 15 pages, reviews should not exceed a total of 25 pages. Papers of experimental or clinical character should have the following parts (no dots after part titles, levelling on left margin, bold font of 12):

Introduction

Material and methods

Results and discussion

Conclusions (list of items)

LITERATURE REFERENCES

REFERENCES (Transliterated list of references).

Papers of theoretical and conceptual character usually do not have section of Material and methods.

Literature reviews have: Introduction, Sections on separate issues under discussion and Conclusions.

Instead of Abstract, the CONTENTS should be provided and include list of these sections. The number of references in the original papers should not exceed 10–15, in the reviews it should not be more than 50–60.

The long (“-”) and short (“-”, in multiple part word) dashes should be distinguished. All syntax signs should be followed by space. To enter a dash press Ctrl + hyphen at the top right on the right (digital) keypad, to enter a hyphen press a sign on the base or on the right numeric keypad.

8. The words of *Table 1* should be written in light *italic* and placed at the left above the table. The next line should

contain the topical name of the table (in bold lower case letters) with central levelling; the table cells should not be shaded. The decoding of symbols and/or acronyms given in the table should be done by Note: (started from the upper case letter and written in bold font), which should be placed under the left lower corner of the table. The note text should not be underlined. If the table cell(s) does not contain any data the long dash “–” should be placed (no short dash “-” should be placed). The text itself of the note should be light, without underscores. All formulas should be typed in a mathematical editor Word MS Equation. Formulas should be written in regular font at the right margin of the manuscript, and enclosed in parentheses. Each table and each figure should be on separate pages.

9. All graphs and diagrams in the picture are accepted in black – white or colour and they should be done applying MS Excel or MS Word diagrams. The editors will try to reproduce color graphics illustrations in the magazine. In all cases, charts and graphs should be placed on a white field. The grey or colour scale pictures and photographs of good clarity and contrast and resolution of 300 pixels/inch at least should be saved in tiff/jpeg/png/gif format and attached as separate files (pictures should not be placed just into the Word document!). Mark for the maker-up the top and bottom of the photo if it may be difficult for layout. It is recommended not to overload pictures with inscriptions in picture field: it is preferable to number different elements of image and decode these numbers in the picture underneath text. Similar fragments of the picture should be marked by lower case Cyrillic letters: *a, б, в* etc.; picture files can be compressed by common used archive software. All inscriptions on pictures, graphs and diagrams (including coordinate axis inscriptions) should be done in Russian only. Decimal fractions in the coordinate axes and on the pitch of the pattern are separated by commas, not by a point. The text reference to the pictures and tables should be as follows: Fig. 4 or Table 2.

10. LITERATURE REFERENCES should be placed after the body text and formatted as the numbered list of bibliography references in the reference order in the body text of the paper irrespectively to their language of quoting or inscription. In case of four and more authors only 3 first authors should be written and «*et al*» should be added. Than the title of paper and bibliography data should be provided. The name of periodical publication (journal) or compendium should be preceded by // (double slash). Journals should be named according to common used acronyms; monographs and compendium names should be given in full.

After the name of journal the year, volume (bold regular font, “Vol.” should not be written), number of issue (no brackets), initial and final page numbers of quoted paper (separated by long dash and without spacing) should be given. The name of monograph, separate report, dissertation etc. should be followed by the place of publishing, publisher or organization, and the year of publication. Italics and bold are not used for the references

Please, follow to the examples below:

Иванов И.А., Петров П.А., Никитенко Н.А. и соавт. Лучевая терапия рака пищевода // Мед. радиол. и радиационная безопасность. 1996. Т. 41. № 6. С. 14–17.

Иванов И.А., Петров П.А., Никитенко Н.А., Коломийцев Н.П. Стресс при подготовке статей. – СПб.: Медицина. 2000. 820 с.

Лягинская А.М., Романова Л.К., Покровская М.С. Опасности облучения плода // В сб.: «Репродуктивное здоровье женщины и потомство в регионах с радиоактивным загрязнением». Под. ред. М.Я. Федорова, В.И. Краснополянского. – М.: Медицина. 1997. С. 246–260.

Караваяев П.И. Топометрическая подготовка онкологических больных к конформному облучению. – М.: Автореф. дисс. докт. мед. наук. 2007. 32 с.

Akiyama M. Role of somatic mutations for risk evaluation // In: Proc. of Fukui Workshop on Health Risks: Perspectives. Ed. by T. Sugahara, K. Torizuka, S. Kobayashi, Y. Ishii. Kyoto: Health Research Foundation. 1992. P. 172–175.

Author A.A., Author B.B., Author C.C. et al. Radiation and health // Lancet. 1999. Vol. 109. Suppl. 3. № 5, P. 2–5.

Otake M., Schull W. Radiation-related small head sizes among prenatally exposed atomic bomb survivors. TR 6–92. Hiroshima: RERF. 1992. 87 pp.

World Health Organization. Environmental Health Criteria \*2.5, Selected Radionuclides. Geneva: WHO, 1983, 234 pp.

For citations from the Internet, the same rules are applied. However, it is necessary to indicate the date of access to electronic resources as the existence of most websites is limited.

When referencing to our journal it is necessary to write its volume referenced. Please, see below volume numbers according to years: 2008 – Vol. 53; 2009 – Vol. 54; 2010 – Vol. 55; 2011 – Vol. 56; 2012 – Vol. 57; 2013 – Vol. 58; 2014 – Vol. 59; 2015 – Vol. 60; 2016 – Vol. 61; 2017 – Vol. 62.

At the end of the article there is the same list of sources, only Russian-language publications are transliterated. For example:

#### СПИСОК ЛИТЕРАТУРЫ

1. Антипов В.В., Давыдов Б.И., Ушаков И.Б., Федоров В.П. Действие факторов космического полета на центральную нервную систему: структурно-функциональные аспекты радиомодифицирующего влияния // Проблемы космической биологии. 1989. Т. 66. – Л.: Наука. 328 с.

#### REFERENCES

1. Antipov V.V., Davydov B.I., Ushakov I.B., Fedorov V.P. Dejstvie faktorov kosmicheskogo poleta na central'nuju nervnuju sistemu: strukturno-funkcional'nye aspekty radiomodificirujushhego vlijaniya: monografija // Problemy kosmicheskoy biologii. T. 66. – L.: Nauka, 1989. 328 s.

In order to send the materials to the editorial board via email, it is recommended to create a separate folder with the files of the article (.doc format) and the images (formats gif / tiff / png / jpeg). You should compress your files to the ZIP/RAR format and send them as one document.

11. There are accepted abridgements, acronyms and symbols that correspond to existing standards. Other abridgements are permitted. Please, note the absence of dots after the majority of abridgements.

**General:** year – y. (with dot); years – yy. (with dot); thousand – th. (with dot); absolute unit – abs. unit; units – u.; that is – i.e.; and so on – etc.; part – p.; volumetric percentage – vol. % (with dot); month – mo; week – wk; day – d;

hour – h; minute – min; second – s; kilogram – kg; gram – g; milligram – mg; microgram –  $\mu\text{g}$ ; litre – L; millilitre – mL; microliter –  $\mu\text{L}$ ; kilometre – km; metre – m; centimetre – cm; millimetre – mm; micrometre –  $\mu\text{m}$ ; nanometre – nm; billion – bn; million – mn; temperature – 42 °C or 315 K (separately from the number as same as percentage, %); pascal – Pa; kilohm – k $\Omega$ ; volt – V; kilovolt – kV; ampere – A; milliamper – mA; fractions like nmol/L, mg/kg, MBq/km<sup>2</sup> are written with dash.

ICRP – International Commission on Radiological Protection; ICRU – International Commission on Radiation Units and Measurements; IAEA – International Atomic Energy Agency; UNSCEAR – United Nations Scientific Committee on the Effects of Atomic Radiation.

**Radiation physics:** becquerel – Bq; megabecquerel – MBq; gray – Gy; application of non-SI units of radioactivity, curie (Ci), millicurie (mCi), microcurie ( $\mu\text{Ci}$ ) is not recommended; sievert – Sv, millisievert – mSv; tesla – T; electron-volt – eV, kiloelectronvolt – keV, megaelectronvolt – MeV; radionuclide symbols are written as <sup>137</sup>Cs, <sup>99m</sup>Tc (“m” is Latin!) or cesium – 137, technetium – 99m but not like Cs<sup>137</sup>, Tc<sup>99m</sup>; gama radiation, beta particles, alpha particles – Greek letters are permitted; potential on X ray tube in peak kilovolts – kVp; half attenuation layer – HAL; 6 MV bremsstrahlung radiation but bremsstrahlung radiation of 6 MeV maximum energy; photoelectric multiplier – PEM; semiconductor detector – SCD; thermoluminescent dosimeter – TLD; IR – infrared; UV – ultraviolet; HF – high frequency; UHF – ultra-high frequency; nuclear power plant – NPP.

**Diagnostic radiology:** USI – ultrasound imaging; MRI – magnetic resonance imaging; MRS – magnetic resonance spectrometry; ESR – electron spin resonance; X-ray CT – computer tomography (X ray computer tomography); digital subtraction angiography – DSA; X ray image amplifier (IA); devices with charge sensitive response – CCD (for instance, digital X ray detector with CCD matrix); metal – oxide – semiconductor – MOS (for instance, MOS capacitor); electronic optical transformer – EOT; exposition is measured in mAs; picture archive and communication system – PACS.

**Nuclear medicine:** single photon emission computer tomography – SPECT; combined SPECT – CT scanner; positron emission tomography – PET; radioimmunological assay – RIA; gamma camera, gamma tomography machine; radionuclide diagnosis – RND; radionuclide therapy – RNT; radiopharmaceutical agent – RPA, modulation transfer function – MTF; spatial resolution is measured in mm of FWHM (full width at half maximum of sensitivity function peak for point radiation source); fluoride desoxyglucose – FDG.

**Radiobiology:** relative biological efficiency – RBE; linear energy transfer – LET; cumulative radiation effect – CRE; oxygen amplification factor – OAF; deoxyribonucleic acid – DNA; ribonucleic acid – RNA; linear quadratic model – LQM; lethal dose – LD; acute radiation syndrome – ARS, chronic radiation disease – CRD.

**Radiation therapy:** radiation therapy – RT; intraoperational radiation therapy – IORT; intensity modulated radiation therapy and image guided radiation therapy – IMRT and IGRT; total focal dose – TFD; single focal dose – SFD; source

to skin distance – SSD; multileaf collimator – MLC; dose – time fractionation factor – DTF; dose – volume histogram – DVH. It is not recommended to use centigray (cGy) and centisievert (cSv) units, Gy and Sv or mGy and mSv should be used instead.

**Radiation safety:** radiation safety – RS; radioactive waste – RW; minimal significant activity (at the workplace) – MSA; radiation accident – RA; radiation safety standards – RSS; sanitary rules and norms – SRN; ionizing radiation source – IRS.

**General medicine:** central nervous system – CNS; arterial tension – AT; ischemic cardiac disease – ICD; circulated blood volume – CBV; erythrocyte sedimentation rate – ESR; electrocardiogram – ECG; red bone marrow – RBM; blood-brain barrier – BBB; gastrointestinal tract – GI; myocardial infarction – MI; prostate specific antigen – PSA.

Non-standard acronyms should be avoided, when authors consider them as common used but they are not familiar to the journal audience majority. The abridgement should be introduced in brackets only at first inclusion of this term in the abstract and/or in the paper body text. The application of any (even common used) acronyms is not permitted in the title of paper.

The total number of abbreviations in the article should not be more than five .

12. Leave only significant numbers. For example, if the expected number of cases is 7.2, and there were only 11 observed cases, their ratio is expressed as 1.53 or even 1.5, but not as 1.5277. Please indicate no more than two figures in the decimal point for the measurement results. In the standard deviation or error of the mean there should be not more decimal places than the average. For statistical processing please explain whether it is a standard deviation or standard error (error) average. Specify the name of the statistical criterion for judging the authenticity.

“Single” numbers up to 10 are recommended to write in words, rather than in numbers.

13. The style of the paper material presentation should correspond to generally accepted literature language norms. Please, read thoroughly the paper text before dispatching it to the journal and correct all revealed mistakes.

The magazine “Medical Radiology and Radiation Safety”, published since 1956 and distributed by subscription as well as through the Chamber of Books, is an open scientific journal and is included in the Russian High Attestation Commission list of scientific journals recommended for publications of the research results.

Editorial board of the journal informs that it is not responsible for the information presented by the authors referring to state-secret information or to the information of restricted distribution, as well as confidential information of scientific and technological advances which may be the subject of an invention or know-how.

In case of any difficulties of the paper formatting, please, take the recent year issue of the journal as the template or call to editors: telephone number: +7(499) 190 9551.