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Instructions to authors for preparing compuscripts to be submitted to OSA journals in the REVTEX 3.0 format. Release date: November 10, 1992.

Contents

1 ELECTRONIC MANUSCRIPT FILE SUBMISSION

Quick-Reference Check List for Submission:

Submission by	IBM-compatible formatted diskette should include:
1.	Cover letter with journal and manuscript identification, hardware identification, and corresponding author information restated
2.	Diskette with filename(s), manuscript number, and first authorjs name written on label
3.	REVTEX 3.0 file(s) on the diskette that match the final, accepted manuscript
4.	Paper copy of the final, accepted manuscript, with camera ready figures.

The Optical Society of America is pleased to invite electronic files in REVTEX 3.0 from authors of journal manuscripts. At this time, the REVTEX format can be converted by OSAjs commercial typesetters, and it is hoped that most files submitted in this fashion will be usable.

Electronic manuscript files should be submitted at the conclusion of the peer review process. The key is that, on acceptance, the authorjs electronic file must be in the hands of the OSA Manuscript Office staff. The electronic version must be that of the authorsjs final, accepted manuscript. If it is not, the file will simply not be used.
A cover letter containing the following information should accompany any electronic file submission:

1. Article identification m include journal name, manuscript number, title of paper, and the fact that this is a REVTEX 3.0 electronic file submission
2. Computer information m give the name of computer used and the density of the diskette
3. Corresponding author information m telephone and facsimile numbers, plus an e-mail address if available, should be restated in the cover letter

Failure to include the necessary information may preclude the use of an authorjs file. Also, if questions arise and the author cannot be reached for an answer in a timely fashion, then the file may not be used (OSA will not delay publication of an authorjs work in this way).
The address for submission is given below for the following four OSA journals:

Journal of the Optical Society of America A
Journal of the Optical Society of America B
Applied Optics.
Optics Letters

Conventional mail delivery of the authorjs file on diskette to the address below is the current mode of receipt. In the future, electronic mail options are expected to be available as well.

Optical Society of America
Manuscript Office
2010 Massachusetts Ave., N.W.
Washington, D.C. 20036-1023

Telephones:	(202) 416-1916 - Manuscript Office (202) 416-1903 - Technical Assistance
Facsimile :	(202) 416-6120
E-mail:	(Internet) osamss@pinet.aip.org m Manuscript Office fharris@pinet.aip.org m Technical Assistance

A paper copy of the manuscript is still required with submissions on diskette. Copy editing will still take place on paper, and then the marked paper plus electronic file will be sent to one of OSAjs typesetters.
The typesetter will examine the authorjs file to determine whether it will be easier and less costly to convert and utilize the full file or just parts of the file or to rekey the manuscript completely. The authorjs compliance with the stylistic directions of LATEX and REVTEX along with the degree of copy editing will be the main factors affecting this decision. In all cases, the typesetter will identify the course of action taken by including a feedback form that the author will receive with the proof.
It may be interesting to know that the Societyjs typesetters do not use REVTEX or LATEX for their actual typesetting. They currently use Xyvision or Arbortext, which are professional, specialty systems used by the typesetting industry.

2 WHERE TO TURN FOR HELP

Authors are expected to know the basics of TEX and LATEX before using REVTEX. Also, authors should fully review the README file included in REVTEX 3.0 before getting started. But if problems or questions specific to REVTEX 3.0 arise, the following staff person from the Optical Society will advise the OSA author:

Frank E. Harris
Optical Society of America
2010 Massachusetts Ave., N.W.
Washington, D.C. 20036-1023

Telephone:	(202) 416-1903
Facsimile:	(202) 416-6120
E-Mail:	fharris@pinet.aip.org (Internet)mfor REVTEX help only fharris@aip.org m other inquiries.
To FTP for files:	ftp aip.org anonymous (Your Internet address) cd revtex30 mget *

Some inquiries may be forwarded to OSA members who have volunteered to assist in answering REVTEX technical questions. Through this member-assisted network, it is OSAjs intent to provide satisfactory answers to all REVTEX-related questions that OSA authors ask.
If you are willing to participate in this member-assistance program for REVTEX, please get in touch with Frank E. Harris, at the above e-mail address.
If you are new to TEX and LATEX, some books that you might find useful are

Paul W. Abrahams, TEX *for the Impatient*, (Addison-Wesley Publishing Company, Reading, Massachusetts, 1990)

Leslie Lamport, LATEX - *A Document Preparation System*, (Addison-Wesley Publishing Company, Reading, Massachusetts, 1986)

3 GETTING STARTED: BASIC TEMPLATES AND OVERVIEW

This is a description of the components of REVTEX 3.0 that are specific to OSAjs journals. A brief map of what files are relevant and an overview of use are provided. The quick- reference guide below is intended for advanced users of REVTEX 3.0, while more detailed how-to-use information is given in Section **IV**.

NOTE: All users of REVTEX 3.0 should fully review the README file before getting started. MS-DOS users can use the TYPE command.

Type: TYPE README: MORE [carriage return].

Users of REVTEX 3.0 for OSA journals will want to use the following files:

README	-	Brief instructions on REVTEX use
revtex.sty	-	Main style file for all physics societies
osa.sty	-	Society-specific style file for OSA journals
osa10.sty	-	Fonts and format style file for OSA journals
osa12.sty	-	Fonts and format style file for OSA manuscripts
osabib.sty	-	Society file for bibliography style
template.tex	-	OSA template for creating a manuscript
manosa.tex	-	The OSA portion of the REVTEX manual, part of which shows output and corresponding REVTEX input on facing pages
sample.tex	-	Short excerpts of the three manuscripts listed below, (about 20% of each original paper), with corresponding input
josaa.tex	-	Sample JOSA A paper (excerpts)
josab.tex	-	Sample JOSA B paper (excerpts)
aplop.tex	-	Sample Applied Optics paper (excerpts)

OSA authors will want to kLATEXl and print sample.tex, and also the more complete sample for the journal to which they are submitting, josaa.tex, josab.tex, or aplop.tex. Optics Letters authors should refer to josaa.tex or josab.tex for a style guide, and select the josaa option in the documentstyle command for their manuscripts.
A valuable tool for authors new to REVTEX is the raw input files josaa.tex, josab.tex, and aplop.tex. These may be imported into a word processor and printed, so that input and REVTEX output can be compared.
The OSA template (template.tex) is a document file set up and ready to use for manuscript input. It includes all the basic section tags and formatting commands (macros) that are relevant to an OSA manuscript. For a list of all available macros, please refer to Appendix B, and for a list of symbols, see Appendix A. It may also be helpful to scan the manuscript example provided in Section **V** to find other macros that may be useful to a particular application.
The three style files (osa.sty, osa10.sty, and osa12.sty) will interpret the macros in terms of special layouts and fonts for OSA journals and thus will produce a properly formatted manuscript when printed. The file osabib.sty handles cross-referencing and bibliographic citations and makes sure that these are formatted according to OSA style.

3.1 Quick-Reference Guide

The following quick-reference guide may be particularly useful for advanced REVTEX users.

1. See Appendix A for a list of symbols.
2. See Appendix B for a list of all REVTEX macros in addition to many useful LATEX macros. [Do not create and use new macros. Use only LATEX and REVTEX macros so the file will be usable by OSAjs typesetters.]
3. Sections, subsections and subsubsections are supported. It is also possible to suppress section numbering by putting a star after each command, i.e., `\section*`your name.

Main section heading:	`\section`
First subheading:	`\subsection`
Second subheading:	`\subsubsection`

4. Delimiter for in-line math: $
5. To display and automatically number an equation, start with `\beginequation` and finish with `\endequation`.
6. To display and automatically number a group of equations, use `\begineqnarray` and `\endeqnarray`. To get each equation to line up under the = or * or similar sign, surround the = sign in each equation with & signs.
7. To number displayed equations manually, use `\eqnumthenumber`. This option would be used for equation (), etc.
8. To number equations using letters start with `\beginmathletters` and end with `\endmathletters`.
9. Number by section: Put the `\eqsecnum` command before the first section.
10. Citations for cross referencing equations and sections use the same commands. Bibliographic citations have separate commands.

Tag for citing equations in text:	`\reftag`
Tag for equations to be cited:	`\labeltag`
Tag for citing references in text:	`\citereftag`
Tag for citing references kon the linel in text:	`\onlinecitereftag`
Tag for listing references:	`\bibitemreftag`

11. Journal name shortcuts: See Table 5 in section **V**.
12. Place figure captions at the end of your manuscript. Use the commands `\beginfigure` and `\endfigure` to start and end each figure. Use the command `\captionyour caption here` to create and automatically number the caption. To label figure captions use `\labelfigureName`. Numbering is automatic.
13. Please place your tables at the end of your manuscript submission. The typesetters will put them in the appropriate place within the journal.

Start the table environment with	`\begintabular`,
and end with	`\endtabular`.
Within the table environment, some standard options are:	
Caption and number:	`\captioncaption here`
Begin tables:	`\begintablecolumn data`
End tables:	`\endtable`
Make a horizontal rule:	`\tableline`
Column headings:	`\multicolumn`
Footnotes:	`\tablenotenote here`

4 DETAILED HOW-TO-USE INFORMATION

NOTE: Do not create and use new macros. Use only LATEX and REVTEX macros so the file will be usable to OSAjs typesetters.

4.1 Title, Authors, Affiliation, Abstract

The document template for OSA (template.tex) already contains the basic macros for the early parts of any manuscript: the title, author(s), affiliation(s), and abstract.

4.2 Text

Paragraphs always begin with a blank input line. Unless a hyphen is required in a word and that hyphen falls at the end of a line as you type it, do not hyphenate a word at the end of a line; REVTEX will do this. Continue to hyphenate modifiers within a line of text, e.g., kelectro-optical devices."
Use 2 single curly quotes for quotation marks around quoted text (kxxxl), not straight quotes ("xxx"). For opening quotes this is two octal 140 characters (hex 60, near the top left on most keyboards); for closing quotes, this is two octal 047 (hex 27) characters.
Donjt use `\smallskip`, `\bigskip`, or any other vertical motion commands. Horizontal motion commands are unnecessary as well.
Authors should avoid the use of specially designed "define characters" and choose symbols from those shown in the LATEX Userjs Guide & Reference Manual or in Appendix A of this REVTEX Authorjs Guide. There is no guarantee that a specially designed definition will produce the desired results at the typesetterjs production

facility. If a special symbol is required and not listed in the LaTeX Userjs Guide & Reference Manual or in Appendix A of this REVTEX Authorjs Guide, please request special consideration in the cover letter accompanying the file submittal. The copy editor will make note of it, and the typesetter will attempt to accommodate the author. *Use of unusual characters is subject to approval by the managing editor.*

4.3 Section Headings