

Instructions for Submission of Manuscripts

Manuscripts submitted for the publication should correspond to the scope of the journal *Fizika i Khimiya Stekla* (Glass Physics and Chemistry), which publishes the theoretical and experimental works on the structure and properties of inorganic glasses and glass-forming melts. The Journal covers different aspects of studies on the structural relaxation, glass transition, and crystallization phenomena; the analytical and metrological support of the investigations on the properties of glasses and glass-forming melts; the physicochemical principles of technological processes for glass manufacturing; and also other glass-based materials (porous, ion-exchanged, and implanted glasses) and processes of their production. Papers on the structure and properties of other materials (including organic glasses) and papers concerning the allied sciences should provide insight into the general problems of the vitreous state.

PAPERS

The Journal publishes papers of the four types.

Original papers.

Review papers. The author of the review paper must submit beforehand the paper topic, an outline of the paper, and information on its approximate length in order for the Editorial Board to decide if the paper qualifies to be published in the Journal.

Short Communications. Papers of this type can present experimental results of interest without their discussion.

Letters to the Editor length, up to 6 pages. Letters are restricted to brief reports of new findings that are of high priority. In the case of a positive decision, Letters are given priority in publication.

MANUSCRIPT STRUCTURE

Original papers. Use the following structure for the papers.

Abstract (A brief description of subjects, used techniques, specific results, and conclusions; length, no more than two thirds of a page).

Introduction (Justification for the research with the required literature review).

Experimental. (For theoretical works, a description of the essence and procedure of a theoretical method). Necessary information must be given for the reader to understand the significance of the data, which will be presented in the **Results** section, including glass compositions, sample preparation, methods of measurements, errors inherent in the methods,

etc. For theoretical works, a description of the applicability limits for a theory or modeling should be given.

Results. Experimental and (or) calculated data must be given with numerical values of their errors. Either in the text or in the figure captions, the basis for all lines drawn in figures must be described: whether they are the result of an approximation with a specific method (least-squares method, etc.) or are manually drawn for the graphic representation of trends in the behavior. If the maxima (minima) observed in spectra are identified, the method for determining the peak positions and the errors of the determination must be presented. The results obtained should be compared with the data available in the literature.

Discussion. The logical interrelations between the data obtained should be revealed, and the salient points comprising the novelty of the work must be stated in detail. The final results are compared with the data which determined the state of the problem prior to the submitted work. The combination of **Discussion** and **Results** is admitted also.

Conclusion. The essence of the research and the novelty of the results obtained are outlined. The use of the abbreviations introduced in the text and references is unacceptable. The section should be larger than the Abstract, but the repetition of numerical data and the discussion of results must be avoided.

References.

Review papers. Abstract, Introduction, and References are the obligatory sections. Other sections are at the discretion of the author, depending on the subject matter of the work. A detailed subdivision of the manuscript is recommended.

Short Communications and Letters to the Editor. Abstract (and **References** if required) are the obligatory sections. Other sections are not necessary.

REQUIREMENTS FOR SUBMISSION AND PREPARATION OF MANUSCRIPT

Accompanying documents. The manuscript should be submitted with the covering letters of the organizations of all the authors. If the work was carried out by the authors of different organizations, the names and postal addresses of all the organizations must be given. The manuscript should be signed by all of the authors. The full name, full postal addresses, official and home telephone numbers, and, if possible, e-mail and fax number of the corresponding author should be presented on a separate sheet.

General. Manuscript and figures must be submitted in duplicate, and photographs must be in triplicate. The text must be legibly printed (no smaller than 12 point font), double-spaced, and on regular, letter-sized (A4: 297 x 210 mm) paper. The margins must be no less than 3 cm on the left, ~2-2.5 cm on the top and bottom, and ~1-1.5 cm on the right. At the top of the first page, print the surnames and initials of the authors, the title of the paper, the names and postal addresses of the organizations, the abstract, followed by the text.

The Editorial Board reserves the right to reject manuscripts that substantially violate the instructions given.

It is desirable, if possible, that the author(s) submit a diskette with the document in WORD, LEXICON, or ASCII text.

Text. Papers should be written in a simple and clear language and carefully edited by the authors. Wherever possible, the authors should avoid long sentences and aim for brevity. Vulgarisms, terms unadmitted in scientific literature, and transliteration of foreign terms are unacceptable. When using nontraditional terms or usual terms with a nontraditional meaning, they should be well defined in the paper. It is desirable that the author(s) present the recommendations for the English translation of nontraditional terms.

All symbols and abbreviations that are not universally accepted or that have been first introduced by the authors should be defined. Disagreement between the text, figures, and tables is unacceptable. Dimensions must be given everywhere they are necessary (including the plot axes). It is preferable to employ SI units; however, other units, including subsidiary, are also acceptable. As a rule, the presentation of the same data in figures and tables should be ruled out (except for the cases dictated by the discussion character). In the text, the use of abbreviations, except for universally accepted (*et al.*, etc., wt %, mol %, at. %, etc.), should be avoided.

The paper reporting the experimental data should contain information on exact as-analyzed or as-batched compositions of the studied glasses. The description of experimental instruments which are not widely used should be attended by their essential characteristics. A brief description of the experimental technique is possible only with reference to the earlier work published in the journal *Fizika i Khimiya Stekla*.

Symbols and equations. All symbols, equations, and chemical formulas should be neatly and large typed or written in black.

In order to distinguish between capital and lowercase letters that are similar in appearance (such as \underline{C} , \underline{P} , \underline{S} , \underline{V} , $\underline{\Theta}$, $\underline{\Psi}$, ...; and \bar{c} , \bar{p} , \bar{s} , \bar{v} , $\bar{\Psi}$, $\bar{\theta}$, ...) in equations and symbolic notations in the text, double-underline capital letters and draw a

double line above lower-case letters. The following pairs of letters and symbols should be distinguished and identified in the margin or in some other way: the letters *e* and *l*, the letter O and the numeral 0 (in the last two cases, letters are marked by double lines above or below), two parallel lines and two unities, and the letters *I* and *J*. Accurately trace out Greek letters ζ (zeta), ξ (xi), ν (nu), and θ (theta), and identify them in the margin. Underline Greek letters in red and vectors in blue. Circle script letters with any pencil, and identify them in the margin.

References. References should be numbered in the order in which they are cited in the text. For the list of References (except for translated monographs), use the original language. If the work cited is a translation of the foreign book, cite the original work as well whenever possible, using the following format: authors' names, title of book, editor, city, publisher, year of publication, volume, edition, chapter, and pages. The reference under the same number to two or more papers (including the papers of the same authors), as well as the reference to the same paper under different numbers, is unacceptable. References to unpublished works of the authors of the manuscript that have been submitted for publication are acceptable. In this case, the reference must include the name of the journal in which the paper has been submitted, followed by "in press." In exceptional cases, the reference of the "personal communication" type including the full name of the information source is acceptable.

References should be listed in the following style:

Books

Pavlushkin, N.M., *Osnovy tekhnologii sitallov* (Principles of Glass Ceramics Technology), Moscow: Stroiizdat, 1970 (in the text, specific page numbers are given if required).

Journal Articles

Golubkov, V.V., A Problem of Inhomogeneous Glass Structure, *Fiz. Khim. Stekla*, 1998, vol. 24, no. 3, pp. 289-304 [*Glass Phys. Chem.* (Engl. transl.), 1998, vol. 24, no. 3, pp. 196-207];

Almeida, R.M., Vibrational Spectroscopy of Glasses, *Non-Cryst. Solids*, 1988, vol. 106, nos. 1-3, pp. 347-358.

If the title of a paper in a journal is in a language other than English, leave it in the original language. In Russian, English, French, and German, use the following abbreviations: vol. (volume), no. (number), and p. (page).

Collected Volumes

Andreev, N.S., Mazurin, O.V., Porai-Koshits, E.A., Roskova, G.P., and Filipovich, V.N., *Yavlenie likvatsii v steklakh* (Phase Separation in Glasses), Shultz, M.M., Ed., Leningrad: Nauka, 1974.

Collections of Articles

Mazurin, O.V., Thermal Ionic Relaxation in Inorganic Glasses, in *Svoistva i razrabotka novykh opticheskikh stekol* (Properties and Development of New Optical Glasses), Tsarevskii, E.N., Ed., Leningrad: Mashinostroenie, 1977, pp. 101-120.

Meeting Papers

Silin', A.R., Structural Defects in Vitreous Silicon Dioxide, *Proc. XV Int. Congress on Glass*, Leningrad, 1989, vol. 1a, pp. 234-239;

Kokorina, V.F., Effect of Chemical Bonding on the Glass Formation and Properties of Glasses, in *Trudy V Vsesoyuznogo soveshchaniya po stekloobraznomu sostoyaniyu* (Proc. V All-Union Conf. on the Vitreous State), Leningrad: Nauka, 1971, pp. 87-94.

Dissertations

Mirnaya, T.A., Liquid-Crystal Melts and Glasses in Binary Salt Systems with Carboxylate Ion, *Cand. Sci. (Chem.) Dissertation*, Kiev: Institute of General and Inorganic Chemistry, 1984.

Depositions

Artyushkin, N.G., Evstrop'ev, K.K., and Pronkin, A.A., *O prirode provodimosti v tverdykh ftorofosfatnykh steklakh* (On the Nature of Electric Conductivity in Solid Fluorophosphate Glasses), Available from VINITI, 1974, Leningrad, no. 1731-74-Dep.

Patents or Inventor's Certificates

Pavlushkin, N.M., Sarkisov, P.D., and Levina, V.S., The Glass, Inventor's Certificate no. 336287, *Byull Izobret.*, 1972, no. 14, p. 77;

Silveran, A., Method of Producing of Glass, US Patent 2 838 882, 1958 (it is desirable to give the patent class).

All works should be cited in their original language.

Tables. Tables must be numbered by Arabic numerals (if their number is more than one) and have a heading. When the table lists the data calculated by equations, their numbers must be included in the table. Explanations in the form of Notes are acceptable.

Illustrations. Figures (except for photographs) must be submitted in duplicate. They can be either in the form of a computer drawing (printed on a laser or ink-jet printer), or drawn on a white or tracing paper with Indian ink, or represented as high-quality xeroopies of originals. The sizes of figures must be no less than 5 x 6 cm and no more than 18 x 24 cm.

Drawings should be legible and clear. Curves in figures are labeled by numerals or letters, which are defined in figure captions.

Photographs should be submitted as high-quality, black and white, glossy prints. Each print must be in triplicate. Any inscriptions on the right side of a print are unacceptable. Label the top of the print (if required) on the reverse side. The magnification is given in the photograph caption. Micrographs should be accurately trimmed in an identical rectangular format. Figures including micrographs should be planned either for the column width (80 mm) or for the page width (170 mm) of the English-language edition of the Journal (page height is 220 mm). Do not tape or glue photographs.

Each illustration should be identified on the back of one copy with a soft pencil by the number, the name of the first author, and the title of the paper. Indicate by marginal notation in the text where the figures are to be inserted. Collect the illustration captions on a separate sheet.

INFORMATION FOR AUTHORS

The authors must respond to a referee's report within six months including time allowed for mailing. If there is no response after six months, the Editorial Board refuses the publication of the manuscript. If the authors disagree with the referee's evaluation, another referee reviews the paper. If his decision is also negative, the Editorial Board refuses to publish the paper. Any manuscripts refused with two negative referee's reports or accepted and not answered (for six months) will not be returned.

After acceptance, the paper is scientifically and stylistically edited. The essential changes in the manuscript are approved by the authors.