Taylor & Francis Group

AUTHOR'S GUIDE TO PUBLISHING

Disk Manuscripts

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WELCOME TO TAYLOR AND FRANCIS GROUP

This *Author's Guide to Publishing* 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, help is only a telephone call away (see the information given below). In order to make the process of manuscript preparation easier for you, Taylor and Francis Group assigns a personal Project Coordinator to each project upon arrival of your signed contract. This Project Coordinator will contact you within 2 weeks of receiving your contract to introduce himself/herself and establish a dialogue. You may feel free to contact your Project Coordinator as often as you deem necessary during your manuscript preparation. Please note, however, that questions regarding marketing, content, or promoting your book should still continue to be directed to your Acquiring Editor.

CONTACTING TAYLOR AND FRANCIS GROUP

All Taylor and Francis Group departments can be reached easily by telephone, voice mail, or E-mail. The telephone number of our main office is (561) 994-0555 and the address is 6000 Broken Sound Parkway NW, Suite 300, Boca Raton, Florida 33487.

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MANUSCRIPT PREPARATION

MANUSCRIPT SIZE

The length of your manuscript was determined before you signed your contract and is specified in your contract. Taylor and Francis' 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 contract, contact your Acquiring Editor **immediately** so the best course of action can be determined. As a rough guideline for estimating the size of your finished book, two manuscript pages normally equal one printed page.

GENERAL GUIDELINES

Your manuscript must be double-spaced, on 8½-inch by 11-inch white paper (A4 paper is also accepted when it is the only available option), with 1-inch margins on all 4 sides. Use only one side of the paper. Submit one hard copy, printed at 100%, with corresponding electronic files saved on disks or CDs that match the manuscript content **exactly**. Keep back-up copies of all disks, CDs, illustrations, photographs, and other materials submitted with your manuscript.

Here are some helpful "Do's" and "Don'ts" when preparing your manuscript.

DO'S

- Page "1" of your manuscript should include a title page showing title, full name(s), and complete affiliations of author(s); all other necessary front matter (table of contents, preface, acknowledgment, author biography, etc.) should follow. All pages should feature the page number in the upper right-hand corner.
- Follow the text of each chapter with references, tables, figure captions, and clearly labeled figures pertaining to each chapter and figure number.
- Place a hard return at the end of each paragraph instead of indenting.
- Be consistent in your use of special characters (Greek letters, mathematical symbols, etc.), abbreviations, and spacing (at ends of sentences, paragraph indents, bulleted material, reference lists, etc.).
- All Greek letters and mathematical symbols should be input using the appropriate Unicode font.
- Save each chapter as a clearly labeled separate file (i.e., Chapter 1.doc).
- Equations should be embedded within the text if you are using the equation editor in Microsoft Word. Equations in any other program should be saved and provided separately as MathType equations.
- 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.)
- Save each figure in its own separate and original electronic art file, equipped with correct file extension. All figure files must be clearly labeled and numbered consecutively, i.e., Figure 01x01, Figure 01x02, etc.). (**Note:** Each figure should be accompanied with a hard copy. The labels on the hard copies **MUST** match the labels on the electronic art files.)

- Original black-and-white glossy photographs, transparencies (slides), or original electronic art files of all figures (including chemical structures) should be submitted with your manuscript (see below for further details on the submission of art). Photographs should be placed in a manila folder following the text of each chapter in which they are to appear.
- Include completed permission verification forms (to be discussed later in this *Guide)* and signed contributor agreements (for contributed works) for every chapter.

DON'TS

- 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. Taylor and Francis will handle that for you. (You can simply call out such items within the text.)
- 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.

REVISIONS

Your manuscript should be correct and complete when submitted. Revisions must be made **before** the manuscript is copyedited. If revisions are necessary, you must secure the approval of your Acquiring Editor before submitting them. The revised page or pages must be reprinted and sent to Taylor and Francis with a CD that includes the corrections**.** *Your printout must exactly match your electronic files.*

MANUSCRIPT PROCESSING STEPS

1. Author/editors submits sample chapter to Acquiring Editor or Project Coordinator 4 months prior to contracted submission for review (artwork and text should be provided).
2. Author/editor then submits complete manuscript, artwork, CD(s), and necessary permission information to Acquiring Editor or Project Coordinator by deadline specified in contract.
3. Artwork and the accompanying electronic files will be reviewed for quality and resolution. If any file is determined to be unacceptable for printing, author/editor and/or contributor will have one opportunity to submit revised files (see Electronic Art Guidelines for more information).
4. Manuscript (along with artwork) and permission documents are reviewed by the Acquiring Editor and Project Coordinator and, if correct and complete, are transmitted to the Production department.
5. Once in Production, the manuscript is assigned to a Project Editor who handles all publication details and ultimately transmits the material to the printer. He or she will be the author/editor's primary contact for issues related to content, format, and appearance of the finished book.
6. Manuscript is disk edited; artwork and CDs are prepared for typesetting.

7. Page proofs are sent to 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 them to contributing authors for proofing and follows up with authors to ensure the prompt return of the pages to him/herself. Author or editor returns one set of corrected proofs to Taylor and Francis by date specified by Project Editor.
8. Project Editor oversees final corrections, index preparation, layout check, and other pre-printing tasks.
9. Final version of manuscript is sent to printer.

SOFTWARE GUIDELINES

Manuscripts must be submitted electronically either by the Taylor & Francis FTP site or by compact disks (CDs). A printed hard copy that exactly matches the submitted disks must be submitted with the electronic files. These guidelines are intended to help you prepare your disks and manuscript, but should not be considered definitive because of continuing advances in publishing software. Please contact your Project Coordinator or Acquiring Editor with any software questions.

All CDs containing text or graphics should be labeled with the author's name, book title, chapter numbers, software used to create the file (including the version number), date of creation, and file format (PC or Mac). *It is essential that figures contained in graphics files be numbered consecutively with chapter number and figure number (i.e., Figure 01x01, Figure 01x02, etc.).* A content directory of each CD must also be submitted.

You will be charged for any retyping of your manuscript if you fail to provide electronic files that meet our software requirements.

ACCEPTABLE SOFTWARE FOR TEXT, TABLES, AND EQUATIONS

Please use a software version created within two years of the submission of your manuscript.
Note: Microsoft Word is the only acceptable format for text. Manuscripts written in other word processors that are converted to word may have corruption issues so this method is not recommended. Wordperfect software is not an acceptable software for text.

	Mac	Windows (PC)
Text:	**MSWord**	**MSWord**
		LaTEX
Tables:	**MSWord**	**MSWord**
		LaTEX
	Excel	**Excel**
Equations:	**MSWord**	**MSWord**
	MathType	**MathType**
		LaTEX

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. To make the manuscript preparation process easier, Taylor and Francis can provide you with MS Word (version 6.0) templates, containing the appropriate styles. Please consult your Acquiring Editor or Project Coordinator if you are interested.

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).

Computer-screen captures should be saved with the highest resolution possible (screen capture resolution is dependent on the resolution of the monitor which is usually 72-96 dpi).

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.

Chemical Structures

Chemical equations (if they cannot be written in normal text) and chemical structures should be created using **ChemDraw**. Figures should be provided separately and accompanied with hard copy. The labels on the hard copies must match the labels of the electronic art files. Electronic art should be saved in the original program format (.cdx for ChemDraw) and as Illustrator (.eps) files. Adobe Acrobat (.pdf) files is also an acceptable format.

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 × 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.
- Scanned black and white images should have a minimum highlight dot of 8% and a maximum shadow dot of 90%.
- Converting color illustrations to black and white is not as simple as converting color images to grayscales. Certain colors have similar values after conversion to black and white. The colors will be indistinguishable and will require adjustment of brightness and contrast to reproduce properly.

Postscript

PostScript is a page description language (PDL) that is capable of describing the entire appearance of a formatted page, including layout, fonts, graphics, and scanned images. Because a PostScript file is device independent, it can be printed on an imagesetter or any PostScript-compatible printer and will retain the original formatting. It does not provide compression, so files are quite large when stored in PostScript format. However, because there is no compression, PostScript is a high-quality, lossless format. Although used primarily for vector graphics, it contains a mechanism for storing bit-mapped images.

Halftones

A halftone is a printed reproduction of a photograph (or an illustration other than line art). It uses evenly spaced dots of varying sizes to simulate shades of gray. Dense patterns of larger dots produce dark shades, and less dense patterns of smaller dots create lighter shades.

Resolution

Resolution is the fineness of detail attained by a printer in producing an image. Resolution quality for printing is expressed in dpi (dots per inch), so the higher the resolution is, the higher the quality of the image will be. Artwork (electronic, original, or scanned) must have a resolution of 300 dpi at *final output size*. Although an image may look good when viewed on a computer screen (at resolution of only 72 dpi), it cannot be reproduced effectively for printing at such a low resolution.

A Few Important Notes:

- The clarity of a printed reproduction is totally dependent on the quality of the original. For that reason, we cannot accept photocopies, faxes, scanned printed figures, halftones, printed grayscales, hand-drawn figures, or previously printed material.

- For best results, please submit the highest quality photographs or original electronic art available. If original electronic drawings are included in a manuscript, the author is responsible for supervising their preparation according to Taylor and Francis' requirements.

Unacceptable Original Art:

- Photocopies
- Faxes
- Any previously scanned or printed material (including line art and halftones)
- Figures with grayscales
- Hand-drawn figures
- Bit-mapped figures with jagged edges and fuzzy type
- Figures with filled-in, hard-to-read type
- Figures with broken type and/or lines
- Images larger than 11 inches × 17 inches

PERMISSIONS GUIDELINES

As the author, it is your responsibility to obtain all necessary permissions for copyrighted material. Permissions must be obtained from the original copyright holder, usually the publisher, ***even if it is your own material.*** Material from Taylor and Francis books and journals must be requested so that our copyright ownership can be verified. Some publishers may require that you obtain the original author's permission as a courtesy. If you are an editor, you should direct your contributing authors to promptly secure permissions for copyrighted material that appears in their chapters. You and your contributors should request permissions as soon as you know copyrighted material will be included in your book or chapter. Requests can take several weeks to process. It is always possible your request may be denied and that will mean modification of your manuscript. The prudent approach is to request permissions early. **Important:** Your manuscript is not complete until all permissions are on file with Taylor and Francis. Failure on the part of an author, editor, or contributing author to secure and submit permissions will delay publication.

WHAT NEEDS PERMISSION?

- A passage from a play, poem, or song
- A quote of 50 or more words from a periodical or journal
- A quote (or series of shorter quotes) totaling 400 words or more from a book
- Any table, diagram, figure, or illustration (line drawing or halftone)

DO I NEED PERMISSIONS FOR MY OWN MATERIAL?

If you are the author of material copyrighted by another party, you must get permission from that party to use the material in your current publication. We have included a sample permission letter (Page 13) to aid you in requesting permissions.

DO I NEED PERMISSION IF I ALTER A FIGURE?

The important issue in determining whether permission is needed for an altered figure is the amount of alteration. The change must be substantial if you want to avoid the legal requirement to obtain permissions. What constitutes "substantial" change is a murky legal area. Changing straight lines to arrows, relabeling a figure with letters instead of numbers, or reordering columns in a table does **not** constitute substantial change and can distort the meaning of the original material. The best approach for avoiding permission issues is to use original materials wherever possible.

FORM VS. CONTENT

Data cannot be copyrighted. Only the format in which it is published can be copyrighted. No permission is needed if data that appear in another text are converted to tabular form. If you are the first author to create a table comparing studies by four other scientists, you do not need permissions, but you should cite the studies as references.

PUBLIC DOMAIN NATURE OF GOVERNMENT MATERIAL

Most printed materials of the U.S., Canadian, and British governments do not require permissions because they are in the public domain and not protected by copyright. However, many government-sponsored agencies copyright their materials and their use requires permission. The best approach is to request permission unless you are certain it is not required.

DENIAL OF PERMISSION REQUEST

Permission requests are rarely denied, but they are frequently ignored, despite repeated attempts to secure them. Some follow-up may be necessary. If a permission cannot be obtained despite your best efforts, you can:

1. Delete the copyrighted material.
2. Find a substitute for the copyrighted material.
3. Substantially alter the material so permission is no longer required. Taylor and Francis strongly discourages this option.

SOURCE LINE ATTRIBUTING MATERIAL TO COPYRIGHT HOLDER

A source line attributing material to a copyright holder who grants you permission to use it should be included with the table, figure, photograph, or other material covered by the permission. Taylor and Francis honors copyright holders' requests for special wording. The style guide section of this booklet provides guidelines for inserting source lines in tables, figures, etc. Figures and tables that do not have source lines are assumed to be original work and must be verified as such. Original permissions signed by copyright holders should be submitted with your manuscript. Remember to keep a copy for your files.

SAMPLE PERMISSION LETTER

Page 13 is a self-explanatory permission request letter that covers use of copyrighted material in all future revisions and all media. If a copyright holder grants permission for one-time use only, additional permissions will be required for future editions of your work. Inclusion of clear information about your planned use of the material and accurate publication data will help the copyright holder respond promptly. You should retain copies of all permission request correspondence in your files.

USE OF PERMISSION VERIFICATION FORM

Page 12 features a permission verification form for your use in forwarding your manuscript and signed permissions to Taylor and Francis. Complete Section A if your work is original and **no** permissions are required. Complete Section B if you plan to reprint previously published work that is not in the public domain. Please provide all information in Section B and include a signed permission grant for each item. Sign and date the permission verification form and include the other information requested on the bottom left side. Submit the form and permissions with your finished manuscript. Remember to keep copies for your files.

PERMISSION VERIFICATION

This form must be returned even if there are no figures or tables in your section.
Verification of ***all*** text, figures, and tables must be submitted before your work can be published.

A. My work, text/figure(s)/table(s), is original, has not been published before, or is in the public domain. **No permission is necessary** for my work.

B. The following text/figure(s)/table(s) have been published before in the following sources. **Written permission will be obtained by me** from the copyright owner as listed below.

(Please list all figures/tables and their sources. Submit granted permissions to address below. Label permission grants with text, tables, or figure to which the grant applies.)

Text pg./Figure #/Table # in T&F work	**Source (author/title/publisher year published)**

(Please print or type name)

_____
(Please sign and date)

_____
(Chapter number/Chapter title)

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in_____
_____ to be published by Taylor and Francis Group, LLC. I hereby request permission for non-exclusive world rights in this and all subsequent editions, revisions and derivative works, in English and in foreign translations, in all formats, including CD-ROM and electronic media, from the following:

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Text: _____
Figure(s): _____ Table(s): _____
_____ _____

Will appear in my publication as text or labeled as:
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Please sign the release form below. Suitable credit will be given in the use of the material; if you have a preferred statement, please indicate it below. If you are not the copyright controller, please indicate to whom I should apply. Your prompt consideration of this request is appreciated.

Yours very truly,

_____
Requestor

I (we) grant the permission requested above.

By:_____ Date: _____

INDEXING

You and your Acquiring Editor will decide whether you or Taylor and Francis will index your book and your choice will be noted in your contract. Keep in mind that simple indexing programs included in some software packages are too rudimentary to handle the in-depth indexing required for a scientific text. Taylor and Francis' production schedule allows only two weeks for preparation of an index and coding it for conversion to the required platform.

To help you decide whether you want to index your publication, you should review Taylor and Francis' *Indexing Instructions for Authors.* The booklet explains the procedure and discusses format, cross-referencing, capitalization, punctuation, and other issues involved in preparing an index that will measure up to the scientific community's exacting standards and enable your readers to quickly locate needed information. This booklet can be obtained from your Acquiring Editor or Project Coordinator.

You may opt to have Taylor and Francis employ a professional indexer and deduct the cost from your royalties, particularly in view of the tight indexing deadline. Solid scientific indexing background is a requirement for our indexers. They understand technical text, work quickly, and use software dedicated to the task. You should discuss the indexing issue with your Acquiring Editor as early as possible to ensure that no index questions arise late in the production process.

TABLE OF CONTENTS HEADINGS

All subject heads used in your text should appear in outline form in the table of contents in one of the two styles below. Use the one that applies to your publication.

Roman Numeral Outline Format

I. MAJOR HEADING

A. FIRST LEVEL SUBHEAD
   1. Second level subhead
   2. Next second level subhead
      a. Third level subhead

B. FIRST LEVEL SUBHEAD

Decimal Outline Format

1. MAJOR HEADING

1.1 FIRST LEVEL SUBHEAD
   1.1.1 Second level subhead
   1.1.2 Next second level subhead
      1.1.2.1 Third level subhead

1.2 FIRST LEVEL SUBHEAD

IN-TEXT HEADINGS

In-text headings should follow the number/letter or decimal system you have chosen. All headings should be input in title case (an option in MS Word), flush left. Leave one blank line above and below a major heading. Note: Taylor and Francis can provide you with MS Word (version 6.0) templates, containing the appropriate styles. Please consult your Acquiring Editor or Project Coordinator if you are interested.

ABBREVIATIONS/ACRONYMS

Abbreviation/acronyms are acceptable in text if they are used universally in your discipline and your readers will easily understand them. They represent a quick way to convey statistical information and should be used consistently throughout a book (or chapter of a contributed book). A list of suggested abbreviations/acronyms is located on Page 20. Do not use the ampersand (&) as a substitute for "and" in text or tables. Please note that acronyms should be explained when first mentioned:

> The American Society for Testing and Materials (ASTM) issued specifications for the material in 1991, after its St. Louis conference. ASTM later revised the specifications…

TRADEMARKS

Trademarks must be acknowledged in text in one of two ways:

- Include the registered trademark symbol (®) and an asterisk in the text: The wide range of consumer uses of Teflon®* resulted indirectly from its use in the space program. Add a footnote (*Registered trademark of E.I. du Pont de Nemours & Company, Inc., Wilmington, Delaware).

- Place the registration information in parentheses in the text: The wide range of consumer uses of Teflon® (E.I. Du Pont de Nemours & Company, Inc., Wilmington, Delaware) resulted indirectly from its use in the space program.

Capitalize subsequent mentions of a trademarked name. You do not have to add the registration symbol to subsequent mentions. If you use a great number of trademarked names throughout your text, the best option may be including a listing at the end of the chapter or book.

EQUATIONS

For single or multi-authored books, equations should be numbered consecutively in Arabic numbers within each chapter. For example, the fourth equation in Chapter 3 should be numbered 3.4. Because chapter numbers are determined late in the production of a contributed book supervised by an editor, equations in contributors' chapters should be numbered consecutively **without** reference to chapter number (Equation 1, Equation 2, etc.).

All equations should appear in the manuscript where you want them to appear in the finished book. If confusion can arise about a symbol, such as 1 (the numeral) and l (the lower case letter), 0 (zero) and O (capital letter), or x (the letter) and × (multiplication symbol), label it. Label Roman numbers and Greek letters and indicate whether they are upper or lower case. Check spacing before and after all symbols in equations. Review mathematical symbols (+, −, ≤, ≠, ≡, for example) to be sure they are correct. If a lengthy equation must be "wrapped" onto the next line, break it in a logical place. Make sure superscript symbols appear above the line and subscript symbols appear below the line. All parentheses and brackets should be closed.

LISTINGS

Listings may be numbered, unnumbered, or bulleted. Punctuation should be consistent throughout a listing and follow grammar principles. The first word of each item should be capitalized. If a listing item is not a complete sentence, no punctuation is used. All items should be complete sentences or incomplete sentences:

Typical equilibrium parameters include:

1. Organic flow rate, ml/min
2. Aqueous flow rate, ml/min
3. Mixer peripheral velocity, fps

The following developments produced the greatest impacts on modern society:

- Henry Ford devised a method for mass producing automobiles.
- The Wright Brothers invented the airplane.
- Radio, television, and the computer allowed instant communication worldwide.

TABLES AND FIGURES

Every table and figure should be mentioned or described in text (Table 6.6 shows results of parking lot reconnaissance; Figure 2.3 illustrates a police line-up.). Tables and figures should be numbered consecutively within each chapter (like equations) in authored books (Table 6.6, Figure 2.3). They should be numbered consecutively **without** reference to chapter number in contributed books (Table 6; Figure 3). The table number and caption should appear above each table, without punctuation; the figure number and caption should appear below each figure, with punctuation.

Table 6.6 Number of cars in parking lot

	9 a.m.	**11 a.m.**	**1 p.m.**	**3 p.m**.	**5 p.m.**
Red	10	2	7	9	N/A
Blue	12	12	10	11	N/A
Green	6	7	4	6	N/A
Silver	4	3	4	3	4
White	14	14	13	14	11

Tables:

When working in MSWord, 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). Do not use ditto marks (″). Use N/A or an en-dash (–) to indicate data that are not available. Footnotes in table data should appear as superscript lower-case letters (11.4^{b}) 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 10×12^{7} (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:

Figures, photographs, and structures will be sized according to the trim size of your book. Your Project Editor 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. Clear, sharp electronic line art and original photographs can be reproduced well and will enhance the quality of your book. *No production process can improve unclear, smudged, bit-mapped, or poorly labeled figures*. Please examine each illustration critically to ensure that it meets Taylor and Francis' standards and readers' expectations.

SOURCE LINES FOR TABLES, PHOTOGRAPHS, AND FIGURES

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CROSS REFERENCING OF CHAPTERS IN CONTRIBUTED BOOKS

Authors of chapters in contributed books frequently refer to other authors' chapters in the same book. It is not necessary to include a source line or include the chapter on your reference list if you do so. Simply refer to the chapter number and include a short description:

> Chapter 15 discusses calcium metabolism in greater detail.

SUGGESTED ABBREVIATIONS

alternating current	AC	kilowatt	kW
American Chemical Society	ACS	lethal dose/fifty	LD_{50}
ampere	A	liter	l
approximately, about	ca	logarithm	log
barrel per day	bbl/day	lumen	lm
barrel	bbl	lumen per watt	lm/W
baud	Bd	measure of hydrogen activity	pH
becquerel	Bq	mega	M
bit per second	b/sec	megahertz	MHz
blood urea nitrogen	BUN	melting point	mp
British thermal unit	Btu	meter	m
candela	cd	micro	μ
catalytic rate constant	k_{cat}	micron	μm
Centers for Disease Control	CDC	mile (statute)	mi
centimeter	cm	millibar	mbar
coulomb	C	milliliter	ml
cubic centimeter (medical use)	cc	millimeter	mm
cubic centimeter (space volume)	cm^3	millimicron	nm
cubic feet per minute	ft^3	millivolt	mV
curie	Ci	minute (time)	min
cycle	c	molal	*m*
decibel	d	molar concentration	*M*
degree Celsius	°C	mole	mol
degree Fahrenheit	°F	nano	n
Department of Energy	DOE	nanosecond	ns
direct current	DC	National Institutes of Health	NIH
dyne	dyn	National Research Council	NRC
Electric Power Research Institute	EPRI	newton	N
electromagnetic unit	EMU	ohm	Ω
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	radian	rad
grain	gr	revolution per second	r/sec
gram	g	roentgen	R
hertz	Hz	second	s
hour	h	specific gravity	sp gr
inch	in.	square foot	ft^2
infrared	IR	standard deviation	SD
international unit	IU	tesla	T
intramuscular	i.m.	ultraviolet	UV
intraperitoneal	i.p.	United Kingdom	U.K.
intravenous	i.v.	United States	U.S.
ionization constant	K	United States Pharmacopeia	USP
Jet Propulsion Laboratory	JPL	volt	V
joule	J	watt	W
kelvin	K	weight per volume	w/v
kilo	k	weight percent	wt%
kilogram	kg	World Health Organization	WHO
kilometer	km	yard	yd

COMMON JOURNAL TITLE ABBREVIATIONS

Acta Math.
Adv. Agron.
Adv. Pharmacol. Chemother.
Adv. Protein Chem.
Adv. Quantum Electron.
Aeronautic. Eng. Rev.
Aerosp. Med.
Agri. Eng. J.
Ann. Intern. Med.
Ann. Med.
Ann. Phys.
Annu. Rev. Immunol.
Arch. Biochem. Biophys.
Arch. Biol. Sci.
Arch. Dermatol.
Arch. Mitrobiol.
Arch. Neurol.
Arch. Ophthalmol.
Arch. Pathol.
Arch. Surg.
Biochem. J.
Biochim. Biophys. Acta
Biol. Psychol.
Br. J. Stat. Psychol.
Br. Med. J.
Bull. Am. Phys. Soc.
Cardiovasc. Res.
Cardiovasc. Rev.
Chem. Eng. Progress
Chem. Eng. Sci.
Clin. Endocrinol.
Colloid Sci.
Comm. Pure Appl. Math.
Commun. Soil Sci. Plant Anal.
Crit. Rev. Anal. Chem.
Electr. Eng. Rev.
Eng. Geol.
Eng. Med.
Eng. News
Eng. Sci.
Environ. Pollution Manage.
Environ. Qual. Saf.
Enzyme Technol. Dig.
Excerpta Med.
Exp. Cell Res.
Exp. Med. Surg.
Fluid Dyn. Trans.
Geophys. Abstr.
Home Health Q.
IEEE Trans.
Ind. Med. Surg.
Inorg. Chem.
J. Am. Chem. Soc.
J. Appl. Bacteriol.
J. Appl. Phys.
J. AWWA
J. Biol. Chem.
J. Clin. Invest.
J. Differential Geometry
J. Electrochem. Soc.
J. Entomology
J. Environ. Health
J. Environ. Qual.
J. Exp. Med.
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J. Infec. Dis.
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Opt. Spectra
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Org. Photochem.
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Polymer Rev.
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Proc. Soc. Exp. Biol. Med.
Soil Biol. Biochem.
Soil Sci. Am. Proc.
Solid State Electron.
Surf. Colloid Sci.
Surg. Gynecol. Obstet.
Trends Cell Biol.
Water Resour. Res.
Water Waste Treat.

INTERNATIONAL SYSTEM OF UNITS (SI)

The International System of Units, abbreviated as SI (from the French name *Le Système International d'Unités*), was established in 1960 by the 11th General Conference on Weights and Measures (CGPM) as the modern metric system of measurement. The core of the SI is the seven base units for the physical quantities length, mass, time, electric current, thermodynamic temperature, amount of substance, and luminous intensity. These base units are:

	SI base unit	
Base quantity	**Name**	**Symbol**
length	meter	m
mass	kilogram	kg
time	second	s
electric current	ampere	A
thermodynamic temperature	kelvin	K
amount of substance	mole	mol
luminous intensity	candela	cd

The SI base units are defined as follows:

meter: The meter is the length of the path travelled by light in vacuum during a time interval of 1/299 792 458 of a second.

kilogram: The kilogram is the unit of mass; it is equal to the mass of the international prototype of the kilogram.

second: The second is the duration of 9 192 631 770 periods of the radiation corresponding to the transition between the two hyperfine levels of the ground state of the cesium 133 atom.

ampere: The ampere is that constant current which, if maintained in two straight parallel conductors of infinite length, of negligible circular cross-section, and placed 1 meter apart in vacuum, would produce between these conductors a force equal to $2 \cdot 10^{-7}$ newton per meter of length.

kelvin: The kelvin, unit of thermodynamic temperature, is the fraction 1/273.16 of the thermodynamic temperature of the triple point of water.

mole: The mole is the amount of substance of a system which contains as many elementary entities as there are atoms in 0.012 kilogram of carbon 12. When the mole is used, the elementary entities must be specified and may be atoms, molecules, ions, electrons, other particles, or specified groups of such particles.

candela: The candela is the luminous intensity, in a given direction, of a source that emits monochromatic radiation of frequency $540 \cdot 10^{12}$ hertz and that has a radiant intensity in that direction of 1/683 watt per steradian.

SI derived units

Derived units are units which may be expressed in terms of base units by means of the mathematical symbols of multiplication and division (and, in the case of °C, subtraction). Certain derived units have been given special names and symbols, and these special names and symbols may themselves be used in combination with those for base and other derived units to express the units of other quantities. The next table lists some examples of derived units expressed directly in terms of base units:

	SI derived unit	
Physical quantity	**Name**	**Symbol**
area	square meter	m^2
volume	cubic meter	m^3
speed, velocity	meter per second	m/s
acceleration	meter per second squared	m/s^2
wave number	reciprocal meter	m^{-1}
density, mass density	kilogram per cubic meter	kg/m^3
specific volume	cubic meter per kilogram	m^3/kg
current density	ampere per square meter	A/m^2
magnetic field strength	ampere per meter	A/m
concentration (of amount of substance)	mole per cubic meter	mol/m^3
luminance	candela per square meter	cd/m^2
refractive index	(the number) one	1[(a)]

[(a)] The symbol "1" is generally omitted in combination with a numerical value.

For convenience, certain derived units, which are listed in the next table, have been given special names and symbols. These names and symbols may themselves be used to express other derived units. The special names and symbols are a compact form for the expression of units that are used frequently. The final column shows how the SI units concerned may be expressed in terms of SI base units. In this column, factors such as m^0, kg^0 ..., which are all equal to 1, are not shown explicitly.

			SI derived unit expressed in terms of:	
Physical quantity	**Name**	**Symbol**	**Other SI units**	**SI base units**
plane angle	radian[(a)]	rad	$m \cdot m^{-1} = 1$[(b)]	
solid angle	steradian[(a)]	sr[(c)]	$m^2 \cdot m^{-2} = 1$[(b)]	
frequency	hertz	Hz	s^{-1}	
force	newton	N	$m \cdot kg \cdot s^{-2}$	
pressure, stress	pascal	Pa	N/m^2	$m^{-1} \cdot kg \cdot s^{-2}$
energy, work, quantity of heat	joule	J	$N \cdot m$	$m^2 \cdot kg \cdot s^{-2}$
power, radiant flux	watt	W	J/s	$m^2 \cdot kg \cdot s^{-3}$
electric charge, quantity of electricity	coulomb	C	$s \cdot A$	
electric potential difference, electromotive force	volt	V	W/A	$m^2 \cdot kg \cdot s^{-3} \cdot A^{-1}$
capacitance	farad	F	C/V	$m^{-2} \cdot kg^{-1} \cdot s^4 \cdot A^2$
electric resistance	ohm	Ω	V/A	$m^2 \cdot kg \cdot s^{-3} \cdot A^{-2}$
electric conductance	siemens	S	A/V	$m^{-2} \cdot kg^{-1} \cdot s^3 \cdot A^2$
magnetic flux	weber	Wb	$V \cdot s$	$m^2 \cdot kg \cdot s^{-2} \cdot A^{-1}$

magnetic flux density	tesla	T	Wb/m^2	$kg \cdot s^{-2} \cdot A^{-1}$
inductance	henry	H	Wb/A	$m^2 \cdot kg \cdot s^{-2} \cdot A^{-2}$
Celsius temperature	degree Celsius[(d)]	°C		K
luminous flux	lumen	lm	$cd \cdot sr$[(c)]	$m^2 \cdot m^{-2} \cdot cd = cd$
illuminance	lux	lx	lm/m^2	$m^2 \cdot m^{-4} \cdot cd = m^{-2} \cdot cd$
activity (of a radionuclide)	becquerel	Bq		s^{-1}
absorbed dose, specific energy (imparted), kerma	gray	Gy	J/kg	$m^2 \cdot s^{-2}$
dose equivalent, ambient dose equivalent, directional dose equivalent, personal dose equivalent, organ equivalent dose	sievert	Sv	J/kg	$m^2 \cdot s^{-2}$
catalytic activity	katal	kat		$s^{-1} \cdot mol$

[(a)] The radian and steradian may be used with advantage in expressions for derived units to distinguish between quantities of different nature but the same dimension. Some examples of their use in forming derived units are given in the next table.

[(b)] In practice, the symbols rad and sr are used where appropriate, but the derived unit "1" is generally omitted in combination with a numerical value.

[(c)] In photometry, the name steradian and the symbol sr are usually retained in expressions for units.

[(d)] It is common practice to express a thermodynamic temperature, symbol T, in terms of its difference from the reference temperature T_0 = 273.15 K. The numerical value of a Celsius temperature t expressed in degrees Celsius is given by t/°C = T/K-273.15. The unit °C may be used in combination with SI prefixes, e.g., millidegree Celsius, m°C. Note that there should never be a space between the ° sign and the letter C, and that the symbol for kelvin is K, not °K.

The SI derived units with special names may be used in combinations to provide a convenient way to express more complex physical quantities. Examples are given in the next table:

	SI derived unit		
Physical Quantity	**Name**	**Symbol**	**As SI base units**
dynamic viscosity	pascal second	Pa · s	$m^{-1} \cdot kg \cdot s^{-1}$
moment of force	newton meter	N · m	$m^2 \cdot kg \cdot s^{-2}$
surface tension	newton per meter	N/m	$kg \cdot s^{-2}$
angular velocity	radian per second	rad/s	$m \cdot m^{-1} \cdot s^{-1} = s^{-1}$
angular acceleration	radian per second squared	rad/s^2	$m \cdot m^{-1} \cdot s^{-2} = s^{-2}$
heat flux density, irradiance	watt per square meter	W/m^2	$kg \cdot s^{-3}$
heat capacity, entropy	joule per kelvin	J/K	$m^{-3} \cdot kg \cdot s^{-2} \cdot K^{-1}$
specific heat capacity, specific entropy	joule per kilogram kelvin	J/(kg · K)	$m^2 \cdot s^{-2} \cdot K^{-1}$
specific energy	joule per kilogram	J/kg	$m^2 \cdot s^{-2}$
thermal conductivity	watt per meter kelvin	W/(m · K)	$m \cdot kg \cdot s^{-3} \cdot K^{-1}$
energy density	joule per cubic meter	J/m^3	$m^{-1} \cdot kg \cdot s^{-2}$
electric field strength	volt per meter	V/m	$m \cdot kg \cdot s^{-3} \cdot A^{-1}$
electric charge density	coulomb per cubic meter	C/m^3	$m^{-3} \cdot s \cdot A$
electric flux density	coulomb per square meter	C/m^2	$m^{-2} \cdot s \cdot A$
permittivity	farad per meter	F/m	$m^{-3} \cdot kg^{-1} \cdot s^4 \cdot A^2$
permeability	henry per meter	H/m	$m \cdot kg \cdot s^{-2} \cdot A^{-2}$
molar energy	joule per mole	J/mol	$m^2 \cdot kg \cdot s^{-2} \cdot mol^{-1}$
molar entropy, molar heat capacity	joule per mole kelvin	J/(mol · K)	$m^2 \cdot kg \cdot s^{-2} \cdot K^{-1} \cdot mol^{-1}$
exposure (x and γ rays)	coulomb per kilogram	C/kg	$kg^{-1} \cdot s \cdot A$
absorbed dose rate	gray per second	Gy/s	$m^2 \cdot s^{-3}$
radiant intensity	watt per steradian	W/sr	$m^4 \cdot m^{-2} \cdot kg \cdot s^{-3} = m^2 \cdot kg \cdot s^{-3}$
radiance	watt per square meter steradian	$W/(m^2 \cdot sr)$	$m^2 \cdot m^{-2} \cdot kg \cdot s^{-3} = kg \cdot s^{-3}$
catalytic (activity) concentration	katal per cubic meter	kat/m^3	$m^{-3} \cdot s^{-1} \cdot mol$

In practice, with certain quantities preference is given to the use of certain special unit names, or combinations of unit names, in order to facilitate the distinction between different quantities having the same dimension. For example, the SI unit of frequency is designated the hertz, rather than the reciprocal second, and the SI unit of angular velocity is designated the radian per second rather than the reciprocal second (in this case retaining the word radian emphasizes that angular velocity is equal to 2π times the rotational frequency). Similarly the SI unit of moment of force is designated the newton meter rather than the joule.

In the field of ionizing radiation, the SI unit of activity is designated the becquerel rather than the reciprocal second, and the SI units of absorbed dose and dose equivalent the gray and sievert, respectively, rather than the joule per kilogram. In the field of catalysis, the SI unit of catalytic activity is designated the katal rather than the mole per second. The special names becquerel, gray, sievert, and katal were specifically introduced because of the dangers to human health which might arise from mistakes involving the units reciprocal second, joule per kilogram and mole per second.

Units for dimensionless quantities, quantities of dimension one

Certain quantities are defined as the ratios of two quantities of the same kind, and thus have a dimension which may be expressed by the number one. The unit of such quantities is necessarily a derived unit coherent with the other units of the SI and, since it is formed as the ratio of two identical SI units, the unit also may be expressed by the number one. Thus the SI unit of all quantities having the dimensional product one is the number one. Examples of such quantities are refractive index, relative permeability, and friction factor. Other quantities having the unit 1 include "characteristic numbers" like the Prandtl number and numbers which represent a count, such as a number of molecules, degeneracy (number of energy levels), and partition function in statistical thermodynamics. All of these quantities are described as being dimensionless, or of dimension one, and have the coherent SI unit 1. Their values are simply expressed as numbers and, in general, the unit 1 is not explicitly shown. In a few cases, however, a spe-

cial name is given to this unit, mainly to avoid confusion between some compound derived units. This is the case for the radian, steradian and neper.

SI prefixes

The following prefixes have been approved by the CGPM for use with SI units. Only one prefix may be used before a unit. Thus 10^{-12} farad should be designated pF, not μμF.

Factor	Name	Symbol	Factor	Name	Symbol
10^{24}	yotta	Y	10^{-1}	deci	d
10^{21}	zetta	Z	10^{-2}	centi	c
10^{18}	exa	E	10^{-3}	milli	m
10^{15}	peta	P	10^{-6}	micro	μ
10^{12}	tera	T	10^{-9}	nano	n
10^{9}	giga	G	10^{-12}	pico	p
10^{6}	mega	M	10^{-15}	femto	f
10^{3}	kilo	k	10^{-18}	atto	a
10^{2}	hecto	h	10^{-21}	zepto	z
10^{1}	deka	da	10^{-24}	yocto	y

The kilogram

Among the base units of the International System, the unit of mass is the only one whose name, for historical reasons, contains a prefix. Names and symbols for decimal multiples and submultiples of the unit of mass are formed by attaching prefix names to the unit name "gram" and prefix symbols to the unit symbol "g".

Example : 10^{-6} kg = 1 mg (1 milligram) *but not* 1 μkg (1 microkilogram).

Units used with the SI

Many units that are not part of the SI are important and widely used in everyday life. The CGPM has adopted a classification of non-SI units: (1) units accepted for use with the SI (such as the traditional units of time and of angle); (2) units accepted for use with the SI whose values are obtained experimentally; and (3) other units currently accepted for use with the SI to satisfy the needs of special interests.

(1) Non-SI units accepted for use with the International System

Name	Symbol	Value in SI units
minute	min	1 min = 60 s
hour	h	1 h= 60 min = 3600 s
day	d	1 d = 24 h = 86 400 s
degree	°	1° = (π/180) rad
minute	’	1’ = (1/60)° = (π/10 800) rad
second	”	1” = (1/60)’ = (π/648 000) rad
liter	l, L	1L= 1 dm^3= 10^{-3} m^3
metric ton	t	1 t = 10^3 kg
neper[(a)]	Np	1 Np = 1
bel[(b)]	B	1 B = (1/2) ln 10 Np

[(a)] The neper is used to express values of such logarithmic quantities as field level, power level, sound pressure level, and logarithmic decrement. Natural logarithms are used to obtain the numerical values of quantities expressed in nepers. The neper is coherent with the SI, but is not yet adopted by the CGPM as an SI unit. In using the neper, it is important to specify the quantity.

[(b)] The bel is used to express values of such logarithmic quantities as field level, power level, sound-pressure level, and attenuation. Logarithms to base ten are used to obtain the numerical values of quantities expressed in bels. The submultiple decibel, dB, is commonly used.

(2) Non-SI units accepted for use with the International system, whose values in SI units are obtained experimentally

Name	Symbol	Value in SI Units
electronvolt[(b)]	eV	1 eV = 1.602 176 53(14) ·10^{-19} J[(a)]
dalton[(c)]	Da	1 Da = 1.660 538 86(28) · 10^{-27} kg[(a)]
unified atomic mass unit[(c)]	u	1 u = 1 Da
astronomical unit[(d)]	ua	1 ua = 1.495 978 706 91(06) · 10^{11} m[(a)]

[(a)] For the electronvolt and the dalton (unified atomic mass unit), values are quoted from the 2002 CODATA set of the Fundamental Physical Constants (p. 1-1 of this Handbook). The value given for the astronomical unit is quoted from the IERS Conventions 2003 (D.D. McCarthy and G. Petit, eds., IERS Technical Note 32, Frankfurt am Main: Verlag des Bundesamts für Kartographie und Geodäsie, 200). The value of ua in meters comes from the JPL ephemerides DE403 (Standish E.M. 1995, "Report of the IAU WGAS Sub-Group on Numerical Standards", in "Highlights of Astronomy", Appenlzer ed., pp 180-184, Kluwer Academic Publishers, Dordrecht). It has been determined in "TDB" units using Barycentric Dynamical Time TDB as a time coordinate for the barycentric system.

[(b)] The electronvolt is the kinetic energy acquired by an electron in passing through a potential difference of 1 V in vacuum.

[(c)] The Dalton and unified atomic mass unit are alternative names for the same unit, equal to 1/12 of the mass of an unbound atom of the nuclide ^{12}C, at rest and in its ground state. The dalton may be combined with SI prefixes to express the masses of large molecules in kilodalton, kDa, or megadalton, MDa.

[(d)] The astronomical unit is a unit of length approximately equal to the mean Earth-Sun distance. It is the radius of an unperturbed circular Newtonian orbit about the Sun of a particle having infinitesimal mass, moving with a mean motion of 0.017 202 098 95 radians/day (known as the Gaussian constant).

(3) Other non-SI units currently accepted for use with the International System

Name	Symbol	Value in SI Units
nautical mile		1 nautical mile = 1852 m
knot		1 nautical mile per hour = (1852/3600) m/s
are		1 a = 1 dam^2 = 10^2 m^2
hectare	ha	1 ha = 1 hm^2 = 10^4 m^2
bar	bar	1 bar = 0.1 MPa = 100 kPa = 10^5 Pa
ångström	Å	1 Å = 0.1 nm = 10^{-10} m
barn	b	1 b = 100 fm^2 = 10^{-28} m^2

Other non-SI units

The SI does not encourage the use of cgs units, but these are frequently found in old scientific texts. The following table gives the relation of some common cgs units to SI units.

Name	Symbol	Value in SI units
erg	erg	1 erg = 10^{-7} J
dyne	dyn	1 dyn = 10^{-5} N
poise	P	1P = 1dyn· s/cm^2 = 0.1 Pa·· s

Name	Symbol	Value in SI units
stokes	St	1 St = 1 $cm^2/s = 10^{-4}\ m^2/s$
gauss	G	1G $\triangleq 10^{-4}$ T
oersted	Oe	1 Oe $\triangleq (1000/4\pi)$ A/m
maxwell	Mx	1Mx $\triangleq 10^{-8}$ Wb
stilb	sb	1 sb = 1 $cd/cm^2 = 10^4\ cd/m^2$
phot	ph	1 ph = 10^4 lx
gal	Gal	1 Gal = 1 $cm/s^2 = 10^{-2}\ m/s^2$

Note: The symbol $\triangleq$ should be read as "corresponds to"; these units cannot strictly be equated because of the different dimensions of the electromagnetic cgs and the SI.

Examples of other non-SI units found in the older literature and their relation to the SI are given below. Use of these units in current texts is discouraged.

Name	Symbol	Value in SI units
curie	Ci	1 Ci = $3.7 \cdot 10^{10}$ Bq
roentgen	R	1 R = $2.58 \cdot 10^{-4}$ C/kg
rad	rad	1 rad = 1 cGy = 10^{-2} Gy
rem	rem	1 r e m = 1 cSv = 10^{-2} Sv
X unit		1 X unit $\approx 1.002 \cdot 10^{-4}$ nm
gamma	γ	1 γ =1 nT = 10^{-9} T
jansky	Jy	1Jy = $10^{-26}\ W \cdot m^{-2} \cdot Hz^{-1}$
fermi		1 fermi = 1 fm = 10^{-15} m
metric carat		1 metric carat = 200 mg = $2 \cdot 10^{-4}$ kg
torr	Torr	1 Torr = (101325/760) Pa
standard atmosphere	atm	1 atm = 101325 Pa
calorie[a]	cal	1 cal = 4.184 J
micron	μ	1 μ = 1 μm = 10^{-6} m

[a] Several types of calorie have been used; the value given here is the so-called "thermochemical calorie".

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