

## Guidelines for Manuscript Preparation

### General Requirements

The electronic version of a manuscript should be submitted to the Organizing committee by email [CorrOfficeOIKS@pnpi.nrcki.ru](mailto:CorrOfficeOIKS@pnpi.nrcki.ru)

Submission must include all files containing elements of an article (text, tables, and illustrations) in PDF and one of the following formats: DOC, DOCX, or RTF. Files and accompanying documents should be compressed in one archive (preferably a ZIP file).

The manuscript should contain the complete affiliation of each author, including country, city, zip code, and address for correspondence, as well as the e-mail address of the corresponding author. Since proofs are sent to authors only by e-mail, it is recommended that additional backup e-mail addresses be included. If a manuscript has several authors, it is recommended that the e-mail addresses of more than one author be included, and that these addresses be checked regularly.

### Publisher's *Example file*

[Example file](#) is used to simplify manuscript preparation for publication. This makes it possible with just one click to adjust styles for the selected fragment as required by manuscript preparation standards. The [Example file](#) alleviates all worry about the parameters of manuscript formatting.

## Guidelines for typesetting your manuscript

### General Requirements

1. If possible, use Microsoft Word and the publisher's [Example file](#).
2. File names should be in Latin characters without spaces. Do not use long names.
3. The file of a manuscript should be identical to the original approved by the editorial board. It should contain all corrections by peer reviewers and editors. Changes to the manuscript introduced without the approval of the editorial board will be disregarded. Electronic versions that differ from the original cannot be used.
4. The text should contain: manuscript title, complete list of all authors, complete affiliation of each author, e-mail address of corresponding author, abstract, keywords, structured body text, references, list of figure captions on separate page, tables on separate pages. Structural chemical formulas and schemes should be placed in text. It is recommended to standardize the structure of the manuscript using subheadings: INTRODUCTION, THEORETICAL ANALYSIS, METHODS, EXPERIMENTAL, RESULTS AND DISCUSSION, CONCLUSIONS, and REFERENCES.
5. Please use only these standard fonts: Times New Roman for text, Symbol for Greek symbols, MathematicalPi2 for handwritten and gothic symbols. Fonts with point size 12 and 1.5 line spacing are the standard.
6. Avoid repetitive use of space bar for indentation. Use autoformatting or Tab key.
7. Do not end a line by pressing Enter unless this is the end of a paragraph.
8. Make full use of your text editor functions: creation of footnotes, enabling and disabling automatic hyphenation, list formatting, indents, etc.
9. Create tables using Microsoft Word embedded functions or export Microsoft Excel tables. Avoid creating tables by hand using multiple spaces or tabs and containing no cells. Tables are typed on separate pages and numbered in Arabic numerals in order of

their mention in the text. The number must be followed by the heading of the table and the table itself. Each column in a table should have headings and be separated by vertical lines.

10. Use the International System of Units (SI) for physical quantities and units of measurement, unified atomic mass units for weights of chemical elements, and IUPAC nomenclature for chemical compounds.

### Some Typesetting Requirements

1. Use periods rather than commas in decimals (correct: 0.25, incorrect: 0,25).
2. Symbols \*, ‘, ±, single Greek letters, single italic or boldface characters, single variables or variables with either superscript or subscript letters, unites of measure, numbers, and simple mathematical or chemical formulas (e.g.,  $a^2 + b^2 = c^2$ ;  $\text{H}_2\text{SO}_4$ ) should be typeset as text rather than embedded objects. Don't use Equation, MathType or other tools.
3. There should be a space between initials and a surname: C.C. Smith. In the list of authors of a manuscript there should be also a space after each initial: C. C. Smith.
4. Dates should be rendered in the following format: January 27, 2014.
5. There should not be periods after manuscript title, list of authors, affiliations, keywords, section headings and subheadings, table titles and most of the units of measure.
6. There should be a period at the end of each footnote (including footnotes to tables), any note to a table, figure caption, and abstract.
7. Text can be formatted using the Format Font window [Ctrl-D]. Symbol \* is in the right part of the standard keyboards above numeric buttons. Symbol ° typeset by the combination of keys [Alt-0176]. Symbol ± is typeset by the combination of keys [Alt-0177].

### Formulas

1. Mathematical formulas created using MathType should be in one frame. Do not compose a single formula of several MathType objects or a MathType object and text, table, or embedded frame.
2. For MathType formulas, standard font settings should be used. Do not change these settings for any element of a formula.

### Contractions and Abbreviations

Avoid word contractions altogether and word abbreviations whenever possible. Abbreviations should be explained in the text unless they are commonly used.

### Units of Measure

1. Units of measure are separated from numbers by a space (17.5 mol %, 77 K, 10.34(2) Å, 58 J/mol, 50 m/s<sup>2</sup>). Exceptions are: 90°, 20°C, 50%, 10‰. A period is not used in abbreviated units of measure.
2. There are various ways of rendering complex units of measure; however, the selected way must be consistent throughout the manuscript:  $\text{J mol}^{-1} \text{K}^{-1}$ ,  $\text{J}/(\text{mol K})$ , and  $\text{J} (\text{mol K})^{-1}$ .
3. In ranges and series, retain only the final unit of measure (10–12 mg; 5, 10, and 20 kV; 25–30%; 30, 60, and 90°C). The degree when it indicates angles sign is an exception.
4. Degrees Celsius should be °C rather than °. The latter refers to angles.
5. Units of measure for quantities under the log sign should be given in square brackets:  $\ln t$  [min].

## Spaces

1. There should be spaces in table and figure callouts: Fig. 1, Table 2.
2. There should not be spaces between quotation marks or parentheses and text included in them.
3. There should be a space between a paragraph mark and its number: § 5.65.
4. Numbers with letters should be rendered without spaces: IVd; 1.3.14a; Fig. 1a.
5. In longitudes and latitudes there should be spaces: 56.5° N; 85.0° E.
6. Mathematical symbols should be separated by a space only when there are units on both the left- and right-hand sides, but without a space when a unit appears only on the right, for example:  $100 \pm 2$ ; by a factor of  $\sim 2$ .

## References

Please use an *Example file* for the format of references to cited literature. Cited literature should be numbered consecutively throughout the manuscript in the order of mention in the text. Citation of two or more papers with the same number is not allowed. If a publication has a DOI, specify the DOI at the end of the reference.

## Preparation of Illustrations for Manuscripts

### General requirements

1. All illustrations should be placed at the end of the text body together with their figure captions. If a figure consists of several parts, they should be arranged one after another and have a common caption. In a file, illustrations should not be placed in table cells or grouped in a similar way. The original files of illustrations should be submitted along with the manuscript.
2. Every illustration file should be named to make it clear to which manuscript they belong and in what order they should be placed inside the text. Each file should contain one illustration. If an illustration consists of several parts, they should be grouped in the same file with the correct arrangement of parts. Each figure should have a caption containing the figure number, the surname and initials of the first author, and the short title of the journal (for example, Fig. 1. H. Ozay, Journal of Surface Investigation).
3. Vector illustrations should be presented in the format of the graphics editor used to prepare these illustrations. EPS format is also acceptable.
4. All other illustrations are acceptable in any standard graphics formats, though TIFF is preferable.

### Technical Requirements

1. General Requirements:
  - 1.1. Illustrations should have sizes that match either one-column or two-column layout: 8–8.5 and 17–17.5 cm, respectively;
  - 1.2. Photographs should be submitted in two variants: with and without text and inscriptions. In other illustrations, inscriptions should not touch any parts of the illustrations;
  - 1.3. For inscriptions, please use standard TrueType fonts;
  - 1.4. Do not add shading or grids to the background of graphs.
2. Line drawings:
  - 2.1. Graphs and diagrams should be prepared in vector graphics editors;
  - 2.2. Vector illustrations should have a resolution of at least 600 dpi;
  - 2.3. Line widths should not be less than 0.5 pt;
  - 2.4. Vector illustrations should not have dotted fill patterns like Noise, Black&White Noise, and Top noise;

- 2.5. All fonts should be embedded in a file.
3. Halftone Illustrations:
  - 3.1. Halftone illustrations should have a resolution of at least 300 dpi.
4. Combined Halftone/Line drawings:
  - 4.1. Such illustrations should have a resolution of at least 600 dpi.

### **Color Illustrations**

1. Our journals are published in black and white. Color illustrations can be published upon agreement with the editorial board.
2. Color illustrations are published in the print version of journals for a fee.
3. Additional requirements for color illustrations:
  - 3.1. 8 bit/channel mode;
  - 3.2. CMYK color space.
4. When the authors agree that color illustrations will be printed as black and white illustrations without additional editing, the following requirements should be met:
  - 4.1. The choice of colors for lines and objects should exclude the loss of information when printed in black and white. It is recommended to print color illustrations on a black and white printer and check if objects with different colors are distinguishable. Avoid references to colors in figure captions;
  - 4.2. Colored lines on graphs and diagrams should be marked with letters, symbols, or numbers, or else the style of lines should be different;
  - 4.3. Colored regions should also be marked with different symbols rather than similar symbols of different colors;
  - 4.4. If different colors of the same brightness are adjacent, it is desirable to identify their border with a thin line;
  - 4.5. When there are many colored regions with similar color tones in the figure, they should be additionally marked with symbols or hatching;
  - 4.6. It is preferable to make all inscriptions either black or white depending on the background.