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AAP BOOK MANUSCRIPT PREPARATION GUIDE

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Please read carefully. Manuscripts that do not follow these guidelines may be returned to you for further work.

WELCOME TO PUBLISHING WITH APPLE ACADEMIC PRESS

This guide was designed to answer your questions about manuscript preparation, software requirements, permissions, and other issues involved in transforming your manuscript into a finished book. We suggest you read it completely to get an overview of the production process and then refer to it as needed as you write and organize your material. If you have questions not covered on these pages, contact us at info@appleacademicpress.com. AAP's website URL is www.appleacademicpress.com.

MANUSCRIPT PROCESSING STEPS

1. The author/editor submits the complete manuscript, artwork, and necessary permission information to your AAP contact by the deadline specified in your book agreement. If you feel you cannot make your due date, please contact AAP.
2. The AAP production department will review your material to make sure everything is provided and will contact you for missing or incomplete material.
3. The manuscript is copyedited; artwork is prepared for typesetting.
4. Page proofs are sent to the author for checking (usually about 2 to 2–1/2 months after a manuscript has been submitted). Proofs are sent to the editor of a contributed book. He or she distributes the chapters to contributing authors for proofing and follows up with them to ensure the prompt return of the pages. The author or editor returns one set of corrected proofs to AAP by the date specified.
5. AAP's production department will incorporate final corrections and will oversee index preparation, checking the layout, and other pre-printing tasks.
6. A final pdf of the complete book will be sent to the first author or editor for one last opportunity to look for any major errors. A very short turnaround time (usually 1 week) is given for this purpose.
7. The final version of the book is sent to press.

HOW TO PREPARE TEXT

MANUSCRIPT LENGTH

Generally, manuscripts for Apple Academic Press books should be between 300–400 pages (unless otherwise arranged with the Publisher), 1.5 line spaced, using 11 point font in Times New Roman, unless other specifications have been mutually agreed to. However, the length of your manuscript was determined before you signed your book agreement and is specified in the agreement. AAP's management approved the manuscript length and based all cost and revenue projections on it; therefore it is essential that you adhere to the agreed-upon length. If you determine that the number of pages of your manuscript will be 10% more or fewer than the number cited in your book agreement, contact your AAP contact immediately so the best course of action can be determined. As a rough guideline for estimating the size of your finished book, 1.25 or 1.5 manuscript pages should equal one printed page, or a 300-page manuscript in 11 Times New Roman with 1.5 spacing equals 270 printed pages.

GENERAL MANUSCRIPT GUIDELINES

Microsoft Word is preferred. You may use MathType for equations. For a list of other programs that are acceptable, see page 9.

Do **not** justify, apply hyphenation, or use any other formatting, including automatic paragraph indents, automatic numbered lists, or automatic bulleted lists. Indents should be created with a hard tab, and all lists should be set manually rather than using Word's automatic formatting. These features of Word cannot be read by our layout software.

Keep backup copies of the manuscript.

Revisions

Your manuscript should be correct and complete when submitted. Revisions must be made before the manuscript is copy edited. Major corrections cannot be undertaken by either the editor or the Publisher after the manuscript has been submitted, unless other arrangements have been made with the Publisher.

Submission

Submit your manuscript electronically via the most convenient method: via email, CD, ftp (preferred), or flash drive. Contact AAP for ftp information. Once you have uploaded your files to AAP's ftp site, send an email to AAP indicating the file names.

WHAT TO INCLUDE

- Submit ALL the material plus permission forms and copyright transmittal forms at the same time.
- For books with more than one contributor, include the following for each chapter author on the first page of the chapter: author name, degrees, affiliations (including city, state/country), mailing address, e-mail, and phone or fax.
- Include the entire book, with the exception of figures, illustrations, and tables, in a single file or in separate files for each chapter. Do not submit the material to the Publisher until the entire book is completed.
- Be sure you have included all elements in this file that are required for each chapter (references, any appendices, tables, figure captions, etc.).

Frontmatter should include:

Title page

- Book title and subtitle (if it has a subtitle).
- Author(s) or editor(s) name, including all degrees and affiliations, exactly as you want these to appear on the book cover and in all promotional materials.

Table of Contents

- Full chapter titles exactly as they appear on the individual chapters in the sequence in which they occur within the book.
- Author names for each chapter (if book has multiple contributors).

Preface

- A preface is written by the author/editor and usually includes the reasons for undertaking the work, the method of research, etc. Author/editor should highlight the high quality of the work and stress who the audience is. The preface should the highest level of readership of the book. The preface should answer these questions: For whom is this book written? Why does the reader need this book? Why is it important? How is it different from other books similar to it?

Introduction

- An introduction may be written by the author/editor or someone else and should sum up what the book is about, introduce the subject, indicate benefits to the reader of the book, note the features of the book, etc.

Foreword

- A foreword is optional. The foreword would be written by an authority in the field, someone willing to lend his or her stamp of approval to your work. If that person has name recognition, it will help to sell your book. You should solicit an author for your foreword well before the manuscript's due date. Submit as much of the finished book as you can to the foreword author so that s/he can have a good sense of what the book will be before about writing the foreword.

About the Author(s)/Editor(s)

- A brief (1 to 2 paragraphs long) professional bio of each author or editor.

Contributors' List

- Required for books with contributors for each chapter.
- Provide an alphabetical list (by last name) containing each contributor's full name, highest degree (PhD, DSc, MD, etc.), and affiliations (title, department, institution, city, state/country).

Optional Frontmatter Element

- Dedication and acknowledgments.

Body of the Book should include

Chapters

- The first page of each chapter should include chapter title and subtitle.
- For edited book: include chapter authors' names (not necessary for authored books).
- Contents within the chapter (see page 17 for a sample chapter opening page), if appropriate.
- Follow the text of each chapter with references, tables, figure captions, and clearly labeled figures pertaining to each chapter.

Back of the Book

- Any appendices.
- Note: AAP will prepare the index.

TEXT FORMATTING INSTRUCTIONS

Formatting Tips

- Please number the pages.
- Don't hit "enter" to insert a return at the end of every line. Allow the computer to "wrap" your text.
- Don't leave space in your text for tables, figures, and illustrations. AAP will handle that for you. (You can simply call out such items within the text by indicated [Table x.x goes here].)
- Don't justify right margins. Cancel the automatic hyphenation feature on your computer. Don't use end-of-line hyphens.
- Don't embed your figures within the text; they should be placed in their own separate and original, clearly labeled electronic art files.
- Don't embed figure captions, tables, and/or references within the text; they should be placed at the end of the text or in a separate file.
- Leave one space between sentences, not two.
- Be consistent in your use of special characters (Greek letters, mathematical symbols, etc.), abbreviations, and spacing throughout. All Greek letters and mathematical symbols should be input using the Symbol font.
- Equations can be embedded within the text if you are working in a Microsoft Word document; however, they should be saved and provided separately if using a program such as MathType. Tables may either be placed at the end of the chapter text or in their own separate electronic files. (Note: All tables must be input/typeset by the author; they are not to be scanned.)

Headings

NUMBER 1 HEADS SHOULD BE ALL BOLD, CAPS, Roman

Number 2 Heads Should Be Bold, Title Case, Roman

Number 3 Heads Should Be Bold, Title Case, Italic

Number 4 heads should be bold, sentence style, italic

Number 5 heads should be light face, sentence style, italic

Italics

Be sure to use italics correctly, in particular in italicizing genus or scientific names (e.g., *Astrophytum myriostigma*).

Units of Measurement and Abbreviations

Always leave a space between a number and a unit (e.g., 5 mm). Use abbreviations that are accepted nomenclature and use them consistently. Define all abbreviations or acronyms at their first use (e.g., cyclic adenosine monophosphate (CAMP)).

Quotations

- A direct quotation of no more than 4 or 5 lines should be enclosed in quotation marks and run into the text.
- Longer quotations—referred to as extracts—should be set with an indented margin from the rest of the text with a line above and below. No quotation marks are used.
- Use ellipses (. . .) to indicate any point in the quote where you have omitted text. If the omission occurs at the end of a sentence, use 4 dots, the last being the period.
- If you add material or italics to a quotation, please place your own words within brackets, not parentheses, or indicate within brackets (e.g., [italics mine]). Parentheses should appear only as used by the original author of the quote.
- Check each quote to be certain that you have copied it verbatim.
- Include the complete source of the quotation or extract's original publication in an endnote at the end of the chapter.

Cross References

- Do not use page cross references. Instead, refer to the chapter and heading under which the material appears (e.g., see chapter 5, Health Behavior).
- If you refer to information found elsewhere in the same chapter, parenthetically refer to the heading under which the material appears and note "above" or "below" as appropriate (e.g., see Clinical Implications below).

COPYEDITING NOTES

Text must be written in good, grammatically correct English. If English is not your native language, you should seek the help of a colleague or professional translator. Have your chapter/article read by at least two other people to avoid grammar and typing errors. Major corrections cannot be undertaken by the Publisher.

Follow US English. However, if the authors are Canadian, Canadian spelling may be used, with the Publisher's approval.

- Check all figure and table captions and also their call outs.
- Table caption will go in the beginning without period, and figure caption will go after the figure with period at the end.
- Check for US English, such as:
 - Use z-spelling, as in analyze rather than analyse; organize rather than organise; etc.
 - Use single— as in traveler, rather than traveller, etc.
 - Use our—use color, favor; not colour, favour
 - Use while and not whilst
 - Use program and not programme
 - Use gray and not grey
 - Use aluminum and not aluminium
 - Use acknowledgment and not acknowledgement
 - Replace & with “and” (spelled out)
 - Replace 90s with 1990s (not 1990's)
 - Replace amongst with among
 - Replace sulphur with sulfur
- Use double quotes (“”) after . or , when the sentence is complete, but if it is for one sentence use before or inside . or ,.
For example:
 - “Before leaving the building, they are required to have an evacuation.”
 - Before leaving the building, they are required to have an “evacuation”.
- All species and genes names should be italics.
- Do not start sentence with number; spell out the number instead:
 - Thirty-one studies showed that . . .
- Put “the” if the sentence is starting with acronyms.
 - The WHO reported that . . .
- Make sure full form of acronym should be used first with the acronym following in parentheses before using only the acronym:
 - The World Hunger Organization (WHO) advocated for poverty control. In 1991, the WHO . . .

HOW TO PREPARE FIGURES, TABLES, AND ILLUSTRATIONS

- Identify each figure or table with a double number (chapter number and figure or table number; e.g., Table 3.1) and a title (e.g., Figure 5.2 Generation of Human and Bovine TAFIa).

Tables

- Use tables when content can be more effectively presented in this format, especially when comparisons are intended.
- Presentation of tables should be as simple as possible. A table that is long but has few columns is preferred to a wider table with many columns.
- Tables should be created using Word. They will be reset during page layout.
- A summary of the findings provided in a table should be discussed within the text. Always cite each table specifically within the text, using the double numbering system discussed above (e.g., see Table 12.3).
- Always double check your tables for accuracy and proofread them carefully.
- Tables can be placed close to where you would want them to occur within the text (after a paragraph break after the first citation).
- When working in Word, please use the Table Editor feature provided. Include a heading for each column of data. A zero should precede the decimal point in a number less than one (0.25). Use N/A or an en-dash (–) to indicate data that are not available. Footnotes in table data should appear as superscript lowercase letters (11.4b) if only a few items need footnotes.

-
- If a reference citation in a table could be confused with data, enclose the reference in parentheses and insert it on the line with table data, as in 10×127 (15). If you plan to include more than three references in a table, it may be advisable to devote a column to references. That will enhance clarity and eliminate the need for superscript numbers and parentheses.

Figures and Illustrations

- Figures should be submitted electronically in a Figure Folder, separate from the Word doc. Each figure should have its own file, labeled according to its double number (e.g., Fig 4.3). Create a list of all figures or illustrations and place a list of figures and all figures the Figure Folder.
- Line art should be scanned at 600 to 1200 dpi (dots per inch).
- Photos (black and white) should be submitted at 300 dpi as TIF files.
- If you cannot submit electronic versions of your figures, supply good quality hard-copy (printed at 1200 dpi on laser printer). Below each figure, outside the area that will be reproduced, write the figure number, your name, the title of the book, and any notations regarding the figure (such as orientation, etc.). If you wish to have the hard copy returned to you, please alert your AAP contact
- Keep illustrations as simple as possible. Avoid large black areas and/or very dense patterns, as they do not reproduce well.
- All figures and illustrations must serve an academic or pedagogical purpose. Illustrations that are purely decorative or not strictly necessary should not be used.
- All figures and illustrations will be printed in black and white. Do not use color-coding. Instead change colors to graytones or use cross-hatching, dots, and other patterns to distinguish separate areas. An acceptable selection of graytones is 20%, 50%, 80%; any other variations will not be easily distinguishable. If color is required, discuss this separately with the Publisher. Charges may apply for color illustrations.
- All figures must be cited parenthetically (e.g., see Fig. 5.7) or within the text.
- Place figure number, title, and caption within text, after the first paragraph break after the first citation, with a line space above and below.
- Figures, photographs, and structures will be sized according to the trim size of your book. The AAP Production Department will size them to produce a uniform and professional appearance. He or she will determine the extent of reduction that will allow the materials to fit on the page and ensure adequate type size.

Source Lines for Tables, Photographs, and Figures

Two of the most common source lines used for illustrations are shown below. A figure source line is enclosed in parentheses and included after the caption. Table source lines should not be enclosed in parentheses and should appear below the table body. Some copyright holders request specific wording of source lines as a condition to granting permission and their requests should be accommodated. Source lines can be included even if material is not subject to copyright (U.S. government publications, for example). For more detail, see the Permissions section.

Figure Source Line for Journal Article:

(From Mueller, W.J., *Poult. Sci.*, 40, 1562, 1961. With permission.)

Table Source Line for Book:

Source: Bath, D.L., Dickinson, F.N., Tucker, H.A., and Appleman, R.D., *Dairy Cattle: Principles, Practices, Problems, Profits*, 3rd ed., Lea & Febiger, Philadelphia, 1985. With permission.

Add “Adapted from” or “Modified from” to your source line if you adapt or modify copyrighted material.

HOW TO PREPARE REFERENCES

Note: Many books are evaluated for the currency of references within the books. When preparing the book, please try to cite recent publications.

- Apple Academic Press uses *The ACS Style Guide, 3rd Edition*. For additional examples and explanations, see the print manual from the American Chemical Society, or your library may have a copy.
- Remember, a reference is a source that is actually cited within the text. If the source is not cited in the text, it should be placed in an additional section at the end of the chapter or book, titled Additional Readings or Bibliography. Sources in the Additional Readings or Bibliography sections should be unnumbered and typed in alphabetical order.
- Do not use the automatic reference feature in Word or any other reference tools, as these are not compatible with our typesetting software.

Each citation consists of two parts: the in-text citation, which provides brief identifying information within the text, and the reference list, a list of sources that provides full bibliographic information which appears at the end of each chapter.

How to Format In-Text Citations

Select one of the three methods below to cite in-text references:

Superscript numbers

At the end of the cited information:

Fluoridated water as well as various fluoride products such as toothpaste provide fluoride ions necessary for remineralization.¹

Within the cited information:

Rakita¹ states that fluoridated water as well as various fluoride products such as toothpaste provide fluoride ions necessary for remineralization.

When citing more than one reference at one place by number, list the numbers in ascending order and separate them by commas (without spaces) in superscripts, or if they are part of a consecutive series, use an en dash to indicate a range of three or more.

in the literature^{2,7,15}

were reported^{3-5,10}

Cohen's Kappa^{1,2,7,18}

Italic numbers in parentheses

At the end of the cited information:

Fluoridated water as well as various fluoride products such as toothpaste provide fluoride ions necessary for remineralization (1).

Within the cited information:

Rakita (1) states that fluoridated water as well as various fluoride products such as toothpaste provide fluoride ions necessary for remineralization.

Author name and year of publication

At the end of the cited information:

Fluoridated water as well as various fluoride products such as toothpaste provide fluoride ions necessary for remineralization (Rakita, 2004).

Within the cited information:

Rakita states that fluoridated water as well as various fluoride products such as toothpaste provide fluoride ions necessary for remineralization (2004).

Note: for two authors use "and": Rakita and Smith. For more than two authors use "et al.": Rakita et al.

HOW TO FORMAT REFERENCE LISTS

Books

Single author

Chang, R. *General Chemistry: The Essential Concepts, 3rd ed.*; McGraw-Hill: Boston, 2003.

Edited Book

Gbalint-Kurti, G. G. *Wavepacket Theory of Photodissociation and Reactive Scattering*. In *Advances in Chemical Physics*; Rice, S. A., Ed.; Wiley: New York, 2004; Vol. 128; p 257.

Book in Series

Omega-3 Fatty Acids: Chemistry, Nutrition, and Health Effects; Shahidi, F., Finley, J. W., Eds.; ACS Symposium Series 788; American Chemical Society: Washington, DC, 2001.

Article from a reference book

Powder Metallurgy. *Kirk-Othmer Encyclopedia of Chemical Technology*, 3rd ed.; Wiley: New York, 1982; Vol. 19, pp 28-62.

Articles

Article in a scientific journal

Evans, D.A.; Fitch, D.M.; Smith, T.E.; Cee, V.J. Application of complex aldol reactions to the total synthesis of phorbaxazole B. *J. Am. Chem. Soc.* 2000,122, 10033-10046.

Article in a popular/non-scientific magazine

Manning, R. *Super Organics*. *Wired*, May 2004, pp 176-181.

Article from an online journal

Peacock-Lopez, E. Exact Solutions of the Quantum Double Square-Well Potential. *Chem. Ed. [Online]* **2007**, 11, 383-393 <http://chemeducator.org/bibs/0011006/11060380lb.htm> (accessed Aug 23, 2007).

Theses, Patents, Conferences, Technical Reports

Theses

Thoman, J. W., Jr. *Studies of Molecular Deactivation: Surface-Active Free Radicals and S(O)para-difluorobenzene*. PhD Dissertation, Massachusetts Institute of Technology, Cambridge, MA, 1987.

or

Gehring, A. PhD. Dissertation, Harvard University, 1998.

Patents

Wilkins, T. D.; Tucker, K. D. Detection, Isolation, and Purification of Clostridium Difficile Toxin A with Toxin Receptors. U.S. Patent 5,098,826, March 24, 1992.

Conference/Meetings (full-text)

Winstein, S. In *University Chemical Education, Proceedings of the International Symposium on University Chemical Education, Frascati (Rome), Italy, October 16-19, 1969*; Chisman, D. G., Ed.; Butterworths: London, 1970.

Conference/Meetings (abstract only)

Kaplan, L.J.; Selder, A. Books of Abstracts, 213th ACS National Meeting, San Francisco, CA, April 13-17, 1997; American Chemical Society: Washington, DC, 1997; CHED-824.

Technical Report or Bulletin

Crampton, S.B.; McAllaster, D. R. Collision and Motional Averaging Effects in Cryogenic Atomic Hydrogen Masers; WMC-AFOSR-002; NTIS: Springfield, VA, 1983.

Web/Online

Note: Different web browsers break the text in different places of a URL. The URL should begin on the same line as the rest of the citation information, with a break inserted after a slash, if needed.

Web page

National Library of Medicine. Environmental Health and Toxicology: Specialized Information Services. <http://sis.nlm.nih.gov/enviro.html> (accessed Aug 23, 2004).

Article from an online journal

Peacock-Lopez, E. Exact Solutions of the Quantum Double Square-Well Potential. *Chem. Ed.* [Online] 2007, 11, 383-393 <http://chemeducator.org/bibs/0011006/11060380lb.htm> (accessed Aug 23, 2007).

Article from full text database

Begley, S. When Does Your Brain Stop Making New Neurons? *Newsweek*[Online] July 2, 2007, p 62. Expanded Academic Index. <http://galegroup.com> (accessed Aug 23, 2007).

Article published online in advance

Chung, J.M. and Peacock-Lopez, E. Cross-diffusion in the Templator model of chemical self-replication. *Phys. Lett. A* [Online early access]. DOI:10.1016/j.physleta.2007.04.114. Published Online: June 12, 2007. <http://www.sciencedirect.com> (accessed Aug 23, 2007).

Computer Program

SciFinder Scholar, version 2007; Chemical Abstracts Service: Columbus, OH, 2007; RN 58-08-2 (accessed Aug 23, 2007).

SOFTWARE GUIDELINES

ACCEPTABLE SOFTWARE AND FILES

Manuscripts must be submitted electronically as attachments to an email or authors may upload to AAP's ftp site. For information on AAP's ftp site, email your contact at AAP. Please do **NOT** send text files in pdf or in other non-editable formats.

Acceptable software files:

- MS Word 2007 (most versions are compatible)
- Indesign CS5
- Photoshop CS3
- Illustrator CS5
- MS Office 2007
- Adobe Acrobat Professional X
- MathType 5.0

You may be charged for any retyping of your manuscript if you fail to provide electronic files that meet our software requirements. Please feel free to ask if your program can be used by our production department. Contact editorial@appleacademicpress.com

Note: Please do not try to make the manuscript look as if it were the final book. For example, chapter titles and subheads typed in full capitals will have to be retyped by the typesetter. It should contain no layout formatting such as styles, borders, shading, etc. Please do not embed art objects (such as figures) into the text from other applications. Also, do not link your footnotes, references, figure captions, etc. To make the manuscript preparation process easier, AAP can provide you with MS Word (version 6.0) templates, containing the appropriate styles. Please consult AAP to request this.

ELECTRONIC ART GUIDELINES

In order to produce high-quality graphics for reproduction, original electronic line-art files should be created in Adobe Illustrator or Macromedia Freehand (vector graphic programs). Original electronic art files containing grayscales or

photographs should be created in Adobe PhotoShop. Note: Vector graphic files provide the best results and are preferable to bit-mapped graphics (see below).

If art consists of computer-screen captures, please create them in CapturEze Pro or another screen capture software program capable of saving screen images in the proper resolution for printing.

Vector Graphics Formats

A vector file creates an image as a collection of lines rather than as a pattern of individual pixels (bit-mapped graphics). Vector files are much easier to edit than bit-mapped graphics (objects can be individually selected, sized, moved, and otherwise manipulated) and are preferred for professional illustration purposes. Because they are scale and resolution independent, vector images can be enlarged without loss of sharpness. Acceptable vector file formats are listed below in order of preference:

Adobe Illustrator (.ai) is the vector graphics program best suited for creating high-quality professional graphics.

PDF (portable document file) is a file format that allows a document to be transferred to another type of computer system without losing the original formatting. In order to print or view a .pdf file, the user should use Adobe Acrobat Reader, which is freeware.

EPS (encapsulated PostScript file) format is a high-resolution graphic image stored in the PostScript language. The .eps format allows users to transfer high-resolution graphics images between applications. The images can also be sized without sacrificing quality.

Two important things to note concerning the preparation of vector graphics:

- Every object must be grayscale. RGB or CMYK color objects will fail at the printer and result in delays and increased costs in production.
- The thickness of every stroked line must be at least 0.5 points. This ensures that the lines do not appear broken or jagged. Note: If you are scaling your images, you must account for the difference when you check your line weights. For example, if your .eps file is 40 picas wide and your thinnest line is 0.75 points and you place the art as 20 picas wide, your thinnest line is now 0.38 points.

Bit-mapped Graphics Formats

A bit-mapped file forms an image as a pattern of pixels (square dots) and is limited in resolution (sharpness) to the maximum resolution of the screen on which it is displayed. Bit-mapped images are inferior to vector graphics for most applications because they tend to have aliasing (also called jaggies and stairstepping) which causes a staircase distortion due to the square shapes of the pixels. Enlarging bit-mapped images accentuates the distortion and jagged edges.

A bit-mapped graphic is stored as a group of bits that represent an image to be displayed on a computer screen. The image on the screen is composed of pixels (dots), similar to the dots in a photograph in a newspaper. Each bit in an image corresponds to one pixel in the screen, so the number of pixels that composes a monitor image determines the quality of the image. Because monitor screen resolution is only 72 dpi (dots per inch), and the resolution needed for printing is 266 dpi, a bit-mapped image limited to 72 dpi cannot be used to produce a quality image for printing.

Although their use is discouraged, the following bit-mapped graphics formats are listed in order of preference:

GIF (graphics interchange format) is a bit-mapped format that was developed to exchange graphics files over the Internet. Although .gif files are widely used, the .jpg format reduces graphics files to about one-third the size of a .gif file, leading to faster Internet transmission. GIF files are more efficient than JPEG files if an image contains many solid areas.

JPEG (Joint Photographics Expert Group) is a graphics format specifically designed for photographic images and other complex pictures such as realistic artwork. It is not well suited to line drawings, text, or simple cartoon illustrations.

TIFF (tagged image file format) is a bit-mapped graphics format commonly used for the scanning, storage, and interchange of grayscale graphic images. (TIFF may be the only format available for older programs, but most current programs can save images in other formats such as .jpg, .gif, .pdf, etc.)

Two important things to note concerning the preparation of bit-mapped graphics:

- Images must be in the grayscale mode (color space). RGB or CMYK color spaces will fail at the printer and will result

in delays and increased costs in Production. Note: Files that appear gray on screen and print gray may still be described in a 3-color mode (RGB) or 4-color mode (CMYK). This is unacceptable and must be fixed.

- Images should also have a resolution of at least 300 dpi at the size they will appear on the page.

PhotoShop Instructions

PhotoShop (.ps) is a powerful tool if used correctly. It can scan photographs (continuous tones) and original art. PhotoShop files of photocopies, photos, or illustrations scanned from previously printed material are not acceptable.

- Do not add text to a PhotoShop file.
- All scans must be at 300 dpi resolution, saved as .tif or .jpg files.
- Line art and type cannot be scanned in PhotoShop. If an original illustration is not available and cannot be redrawn, it must be scanned at 8 times the continuous tone resolution ($8 \times 300 = 2400$ dpi). The process is very slow and generates huge files. The time required to scan such material will add to production time and could delay printing. For that reason, we discourage the use of material that must be scanned.
- Do not scan any illustration in bit-map mode, and do not convert it to .tif or any other format. The file must be created in a format we accept.
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1 Bohmian Trajectories as the Foundation of Quantum Mechanics

*Sheldon Goldstein, Roderich Tumulka,
and Nino Zanghì*

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Bohmian trajectories have been used for various purposes, including the numerical simulation of the time-dependent Schrödinger equation and the visualization of time-dependent wave functions. We review the purposes they were invented for: to serve as the foundation of quantum mechanics, i.e., to explain quantum mechanics in terms of a theory that is free of paradoxes and allows an understanding that is as clear as that of classical mechanics. Indeed, they succeeded in serving that purpose in the context of a theory known as Bohmian mechanics, to which this article is an introduction.

1.1 BOHMIAN TRAJECTORIES

Let us consider a wave function $\psi_1(q)$ of non-relativistic quantum mechanics, defined on the configuration space \mathbb{R}^{3N} of N particles, taking values in the set \mathbb{C} of complex

SUGGESTED ABBREVIATIONS

alternating current	AC	kilowatt	kW
American Chemical Society	ACS	lethal dose/fifty	LD50
ampere	A	liter	l
approximately, about	ca	logarithm	log
barrel per day	bbbl/day	lumen	lm
barrel	bbbl	lumen per watt	lm/W
baud	Bd	measure of hydrogen activity	pH
bit per second	b/sec	mega	M
blood urea nitrogen	BUN	megahertz	MHz
British thermal unit	Btu	melting point	mp
catalytic rate constant	kcat	meter	m
Centers for Disease Control	CDC	micro	μ
centimeter	cm	micron	μm
coulomb	C	mile (statute)	mi
cubic centimeter (medical use)	cc	millibar	mbar
cubic centimeter (space volume)	cm ³	milliliter	ml
cubic feet per minute	ft ³	millimeter	mm
curie	Ci	millimicron	nm
cycle	c	millivolt	mV
decibel	d	minute (time)	min
degree Celsius	°C	molal	m
degree Fahrenheit	°F	molar concentration	M
Department of Energy	DOE	nano	n
direct current	DC	nanosecond	ns
dyne	dyn	National Institutes of Health	NIH
Electric Power Research Institute	EPRI	National Research Council	NRC
electromagnetic unit	EMU	newton	N
Environmental Protection Agency	EPA	ounce	oz
et alii (and others)	et al.	parts per billion	ppb
farad	F	parts per million	ppm
feet/foot	ft	pascal	Pa
feet per minute	ft/min	per os (orally)	p.o.
freezing point	fp	pint	pt
gallon	gal	pound	lb
gastrointestinal	GI	quart	qt
gigacycle per second	GHz	revolution per second	r/sec
grain	gr	roentgen	R
gram	g	specific gravity	sp gr
hertz	Hz	square foot	ft ²
hour	h	standard deviation	SD
inch	in.	ultraviolet	UV
infrared	IR	United Kingdom	U.K.
international unit	IU	United States	U.S.
intramuscular	i.m.	United States Pharmacopeia	USP
intraperitoneal	i.p.	volt	V
intravenous	i.v.	watt	W
ionization constant	K	weight per volume	w/v
Jet Propulsion Laboratory	JPL	weight percent	wt%
joule	J	World Health Organization	WHO
kilo	k	yard	yd
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Chem. Eng. Progress
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