

TECNIA instructions for the preparation of a 2-column-format camera ready paper using the Word template

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Abstract

All articles *must* contain an abstract. The abstract follows the addresses and should give readers concise information about the content of the article and indicate the main results obtained and conclusions drawn. As the abstract is not part of the text it should be complete in itself; no table numbers, figure numbers, references or displayed mathematical expressions should be included. It should be suitable for direct inclusion in abstracting services and should not normally exceed 200 words. The abstract should generally be restricted to a single paragraph. These pages provide you with instructions on how to use this word template to prepare your paper according to the required layout and style for TECNIA papers.

Keywords: (Please select a maximum of 5 keywords from the keyword list)

1 Introduction

These guidelines, written in the style of a submission TECNIA, discuss how to prepare your paper using Microsoft Word. In addition to the usual guidance on style/formatting, there are notes and links to assist in using some of Word's features such as inserting graphics, formatting equations and so forth.

The structure of standard TECNIA paper is presented in Appendix 1.

2 How to use the template

Using this template will enable you to prepare your paper in accordance with the instructions for authors for TECNIA papers with a minimal amount of manual styling and formatting. Where appropriate you should overwrite the different fields with your own text. Make sure that as you do this the correct style for the current paragraph is still displayed in the style box on the menu bar. If you need you can modify the style of a section of text using 1 column style for large formulas, figures and tables, or use a special **Appendix** at the end of the paper.

Please read through the following sections for more information on preparing your paper. However, if you use the template you do not have to worry about setting margins, page size, and column size etc. as the template already has the correct dimensions.

3 Format

Text should be produced within the dimensions shown on these pages; each column 8.2 cm wide with 0.6 cm middle margin, total width of 17 cm and a maximum length of 21cm on the first page and 23.5cm on the second and following pages. Make use of the maximum stipulated length apart from the following two exceptions: (i) do not begin a new section directly at the bottom of a page, but transfer the heading to the top of the next column; (ii) you may exceed the length of the text area by *one line only* in order to complete a section of text or a paragraph.

You must use 1.0 (single) line spacing. However, when typing complicated mathematical text it is important to increase the space between the text lines in order to prevent sub- and superscript fonts overlapping one another and making your printed matter illegible. If you are using a desktop publishing program ensure that your auto adjust for interline spacing is suitably set to prevent overlapping but without leaving too much space.

The Title 17pt should be Cambria, Authors 13pt - **Cambria bold**. All text should be Times New Roman (or Times Roman) with font sizes as follow: Addresses 8pt, Article history 8pt, Abstract including abstract title 9pt, Keywords 8pt, Body text 10pt, Level 1 headings 10pt bold, Level 2 headings 10pt CAPS, Level 3 headings 10pt italic, Level 4 headings 10pt italic no space below and text runs on, Footnotes 8pt.

The style for the names is initials then surname, with a comma after all but the last two names, which are separated by 'and'. Initials should not have full stops—for example **A E Kiv** and *not A. E. Kiv*. First names in full may be used if desired.

Please ensure that affiliations are as full and complete as possible and include the country. If the

* Corresponding author. Tel: +00-000-000-0000; fax: +00-000-000-0000;
E-mail: author@domain.com

authors are at different addresses, numbered superscripts should be used after each surname to reference an author to his/her address. The numbered superscripts should *not* be inserted using Word's footnote command. Ensure that any numbered superscripts used to link author names and addresses start at 1 and continue on to the number of affiliations. Do not add any footnotes until all the author names are linked to the addresses. For example, to format

A E Kiv^{1,2} and D Fuks²,

where there are 2 addresses, you should insert a symbol * to insert a *footnote* for Corresponding Author (see page 1 of this Guidelines):

A E Kiv^{1,2*} and D Fuks².

4 Tables

TABLE 1 Biologically treated effluents (mg/l)^a

| | Pilot plant | | Full scale plant | |
|------------------|-------------|----------|------------------|----------|
| | Influent | Effluent | Influent | Effluent |
| Total cyanide | 6.5 | 0.35 | 2.0 | 0.30 |
| Method-C cyanide | 4.1 | 0.05 | | 0.02 |
| Thiocyanide | 60.0 | 1.0 | 50.0 | <0.10 |
| Ammonia | 6.0 | 0.50 | | 0.10 |
| Copper | 1.0 | 0.04 | 1.0 | 0.05 |
| Suspended solids | | | | <0.10 |

TABLE 2 Points sizes and types styles

| Points | Place of Text | Type Styles |
|--------|--|----------------|
| 10 | Table number | ROMAN NUMERALS |
| 10 | Figure and Table Headings | ALL CAPS |
| 8 | Figure and Table Captions Reference list | SMALL CAPS |

TABLE 3 Setting Word's margins for A4

| Margin | A4 |
|---------------------|--------|
| Top | 2.5 cm |
| Bottom | 2.8 cm |
| Left | 2.0 cm |
| Right | 2.0 cm |
| Gutter ^a | 0 cm |
| Header ^a | 0 cm |
| Footer ^a | 0 cm |

^a These *must* be set to 0 cm. In addition, please make sure the *Mirror Margins* option is *not* selected.

Tables should have a title which makes the general meaning understandable without reference to the text. Tables should be presented in the form shown in Table 1, with all text, including title 8pt. Their layout should be consistent throughout.

Horizontal lines should be placed above and below table headings, above the subheadings and at the end of the table above any notes. Vertical lines should be avoided.

If a table is too long to fit onto one page, the table number and headings should be repeated on the next page before the table is continued.

Alternatively, the table can be spread over two consecutive pages (first on even-numbered, then on odd-numbered page).

For a wide table you can use 1-column section (Table 1), for a small standard table 2-column section is used (Table 2).

Line drawings should be drawn in black ink on drawing or tracing paper or should be glossy prints of the same, if they have not been prepared on your computer facility. All illustrations should be clearly displayed by leaving at least a single line of spacing above and below them.

When placing a figure at the top of a page, the top of the figure should be at the same level as the first text line of the other column. Legends to illustrations should be centred if on one line or aligned left if on two or more lines and should be 8pt. You can place a figure in 2-column style (see, Figure 1) or in 1-column style if your figure is large and consists of many small details (e.g., Figure 2),

Photographs must always be sharp originals (*not screened versions*) and rich in contrast. A copy or scan of the photograph should be pasted on the page and the original photograph (labelled) should accompany your paper.

5 Illustrations

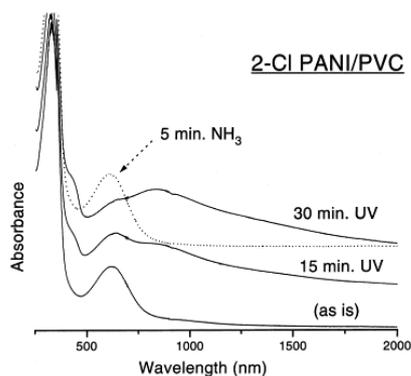


FIGURE 1 An example. Good quality with clear lettering.

Sharp originals (*not transparencies or slides*) should be submitted close to the size expected in the publication. Charges for the processing and printing of colour will be passed on to the author(s) of the paper. As the costs involved are per page, care should be taken in the selection of size and shape so that two or more illustrations may be fitted together on one page. When your paper has been received and logged by the publisher you will be contacted re: prices for colour figures. All notations and lettering should be no less than 2 mm high. The use of heavy black, bold lettering should be avoided as this will look unpleasantly dark when printed.

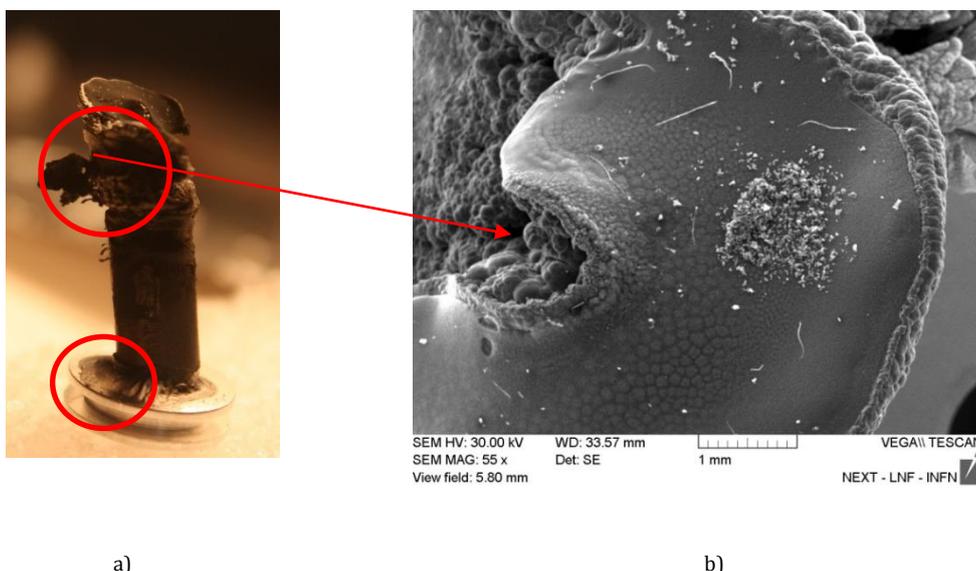


FIGURE 2. An example of color picture: a) Photo of the cathode filaments exiting out after the synthesis, b) SEM photo of the cathode surface.

6 Equations

Equations should be placed flush-left with the text margin and should be preceded and followed by one line of white, using *Microsoft Equation Editor*. Formulas fonts and sizes must match the text of your document.

For example, the style is:

$$\psi_{\mathbf{k}}^{(\pm)}(\mathbf{r}) \underset{r \rightarrow \infty}{\propto} \phi_{\mathbf{k}}(\mathbf{r}) + f_{\mathbf{k}}^{(\pm)}(\Omega) \frac{\exp(\pm ikr)}{r^{\frac{d-1}{2}}}, \quad (1)$$

where superscripts '+' and '-' label the asymptotic behavior in terms of d -dimensional waves, d is the atomic structure dimension.

Equations may be numbered sequentially throughout the text (i.e., (1), (2), (3),...) or numbered by section (i.e., (1.1), (1.2), (2.1),...) depending on the author's personal preference. In articles with several appendices equation numbering by section is useful in the appendices even when sequential numbering has

been used throughout the main body of the text: for example, A.1, A.2 and so forth.

When referring to an equation in the text, always put the equation number in brackets - e.g. 'as in Equation (2)' or 'as in Equation (2.1)'.

In cases of large and complicated formulas you can use 1-column text formatting as in cases of large tables and figures.

7 Appendices

Technical detail that it is necessary to include, but that interrupts the flow of the article, may be consigned to an appendix. Any appendices should be included at the end of the main text of the paper, after the acknowledgments section (if any) but before the reference list. If there are two or more appendices they should be called appendix A, appendix B, etc.

Numbered equations should be in the form (A.1), (A.2), etc, figures should appear as Figure A1, Figure B1, etc and tables as Table A1, Table B1, etc.

Acknowledgments

Authors wishing to acknowledge assistance or encouragement from colleagues, special work by technical staff or financial support from organizations should do so in an unnumbered Acknowledgments section immediately following the last numbered section of the paper (usually after **Conclusions**).

References

The references should be brought together at the end of the article, and numbered in the order of their appearance in the text. Authors should check whether every reference in the text appears in the list of references and vice versa. Numerals for references are given in square brackets []. Do not set reference numbers in superscript. The font size for the reference list should be 8pt.

A complete reference should provide the reader with enough information to locate the article concerned, whether published in print or electronic form, and should, depending on the type of reference, consist of:

- name(s) and initials;
- date published;
- title of journal, book or other publication;
- titles of journal articles may also be included (optional);
- volume number;
- editors, if any;
- town of publication and publisher in parentheses for books;
- the page numbers.

Two different styles of referencing are in common use: the Harvard alphabetical system and the Vancouver numerical system. For **TECNIA**, please use the Vancouver numerical system as described below.

In the numerical system references are numbered sequentially throughout the text. The numbers occur within square brackets, like this [8], and one number in particular cases can be used to designate several references. The reference list gives the references in numerical, not alphabetical, order. The fonts style see in Table 4.

TABLE 4. Font styles for a reference to a journal article

| Element | Style |
|--------------------------|-------------|
| Authors | Roman type |
| Date | Roman type |
| Article title (optional) | Roman type |
| Journal title | Italic type |
| Volume number | Bold type |
| Page numbers | Roman type |

For example to **Journal articles** the references are:

- [8] Shunin Yu N, Zhukovskii Yu F, Gopejenko V I, Burlutskaya N, Lobanova-Shunina T and Bellucci S 2012 *Journal of Nanophotonics* **6**(1), 061706-1-16
- [9] Moisala A, Nasibulin A G and Kauppinen E I 2003 *J. Phys. Condens. Mater.* **15**, S3011-35

The authors should be in the form surname (with only the first letter capitalized) followed by the initials with no periods after the initials. Authors should be separated by a comma except for the last two which should be separated by 'and' with no comma preceding it.

The article title (if given) should be in lower case letters, except for an initial capital, and should follow the date.

The journal title is in italic and is abbreviated. If a journal has several parts denoted by different letters the part letter should be inserted after the journal in Roman type, e.g. *Phys. Rev. A*.

Both the initial and final page numbers should be given where possible. The final page number should be in the shortest possible form and separated from the initial page number by an en rule '-', e.g. 2104-14, i.e. the numbers '21' are not repeated.

References to **Books** are:

-
- [2] Ziman J M 1979 *Models of Disorder* Cambridge Univ. Press: New York-London chapter 10
- [3] Economou E L 2006 *Green's Functions in Quantum Physics* (3rd edition) *Solid State Ser.* vol. 7 Springer Verlag: Berlin-Heidelberg
- [4] Sze S M 1969 *Physics of Semiconductor Devices* Wiley Interscience: New York
- [5] Shunin Yu N, Zhukovskii Yu F, Burlutskaya N Yu, Gopejenko V I, Bellucci S 2012 in *Nanodevices and Nanomaterials for Ecological Security, Series: NATO Science for Peace Series B - Physics and Biophysics* ed Yu Shunin and A Kiv Springer Verlag: Hiedelberg pp 237-262

Some more examples to **Books and Articles in Books and Conference Proceedings**:

-
- [4] Dorman L I 1975 *Variations of Galactic Cosmic Rays* Moscow State University Press: Moscow p 103
- [5] Caplar R and Kulisic P 1973 *Proc. Int. Conf. on Nuclear Physics (Munich)* vol 1 North-Holland/American Elsevier: Amsterdam p 517
- [6] Cheng G X 2001 *Raman and Brillouin Scattering-Principles and Applications* Scientific: Beijing
- [7] Szytula A and Leciejewicz J 1989 *Handbook on the Physics and Chemistry of Rare Earths* vol 12, ed K A Gschneidner Jr and L Erwin Elsevier: Amsterdam p 133
- [8] Kuhn T 1998 Density matrix theory of coherent ultrafast dynamics *Theory of Transport Properties of Semiconductor Nanostructures (Electronic Materials* vol 4) ed E Schöll Chapman and Hall: London chapter 6 pp 173-214
- [9] Kuhn T, Binder E, Rossi F, Lohner A, Rick K, Leisching P, Leitenstorfer A, Elsaesser T and Stolz W 1994 Coherent excitonic and free-carrier dynamics in bulk GaAs and heterostructures *Coherent Optical Interactions in Semiconductors: Proc. NATO Advanced Research Workgroup (Cambridge, UK, 11-14 August 1993) NATO Advanced Study Institute, Series B: Physics* vol 330 ed R T Phillips Plenum: New York pp 33-62

References to **Preprints and Patents**:

- [5] Milson R, Coley A, Pravda V and Pravdova A 2004 Alignment and algebraically special tensors *Preprint gr-qc/0401010*
- [6] Eaton D I 1975 *Porous glass support material* US Patent No. 3 904

If you are citing **Internet recourses** you should note the site address, full title of material and access date, i.e.,

- name of author(s) --if known
- title of the work - in quotes, if known
- title of the Web page - in italics, if applicable
- date of last revision - if known
- URL
- Date accessed

[3] Ram R, Orlando T 2003 *Physics for Solid-State Applications* <http://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-730-physics-for-solid-state-applications-spring-2003/> 16 Jan 2014

If you are citing, in particular, a work written in a non-Latin script (e.g., Chinese, Greek, Japanese, Russian etc), the reference must be transliterated into the English alphabet. **Transliteration** means a procedure of the conversion of scripts or writing replacing text written in one script or writing system with the characters of another script or system in order to make the text (e.g., proper names) legible for users of another language or script (see, <http://en.wikipedia.org/wiki/Transliteration>).

[3] Sidorov S, Sidorova N G, Preobrazhenskii G I, et al. 1997 *Vopr. Ikhtiol.* **37** 560 (1997). *Ichthyol.* **37**, 547)

If you are citing the work published on the original language the reference should be accompanied by remark, e.g., (*in Russian*), (*in Japanese*), (*in Chinese*) etc.:

...

[7] Grosberg A. Yu. and Khokhlov A. R., 1989 *Statistical Physics of Macromolecules* Nauka: Moscow (*in Russian*)

[8] Kireev S V, Protsenko E D, Shyrev S L 2002 *Byull. Izobret.* No. 10 RF Patent No.2181197 (*in Russian*)

Unpublished conferences and reports should generally not be included in the reference list and articles in the course of publication should be entered only if the journal of publication is known.

Please follow the style in the examples presented for Journal references, Books, Edited Books, Patents and Internet resources.

References

[1] Tallman D E, Wallace G G 1997 *Synth. Met.* **90** 13

[2] Kroto H W, Fischer J E, Cox D E 1993 *The Fullerenes* Pergamon:Oxford

[3] MacDiarmid A G, Epstein A J 1991 in ed.W R Salaneck, D T Clark, E J Samuelson *Science and Applications of Conducting Polymers* Adam Hilger: Bristol p.117

[4] Eaton D I 1975 *Porous glass support material* US Patent No. 3 904

↑ If possible equalize columns on the last page ↑