

# achemso — Support for submissions to American Chemical Society journals\*

Joseph Wright<sup>†</sup>

Released 2018/07/12

## Abstract

The `achemso` bundle provides a  $\text{\LaTeX}$  class file and  $\text{\BibTeX}$  style file in accordance with the requirements of the American Chemical Society (ACS). The files can be used for any documents, but have been carefully designed and tested to be suitable for submission to ACS journals.

The bundle also includes the `natmove` package. This package is loaded by `achemso`, and provides automatic moving of superscript citations after punctuation.

<b>Contents</b>	<b>6 The <math>\text{\BibTeX}</math> style files</b>	<b>8</b>
<b>1 Introduction</b>	<b>7 The <code>natmove</code> package</b>	<b>9</b>
<b>2 Installation</b>	<b>8 Implementation</b>	<b>9</b>
<b>3 Requirements</b>	8.1 Early class-only code . .	10
<b>4 The class file</b>	8.2 Early package-only code	10
4.1 Class options . . . . .	8.3 Common code . . . . .	10
4.2 Manuscript meta-data .	8.4 Late class-only code . .	17
4.3 Floats . . . . .	8.5 Late shared code . . . . .	41
4.4 Section headers . . . . .	8.6 Late package-only code	42
4.5 Special sections . . . . .	8.7 Moving citations with <code>natbib</code> . . . . .	42
4.6 Miscellaneous commands	8.8 The configuration files .	45
<b>5 The package file</b>	<b>9 Change History</b>	<b>57</b>
5.1 Package options . . . . .	<b>10 Index</b>	<b>59</b>
5.2 Bibliography notes . . .		

## 1 Introduction

Support for  $\text{\BibTeX}$  bibliography following the requirements of the American Chemical Society (ACS), along with a package to make these easy to have been

---

\*This file describes version v3.11b, last revised 2018/07/12.

<sup>†</sup>E-mail: joseph.wright@morningstar2.co.uk

available since version one of `achemso`. The re-write from version 1 to version 2 made a number of improvements to the package, and also added a number of new features. However, neither version one nor version two of the package was targeted directly at use for submissions to ACS journals. This new release of `achemso` addresses this issue.

The bundle consists of four parts. The first is a  $\text{\LaTeX}$   $2_{\epsilon}$  class, intended for use in submissions. It is based on the standard `article` class, but makes various changes to facilitate ease of use. The second part is the  $\text{\LaTeX}$  package. The package contains the parts of the bundle which are appropriate for use with other document classes.<sup>1</sup> Thirdly, two  $\text{\BibTeX}$  style files are included. These are used by both the class and the package, but can be used directly if desired. Finally, an example document is included; this is intended to act a potential template for submission, and illustrates the use of the class file.

## 2 Installation

The package is supplied in `dtx` format and as a pre-extracted zip file, `achemso.tds.zip`. The later is most convenient for most users: simply unzip this in your local `texmf` directory and run `texhash` to update the database of file locations. If you want to unpack the `dtx` yourself, running `tex achemso.dtx` will extract the package whereas `latex achemso.dtx` will extract it and also typeset the documentation.

Typesetting the documentation requires a number of packages in addition to those needed to use the package. This is mainly because of the number of demonstration items included in the text. To compile the documentation without error, you will need the packages:

- `array`
- `booktabs`
- `hypdoc`
- `listings`
- `lmodern`
- `mathpazo`
- `microtype`

## 3 Requirements

The `achemso` class requires the following packages:

- `caption`
- `float`
- `geometry`

---

<sup>1</sup>For example, when writing a thesis.

- natbib
- setspace
- xkeyval

These are normally present in the current major TeX distributions, but are also available from [The Comprehensive TeX Archive Network](#).

## 4 The class file

The class file has been designed for use in submitting journals to the ACS. It uses all of the modifications described here (those in the package as well as those in the class). The accompanying example manuscript can be used as a template for the correct use of the class file. It is intended to act as a model for submission.

When submitting communications to *J. Am. Chem. Soc.*, the class will automatically lay the document out in the publication style. This allows the author to judge the length of text submitted more accurately. Changing the manuscript in the demonstration document to `communication` will illustrate the effect.

### 4.1 Class options

journal	The class supports a limited number of options, which are specifically-targeted at submission. The class uses the keyval system for options, in the form <code>key=value</code> . The most important option is <code>journal</code> . This is the name of the target journal for the publication. The package is designed such that the choice of journal will set up the correct bibliography style and so on. The journals currently recognised by the package are summarised in Table 1. If an unknown journal is specified, the package will fall-back on the <code>journal=jacsat</code> option.
manuscript	The second option is the <code>manuscript</code> option. This specifies the type of paper in the manuscript. The values here are <code>article</code> , <code>note</code> , <code>communication</code> , <code>review</code> , <code>letter</code> and <code>perspective</code> . The valid values will depend on the value of <code>journal</code> . The <code>manuscript</code> option determines whether sections and an abstract are valid. The value <code>suppinfo</code> is also available for supporting information.
layout	The <code>achemso</code> class can produce drafts in two layout styles. The standard setting for the <code>layout</code> option is <code>traditional</code> , which produces a double-spaced single column manuscript. The alternative setting <code>twocolumn</code> will use single spacing and print the text in two columns. The second option is obviously more compact. If the journal requires a particular style this option may be ignored.
email	It may be desirable to omit e-mail addresses from the front page of a manuscript. The printing of e-mail addresses can be disabled using the <code>email</code> option, which takes Boolean values only. The default is to print e-mail addresses. Notice that phone and fax numbers are only printed if e-mail addresses are printed.

Other options are provided by the package, but when used with the class these are silently ignored. If you need to override the settings chosen by the class, include the settings *after* the `\documentclass` line using `\setkeys`:

```
\documentclass[journal = jacsat]{achemso}
\setkeys{acs}{articletitle = false}
```

<i>Journal</i>	<i>Setting</i>	<i>Journal</i>	<i>Setting</i>
<i>Acc. Chem. Res.</i>	achre4	<i>Chem. Rev.</i>	chreay
<i>ACS Appl. Energy Mater.</i>	aaemcq	<i>Cryst. Growth Des.</i>	cgdefu
<i>ACS Appl. Mater. Interfaces</i>	aamick	<i>Energy Fuels</i>	enfuem
<i>ACS Appl. Nano Mater.</i>	aanmf6	<i>Environ. Sci. Technol.</i>	esthag
<i>ACS Biomater. Sci. Eng.</i>	abseba	<i>Environ. Sci. Technol. Lett.</i>	estlcu
<i>ACS Catal.</i>	accacs	<i>Ind. Eng. Chem. Res.</i>	iecred
<i>ACS Central Sci.</i>	acscii	<i>Inorg. Chem.</i>	inoraj
<i>ACS Chem. Biol.</i>	acbcct	<i>J. Agric. Food Chem.</i>	jafcau
<i>ACS Chem. Neurosci.</i>	acncdm	<i>J. Chem. Ed.</i>	jceda8
<i>ACS Combinatorial Sci.</i>	acsccc	<i>J. Chem. Eng. Data</i>	jceaax
<i>ACS Earth Space Chem.</i>	aesccq	<i>J. Chem. Inf. Model.</i>	jcisd8
<i>ACS Energy Lett.</i>	aelccp	<i>J. Chem. Theory Comput.</i>	jctcce
<i>ACS Infect. Dis.</i>	ascejf	<i>J. Med. Chem.</i>	jmcmar
<i>ACS Macro Lett.</i>	amlccd	<i>J. Nat. Prod.</i>	jnprdf
<i>ACS Med. Chem. Lett.</i>	amclct	<i>J. Org. Chem.</i>	joceah
<i>ACS Nano</i>	ancac3	<i>J. Phys. Chem. A</i>	jpcafh
<i>ACS Omega</i>	acsodf	<i>J. Phys. Chem. B</i>	jpcbfk
<i>ACS Photon.</i>	apchd5	<i>J. Phys. Chem. C</i>	jpccck
<i>ACS Sensors</i>	ascejf	<i>J. Phys. Chem. Lett.</i>	jpclcd
<i>ACS Sustainable Chem. Eng.</i>	ascecg	<i>J. Proteome Res.</i>	jprobs
<i>ACS Synth. Biol.</i>	asbcd6	<i>J. Am. Chem. Soc.</i>	jacsat
<i>Anal. Chem.</i>	ancham	<i>Langmuir</i>	langd5
<i>Biochemistry</i>	bichaw	<i>Macromolecules</i>	mamobx
<i>Bioconjugate Chem.</i>	bcches	<i>Mol. Pharm.</i>	mpohbp
<i>Biomacromolecules</i>	bomaf6	<i>Nano Lett.</i>	nalefd
<i>Chem. Mater.</i>	cmatex	<i>Org. Lett.</i>	orlef7
<i>Chem. Res. Toxicol.</i>	crtoec	<i>Organometallics</i>	orgnd7

Table 1: Values for journal option

## 4.2 Manuscript meta-data

`\author` Inspired by REVTeX, the `achemso` class alters the method for adding author information to the manuscript. Each author should be given as a separate `\author` command. These should be followed by an `\affiliation`, which applies to the preceding authors. The `\affiliation` macro takes an optional argument, for a short version of the affiliation.<sup>2</sup> At least one author should be followed by an `\email` macro, containing contact details. All authors with an e-mail address are automatically marked with a star. The example manuscript demonstrates the use of all of these macros. Notice that `\alsoaffiliation` is used when one (or more) authors work at multiple institutions, while `\altaffiliation` is intended for previous addresses (or other notes). Only `\affiliation` applies to multiple authors: both `\alsoaffiliation` and `\altaffiliation` are set on a per author basis.

```
\author{Author Person}
\author{Second Bloke}
\email{second.bloke@some.place}
\affiliation[University of Sometown]
    {University of Somewhere, Sometown, USA}
\altaffiliation
    {Previous address: Minute University, Nowhereville, USA}
\author{Indus Trialguy}
\email{i.trialguy@sponsor.co}
\affiliation[SponsoCo]
    {Research Department, SponsorCo, BigCity, USA}
\alsoaffiliation{University of Somewhere, Sometown, USA}
```

Repeated entries for `\affiliation` and `\alsoaffiliation` will result in only one address being printed in the address list and footnotes. Repeated `\altaffiliation` entries only produce a single footnote, and can therefore be used for entries such as

```
\author{First Coworker}
\altaffiliation{Contributed equally to this work}
\author{Second Coworker}
\altaffiliation{Contributed equally to this work}
```

if required.

`\fax` The class will recognise the optional information `\fax` and `\phone`, which will be printed along with the lead authors e-mail address. Note that this information is only used for authors who have an e-mail address supplied.

```
\author{Second Bloke}
\email{second.bloke@some.place}
\phone{+xxx (0)yyy zzzzzz}
\fax{+xxx (0)yyy wwwwww}
\affiliation[University of Sometown]
    {University of Somewhere, Sometown, USA}
```

`\and` The method used for setting the meta-data means that the normal `\and` and `\thanks` macros are not appropriate in the `pkgachemso` class. Both produce a warning if used.

`\title` The `\title` macro is extended to accept an optional argument. This is

---

<sup>2</sup>This will usually be the university or company name.

intended for a shortened version of the journal title suitable for running headers. Some journals require that authors supply this data: if it is needed then it will be printed in the appropriate place.

```
\title[Short running title]
      {Long title which would not fit in running headers}
```

The meta-data items should be given in the preamble to the L<sup>A</sup>T<sub>E</sub>X file, and no `\maketitle` macro is required in the document body. This is all handled by the class file directly. At least one author, affiliation and e-mail address must be specified.

### 4.3 Floats

scheme	The class defines three new floating environments: <code>scheme</code> , <code>chart</code> and <code>graph</code> .
chart	These can be used as expected to include graphical content. The placement of
graph	these new floats and the standard <code>table</code> and <code>figure</code> floats is altered to be “here” if possible. The contents of all floats is automatically horizontally centred on the page.

### 4.4 Section headers

\SectionNumbersOff	Some journals have no section numbering by default. This can be set up in the appropriate configuration file, but it may be that individual users need to change the decision. The macros <code>\SectionNumbersOff</code> and <code>\SectionNumbersOn</code> are therefore available: these should be given in the preamble.
\SectionNumbersOn	
\SectionsOff	More radically, the entire availability of sections can be turned on and of. This is functionality is available to the user <i>via</i> the <code>\SectionsOn</code> and <code>\SectionsOff</code> macros, which again are preamble-only. Similar functions are available for the abstract: <code>\AbstractOff</code> and <code>\AbstractOn</code> .
\SectionsOn	
\AbstractOff	
\AbstractOn	

### 4.5 Special sections

acknowledgement	The sections for acknowledgements and supporting information have dedicated environments available. These ensure that the section headings are generated, and that the text is sized corrected when using creating a Communication.
suppinfo	

```
\begin{acknowledgement}
  The authors thank A.N.-Other.
\end{acknowledgement}

\begin{suppinfo}
  Full characterization data for all new compounds.
\end{suppinfo}
```

tocentry	For generating an entry for the graphical table of content, required by some journals, the environment <code>tocentry</code> is available. This prints its content in an appropriately sized box on a separate page. In contrast to the rest of the manuscript, this section is intended to be “print ready” in appearance.
----------	---

```
\begin{tocentry}
  \includegraphics{toc-entry-graphic}
  Some text to explain the graphic.
\end{tocentry}
```

## 4.6 Miscellaneous commands

`\latin`

The command `\latin` is provided by the class to format Latin phrases such as “et al.” Most ACS journals do not make these italic, but some (for example *ACS Nano*) do. By providing a command, the formatting is left flexible.

`\doi`

The bibliography style prints any DOI values as the argument to the command `\doi`. The default definition will allow printing of special characters but does not create hyperlinks. A more sophisticated version of the command may be set up if `hyperref` is loaded, for example

```
\begin{tocentry}  
  \newcommand{\doi}[1]{\href{http://dx.doi.org/#1}{\nolinkurl{#1}}}  
\end{tocentry}
```

## 5 The package file

The `achemso` package is independent of the class file, and contains parts of the bundle useful outside of submission to the ACS.

### 5.1 Package options

As with the class options, the package uses the key–value method for option set up. These are used to control the output of citations and bibliographic data. The same options are used when creating journal configurations for the class: this is a task most users will not need to undertake!

`super`

The `super` option affects the handling of superscript reference markers. The option switches this behaviour on and off (and takes Boolean values: `super=true` and `super=false` are valid).

`articletitle`

The `articletitle` option is a Boolean, and sets whether the title of a paper referenced appears in the bibliography. The default is `articletitle=true`.

`doi`

The boolean `doi` option is provided to allow a DOI (Digital Object Identifier) to be included for bibliography entries even where other identification such as page numbers is available. The standard setting is `false`: setting it to `true` will cause DOI numbers to be printed if available.

`chaptertitle`

The boolean `chaptertitle` option is provided to allow flexibility for the inclusion of chapter titles for book and related entries. The standard setting is `false`: setting it to `true` will cause chapter titles to be included.

`etalmode`

`maxauthors`

Many journals require that long lists of authors are shortened using ‘et al.’ in the references section. The behaviour of the `BIBTEX` styles in this regard is controlled by two options, `etalmode` and `maxauthors`. There are two possible ways to shorten a long list of authors. Some journals require that only the first author is given, followed by ‘et al.’: for this behaviour, set `etalmode=firstonly`:

Jones, A.N. et al.

On the other hand, some journals request that the list of authors is truncated after  $n$  authors. This is set up by the `etalmode=truncate` option:

Jones, A.N.; Bloggs, F.; Nobacon, D. et al.

In both cases, the maximum number of authors permitted before introducing ‘et al.’ is governed by the `maxauthors` option. This option recognises the sentinel value 0, which indicates that no shortening should occur at all.

`biblabel` Redefining the formatting of the numbers used in the bibliography usually requires modifying internal  $\text{\LaTeX}$  macros. The `biblabel` option makes these changes more accessible: valid values are `plain` (use the number only), `brackets` (surround the number in brackets) and `period` or `fullstop` (follow the number by a full stop/period).

`biochem`  
`biochemistry` Most ACS journals use the same bibliography style, with the only variation being the inclusion of article titles. However, a small number of journals use a rather different style; the journal *Biochemistry* is probably the most prominent. The `biochemistry` or `biochem` option uses the style of *Biochemistry* for the bibliography, rather than the normal ACS style.

## 5.2 Bibliography notes

`\bibnote`  
`\bibnotemark`  
`\bibnotetext` `achemso` provides the `\bibnote` macro. This is intended for addition of notes to the bibliography (references). The macro accepts a single argument, which is transferred to the bibliography by  $\text{\BibTeX}$ . In analogy to `\footnote`, the macros `\bibnotemark` and `\bibnotetext` are available for dividing up the marker for a note from the text.

Some text `\bibnote{This note text will be in the bibliography}`.  
Some text.<sup>?</sup>

The functionality for bibnotes in `achemso` is based on that in the `notes2bib` package. The `notes2bib` package can be loaded with the `achemso` package, and no clash will occur. With the class file, `notes2bib` will be ignored if requested, to prevent issues on submission to the ACS.

## 6 The $\text{\BibTeX}$ style files

`achemso` is supplied with two style files, `achemso.bst` and `biochem.bst`. The direct use of these without the `achemso` package file is not recommended, but is possible. The style files can be loaded in the usual way, with a `\bibliographystyle` command. The `natbib` package must be loaded by the  $\text{\LaTeX}$  file concerned, if the `achemso` package is not in use.

The style files are designed to use the `mciteplus` package if it is available, but to work even if it is not. When `mciteplus` is present, it is possible to automatically produce references of the form

(5) (a) Arduengo, A. J., III; Dias, H. V. R.; Harlow, R. L.; Kline, M. J. *Am. Chem. Soc.* **1992**, *114*, 5530–5534; (b) Appelhans, L. N.; Zuccaccia, D.; Kovacevic, A.; Chianese, A. R.; Miecznikowski, J. R.; Macchioni, A.; Clot, E.; Eisenstein, O.; Crabtree, R. H. *J. Am. Chem. Soc.* **2005**, *127*, 16299–16311; (c) Arduengo, A. J., III; Gamper, S. F.; Calabrese, J. C.; Davidson, F. J. *Am. Chem. Soc.* **1994**, *116*, 4391–4394.

as demonstrated in the example document. When `mciteplus` is not present, this functionality is not available but the style files will work normally.



The `BibTeX` style files implement the bibliographic style specified by the ACS in *The ACS Style Guide*.<sup>7</sup> By default, article titles are not included in output using the `achemso.bst` file, but are with the `biochem.bst` file.

The style used by the ACS does not differentiate between `BibTeX` `book`, `inbook`, `collection` and `incollection` entries. As a result, the appearance of these entry types depends on the fields available. Named subdivisions of a book (for example, chapters where each has a named author) should be given in the `title` field, with the title of the book itself in the `booktitle` field. The `chapter` field should be used for a chapter number, and is printed as part of the pagination.

One frequently asked question is why some people see an empty first item in their bibliography when using the `achemso` package or class. This is usually because they have downloaded the `LaTeX` files and done a local installation without also updating the `BibTeX` style. The two must be from the same version of `achemso`: they are designed to work together.

## 7 The `natmove` package

The `natmove` package does only one job. It brings the ability to move punctuation after citations, using code borrowed from the `cite` package. Both the `achemso` class and package load `natmove` automatically.

```
Some text \cite{Coghill2006} some more text.\\
Some text ending a sentence \cite{Coghill2006}.
Some text? some more text.
Some text ending a sentence.?
```

This is deactivated for other citation types.

```
Some text \citeyear{Coghill2006}.\\
Some text \citeauthor{Coghill2006}.\\
Some text \citenum{Coghill2006}.
Some text ?.
Some text ?.
Some text ? .
```

The package does nothing if the `super` option has not been given to `natbib`. This means that the source can be written without needing to decide where citations will to appear, with the `super` option for `natbib` controlling the result.

`\natmovechars` One user macro is provided: `\natmovechars`. This contains the characters which are moved before superscript punctuation. The default contents is `,;:.` and can be set using `\renewcommand*`:

```
Some text? , more text.?
\renewcommand*\natmovechars{.}
Some text \cite{Coghill2006},
more text \cite{Coghill2006}.
```

## 8 Implementation

A lot of the work done by the package is also needed by the class. Loading the package and the class makes load-order awkward. Instead, the two parts are done in one place. Sandwiching the common code are two slices of dedicated

material for the class and the package. Some of this is needed “early”, before the common material, whilst the rest is “late”.

## 8.1 Early class-only code

So that there is no confusion, the base class is loaded early.

```
1 <*class>
2 \ProvidesClass{achemso}
3 [2018/07/12 v3.11b Submission to ACS journals]
4 \LoadClass[12pt,letter]{article}
```

\acs@warning The code for a warning is created so that it works for the package too.

```
5 \newcommand*\acs@warning{\ClassWarning{achemso}}
6 </class>
```

## 8.2 Early package-only code

The package and the class should not both be loaded, as the two use the same internal macro names. On the other hand, if the class is not in use a reminder is printed to use it if possible.

```
7 <*package>
8 \ProvidesPackage{achemso}
9 [2018/07/12 v3.11b Support for ACS journals]
10 \ifclassloaded{achemso}{%
11   \PackageInfo{achemso}{%
12     You have already loaded the ‘achemso’ class:\MessageBreak
13     loading the package will abort%
14   }%
15   \endinginput
16 }{%
17   \PackageInfo{achemso}{%
18     When writing a submission to an ACS journal, please\MessageBreak
19     use the achemso document class%
20   }%
21 }
```

\acs@warning The code for a warning is created so that it works for the class too.

```
22 \newcommand*\acs@warning{\PackageWarning{achemso}}
23 </package>
```

## 8.3 Common code

\acs@ifundefined A non-expandable test for defined macros: does not add to the hash table.

```
24 <*package | class>
25 \newcommand*\acs@ifundefined[1]{%
26   \begingroup\expandafter\expandafter\expandafter\endgroup
27   \expandafter\ifx\csname #1\endcsname\relax
28     \expandafter\@firstoftwo
29   \else
30     \expandafter\@secondoftwo
31   \fi
32 }
```

The first stage needed is to read the package options given. Although xkeyval was perhaps not the best choice, changing this now would be rather risky.

```
33 \RequirePackage{xkeyval}
```

`\acs@keyval@bool` A support macro for making Boolean options: the xkeyval version is only available in newer releases.

```
34 \newcommand*\acs@keyval@bool[2]{%
35   \acs@ifundefined{acs@#1#2}{%
36     \acs@warning{Unknown option ‘#2’ for key #1}%
37   }{%
38     \@nameuse{acs@#1#2}%
39   }%
40 }
```

`\ifacs@abbreviations` These are all very trivial definitions: to avoid issues with older versions of xkeyval each definition is done directly.

```
\ifacs@articletitle
  \ifacs@biochem
\ifacs@chaptertitle
  \ifacs@doi
  \ifacs@email
\ifacs@hyperref
\ifacs@keywords
  \ifacs@super
41 \newif\ifacs@abbreviations
42 \newif\ifacs@articletitle
43 \newif\ifacs@biochem
44 \newif\ifacs@doi
45 \newif\ifacs@chaptertitle
46 \newif\ifacs@email
47 \newif\ifacs@hyperref
48 \newif\ifacs@keywords
49 \newif\ifacs@super
50 \define@key{acs}{abbreviations}[true]{%
51   \acs@keyval@bool{abbreviations}{#1}%
52 }
53 \define@key{acs}{articletitle}[true]{%
54   \acs@keyval@bool{articletitle}{#1}%
55 }
56 \define@key{acs}{biochem}[true]{%
57   \acs@keyval@bool{biochem}{#1}%
58 }
59 \define@key{acs}{doi}[true]{%
60   \acs@keyval@bool{doi}{#1}%
61 }
62 \define@key{acs}{chaptertitle}[true]{%
63   \acs@keyval@bool{chaptertitle}{#1}%
64 }
65 \define@key{acs}{email}[true]{%
66   \acs@keyval@bool{email}{#1}%
67 }
68 \define@key{acs}{hyperref}[true]{%
69   \acs@keyval@bool{hyperref}{#1}%
70 }
71 \define@key{acs}{keywords}[true]{%
72   \acs@keyval@bool{keywords}{#1}%
73 }
74 \define@key{acs}{super}[true]{%
75   \acs@keyval@bool{super}{#1}%
76 }
77 \define@key{acs}{usetitle}[true]{%
```

```

78 \acs@keyval@bool{articletitle}{#1}%
79 }

```

\acs@journal Trivial again: done without using xkeyval for the same reasons as before.

\acs@layout

\acs@manuscript

\acs@maxauthors

```

80 \newcommand*\acs@journal{jacsat}
81 \newcommand*\acs@layout{traditional}
82 \newcommand*\acs@manuscript{article}
83 \newcommand*\acs@maxauthors{15}
84 \define@key{acs}{journal}{%
85   \def\acs@journal{#1}%
86 }
87 \define@key{acs}{layout}{%
88   \def\acs@layout{#1}%
89 }
90 \define@key{acs}{manuscript}{%
91   \def\acs@manuscript{#1}%
92 }
93 \define@key{acs}{maxauthors}{%
94   \def\acs@maxauthors{#1}%
95 }

```

\ifacs@etal@truncate The setup for the etalmode option is quite simple: just look for the appropriate macros.

\acs@etal@firstonly

\acs@etal@truncate

```

96 \newif\ifacs@etal@truncate
97 \define@key{acs}{etalmode}{%
98   \acs@ifundefined{acs@etal@#1}{%
99     \acs@warning{%
100       Unknown value ‘#1’ for\MessageBreak etalmode option%
101     }%
102   }{%
103     \@nameuse{acs@etal@#1}%
104   }%
105 }
106 \newcommand*\acs@etal@firstonly{\acs@etal@truncatefalse}
107 \newcommand*\acs@etal@truncate{\acs@etal@truncatetrue}

```

\acs@activate@biblabel The biochemistry option is an alias for biochem. The biblabel option is a choice, which is implemented using a csname search. The group here prevents hash table pollution, whilst the xkeyval method is avoided as it is more complex than it is worth!

```

108 \define@key{acs}{biochemistry}{%
109   \setkeys{acs}{biochem = #1}%
110 }
111 \define@key{acs}{biblabel}{%
112   \acs@ifundefined{acs@biblabel@#1}{%
113     \acs@warning{%
114       Unknown value ‘#1’ for\MessageBreak biblabel option%
115     }%
116   }{%
117     \acs@activate@biblabel{\@nameuse{acs@biblabel@#1}}%
118   }%
119 }
120 \newcommand*\acs@activate@biblabel{}

```

```

121 \class
122 \let\acs@activate@biblabel\AtEndOfClass
123 \AtEndOfClass{\let\acs@activate@biblabel\@firstofone}
124 \class
125 \package
126 \let\acs@activate@biblabel\AtEndOfPackage
127 \AtEndOfPackage{\let\acs@activate@biblabel\@firstofone}
128 \package

```

```

\acs@biblabel@brackets
\acs@biblabel@fullstop
\acs@biblabel@period
\acs@biblabel@plain

```

The macros to implement the idea above for biblabels.

```

129 \newcommand*\acs@biblabel@brackets{\def\bibnumfmt##1{##1}}
130 \newcommand*\acs@biblabel@fullstop{\def\bibnumfmt##1{##1.}}
131 \newcommand*\acs@biblabel@period{\def\bibnumfmt##1{##1.}}
132 \newcommand*\acs@biblabel@plain{\def\bibnumfmt##1{##1}}

```

Set up some defaults.

```

133 \setkeys{acs}{
134   email = true,
135   super = true
136 }

```

Loading some other packages depends on the options chosen, so they are processed now.

```

137 \ProcessOptionsX*

```

```

\acs@manuscript@communication
\acs@manuscript@letter
\acs@manuscript@note
\acs@manuscript@review
\acs@manuscript@suppinfo

```

For text comparisons.

```

138 \newcommand*\acs@manuscript@communication{communication}
139 \newcommand*\acs@manuscript@letter{letter}
140 \newcommand*\acs@manuscript@note{note}
141 \newcommand*\acs@manuscript@review{review}
142 \newcommand*\acs@manuscript@suppinfo{suppinfo}

```

```

\acs@niib@create
  bibnote
  \thebibnote
  \bibnote
  \bibnotemark
  \bibnotetext
\printbibnotes

```

To avoid needing to load the notes2bib package, especially as the plan is to move that package to L<sup>A</sup>T<sub>E</sub>X<sub>3</sub> internal syntax, achemso provides a minimal version here. The first step is to create macros which will need a guard against notes2bib already having been loaded. To allow the package and class to behave differently these are actually applied later.

```

143 \newcommand*\acs@niib@create{%
144   \@namedef{ver@notes2bib.sty}{%
145     2009/04/20 v1.6a Integrating notes into the bibliography (achemso
146     version)
147   }%
148   \@ifundefined{c@bibnote}{\newcounter{bibnote}}{}
149   \def\thebibnote{%
150     Note-\the\value{bibnote}%
151   }%
152   \DeclareRobustCommand*\bibnote[1][\thebibnote]{%
153     \stepcounter{bibnote}%
154     \def\acs@niib@after@text{\cite{##1}}%
155     \acs@niib@text{##1}%
156   }%
157   \DeclareRobustCommand*\bibnotemark[1][\thebibnote]{%
158     \stepcounter{bibnote}%
159     \cite{##1}%

```

```

160 }%
161 \DeclareRobustCommand*{\bibnotetext}[1][\thebibnote]{%
162   \let\acs@niib@after@text\relax
163   \acs@niib@text{##1}%
164 }%
165 \newcommand*\printbibnotes{%
166   \ifnum\the\value{bibnote}>\z@ \relax
167   \nocite{achemso-control}%
168   \acs@bibliography{acs-\jobname}%
169   \fi
170 }%
171 }

```

\acs@niib@after@text After the text.

```

172 \newcommand*\acs@niib@after@text{}

```

\acs@niib@text The \acs@niib@text macro is the outer part of the writing system. It does not absorb the text of note, as without  $\epsilon$ -TeX this is bad news. The same file is used for notes and the control entry for the bibliography style.

```

173 \newcommand*\acs@niib@text{%
174   \@bsphack
175   \if@filesw
176     \expandafter\acs@niib@write
177   \else
178     \expandafter\acs@niib@no@write
179   \fi
180 }

```

\acs@niib@write Writing verbatim without  $\epsilon$ -TeX.

```

\acs@niib@write@aux@i 181 \newcommand*\acs@niib@write[1]{%
\acs@niib@write@aux@ii 182   \begingroup
183     \let\do\@makeother
184     \dospecials
185     \catcode'\{ 1\relax
186     \catcode'\} 2\relax
187     \acs@niib@write@aux@i{#1}%
188   }
189 \newcommand*\acs@niib@write@aux@i[1]{%
190   \long\def\@tempa##1{%
191     \def\@tempa{##1}%
192     \@onelevel@sanitize\@tempa
193     \expandafter\endgroup
194     \expandafter\def\expandafter\@tempa\expandafter{\@tempa}%
195     \acs@niib@write@aux@ii{#1}%
196   }%
197   \catcode'\^^M 10\relax
198   \@tempa
199 }
200 \newcommand*\acs@niib@write@aux@ii[1]{%
201   \immediate\write\acs@bib@file{%
202     @Misc\string{#1,^^J%
203     \space\space note = \string{\@tempa\string},^^J%
204     \string}^^J%
205   }%

```

```

206 \esphack
207 \acs@niib@after@text
208 }

\acs@niib@no@write If no files are to be written, a bit of tidying up.
209 \newcommand\acs@niib@no@write[2]{%
210 \esphack
211 \acs@niib@after@text
212 }

\nmv@natbib@detect The functionality of notes2bib is combined with the standard \cite macro, to
\acs@nmv@activate give automatic note-like data in the bibliography.
\acs@autonote
213 \AtBeginDocument{
214 \def\nmv@natbib@detect{%
215 \ifNAT@super
216 \expandafter\acs@nmv@activate
217 \else
218 \expandafter\acs@autonote
219 \fi
220 }
221 }
222 \newcommand*\acs@nmv@activate{%
223 \let\nmv@citex@nat\@citex
224 \let\@citex\nmv@citex
225 \let\nmv@cite\cite
226 \renewcommand*\cite}[2][{}]{%
227 \nmv@ifmtarg{##1}{%
228 \nmv@citetrue
229 \nmv@cite{##2}%
230 }{%
231 \nocite{##2}%
232 \bibnote{Ref.~\citenum{##2}, ##1}%
233 }%
234 }%
235 }
236 \newcommand*\acs@autonote{%
237 \let\nmv@cite\cite
238 \renewcommand*\cite}[2][{}]{%
239 \nmv@ifmtarg{##1}{%
240 \nmv@cite{##2}%
241 }{%
242 \nocite{##2}%
243 \bibnote{Ref.~\citenum{##2}, ##1}%
244 }%
245 }%
246 }

\acs@bib@file Some information or creating the control file for BibTEX is set up.
\acs@bib@message
\acs@bib@name
247 \newwrite\acs@bib@file
248 \newcommand*\acs@bib@message{%
249 This is an auxiliary file used by the ‘achemso’ bundle.^^J%
250 This file may safely be deleted. It will be recreated as required.^^J
251 }
252 \newcommand*\acs@bib@name{acs-.bib}

```

`\acs@bib@write` The control information for Bib<sub>T</sub><sub>E</sub>X needs to be written to a special file. The main  
`\acs@bib@write@aux` writing macro is quite simple. Actually writing the information is left to the code  
for `\bibliography`, so that this only happens if needed.

```

253 \newcommand*\acs@bib@write{%
254   \if@files
255     \expandafter\acs@bib@write@aux
256   \fi
257 }
258 \AtBeginDocument{\acs@bib@write}
259 \newcommand*\acs@bib@write@aux{%
260   \immediate\openout\acs@bib@file\acs@bib@name\relax
261   \immediate\write\acs@bib@file{\acs@bib@message}%
262   \edef\@tempa##1##2{%
263     \space\space##1\space = "##2",^^J%
264   }%
265   \immediate\write\acs@bib@file{%
266     @Control\string{%
267       achemso-control,^^J%
268       \@tempa{ctrl-article-title\space}{%
269         \ifacs@articletitle yes\else no\fi
270       }%
271       \@tempa{ctrl-chapter-title\space}{%
272         \ifacs@chaptertitle yes\else no\fi
273       }%
274       \@tempa{ctrl-doi\space\space\space\space\space\space\space\space
275         \space\space\space\space}{%
276         \ifacs@doi yes\else no\fi
277       }%
278       \@tempa{ctrl-etal-number\space\space\space}{\acs@maxauthors}%
279       \@tempa{ctrl-etal-firstonly}{%
280         \ifacs@etal@truncate no\else yes\fi
281       }%
282       \string}^^J%
283   }%
284   \immediate\write\@auxout{%
285     \string\citation\string{achemso-control\string}%
286   }%
287   \AtEndDocument{%
288     \immediate\closeout\acs@bib@file\relax
289   }%
290 }

```

`\acs@bibliography` The `\bibliography` macro is now patched so that everything works correctly.

```

\patchbibliography
291 \AtBeginDocument{%
292   \let\acs@bibliography\bibliography
293   \def\bibliography#1{%
294     \acs@bibliography{acs-\jobname,#1}%
295   }%
296 }

```

`\latin` The journal *ACS Nano* formats Latin phrases differently from every other ACS journal: we provide a `\latin` command to cover this.

```

297 \AtBeginDocument{

```



```

298 \providecommand{\latin}[1]{#1}
299 }
300 </package | class>

```

## 8.4 Late class-only code

Most of the power of the class is now created. First, a few options are reset so that any given by the user are effectively ignored.

```

301 <*class>
302 \setkeys{acs}{
303   abbreviations = false,
304   articletitle  = true,
305   biblabel      = brackets,
306   biochem       = false,
307   doi           = false,
308   etalmode      = firstonly,
309   keywords      = false,
310   maxauthors    = 15,
311   super         = true
312 }

```

When using the class, notes2bib is always emulated. Other standard support packages can now be loaded.

```

313 \acs@niib@create
314 \RequirePackage[margin=2.54cm]{geometry}
315 \RequirePackage{
316   caption,
317   float,
318   graphicx,
319   setspace,
320   url
321 }
322 \ifacs@hyperref
323   \expandafter\RequirePackage
324 \else
325   \expandafter\@gobble
326 \fi
327 {hyperref}
328 \AtBeginDocument{\doublespacing}

```

\title For the meta-data, the REVTeX bundle provides a good model for the commands to give the author. \gdef is used here to avoid any odd grouping issues.

```

\acs@title@short 329 \renewcommand*{\title}[2][]{%
330   \gdef\acs@title@short{#1}%
331   \gdef\@title{#2}%
332   \ifx\acs@title@short\@empty
333     \global\let\acs@title@short\@title
334   \fi
335 }
336 \onlypreamble\title

```

\acs@author@cnt \acs@aaffil@cnt \acs@aaffil@alt@cnt achemso tracks the number authors, affiliations and alternative affiliations.

```

337 \newcount\acs@author@cnt

```

```

338 \newcount\acs@affil@cnt
339 \newcount\acs@affil@alt@cnt

\acs@footnote@cnt Two counts for getting affiliation footnotes correct.
\acs@affil@marker@cnt 340 \newcount\acs@footnote@cnt
341 \newcount\acs@affil@marker@cnt

\author The author macro stores the current author details and sets the affiliation of the
author to the current one. Everything is \global so that there is no possibility of
begin trapped inside a group. The affiliation counter is always one behind, and
so it is locally incremented to keep the logic of the code clear elsewhere.
342 \def\author#1{%
343   \global\advance\acs@author@cnt\@ne\relax
344   \expandafter\gdef\csname @author@\@roman\acs@author@cnt\endcsname{#1}%
345   \begingroup
346     \advance\acs@affil@cnt\@ne
347     \expandafter\xdef\csname @author@affil@\@roman
348       \acs@author@cnt\endcsname
349       {\the\acs@affil@cnt}%
350   \endgroup
351 }
352 \@onlypreamble\author

\and Neither \and nor \thanks are used by the document class.
\thanks 353 \def\and{%
354   \acs@warning{%
355     \string\and\space not used by the achemso class: please see
356     the\MessageBreak package documentation for details%
357   }%
358 }
359 \def\thanks{%
360   \acs@warning{%
361     \string\thanks\space not used by the achemso class: please see
362     the\MessageBreak the package documentation for details%
363   }%
364 }

\affiliation As with \author, everything is \global just in case. The system insists that
affiliations come after authors. Before anything is committed, a check is made
that the affiliation has not already been seen.
365 \newcommand*\affiliation[2][\relax]{%
366   \ifnum\acs@author@cnt>\z@\relax
367     \acs@affil@ifdup{#2}{%
368       \acs@affil@swap{#2}%
369     }{%
370       \global\advance\acs@affil@cnt\@ne\relax
371       \expandafter\gdef\csname @address@\@roman\acs@affil@cnt\endcsname
372         {#2}%
373       \ifx\relax#1\relax
374         \expandafter\gdef\csname @affil@\@roman\acs@affil@cnt\endcsname
375           {#2}%
376       \else
377         \expandafter\gdef\csname @affil@\@roman\acs@affil@cnt\endcsname

```

```

378         {#1}%
379     \fi
380 }%
381 \else
382     \acs@warning{Affiliation with no author}%
383 \fi
384 }
385 \@onlypreamble\affiliation

```

\acs@affil@ifdup    A short test for two addresses being identical.  
\acs@affil@ifdup@aux

```

386 \newcommand*\acs@affil@ifdup[1]{%
387     \begingroup
388     \def\@tempa{#1}%
389     \@tempswafalse
390     \@tempcnta\z@\relax
391     \acs@affil@ifdup@aux
392     \if@tempswa
393         \aftergroup\@firstoftwo
394     \else
395         \aftergroup\@secondoftwo
396     \fi
397 \endgroup
398 }
399 \newcommand*\acs@affil@ifdup@aux{%
400     \advance\@tempcnta\@one\relax
401     \expandafter\expandafter\expandafter\def\expandafter\expandafter
402     \expandafter\@tempb\expandafter\expandafter\expandafter
403     {\csname @address@\@roman\@tempcnta\endcsname}%
404     \ifx\@tempa\@tempb
405         \expandafter\@tempswatrue
406     \else
407         \ifnum\@tempcnta<\acs@affil@cnt\relax
408             \expandafter\expandafter\expandafter\acs@affil@ifdup@aux
409         \fi
410     \fi
411 }

```

\acs@affil@swap    If the affiliation has already been given, then all of the authors need to be checked  
\acs@affil@swap@aux    to make sure that the correct affiliation is used. First, the loop from above is used  
to find the correct number for the duplicate.

```

412 \newcommand*\acs@affil@swap[1]{%
413     \begingroup
414     \def\@tempa{#1}%
415     \@tempcnta\z@\relax
416     \@tempcntb\z@\relax
417     \acs@affil@ifdup@aux
418     \advance\acs@affil@cnt\@one\relax
419     \acs@affil@swap@aux
420 \endgroup
421 }
422 \newcommand*\acs@affil@swap@aux{%
423     \advance\@tempcntb\@one\relax
424     \expandafter\ifnum\csname @author@affil@\@roman\@tempcntb\endcsname
425     = \acs@affil@cnt\relax

```

```

426 \expandafter\xdef\csname @author@affil@\@roman\@tempcntb\endcsname{%
427 \the\@tempcnta
428 }%
429 \fi
430 \ifnum\@tempcntb<\acs@author@cnt\relax
431 \expandafter\acs@affil@swap@aux
432 \fi
433 }

```

`\alsoaffiliation` To allow complex affiliations, two commands are needed. The first deals with  
`\acs@alsoaffil@find` affiliations that are in some way shared by several authors. This is tracked on a  
per author basis.

```

434 \newcommand*\alsoaffiliation[2][\relax]{%
435 \ifnum\acs@author@cnt>\z@\relax
436 \acs@affil@ifdup{#2}{%
437 \acs@alsoaffil@find{#2}%
438 }{%
439 \global\advance\acs@affil@cnt\@ne\relax
440 \@tempcnta\acs@affil@cnt\relax
441 \expandafter\gdef\csname @address@\@roman\acs@affil@cnt\endcsname
442 {#2}%
443 \ifx\relax#1\relax
444 \expandafter\gdef\csname @affil@\@roman\acs@affil@cnt\endcsname
445 {#2}%
446 \else
447 \expandafter\gdef\csname @affil@\@roman\acs@affil@cnt\endcsname
448 {#1}%
449 \fi
450 }%
451 \ifundefined{@author@alsoaffil@\@roman\acs@author@cnt}{%
452 \expandafter\xdef\csname @author@alsoaffil@\@roman\acs@author@cnt
453 \endcsname{\the\@tempcnta}%
454 }{%
455 \expandafter\xdef\csname @author@alsoaffil@\@roman\acs@author@cnt
456 \endcsname{%
457 \csname @author@alsoaffil@\@roman\acs@author@cnt\endcsname
458 ,\the\@tempcnta
459 }%
460 }%
461 \else
462 \acs@warning{Affiliation with no author}%
463 \fi
464 }
465 \newcommand*\acs@alsoaffil@find[1]{%
466 \begingroup
467 \def\@tempa{#1}%
468 \@tempcnta\z@\relax
469 \@tempcntb\z@\relax
470 \acs@affil@ifdup@aux
471 \expandafter\endgroup
472 \expandafter\@tempcnta\the\@tempcnta\relax
473 }

```

`\altaffiliation` For the alternative affiliation, a second count is kept, and the affiliation is “at-

tached” to the author. The way these are stored means that the appropriate affiliation number can be recovered later, and so printed correctly when things get complex.

```

474 \newcommand*\altaffiliation[1]{%
475   \ifnum\acs@author@cnt>\z@\relax
476   \begingroup
477     \acs@altaffil@ifdup{#1}{%
478       \expandafter\xdef\csname @author@altaffil@\@roman\acs@author@cnt
479         \endcsname{\the\@tempcnta}%
480     }{%
481       \global\advance\acs@affil@alt@cnt\@ne\relax
482       \expandafter\gdef\csname @altaffil@\@roman\acs@affil@alt@cnt
483         \endcsname{#1}%
484       \expandafter\xdef\csname @author@altaffil@\@roman\acs@author@cnt
485         \endcsname{\the\acs@affil@alt@cnt}%
486     }%
487   \endgroup
488   \else
489     \acs@warning{Affiliation with no author}%
490   \fi
491 }
492 \@onlypreamble\altaffiliation

```

\acs@altaffil@ifdup This is very similar to the same routine for normal affiliations but with the appropriate name changes.

\acs@altaffil@ifdup@aux

```

493 \newcommand*\acs@altaffil@ifdup[1]{%
494   \def\@tempa{#1}%
495   \@tempswafalse
496   \@tempcnta\z@\relax
497   \ifnum\acs@affil@alt@cnt>\z@\relax
498     \expandafter\acs@altaffil@ifdup@aux
499   \fi
500   \if@tempswa
501     \expandafter\@firstoftwo
502   \else
503     \expandafter\@secondoftwo
504   \fi
505 }
506 \newcommand*\acs@altaffil@ifdup@aux{%
507   \advance\@tempcnta\@ne\relax
508   \expandafter\expandafter\expandafter\def\expandafter\expandafter
509     \expandafter\@tempb\expandafter\expandafter\expandafter
510     {\csname @altaffil@\@roman\@tempcnta\endcsname}%
511   \ifx\@tempa\@tempb
512     \expandafter\@tempswatrue
513   \else
514     \ifnum\@tempcnta<\acs@affil@alt@cnt\relax
515       \expandafter\expandafter\expandafter\acs@altaffil@ifdup@aux
516     \fi
517   \fi
518 }

```

\email E-mail addresses are attached to authors as well.

```

519 \newcommand*\email[1]{%
520   \ifnum\acs@author@cnt>\z@\relax
521     \expandafter\gdef\csname @email@\@roman\acs@author@cnt\endcsname
522       {#1}%
523   \else
524     \acs@warning{E-mail with no author}%
525   \fi
526 }
527 \@onlypreamble\email

\fax Fax and phone numbers are similar.
\phone
528 \newcommand*\fax[1]{%
529   \ifnum\acs@author@cnt>\z@\relax
530     \expandafter\gdef\csname @fax@\@roman\acs@author@cnt\endcsname
531       {#1}%
532   \else
533     \acs@warning{Fax number with no author}%
534   \fi
535 }
536 \@onlypreamble\fax
537 \newcommand*\phone[1]{%
538   \ifnum\acs@author@cnt>\z@\relax
539     \expandafter\gdef\csname @phone@\@roman\acs@author@cnt\endcsname
540       {#1}%
541   \else
542     \acs@warning{Phone number with no author}%
543   \fi
544 }
545 \@onlypreamble\phone

\abbreviations Some journals use these.
\@abbreviations
\keywords
\@keywords
546 \newcommand*\abbreviations[1]{%
547   \gdef\@abbreviations{#1}%
548 }
549 \newcommand*\@abbreviations{}
550 \@onlypreamble\abbreviations
551 \newcommand*\keywords[1]{%
552   \gdef\@keywords{#1}%
553 }
554 \newcommand*\@keywords{}
555 \@onlypreamble\keywords

\acs@abbreviations@print For printing the key simple meta-data.
\acs@keywords@print
\acs@title@short@print
556 \newcommand*\acs@abbreviations@print{%
557   \ifx\@abbreviations\@empty\else
558     \section*{Abbreviations}
559     \@abbreviations
560   \par
561   \fi
562 }
563 \newcommand*\acs@keywords@print{%
564   \ifx\@keywords\@empty\else
565     \section*{Keywords}
566     \@keywords

```

```

567     \par
568     \fi
569 }
570 \newcommand*\acs@title@short@print{%
571     \section*{Running header}
572     \acs@title@short
573     \par
574 }

\acs@space@pre@title Lengths for \@maketitle.
\acs@space@post@title 575 \newlength\acs@space@pre@title
\acs@space@post@author 576 \setlength\acs@space@pre@title{2em}
\acs@space@post@address 577 \newlength\acs@space@post@title
\acs@space@post@email 578 \setlength\acs@space@post@title{1.5em}
\acs@maketitle@width 579 \newlength\acs@space@post@author
580 \setlength\acs@space@post@author{1em}
581 \newlength\acs@space@post@address
582 \setlength\acs@space@post@address{1em}
583 \newlength\acs@space@post@email
584 \setlength\acs@space@post@email{1.5em}
585 \newlength\acs@maketitle@width
586 \setlength\acs@maketitle@width{\textwidth}

\affilsize Some simple size commands.
\authorsize 587 \newcommand*\affilsize{\normalsize}
\emailsize 588 \newcommand*\authorsize{\large}
\titlesize 589 \newcommand*\emailsize{\normalsize}
590 \newcommand*\titlesize{\LARGE}

\authorfont Font settings for \@maketitle.
\authorfont 591 \newcommand*\affilfont{\itshape}
\emailfont 592 \newcommand*\authorfont{\sffamily}
\titlefont 593 \newcommand*\emailfont{}
594 \newcommand*\titlefont{\bfseries\sffamily}

\ps@acs A shortcut to make page styles.
595 \newcommand*\ps@acs{}
596 \let\ps@acs\ps@plain

\@maketitle With the changes outlined above in place, a new \@maketitle macro is needed.
\@maketitle@title@hook This is partially a copy of the existing, but rather heavily modified.
597 \def\@maketitle{%
598     \pagestyle{acs}%
599     \ifnum\acs@author@cnt<\z@ \relax
600         \acs@warning{No authors defined: At least one author is required}%
601     \fi
602     \newpage
603     \null
604     \vspace*{\acs@space@pre@title}%
605     \begin{center}
606         \begin{minipage}{\acs@maketitle@width}
607             \begin{center}
608                 {%

```

```

609         \titlefont
610         \titlesize
611         \let\@fnsymbol\acs@author@fnsymbol
612         \let\footnote\acs@title@footnote
613         \acs@maketitle@suppinfo \@title
614         \acs@title@footnote@check
615         \global\acs@footnote@cnt\c@footnote
616         \@maketitle@title@hook
617     \par
618 }%
619 \vspace*{\acs@space@post@title}%
620 {%
621     \authorsize
622     \authorfont
623     \frenchspacing
624     \acs@author@list
625 \par
626 }%
627 \vspace*{\acs@space@post@author}%
628 {%
629     \affilsize
630     \affilfont
631     \acs@address@list
632 \par
633 }%
634 \vspace*{\acs@space@post@address}%
635 {%
636     \emailsize
637     \emailfont
638     \ifacs@email
639         \expandafter\acs@contact@details
640     \fi
641 }%
642 \vspace*{\acs@space@post@email}%
643 \end{center}
644 \end{minipage}
645 \end{center}%
646 }
647 \newcommand*\@maketitle@title@hook{}

```

\acs@maketitle@suppinfo This is spun out so that it can be avoided if necessary: this is done on the sly.

```

648 \newcommand*\acs@maketitle@suppinfo{%
649     \ifx\acs@manuscript\acs@manuscript@suppinfo
650         Supporting Information:\
651     \fi
652 }

```

\acs@title@footnote Footnotes need to be created so that they appear correctly.

```

\acs@title@footnote@check
653 \newcommand*\acs@title@footnote[1]{%
654     \footnotemark
655     \g@addto@macro\@thanks{\footnotetext{#1}}%
656 }
657 \newcommand\acs@title@footnote@check{%
658     \ifx\@thanks\@empty

```



```

659 \else
660 \begingroup
661 \toks@=\expandafter{\@thanks}%
662 \xdef\@thanks{%
663 \begingroup
664 \let\noexpand\@fnsymbol\noexpand\acs@author@fnsymbol
665 \the\toks@
666 \endgroup
667 }%
668 \endgroup
669 \fi
670 }

```

`\acs@contact@details` A general contact details macro.

```

671 \newcommand*\acs@contact@details{%
672 { \sffamily E-mail: \acs@email@list }%
673 \acs@number@list
674 }

```

`\@thanks` The `\@thanks` macro is used as a hook to generate the footnotes if needed.

```

675 \let\@thanks\@empty

```

`\acs@author@list` Printing the author list needs to do several things. The appropriate separators between authors are created and the author names themselves are printed.

```

676 \newcommand*\acs@author@list{%
677 \@tempcnta\z@\relax
678 \ifnum\acs@author@cnt=\z@\relax\else
679 \expandafter\acs@author@list@main
680 \fi
681 }

```

`\acs@author@footnotes` The main control macro for producing the author list iterates over each author on the list. The result is stored as `\acs@author@listing`.

`\acs@author@list@main`

```

682 \newcommand*\acs@author@footnotes{}
683 \newcommand*\acs@author@list@main{%
684 \advance\@tempcnta\@ne\relax
685 \def\acs@author@footnotes{}%
686 \acs@author@list@and
687 \space
688 \@nameuse{@author@\@roman\@tempcnta}%
689 \acs@author@list@comma
690 \acs@author@star
691 \acs@author@affil
692 \acs@author@affil@also
693 \acs@author@affil@alt
694 \ifx\@empty\acs@author@footnotes\else
695 \textsuperscript{\acs@author@footnotes}%
696 \fi
697 \ifnum\@tempcnta<\acs@author@cnt\relax
698 \expandafter\acs@author@list@main
699 \fi
700 }

```

<pre> \acs@author@list@and \acs@author@list@comma </pre>	<p>Simple checks to add an “and” and a comma.</p> <pre> 701 \newcommand*\acs@author@list@and{% 702   \ifnum\acs@author@cnt=\@ne\relax\else 703     \ifnum\@tempcnta=\acs@author@cnt\relax 704       \space and% 705     \fi 706   \fi 707 } 708 \newcommand*\acs@author@list@comma{% 709   \ifnum\acs@author@cnt&gt;\tw@\relax 710     \ifnum\@tempcnta&lt;\acs@author@cnt\relax 711       ,% 712     \fi 713   \fi 714 } </pre>
<pre> \acs@author@star \acs@author@star@aux </pre>	<p>A check for an e-mail for an author: if so, add a star.</p> <pre> 715 \newcommand*\acs@author@star{% 716   \acs@ifundefined{@email@\@roman\@tempcnta}{\}% 717   \acs@author@star@aux 718 }% 719 } 720 \newcommand*\acs@author@star@aux{% 721   \protected@edef\acs@author@footnotes{% 722     \acs@author@fnsymbol{\z@}% 723     \ifnum\acs@affil@cnt&gt;\@ne\relax 724       ,% 725     \else 726       \ifnum\acs@affil@alt@cnt&gt;\z@\relax 727         ,% 728       \fi 729     \fi 730   }% 731 } </pre>
<pre> \acs@author@affil \acs@author@affil@aux </pre>	<p>The main affiliation of the author is checked for, and assuming one is found the appropriate symbol is added to the list.</p> <pre> 732 \newcommand*\acs@author@affil{% 733   \acs@ifundefined{% 734     @affil@\@roman\csname @author@affil@\@roman\@tempcnta\endcsname 735   }{% 736     \acs@warning{% 737       No affiliation given for author\MessageBreak 738       \@nameuse{@author@\@roman\@tempcnta}% 739     }% 740   }{% 741     \acs@author@affil@aux 742   }% 743 } 744 \newcommand*\acs@author@affil@aux{% 745   \ifnum\acs@affil@cnt&gt;\@ne\relax 746     \expandafter\acs@affil@marker@cnt\csname @author@affil@\@roman 747       \@tempcnta\endcsname\relax 748     \advance\acs@affil@marker@cnt\acs@footnote@cnt\relax </pre>

```

749 \protected@edef\acs@author@footnotes{%
750 \acs@author@footnotes
751 \acs@author@fnsymbol{\acs@affil@marker@cnt}}%
752 }%
753 \else
754 \ifnum\acs@affil@alt@cnt>\z@ \relax
755 \acs@affil@marker@cnt\@ne \relax
756 \advance\acs@affil@marker@cnt\acs@footnote@cnt \relax
757 \protected@edef\acs@author@footnotes{%
758 \acs@author@footnotes
759 \acs@author@fnsymbol{\acs@affil@marker@cnt}}%
760 }%
761 \fi
762 \fi
763 }

```

\acs@author@affil@also The “also” affiliations are generated by a loop as there may be more than one.

```

\acs@author@affil@also@aux 764 \newcommand*\acs@author@affil@also{%
765 \acs@ifundefined{@author@alsoaffil@\@roman\@tempcnta}{-}{%
766 \acs@author@affil@also@aux
767 }%
768 }
769 \newcommand*\acs@author@affil@also@aux{%
770 \expandafter\@for\expandafter\@tempa\expandafter:\expandafter
771 =\csname @author@alsoaffil@\@roman\@tempcnta\endcsname\do{%
772 \acs@affil@marker@cnt\@tempa \relax
773 \advance\acs@affil@marker@cnt\acs@footnote@cnt \relax
774 \protected@edef\acs@author@footnotes{%
775 \acs@author@footnotes
776 ,%
777 \acs@author@fnsymbol{\acs@affil@marker@cnt}}%
778 }%
779 }%
780 }

```

\acs@author@affil@alt Alternative affiliations get the correct affiliation number back out from the stored data. There are then two corrections: one for the total number of main affiliations and a second in case there is a footnote to the title.

```

781 \newcommand*\acs@author@affil@alt{%
782 \acs@ifundefined{@author@altaffil@\@roman\@tempcnta}{-}{%
783 \acs@author@affil@alt@aux
784 }%
785 }
786 \newcommand*\acs@author@affil@alt@aux{%
787 \expandafter\acs@affil@marker@cnt
788 \csname @author@altaffil@\@roman\@tempcnta\endcsname \relax
789 \advance\acs@affil@marker@cnt\acs@affil@cnt \relax
790 \advance\acs@affil@marker@cnt\acs@footnote@cnt \relax
791 \protected@edef\acs@author@footnotes{%
792 \acs@author@footnotes
793 ,%
794 \acs@author@fnsymbol{\acs@affil@marker@cnt}}%
795 }%
796 }

```

<pre> \acs@author@fnsymbol \acs@author@fnsymbol@aux \acs@author@fnsymbol@loop cs@author@fnsymbol@loop@aux@i s@author@fnsymbol@loop@aux@ii cs@author@fnsymbol@loop@aux@m cs@author@fnsymbol@loop@aux@Q \acs@author@fnsymbol@symbol </pre>	<p>The ACS have an extended list of symbols. The star appears at the special position zero.</p> <pre> 797 \newcommand*{\acs@author@fnsymbol}[1]{% 798   \ensuremath{% 799     \expandafter\acs@author@fnsymbol@aux\expandafter{\number#1 }% 800   }% 801 } 802 \newcommand*{\acs@author@fnsymbol@aux}[1]{% 803   \ifnum#1&gt;10 % 804     \expandafter\acs@author@fnsymbol@loop 805   \else 806     \expandafter\acs@author@fnsymbol@symbol 807   \fi 808   {#1}% 809 } 810 \newcommand*{\acs@author@fnsymbol@loop}[1]{% 811   \acs@author@fnsymbol@loop@aux@i#1% 812 } 813 \newcommand*{\acs@author@fnsymbol@loop@aux@i}[2]{% 814   \acs@author@fnsymbol@symbol{\ifnum#2=0 10\else #2\fi}% 815   \expandafter\acs@author@fnsymbol@loop@aux@ii\romannumeral #1000Q{}% 816   {\acs@author@fnsymbol@symbol{\ifnum#2=0 10\else #2\fi}}% 817 } 818 \newcommand*{\acs@author@fnsymbol@loop@aux@ii}[1]{% 819   \@nameuse{\acs@author@fnsymbol@loop@aux@#1}% 820 } 821 \def\acs@author@fnsymbol@loop@aux@m#1Q#2#3{% 822   \acs@author@fnsymbol@loop@aux@ii#1Q{#2#3}{#3}% 823 } 824 \newcommand*{\acs@author@fnsymbol@loop@aux@Q}[2]{#1} 825 \newcommand*{\acs@author@fnsymbol@symbol}[1]{% 826   \ifcase #1 *\or 827     \dagger\or 828     \ddagger\or 829     \P\or 830     \S\or 831     \ \or 832     \bot\or 833     \#\or 834     @\or 835     \triangle\or 836     \nabla 837   \fi 838 } </pre>
<pre> \acs@address@list \acs@address@list@auxi \acs@address@list@auxii </pre>	<p>Loop over the addresses and any extra affiliations and print them all: if there is only one, omit the marker entirely. There is also a need to watch out for any footnotes from the title.</p> <pre> 839 \newcommand*\acs@address@list{% 840   \ifnum\acs@affil@cnt&gt;\z@ 841     \expandafter\acs@address@list@auxi 842   \else 843     \acs@warning{No affiliations: at least one affiliation is needed}% 844   \fi </pre>

```

845 }
846 \newcommand*\acs@address@list@auxi{%
847   \ifnum0%
848     \ifnum\acs@affil@cnt>\@ne 1\fi
849     \ifnum\acs@affil@alt@cnt>\z@ 1\fi
850     >\z@
851     \expandafter\acs@address@list@auxii
852   \else
853     \@address@i\par
854   \fi
855 }
856 \newcommand*\acs@address@list@auxii{%
857   \@tempcnta\z@
858   \acs@affil@marker@cnt\acs@footnote@cnt
859   \loop\ifnum\@tempcnta<\acs@affil@cnt
860     \advance\@tempcnta\@ne
861     \advance\acs@affil@marker@cnt\@ne
862     \acs@author@fnsymbol{\acs@affil@marker@cnt}%
863     \@nameuse{\@address@\@roman\@tempcnta}\par
864   \repeat
865   \@tempcnta\z@
866   \loop\ifnum\@tempcnta<\acs@affil@cnt
867     \advance\@tempcnta\@ne
868     \advance\acs@affil@marker@cnt\@ne
869     \acs@ifundefined{\altaffil@\@roman\@tempcnta}
870     {}
871     {%
872       \acs@author@fnsymbol{\acs@affil@marker@cnt}%
873       \@nameuse{\altaffil@\@roman\@tempcnta}\par
874     }%
875   \repeat
876 }

```

\acs@fnsymbol@org      Footnotes are done in two stages. First the main affiliation is handled, then the  
\acs@affil@list      possible alternative. There is a need to check for the possibility that there is only  
\acs@affil@list@aux      one main affiliation but one or more alternative ones.

```

877 \newcommand*\acs@fnsymbol@org{}
878 \newcommand*\acs@affil@list{%
879   \let\acs@fnsymbol@org\@fnsymbol
880   \let\@fnsymbol\acs@author@fnsymbol
881   \@tempcnta\z@\relax
882   \@tempcntb\z@\relax
883   \ifnum\acs@affil@cnt>\@ne\relax
884     \expandafter\acs@affil@list@aux
885   \else
886     \ifnum\acs@affil@alt@cnt>\z@\relax
887       \acs@affil@marker@cnt\@ne\relax
888       \advance\acs@affil@marker@cnt\acs@footnote@cnt\relax
889       \footnotetext[\acs@affil@marker@cnt]{\@affil@i}%
890       \@tempcnta\@ne\relax
891     \fi
892   \fi
893   \ifnum\acs@affil@alt@cnt>\z@\relax
894     \expandafter\acs@affil@alt@list

```

```

895 \fi
896 \let\@fnsymbol\acs@fnsymbol@org
897 }
898 \newcommand*\acs@affil@list@aux{%
899 \advance\@tempcnta\@ne\relax
900 \acs@affil@marker@cnt\@tempcnta\relax
901 \advance\acs@affil@marker@cnt\acs@footnote@cnt\relax
902 \footnotetext[\acs@affil@marker@cnt]{%
903 \@nameuse{\@affil@\@roman\@tempcnta}%
904 }%
905 \ifnum\@tempcnta<\acs@affil@cnt\relax
906 \expandafter\acs@affil@list@aux
907 \fi
908 }

```

\acs@affil@alt@list The secondary loop for alternative affiliations is similar.  
\acs@affil@alt@list@aux

```

909 \newcommand*\acs@affil@alt@list{%
910 \advance\@tempcntb\@ne\relax
911 \acs@ifundefined{\altaffil@\@roman\@tempcntb}{\}%
912 \acs@altaffil@foot@aux
913 }
914 \ifnum\@tempcntb<\acs@author@cnt\relax
915 \expandafter\acs@affil@alt@list
916 \fi
917 }
918 \newcommand*\acs@altaffil@foot@aux{%
919 \advance\@tempcnta\@ne\relax
920 \acs@affil@marker@cnt\@tempcnta\relax
921 \advance\acs@affil@marker@cnt\acs@footnote@cnt\relax
922 \footnotetext[\acs@affil@marker@cnt]{%
923 \@nameuse{\@altaffil@\@roman\@tempcntb}%
924 }%
925 }

```

\acs@email@list@font The final piece of meta-data to print is the e-mail address list. The total number  
\acs@email@list of e-mail addresses given it counted in \@tempcntb, which means a warning  
\acs@email@list@aux can be given if there are none. The group is used so that \UrlFont can be set  
correctly.

```

926 \newcommand*\acs@email@list@font{\sf}
927 \newcommand*\acs@email@list{%
928 \begingroup
929 \def\UrlFont{\acs@email@list@font}%
930 \@tempcnta\z@\relax
931 \@tempcntb\z@\relax
932 \acs@email@list@aux
933 \ifnum\@tempcntb=\z@\relax
934 \acs@warning{%
935 No e-mail given:\MessageBreak
936 at least one author must have a contact e-mail%
937 }%
938 \fi
939 \endgroup
940 }
941 \newcommand*\acs@email@list@aux{%

```

```

942 \advance\@tempcnta\@ne\relax
943 \ifnum\@tempcnta>\acs@author@cnt\relax\else
944 \acs@ifundefined{\email@\@roman\@tempcnta}{\}%
945 \advance\@tempcntb\@ne\relax
946 \ifnum\@tempcntb>\@ne\relax
947 ;
948 \fi
949 \expandafter\expandafter\expandafter\url\expandafter
950 \expandafter\expandafter{\%
951 \csname @email@\@roman\@tempcnta\endcsname
952 }%
953 }%
954 \expandafter\acs@email@list@aux
955 \fi
956 }

```

\acs@number@list Listing phone and fax numbers is easier as they don't have to be given. Everything  
\acs@number@list@aux@i is done in one block so that it is possible to know whether to add a new line and  
\acs@number@list@aux@ii also keep everything together.

```

957 \newcommand*\acs@number@list{%
958 \begingroup
959 \acs@number@list@aux@i{phone}%
960 \let\@tempb\@tempa
961 \acs@number@list@aux@i{fax}%
962 \ifx\@tempa\@empty
963 \let\@tempa\@tempb
964 \else
965 \ifx\@tempb\@empty\else
966 \protected@edef\@tempa{%
967 \@tempb.\space\@tempa
968 }%
969 \fi
970 \fi
971 \ifx\@tempa\@empty\else
972 \par
973 \@tempa
974 \fi
975 \endgroup
976 }
977 \newcommand*\acs@number@list@aux@i[1]{%
978 \def\@tempa{}%
979 \@tempcnta\z@\relax
980 \def\acs@number@list@aux@ii{%
981 \advance\@tempcnta\@ne\relax
982 \ifnum\@tempcnta>\acs@author@cnt\relax\else
983 \acs@ifundefined{\@#1@\@roman\@tempcnta}{\}%
984 \acs@ifundefined{\email@\@roman\@tempcnta}{\}%
985 \ifx\@tempa\@empty
986 \edef\@tempa{%
987 \@nameuse{\@#1@\@roman\@tempcnta}%
988 }%
989 \else
990 \edef\@tempa{%
991 \@tempa

```

```

992             ;
993             \@nameuse{@#1@\@roman\@tempcnta}%
994         }%
995     \fi
996 }%
997 }%
998 \expandafter\acs@number@list@aux@ii
999 \fi
1000 }%
1001 \acs@number@list@aux@ii
1002 \ifx\@tempa\@empty\else
1003     \protected@edef\@tempa{%
1004         \MakeUppercase#1: \@tempa
1005     }%
1006 \fi
1007 }
1008 \newcommand*\acs@number@list@aux@ii{}

```

```

\endabstract
\acs@abstract@extras
1009 \g@addto@macro\endabstract{%
1010     \aftergroup\acs@abstract@extras
1011 }
1012 \newcommand*\acs@abstract@extras{%
1013     \ifacs@abbreviations
1014         \acs@abbreviations@print
1015     \par
1016 \fi
1017 \ifacs@keywords
1018     \acs@keywords@print
1019 \par
1020 \fi
1021 }

```

```

\acs@maketitle@extras A couple of things might need to be added to \maketitle.
\acs@maketitle@extras@hook
1022 \newcommand*\acs@maketitle@extras{%
1023     \acs@maketitle@extras@hook
1024 }
1025 \newcommand*\acs@maketitle@extras@hook{}
1026 \g@addto@macro{\maketitle}{\acs@maketitle@extras}

```

\maketitle is required by the document class, and must start the document. No variation is allowed, and so it is done automatically.

```

1027 \g@addto@macro{\document}{\maketitle}

```

scheme Three new float types are provided, scheme, chart and graph. These are the  
chart most obvious types; for graphs, a slight problem arises with the file extension.

```

graph
1028 \newfloat{scheme}{htbp}{los}
1029 \floatname{scheme}{Scheme}
1030 \newfloat{chart}{htbp}{loc}
1031 \floatname{chart}{Chart}
1032 \newfloat{graph}{htbp}{loh}
1033 \floatname{graph}{Graph}

```



`\schemename` Naming is set up in the same way as the kernel floats.

```
\chartname 1034 \newcommand*\schemename{Scheme}
\graphname 1035 \newcommand*\chartname{Chart}
1036 \newcommand*\graphname{Graph}
```

The standard floats should appear “here” by default.

```
1037 \floatplacement{table}{htbp}
1038 \floatplacement{figure}{htbp}
1039 \floatstyle{plaintop}
1040 \restylefloat{table}
```

`\acs@floatboxreset` Floats are all centred.

```
1041 \let\acs@floatboxreset\floatboxreset
1042 \def\@floatboxreset{%
1043   \centering
1044   \acs@floatboxreset
1045 }
```

`\plainref` For legacy support.

```
\ref 1046 \newcommand*\plainref{}
1047 \AtBeginDocument{\let\plainref\ref}
```

`\acs@section` Both the numbering and existence of section headers may need to be altered.

`\acs@subsection` Some generic functions are therefore provided to deal with this cleanly. First,

`\acs@subsubsection` some original definitions are saved.

```
\acs@startsection@orig 1048 \newcommand*\acs@section{}
1049 \let\acs@section\section
1050 \newcommand*\acs@subsection{}
1051 \let\acs@subsection\subsection
1052 \newcommand*\acs@subsubsection{}
1053 \let\acs@subsubsection\subsubsection
1054 \newcommand*\acs@startsection@orig{}
1055 \let\acs@startsection@orig\@startsection
```

`\acs@startsection` A version of `\@startsection` which adds unnumbered sections to the TOC: modelled on `amsart`. This is active as standard.

```
1056 \newcommand\acs@startsection[6]{%
1057   \if@noskipsec \leavevmode \fi
1058   \par \@tempskipa #4\relax
1059   \@afterindenttrue
1060   \ifdim \@tempskipa <\z@ \@tempskipa -\@tempskipa \@afterindentfalse\fi
1061   \if@nobreak \everypar{}\else
1062     \addpenalty\@secpenalty\addvspace\@tempskipa\fi
1063   \@ifstar{\@dblarg{\@sect{#1}{\@m}{#3}{#4}{#5}{#6}}}%
1064     {\@dblarg{\@sect{#1}{#2}{#3}{#4}{#5}{#6}}}%
1065 }
1066 \let\@startsection\acs@startsection
```

`\acs@startsection@alt` An alternative version of `\@startsection` which never adds numbers.

```
1067 \newcommand*\acs@startsection@alt[6]{%
1068   \if@noskipsec \leavevmode \fi
1069   \par \@tempskipa #4\relax
1070   \@afterindenttrue
```

```

1071 \ifdim \@tempskipa <\z@ \@tempskipa -\@tempskipa \@afterindentfalse\fi
1072 \if@nobreak \everypar{}\else
1073     \addpenalty\@secpenalty\addvspace\@tempskipa\fi
1074     \@ifstar{\@ssect{#3}{#4}{#5}{#6}}
1075         {\@ssect{#3}{#4}{#5}{#6}}%
1076 }

```

`\acs@sections@none` When removing sections entirely, a gobble macro is needed.  
`\acs@sections@none@aux`

```

1077 \newcommand*\acs@sections@none{%
1078     \@ifstar{%
1079         \acs@sections@none@aux
1080     }{%
1081         \acs@sections@none@aux
1082     }%
1083 }
1084 \newcommand*\acs@sections@none@aux[2] []{%
1085     \acs@warning{%
1086         (Sub)section ‘#2’ ignored%
1087     }%
1088 }

```

`\SectionNumbersOff` To macros to add or remove the section numbers. The standard setting for the  
`\SectionNumbersOn` class has them on, but some configurations will turn them off. The names of  
these functions are both in design space so that users can change the decision  
easily.

```

1089 \newcommand*\SectionNumbersOff{%
1090     \let\@startsection\acs@startsection@alt
1091 }
1092 \@onlypreamble\SectionNumbersOff
1093 \newcommand*\SectionNumbersOn{%
1094     \let\@startsection\acs@startsection
1095 }
1096 \@onlypreamble\SectionNumbersOn

```

`\SectionsOff` Quite similar for entire sections.

```

\SectionsOn
1097 \newcommand*\SectionsOff{%
1098     \let\section\acs@sections@none
1099     \let\subsection\acs@sections@none
1100     \let\subsubsection\acs@sections@none
1101 }
1102 \@onlypreamble\SectionsOff
1103 \newcommand*\SectionsOn{%
1104     \let\section\acs@section
1105     \let\subsection\acs@subsection
1106     \let\subsubsection\acs@subsubsection
1107 }
1108 \@onlypreamble\SectionsOn

```

`\tableofcontents` Never print TOC in itself.

```

1109 \begingroup
1110     \toks@=\expandafter{\tableofcontents}
1111     \xdef\tableofcontents{%
1112         \begingroup

```

```

1113     \let\noexpand\@startsection\noexpand\acs@startsection@orig
1114     \the\toks@
1115     \endgroup
1116   }
1117 \endgroup

acknowledgement Simple named sections.
  supinfo 1118 \newenvironment{acknowledgement}{%
1119   \acs@section*{\acknowledgementname}%
1120 }{}
1121 \newenvironment{supinfo}{%
1122   \acs@section*{\supinfofname}%
1123 }{}

\acknowledgementname A few macros need to get around the changes.
  \bibsection 1124 \newcommand*\acknowledgementname{Acknowledgement}
  \supinfofname 1125 \AtEndOfClass{%
1126   \def\bibsection{%
1127     \acs@section*{\refname}%
1128   }%
1129 }
1130 \newcommand*\supinfofname{Supporting Information Available}

\acs@abstract Removing the abstract, if necessary, is done using a trick from the comment
\acs@endabstract package. However, it code is copied here to keep requirements down.
\acs@abstract@start 1131 \newcommand*\acs@abstract{}
\acs@abstract@end 1132 \let\acs@abstract\abstract
\acs@abstract@iffalse 1133 \newcommand*\acs@endabstract{}
1134 \let\acs@endabstract\endabstract
1135 \begingroup
1136   \catcode'\active
1137   \catcode'\relax
1138   \catcode'\relax
1139   \catcode'\relax
1140   \gdef\acs@abstract@start(%
1141     \acs@warning(%
1142       Abstract not allowed for this\MessageBreak
1143       manuscript type
1144     )%
1145     \@bsphack
1146     \catcode'\active
1147     \catcode'\relax
1148     \let\end\fi
1149     \let{\acs@abstract@end% }
1150     \iffalse
1151   ){
1152   \gdef\acs@abstract@end#1}{%
1153     \def\@tempa(#1)%
1154     \ifx\@tempa\@currenir
1155       \@Esphack\endgroup
1156       \if@ignore
1157         \global\@ignorefalse
1158         \ignorespaces
1159       \fi

```

```

1160     \else
1161         \expandafter\acs@abstract@iffalse
1162     \fi
1163 )
1164 \endgroup
1165 \newcommand*\acs@iffalse{\iffalse}

\AbstractOff A very similar pattern to before.
\AbstractOn 1166 \newcommand*\AbstractOff{%
1167     \let\abstract\acs@abstract@start
1168     \let\endabstract\acs@abstract@end
1169 }
1170 \@onlypreamble\AbstractOff
1171 \newcommand*\AbstractOn{%
1172     \let\abstract\acs@abstract
1173     \let\endabstract\acs@endabstract
1174 }
1175 \@onlypreamble\AbstractOn

\acs@collect@toks The content of the graphic TOC entry is processed using a method from amsmath
\acs@collect@content via environ. The entire environment is gathered for typesetting in a box. First,
\acs@collect@content some storage is needed.
1176 \newtoks\acs@collect@toks
1177 \newtoks\acs@collect@empty@toks
1178 \newcommand*\acs@collect@begins{}
1179 \newcommand*\acs@collect@content{}

\acs@collect This is a \long version of \collect@body.
\acs@collect@aux 1180 \newcommand\acs@collect[1]{%
\acs@collect@begins@ 1181     \acs@collect@toks{%
\acs@collect@body 1182         \expandafter#1\expandafter{\the\acs@collect@toks}%
1183     }%
1184     \edef\acs@collect@content{%
1185         \the\acs@collect@toks
1186         \noexpand\end{\@currenvir}%
1187     }%
1188     \acs@collect@toks\acs@collect@empty@toks
1189     \def\acs@collect@begins{b}%
1190     \begingroup
1191         \expandafter\let\csname\@currenvir\endcsname\acs@collect@aux
1192         \edef\acs@collect@content{%
1193             \expandafter\noexpand\csname\@currenvir\endcsname
1194         }%
1195         \acs@collect@content
1196     }
1197 \newcommand*\acs@collect@aux{}
1198 \long\def\acs@collect@aux#1\end#2{%
1199     \edef\acs@collect@begins{%
1200         \acs@collect@begins@#1\begin\end
1201         \expandafter\@gobble\acs@collect@begins
1202     }%
1203     \ifx\@empty\acs@collect@begins
1204         \endgroup
1205         \@checkend{#2}%

```

```

1206 \acs@collect@body{#1}%
1207 \else
1208 \acs@collect@body{#1\end{#2}}%
1209 \fi
1210 \acs@collect@content
1211 }
1212 \newcommand\acs@collect@begins@{}
1213 \long\def\acs@collect@begins@#1\begin#2{%
1214 \ifx\end#2\else
1215 b\expandafter\acs@collect@begins@
1216 \fi
1217 }
1218 \newcommand\acs@collect@body[1]{%
1219 \global\acs@collect@toks\expandafter{\the\acs@collect@toks#1}%
1220 }

```

`\acs@abstract@print` Delayed abstract printing works in a similar way, but with some formatting ‘built-in’.

```

1221 \newcommand\acs@abstract@print[1]{%
1222 \global\long\def\acs@abstract@text{%
1223 \if@twocolumn
1224 \@restonecoltrue\onecolumn
1225 \else
1226 \@restonecolfalse\newpage
1227 \fi
1228 \acs@section*{Abstract}%
1229 #1%
1230 \if@restonecol
1231 \twocolumn
1232 \else
1233 \newpage
1234 \fi
1235 }%
1236 \AtEndDocument{\acs@abstract@text}%
1237 }

```

`\acs@tocentry@print` The same approach is taken for the graphical table of content printing. This is done in a box so that everything has a frame around it.

```

\acs@tocentry@print@aux
\acs@tocentry@text
1238 \newcommand{\acs@tocentry@print}[1]{%
1239 \gdef\acs@tocentry@text{\normalsize#1}%
1240 \AtEndDocument{%
1241 \if@twocolumn
1242 \@restonecoltrue\onecolumn
1243 \else
1244 \@restonecolfalse\newpage
1245 \fi
1246 \acs@tocentry@print@aux
1247 \if@restonecol
1248 \twocolumn
1249 \else
1250 \newpage
1251 \fi
1252 }%
1253 }

```

```

1254 \newcommand*{\acs@tocentry@print@aux}{%
1255   \begingroup
1256   \let\@startsection\acs@startsection@orig
1257   \acs@section*{\tocentryname}%
1258   \tocsize
1259   \sffamily
1260   \singlespacing
1261   \begin{center}
1262     \fbox
1263     {%
1264       \begin{minipage}{\acs@tocentry@height}
1265         \vbox to \acs@tocentry@width{\acs@tocentry@text}%
1266       \end{minipage}%
1267     }%
1268   \end{center}%
1269 \endgroup
1270 }
1271 \newcommand*\acs@tocentry@text{TOC ENTRY REQUIRED}
1272 \newlength{\acs@tocentry@height}
1273 \newlength{\acs@tocentry@width}
1274 \setlength{\acs@tocentry@height}{9 cm}
1275 \setlength{\acs@tocentry@width}{3.5 cm}

```

`tocentry` Actually creating the entry is pretty easy.

```

1276 \newenvironment{tocentry}{\acs@collect\acs@tocentry@print}{}

```

`\tocentryname` A simple name macro.

```

1277 \newcommand*\tocentryname{Graphical TOC Entry}

```

`\tocsize` The font size for printing the TOC entry.

```

1278 \newcommand*\tocsize{%
1279   \@setfontsize\tocsize\@viipt\@ixpt
1280 }

```

`\acs@type@list` Different journals allow different types of article. A list is set up here: different journals can then alter it. A check function is also provided along with a default.

```

\acs@type@default
\acs@type@check
1281 \newcommand*\acs@type@list{article,communication,suppinfo}
1282 \newcommand*\acs@type@default{article}
1283 \newcommand*\acs@type@check{%
1284   \@tempswafalse
1285   \@for\@tempa:=\acs@type@list\do{%
1286     \ifx\@tempa\acs@manuscript
1287       \expandafter\@tempswatrue
1288     \fi
1289   }%
1290   \if@tempswa\else
1291     \acs@warning{%
1292       Invalid manuscript type \acs@manuscript:\MessageBreak
1293       changed to default type \acs@type@default
1294     }%
1295     \let\acs@manuscript\acs@type@default
1296   \fi
1297 }

```

A few bits for older versions.

```

1298 \newcommand*\acs@setkeys{\setkeys{acs}}
1299 \let\acs@killabstract\AbstractOff
1300 \let\acs@killsecs\SectionsOff
1301 \newcommand*\acs@validtype[2][article]{%
1302   \def\acs@type@default{#1}%
1303   \def\acs@type@list{#2}%
1304 }

```

`\acs@par` A saved paragraph.

```

1305 \newcommand*\acs@par{}
1306 \let\acs@par\par

```

`\acs@layout@shared` Some code is used generally when setting up “press ready” layouts. There is quite a bit here, mainly layout related.

```

acknowledgement
suppinfo 1307 \newcommand*\acs@layout@shared{%
1308   \AtBeginDocument{\singlespacing}%
1309   \twocolumn
1310   \tolerance=2000\relax
1311   \emergencystretch=10pt\relax
1312   \geometry{
1313     letterpaper,
1314     top    = 12.7mm,
1315     bottom = 16.8mm,
1316     left   = 19.3mm,
1317     right  = 19.3mm
1318   }%
1319   \setlength{\columnsep}{8.1mm}%
1320   \setlength{\parindent}{3.3mm}%
1321   \renewenvironment{acknowledgement}{%
1322     \def\@tempa{acknowledgement}%
1323     \ifx\@currenvir\@tempa
1324       \let\par\relax
1325       \acksizesize
1326       \vspace{6pt}%
1327       \textbf{\acknowledgementname}%
1328     \else
1329       \acs@section*{\acknowledgementname}%
1330     \fi
1331   }{%
1332     \acs@par
1333   }%
1334 }

```

`\acksizesize` More sizes.

```

\suppsizesize 1335 \newcommand*\acksizesize{\normalsize}
1336 \newcommand*\suppsizesize{\normalsize}

```

`\acs@layout@nine` The class loads twelve point text. To reset it for print layouts, it is easiest to do things directly.

```

\@xipt
\acs@layout@ten 1337 \newcommand*\acs@layout@nine{%
1338   \def\@xipt{11}%
1339   \long\def\normalsize{%

```

```

1340 \setfontsize\normalsize\@ixpt\@xipt
1341 }%
1342 \normalsize
1343 \let\@listi\@listI
1344 \abovedisplayskip 5\p@ \@plus2\p@ \@minus 5\p@\relax
1345 \abovedisplayshortskip \z@ \@plus3\p@\relax
1346 \belowdisplayshortskip 3\p@ \@plus3\p@ \@minus 3\p@\relax
1347 \belowdisplayskip\abovedisplayskip\relax
1348 \abovecaptionskip 5\p@\relax
1349 \intextsep 7\p@ \@plus 2\p@ \@minus 2\p@\relax
1350 }
1351 \newcommand*\acs@layout@ten{%
1352 \long\def\normalsize{%
1353 \setfontsize\normalsize\@xpt\@xipt
1354 }%
1355 \normalsize
1356 \setfontsize\normalsize\@xpt\@xipt
1357 \let\@listi\@listI
1358 \abovedisplayskip 10\p@ \@plus2\p@ \@minus5\p@\relax
1359 \abovedisplayshortskip \z@ \@plus3\p@\relax
1360 \belowdisplayshortskip 6\p@ \@plus3\p@ \@minus3\p@\relax
1361 \belowdisplayskip \abovedisplayskip\relax
1362 }

```

With all of the standard settings done, the journal configuration can be loaded.

```

1363 \InputIfFileExists{achemso-\acs@journal.cfg}{\}%
1364 \acs@warning{%
1365 Unknown journal '\acs@journal':\MessageBreak
1366 using default configuration JACSAT%
1367 }%
1368 \input{achemso-jacsat.cfg}%
1369 }

```

\thepage Some changes that can always be applied if the manuscript type is appropriate: this saves some repetition in the configuration files.

```

1370 \acs@type@check
1371 \ifx\acs@manuscript\acs@manuscript@note
1372 \SectionsOff
1373 \fi
1374 \ifx\acs@manuscript\acs@manuscript@review
1375 \SectionsOn
1376 \SectionNumbersOn
1377 \fi
1378 \ifx\acs@manuscript\acs@manuscript@suppinfo
1379 \setkeys{acs}{maxauthors = 0}
1380 \def\thepage{S-\arabic{page}}
1381 \renewcommand*\thefigure{S\@arabic\c@figure}
1382 \renewcommand*\thescheme{S\@arabic\c@scheme}
1383 \renewcommand*\thetable{S\@arabic\c@table}
1384 \AtBeginDocument
1385 {%
1386 \renewcommand*\citenumfont[1]{S#1}%
1387 \renewcommand*\bibnumfmt[1]{(S#1)}%
1388 }

```



```
1389 \fi
```

Set up two column layout.

```
1390 \beginngroup
1391   \def\@tempa{twocolumn}
1392   \ifx\acs@layout\@tempa
1393     \aftergroup\acs@layout@shared
1394   \fi
1395   \def\@tempa{two-column}
1396   \ifx\acs@layout\@tempa
1397     \aftergroup\acs@layout@shared
1398   \fi
1399 \endgroup
1400 \endclass
```

## 8.5 Late shared code

`\citenumfont` Changes to citations can now be made. The citation styles supplied here require `natbib`, which is loaded with the appropriate options. This part applies to the package as well as the class: it is here so that the load order is correct.

```
1401 \ifclass|package
1402 \ifacs@super
1403   \RequirePackage[sort&compress,numbers,super]{natbib}
1404 \else
1405   \RequirePackage[sort&compress,numbers,round]{natbib}
1406   \def\citenumfont{\textit}
1407 \fi
1408 \define@key{acs}{super}[true]{%
1409   \def\@tempa{#1}%
1410   \def\@tempb{true}%
1411   \ifx\@tempa\@tempb
1412     \setcitestyle{super,open={},close={}}%
1413     \renewcommand*\citenumfont{}%
1414   \else
1415     \setcitestyle{round}%
1416     \renewcommand*\citenumfont{\textit}%
1417   \fi
1418 }
1419 \RequirePackage{natmove}
```

The `mciteplus` package allows the construction of lists of references with sub-letters. However, it might not be available, and so it is only loaded if available: the `.bst` files should work either way. There is also a patch to get cross-references correct with the modified `\ref` macro used here. The reason for ensuring that `\@mciteNatbibCiteCmdList` is defined is that it allows for the case where people prevent `mciteplus` being loaded using `\ver@mciteplus.sty`.

```
1420 \IfFileExists{mciteplus.sty}{%
1421   \RequirePackage{mciteplus}
1422   \providecommand*\@mciteNatbibCiteCmdList{}%
1423   \edef\@tempa{\noexpand\in@{\citenum}{\@mciteNatbibCiteCmdList}}%
1424   \@tempa
1425   \ifin@
1426   \else
```

```

1427 \edef\@mciteNatbibCiteCmdList{\@mciteNatbibCiteCmdList,citenum}%
1428 \fi
1429 \<!*package>
1430 \def\@mciteSubRef[##1]##2{\plainref{\@mcitereflabelprefix:##1:##2}}
1431 \</!package>
1432 }{}

```

`\acs@bibstyle` The next step is to sort out bibliography formatting. With both the package and the class, the bibliography style is determined without user intervention. The style is stored as it may need to be altered later.

```

1433 \newcommand*\acs@bibstyle{achemso}
1434 \ifacs@biochem
1435 \def\acs@bibstyle{biochem}
1436 \bibliographystyle{biochem}
1437 \else
1438 \bibliographystyle{achemso}
1439 \fi

```

`\acs@bibliographystyle` The original `\bibliographystyle` macro is now disabled: the underlying command is repeated otherwise problems cop up with `chapterbib`.

`\bibliographystyle`

```

1440 \newcommand*\acs@bibliographystyle{}
1441 \let\acs@bibliographystyle\bibliographystyle
1442 \def\bibliographystyle#1{%
1443 \acs@warning{\string\bibliographystyle\space ignored}%
1444 \expandafter\acs@bibliographystyle\expandafter{\acs@bibstyle}%
1445 }
1446 \</class | package>

```

## 8.6 Late package-only code

The `notes2bib` code may or may not be activated.

```

1447 \<!*package>
1448 \AtBeginDocument{%
1449 \<@ifpackageloaded{notes2bib}{-}{-}%
1450 \acs@niib@create
1451 }%
1452 }
1453 \</package>

```

## 8.7 Moving citations with natbib

The code for moving citations is created as a separate package, as the code needed is the same in both cases.

```

1454 \<!*natmove>
1455 \ProvidesPackage{natmove}
1456 [2010/01/15 v1.1a Automatic citation moving with natbib]
1457 \RequirePackage{natbib}

```

`\nmv@ifmtarg` To keep down dependence on other packages, the very short code block from `ifmtarg` is copied here with an internal name.

`\nmv@xifmtarg`

```

1458 \newcommand*\nmv@ifmtarg{}
1459 \newcommand*\nmv@xifmtarg{}

```

```

1460 \begingroup
1461 \catcode'\Q 3\relax
1462 \long\gdef\nmv@ifmtarg#1{%
1463   \nmv@xifmtarg#1QQ\@secondoftwo\@firstoftwo\@nil
1464 }
1465 \long\gdef\nmv@xifmtarg#1#2Q#3#4#5\@nil{#4}
1466 \endgroup

```

`\ifnmv@cite` A flag is need to watch whether `\cite` or another macro is in use.

```

1467 \newif\ifnmv@cite

```

`\nmv@citex` Using the flag, either the new internal macro, or the natbib original, can be called.

```

1468 \newcommand*\nmv@citex{%
1469   \ifnmv@cite
1470     \expandafter\nmv@citex@moving
1471   \else
1472     \expandafter\nmv@citex@nat
1473   \fi
1474 }

```

`\nmv@after` Later, the argument for `\cite` will need to be saved.

```

1475 \newcommand*\nmv@after{}

```

`\nmv@citex@moving` The new version of `\@citex` is needed that looks ahead of the citation using `\futurelet`. There are three arguments to `\@citex` when using natbib. Other than that, the trick used here is similar to that in `cite`.

```

1476 \newcommand*\nmv@citex@moving{}
1477 \def\nmv@citex@moving[#1][#2]#3{%
1478   \leavevmode
1479   \skip@\lastskip\relax
1480   \unskip
1481   \begingroup
1482     \def\nmv@after{\nmv@citex@nat[#1][#2]{#3}}%
1483     \global\nmv@citefalse
1484     \nmv@citex@get@next\relax
1485 }

```

`\nmv@citex@end` To get things right at the end.

```

1486 \newcommand*\nmv@citex@end{%
1487   \nmv@after
1488   \endgroup
1489 }

```

`\nmv@citex@get@next` The next token on the input stack is saved into `\nmv@citex@next`, after gobbling up one token.

`\nmv@citex@next`

```

1490 \newcommand*\nmv@citex@get@next[1]{%
1491   \futurelet\nmv@citex@next\nmv@citex@punct
1492 }

```

`\nmv@citex@punct` The working macro for moving the punctuation. This is very much like `\@citey` in the `cite` package. The initial assumption is that the loop will terminate, and so the recursion call will simply do the finalisation.

`\nmv@citex@loop`

```

1493 \newcommand*\nmv@citex@punct{%

```

```

1494 \let\nmv@citex@loop\nmv@citex@end
1495 \ifx\nmv@citex@next.\relax
1496 \ifnum\spacefactor<\nmv@citex@sfac\else
1497 \expandafter\expandafter\expandafter\nmv@citex@punct@undouble
1498 \fi
1499 \fi
1500 \expandafter\nmv@citex@punct@aux\natmovechars\@nil
1501 \nmv@citex@loop
1502 }
1503 \newcommand*\nmv@citex@punct@undouble{%
1504 \let\nmv@citex@next\relax
1505 \let\nmv@citex@loop\nmv@citex@get@next
1506 }
1507 \newcommand*\nmv@citex@loop{}

```

`\nmv@citex@punct@aux` The final part of the punctuation moving system.

```

1508 \newcommand*\nmv@citex@punct@aux[1]{%
1509 \ifx\nmv@citex@next#1\@empty
1510 #1%
1511 \let\nmv@citex@loop\nmv@citex@get@next
1512 \fi
1513 \ifx#1\@nil\else
1514 \expandafter\nmv@citex@punct@aux
1515 \fi
1516 }

```

`\nmv@citex@sfac` The value of the spacing factor after a full stop is used to signal doubled punctuation. For French spacing, a bit of patching is needed.

```

1517 \mathchardef\nmv@citex@sfac3000\relax
1518 \expandafter\def\expandafter\frenchspacing\expandafter{%
1519 \frenchspacing
1520 \mathchardef\nmv@citex@sfac1001\relax
1521 \sfcode'\.\nmv@citex@sfac
1522 \sfcode'\?\nmv@citex@sfac
1523 \sfcode'\!\nmv@citex@sfac
1524 }
1525 \ifnum\sfcode'\.=\@m
1526 \frenchspacing
1527 \fi

```

`\nmv@citex@nat` The swap has to be done at the beginning of the document. The internal flag  
`\nmv@activate` from natbib is used, but under the circumstances we should be safe. `\cite` is also  
`\cite` patched to make the system active.

```

1528 \newcommand*\nmv@citex@nat{}
1529 \newcommand*\nmv@activate{%
1530 \let\nmv@citex@nat\@citex
1531 \let\@citex\nmv@citex
1532 \let\nmv@cite\cite
1533 \renewcommand*\cite}[2][{}]{%
1534 \nmv@ifmtarg{##1}{%
1535 \nmv@citetrue
1536 \nmv@cite{##2}%
1537 }{%
1538 \nmv@citefalse

```

```

1539     \nmv@cite[##1]{##2}}}%
1540 }%
1541 }

```

`\nmv@natbib@detect` So that natbib options can be set without worrying about load order, natmove doesn't require natbib. So a test is needed to see if it is actually loaded. This is done as a macro so that the effect can be changed by achemso.

```

1542 \newcommand*\nmv@natbib@detect{%
1543   \@ifpackageloaded{natbib}{%
1544     \ifNAT@super
1545       \expandafter\nmv@activate
1546     \fi
1547   }{%
1548     \PackageInfo{natmove}{%
1549       The natbib package is not loaded.\MessageBreak
1550       Loading natmove will do nothing
1551     }%
1552   }%
1553 }
1554 \AtBeginDocument{\nmv@natbib@detect}

```

`\natmovechars` A user macro is needed for moving characters.

```

1555 \newcommand*\natmovechars{.,;:}
1556 \natmove

```

## 8.8 The configuration files

The configuration files for different journals are not very complex. Keeping everything separate simply helps with maintenance.

```

1557 \achre4
1558 \ProvidesFile{achemso-achre4.cfg}
1559 [2018/07/12 v3.11b achemso configuration: Acc. Chem. Res.]
1560 \setkeys{acs}{biblabel = plain}
1561 \def\acs@type@list{article,supinfo}
1562 \def\abstractname{Conspectus}
1563 \achre4
1564 \aaemcq
1565 \ProvidesFile{achemso-aaemcq.cfg}
1566 [2018/07/12 v3.11b achemso configuration: ACS Appl. Energy Mater.]
1567 \def\acs@type@list{article,letter,supinfo}
1568 \setkeys{acs}{keywords = true}
1569 \aaemcq
1570 \aamick
1571 \ProvidesFile{achemso-aamick.cfg}
1572 [2018/07/12 v3.11b achemso configuration: ACS Appl. Mater. Interfaces]
1573 \def\acs@type@list{article,letter,supinfo}
1574 \setkeys{acs}{keywords = true}
1575 \aamick
1576 \aanmf6
1577 \ProvidesFile{achemso-aanmf6.cfg}
1578 [2018/07/12 v3.11b achemso configuration: ACS Appl. Nano Mater.]
1579 \def\acs@type@list{article,letter,supinfo}
1580 \setkeys{acs}{keywords = true}

```

```

1581 </aanmf6>
1582 <*abseba>
1583 \ProvidesFile{achemso-abseba.cfg}
1584 [2018/07/12 v3.11b achemso configuration: ACS Biomater. Sci. Eng.]
1585 \setkeys{acs}{keywords = true}
1586 \def\acs@type@list{article,review,supinfo}
1587 </abseba>
1588 <*accacs>
1589 \ProvidesFile{achemso-accacs.cfg}
1590 [2018/07/12 v3.11b achemso configuration: ACS Catal.]
1591 \setkeys{acs}{keywords = true}
1592 \def\acs@type@list{article,letter,perspective,review,viewpoints,supinfo}
1593 \SectionNumbersOff
1594 </accacs>
1595 <*acscii>
1596 \ProvidesFile{achemso-acscii.cfg}
1597 [2018/07/12 v3.11b achemso configuration: ACS Central Sci.]
1598 \def\acs@type@list{article,review,supinfo}
1599 \setkeys{acs}{doi = true}
1600 \SectionNumbersOff
1601 </acscii>
1602 <*acbcct>
1603 \ProvidesFile{achemso-acbcct.cfg}
1604 [2018/07/12 v3.11b achemso configuration: ACS Chem. Biol.]
1605 \setkeys{acs}{
1606   biblabel = fullstop,
1607   biochem  = true,
1608   super    = false
1609 }
1610 \def\acs@type@list{article,letter,review,supinfo}
1611 \SectionNumbersOff
1612 </acbcct>
1613 <*acncdm>
1614 \ProvidesFile{achemso-acncdm.cfg}
1615 [2018/07/12 v3.11b achemso configuration: ACS Chem. Neurosci.]
1616 \def\acs@type@list{article,review,letter,supinfo,viewpoint}
1617 \setkeys{acs}{
1618   biblabel = fullstop,
1619   biochem  = true,
1620   keywords = true,
1621   super    = false
1622 }
1623 </acncdm>
1624 <*acsccl>
1625 \ProvidesFile{achemso-acsccl.cfg}
1626 [2018/07/12 v3.11b achemso configuration: ACS Combinatorial Sci.]
1627 \def\acs@type@list{article,letter,review,perspective,account,note,supinfo}
1628 \setkeys{acs}{keywords = true}
1629 \SectionNumbersOff
1630 </acsccl>
1631 <*aesccq>
1632 \ProvidesFile{achemso-aesccq.cfg}
1633 [2018/07/12 v3.11b achemso configuration: ACS Earth Space Chem.]
1634 \def\acs@type@list{article,supinfo}

```

```

1635 \setkeys{acs}{keywords = true}
1636 </aescq>
1637 <*aelccp>
1638 \ProvidesFile{achemso-aelccp.cfg}
1639 [2018/07/12 v3.11b achemso configuration: ACS Energy Lett.]
1640 \def\acs@type@list{letter,perspective,review,viewpoint,focus}
1641 \SectionsOff
1642 </aelccp>
1643 <*ascej>
1644 \ProvidesFile{achemso-ascej.cfg}
1645 [2018/07/12 v3.11b achemso configuration: ACS Infect. Dis.]
1646 \def\acs@type@list{article,letter,perspective,review,viewpoint,supinfo}
1647 \setkeys{acs}{keywords = true}
1648 \SectionsOff
1649 </ascej>
1650 <*amlccd>
1651 \ProvidesFile{achemso-amlccd.cfg}
1652 [2018/07/12 v3.11b achemso configuration: ACS Macro Lett.]
1653 \def\acs@type@list{letter,supinfo}
1654 \SectionsOff
1655 \setlength{\acs@tocentry@height}{8 cm}
1656 \setlength{\acs@tocentry@width}{4 cm}
1657 </amlccd>
1658 <*amclct>
1659 \ProvidesFile{achemso-amclct.cfg}
1660 [2018/07/12 v3.11b achemso configuration: ACS Med. Chem. Lett.]
1661 \def\acs@type@list{article,letter,perspective,supinfo}
1662 \SectionNumbersOff
1663 </amclct>
1664 % \changes{v3.8n}{2015/01/13}{\emph{ACS Nano} want abbreviations}
1665 % \changes{v3.11}{2018/04/02}{Change \emph{ACS Nano} truncation}
1666 <*ancac3>
1667 \ProvidesFile{achemso-ancac3.cfg}
1668 [2018/07/12 v3.11b achemso configuration: ACS Nano]
1669 \setkeys{acs}{
1670   abbreviations = true,
1671   biblabel      = fullstop,
1672   etalmode      = truncate,
1673   maxauthors    = 20,
1674   keywords      = true
1675 }
1676 \def\acs@type@list{article,perspective,supinfo}
1677 \newcommand*{\latin}[1]{\emph{#1}}
1678 \SectionNumbersOff
1679 </ancac3>
1680 <*acsodf>
1681 \ProvidesFile{achemso-acsodf.cfg}
1682 [2018/07/12 v3.11b achemso configuration: ACS Omega.]
1683 \def\acs@type@list{article}
1684 </acsodf>
1685 <*apchd5>
1686 \ProvidesFile{achemso-apchd5.cfg}
1687 [2018/07/12 v3.11b achemso configuration: ACS Photon.]
1688 \def\acs@type@list{article,letter,perspective,review,supinfo}

```

```

1689 \setkeys{acs}{keywords = true}
1690 \ifx\acs@manuscript\acs@manuscript@letter
1691   \SectionNumbersOff
1692 \fi
1693 </apchd5>
1694 <*aidcbc>
1695 \ProvidesFile{achemso-aidcbc.cfg}
1696 [2018/07/12 v3.11b achemso configuration: ACS Sensors]
1697 \def\acs@type@list{article,letter,perspective,review,supinfo}
1698 \setkeys{acs}{keywords = true}
1699 \SectionNumbersOff
1700 </aidcbc>
1701 <*ascecg>
1702 \ProvidesFile{achemso-ascecg.cfg}
1703 [2018/07/12 v3.11b achemso configuration: ACS Sustainable Chem Eng.]
1704 \setkeys{acs}{
1705   biblabel = fullstop,
1706   keywords = true
1707 }
1708 \SectionNumbersOff
1709 \def\acs@type@list{article,feature,letter,perspective,review,supinfo}
1710 </ascecg>
1711 <*asbcd6>
1712 \ProvidesFile{achemso-asbcd6.cfg}
1713 [2018/07/12 v3.11b achemso configuration: ACS Synth. Biol.]
1714 \setkeys{acs}{
1715   abbreviations = true,
1716   biblabel      = fullstop,
1717   biochem       = true,
1718   keywords      = true,
1719   super         = false
1720 }
1721 \def\acs@type@list{article,letter,note,tutorial,review,supinfo}
1722 </asbcd6>
1723 <*ancham>
1724 \ProvidesFile{achemso-ancham.cfg}
1725 [2018/07/12 v3.11b achemso configuration: Anal. Chem.]
1726 \def\acs@type@list{article,note,supinfo}
1727 \SectionNumbersOff
1728 </ancham>
1729 <*bichaw>
1730 \ProvidesFile{achemso-bichaw.cfg}
1731 [2018/07/12 v3.11b achemso configuration: Biochemistry]
1732 \setkeys{acs}{
1733   abbreviations = true,
1734   biblabel      = brackets,
1735   biochem       = true,
1736 }
1737 \SectionNumbersOff
1738 \def\acs@maketitle@extras@hook{%
1739   \par
1740   \acs@title@short@print
1741 }
1742 \g@addto@macro{\maketitle}{\newpage}

```



`\acs@author@fnsymbol` Some changes to do with footnotes: symbols are different and symbol number one can only be used for the title.

```

1743 \def\acs@author@fnsymbol#1{%
1744   \ensuremath{%
1745     \ifcase #1 *\or
1746       \dagger\or
1747       \ddagger\or
1748       \S\or
1749       \parallel\or
1750       \perp\or
1751       \P\or
1752       \|\or
1753       \bot\or
1754       \#\or
1755       @\or
1756       \triangle\or
1757       \nabla\else
1758         #1%
1759   \fi
1760 }%
1761 }
1762 \def\@maketitle@title@hook{%
1763   \ifnum\acs@footnote@cnt>\@ne
1764   \else
1765     \global\acs@footnote@cnt\@ne
1766   \fi
1767 }

1768 </bichaw>
1769 <*bcches>
1770 \ProvidesFile{achemso-bcches.cfg}
1771 [2018/07/12 v3.11b achemso configuration: Bioconjugate Chem.]
1772 \setkeys{acs}{
1773   biochem = true,
1774   super   = false
1775 }
1776 \SectionNumbersOff
1777 </bcches>
1778 <*bomaf6>
1779 \ProvidesFile{achemso-bomaf6.cfg}
1780 [2018/07/12 v3.11b achemso configuration: Biomacromolecules]
1781 \def\acs@type@list{article,comment,communication,note,review,supinfo}
1782 \SectionNumbersOff
1783 \AtEndOfClass{\SectionsOn}
1784 </bomaf6>
1785 <*crtoec>
1786 \ProvidesFile{achemso-crtoec.cfg}
1787 [2018/07/12 v3.11b achemso configuration: Chem. Res. Toxicol.]
1788 \setkeys{acs}{
1789   abbreviations = true,
1790   biochem       = true,
1791   keywords      = true
1792 }
1793 \def\acs@maketitle@extras@hook{%

```

```

1794 \par
1795 \acs@title@short@print
1796 }
1797 \def\acs@type@list{%
1798 article,perspective,profile,review,supinfo%
1799 }
1800 \SectionNumbersOff
1801 </crtoec>
1802 <*chreay>
1803 \ProvidesFile{achemso-chreay.cfg}
1804 [2018/07/12 v3.11b achemso configuration: Chem. Rev.]
1805 \def\acs@type@default{review}
1806 \def\acs@type@list{review}

```

The references section is numbered in *Chem. Rev.*

```

1807 \def\bibsection{\acs@section{\refname}}
1808 </chreay>
1809 <*cmatex>
1810 % \begin{macrocode}
1811 \ProvidesFile{achemso-cmatex.cfg}
1812 [2018/07/12 v3.11b achemso configuration: Chem. Mater.]
1813 \setkeys{acs}{keywords = true}
1814 \SectionNumbersOff
1815 \ifx\acs@manuscript\acs@manuscript@communication
1816 \AbstractOff
1817 \SectionsOff
1818 \fi
1819 </cmatex>
1820 <*cgdefu>
1821 \ProvidesFile{achemso-cgdefu.cfg}
1822 [2018/07/12 v3.11b achemso configuration: Cryst. Growth Des.]
1823 \def\acs@type@list{%
1824 article,communication,perspective,supinfo%
1825 }
1826 \SectionNumbersOff
1827 \ifx\acs@manuscript\acs@manuscript@communication
1828 \SectionsOff
1829 \fi
1830 \setlength{\acs@tocentry@height}{8.9 cm}
1831 \setlength{\acs@tocentry@width}{4.6 cm}
1832 </cgdefu>
1833 <*enfuem>
1834 \ProvidesFile{achemso-enfuem.cfg}
1835 [2018/07/12 v3.11b achemso configuration: Energy Fuels]
1836 \def\acs@type@list{article,review,supinfo}
1837 \SectionNumbersOff
1838 </enfuem>
1839 <*esthag>
1840 \ProvidesFile{achemso-esthag.cfg}
1841 [2018/07/12 v3.11b achemso configuration: Environ. Sci. Technol.]
1842 \def\acs@type@list{article,supinfo}
1843 \SectionNumbersOff
1844 </esthag>
1845 <*estlcu>

```

```

1846 \ProvidesFile{achemso-estlcu.cfg}
1847 [2018/07/12 v3.11b achemso configuration: Environ. Sci. Technol. Lett.]
1848 \def\acs@type@list{letter,supinfo}
1849 \SectionNumbersOff
1850 \estlcu
1851 % \changes{v3.8m}{2014/11/24}{Fixes for \emph{Ind.\ Eng.\ Chem.\ Res.}\ style}
1852 \iecred
1853 \ProvidesFile{achemso-iecred.cfg}
1854 [2018/07/12 v3.11b achemso configuration: Ind. Eng. Chem. Res.]
1855 \setkeys{acs}{biblabel = brackets}
1856 \SectionNumbersOff
1857 \iecred
1858 \inoraj
1859 \ProvidesFile{achemso-inoraj.cfg}
1860 [2018/07/12 v3.11b achemso configuration: Inorg. Chem.]
1861 \SectionNumbersOff
1862 \ifx\acs@manuscript\acs@manuscript@communication
1863 \AbstractOff
1864 \SectionsOff
1865 \fi
1866 \setkeys{acs}{doi = true}
1867 \inoraj
1868 \jafcau
1869 \ProvidesFile{achemso-jafcau.cfg}
1870 [2018/07/12 v3.11b achemso configuration: J. Agric. Food Chem.]
1871 \setkeys{acs}{keywords = true}
1872 \def\acs@type@list{article,supinfo}
1873 \SectionNumbersOff
1874 \jafcau
1875 \jceda8
1876 \ProvidesFile{achemso-jceda8.cfg}
1877 [2018/07/12 v3.11b achemso configuration: J. Chem. Ed.]
1878 \setkeys{acs}{keywords = true}
1879 \SectionNumbersOff
1880 \def\acs@type@list{article,supinfo}
1881 \SectionNumbersOff
1882 \jceda8
1883 \jceaax
1884 \ProvidesFile{achemso-jceaax.cfg}
1885 [2018/07/12 v3.11b achemso configuration: J. Chem. Eng. Data]
1886 \def\acs@type@list{article,supinfo}
1887 \def\refname{Literature Cited}
1888 \SectionNumbersOff
1889 \jceaax
1890 \jcisd8
1891 \ProvidesFile{achemso-jcisd8.cfg}
1892 [2018/07/12 v3.11b achemso configuration: J. Chem. Inf. Model.]
1893 \def\acs@type@list{article,supinfo}
1894 \SectionNumbersOff
1895 \jcisd8
1896 \jctcce
1897 \ProvidesFile{achemso-jctcce.cfg}
1898 [2018/07/12 v3.11b achemso configuration: J. Chem. Theory Comput.]
1899 \def\acs@type@list{article,supinfo}

```

```

1900 \setkeys{acs}{maxauthors = 0}
1901 </jctcce>
1902 <*jmcmr>
1903 \ProvidesFile{achemso-jmcmr.cfg}
1904 [2018/07/12 v3.11b achemso configuration: J. Med. Chem.]
1905 \def\acs@type@list{article,letter,perspective,supinfo}
1906 \SectionNumbersOff
1907 \setlength{\acs@tocentry@height}{5.5cm}
1908 \setlength{\acs@tocentry@width}{21cm}
1909 </jmcmr>
1910 <*jnprdf>
1911 \ProvidesFile{achemso-jnprdf.cfg}
1912 [2018/07/12 v3.11b achemso configuration: J. Nat. Prod.]
1913 \renewcommand*{\abstractname}{ABSTRACT}
1914 \renewcommand*{\acknowledgementname}{ACKNOWLEDGEMENT}
1915 \renewcommand*{\supinfofname}{ASSOCIATED CONTENT}
1916 \SectionNumbersOff
1917 \renewcommand*{\acs@abstract}{%
1918   \quotation
1919   \textbf{\abstractname :}%
1920 }
1921 \AbstractOn
1922 \ifx\acs@manuscript\acs@manuscript@communication
1923   \AbstractOff
1924   \SectionsOff
1925 \fi
1926 \def\refname{REFERENCES}
1927 \captionsetup{
1928   labelfont = bf,
1929   labelsep = period
1930 }
1931 </jnprdf>
1932 <*joeah>
1933 \ProvidesFile{achemso-joeah.cfg}
1934 [2018/07/12 v3.11b achemso configuration: J. Org. Chem.]
1935 \ifx\acs@manuscript\acs@manuscript@communication
1936   \AbstractOff
1937   \SectionsOff
1938 \fi
1939 \floatstyle{plaintop}
1940 \restylefloat{scheme}
1941 \floatstyle{plain}
1942 \renewcommand*\acs@type@list{article,communication,note,perspective,review,supinfo}
1943 </joeah>
1944 <*jpcafh>
1945 \ProvidesFile{achemso-jpcafh.cfg}
1946 [2018/07/12 v3.11b achemso configuration: J. Phys. Chem. A]
1947 \def\acs@type@list{article,supinfo}
1948 \setkeys{acs}{
1949   etalmode      = truncate,
1950   maxauthors    = 10
1951 }
1952 \SectionNumbersOff
1953 \captionsetup[table]{labelfont=bf,textfont=bf}

```

## Title

```

1954 \g@addto@macro{\maketitle}{\newpage}
1955 \</jpcafh>
1956 \<*jpcbfk>
1957 \ProvidesFile{achemso-jpcbfk.cfg}
1958 [2018/07/12 v3.11b achemso configuration: J. Phys. Chem. B]
1959 \def\acs@type@list{article,supinfo}
1960 \setkeys{acs}{
1961   etalmode      = truncate,
1962   maxauthors    = 10
1963 }
1964 \SectionNumbersOff
1965 \captionsetup[table]{labelfont=bf,textfont=bf}
1966 \g@addto@macro{\maketitle}{\newpage}
1967 \</jpcbfk>
1968 \<*jpccck>
1969 \ProvidesFile{achemso-jpccck.cfg}
1970 [2018/07/12 v3.11b achemso configuration: J. Phys. Chem. C]
1971 \def\acs@type@list{article,supinfo}
1972 \setkeys{acs}{
1973   etalmode      = truncate,
1974   maxauthors    = 10
1975 }
1976 \SectionNumbersOff
1977 \captionsetup[table]{labelfont=bf,textfont=bf}
1978 \g@addto@macro{\maketitle}{\newpage}
1979 \</jpccck>

1980 \<*jpclcd>
1981 \ProvidesFile{achemso-jpclcd.cfg}
1982 [2018/07/12 v3.11b achemso configuration: J. Phys. Chem. Lett.]
1983 \setkeys{acs}{
1984   etalmode      = truncate,
1985   maxauthors    = 10
1986 }
1987 \def\acs@type@default{letter}
1988 \def\acs@type@list{letter}
1989 \SectionNumbersOff
1990 \captionsetup[table]{labelfont=bf,textfont=bf}
1991 \g@addto@macro{\maketitle}{\newpage}
1992 \renewcommand{\acs@tocentry@print}[1]{%
1993   \gdef\acs@tocentry@text{#1}%
1994 }
1995 \renewcommand*{\acs@abstract@extras}{%
1996   \begingroup
1997     \acs@tocentry@print@aux
1998   \endgroup
1999   \acs@keywords@print
2000   \newpage
2001 }
2002 \setlength\acs@tocentry@height{2in}
2003 \setlength\acs@tocentry@width{2in}
2004 \</jpclcd>
2005 \<*jprobs>

```

```

2006 \ProvidesFile{achemso-jprobs.cfg}
2007 [2018/07/12 v3.11b achemso configuration: J. Proteome Res.]
2008 \setkeys{acs}{keywords = true}
2009 \def\acs@type@list{article,review,supinfo}
2010 \SectionNumbersOff
2011 \jprobs)

```

The *J. Am. Chem. Soc.* configuration is rather more complicated as there is the need to construct a “galley-like” layout for communications.

```

2012 (*jacsat)
2013 \ProvidesFile{achemso-jacsat.cfg}
2014 [2018/07/12 v3.11b achemso configuration: J. Am. Chem. Soc.]
2015 \SectionNumbersOff
2016 \ifx\acs@manuscript\acs@manuscript@communication\else
2017 \expandafter\endinput
2018 \fi

```

Everything from here onward applies only to communications. Some adjustments are now made using the existing tools.

```

2019 \setkeys{acs}{
2020   email = true,
2021   layout = twocolumn
2022 }
2023 \SectionsOff
2024 \acs@layout@nine

```

**abstract** The abstract appears at the start of the document, with lines around it.s

```

2025 \renewenvironment{abstract}{%
2026   \hrule
2027   \vspace{2 mm}%
2028   \sffamily
2029   \noindent
2030   \emph{\textbf{Abstract:}}%
2031 }{%
2032   \vspace{2 mm}%
2033   \hrule
2034   \vspace{6 mm}%
2035 }

```

**\acksizes** To keep things logical, the size macros are given names related to their function.

**\affilsize** Some of these are new, some are defined in the class.

**\authorsize** 2036 \def\affilsize{%

**\emailsize** 2037 \setfontsize\affilsize\@ixpt\@xpt

**\capsizes** 2038 }

**\refsize** 2039 \def\acksizes{%

**\suppsizes** 2040 \setfontsize\acksizes\@ixpt\@xipt

**\titlesizes** 2041 }

2042 \def\authorsize{%

2043 \setfontsize\authorsize{10.5}{12.5}%

2044 }

2045 \newcommand\*\capsizes{%

2046 \setfontsize\capsizes\@viipt\@ixpt

2047 }

2048 \def\emailsize{%

```

2049 \setfontsize\emailsize\@viipt{15}%
2050 }
2051 \newcommand*\refsize{%
2052 \setfontsize\refsize{7.5}{7.5}%
2053 }
2054 \def\suppsize{%
2055 \setfontsize\suppsize{8.5}{10.5}%
2056 }
2057 \def\titlesize{%
2058 \setfontsize\titlesize\@xipt{13}%
2059 }
2060 \let\footnotesize\refsize
2061 \let\captionfont\capsize

\emailfont A slight font change.
2062 \def\emailfont{\sffamily}

\ps@plain The header styles are done the hard way, to keep down the number of packages
\ps@jacs loaded.
2063 \def\ps@plain{%
2064 \let\@mkboth\@gobbletwo
2065 \let\@oddhead\@empty
2066 \def\@oddfoot{%
2067 \reset@font
2068 \sffamily
2069 \textbf{\thepage}%
2070 \hfil
2071 }%
2072 \let\@evenhead\@empty
2073 \let\@evenfoot\@oddfoot
2074 }
2075 \def\ps@acs{%
2076 \def\@oddfoot{%
2077 \reset@font
2078 \sffamily
2079 \textbf{\thepage}%
2080 \hfil
2081 }%
2082 \def\@evenfoot{%
2083 \reset@font
2084 \hfil
2085 \sffamily
2086 \textbf{\thepage}%
2087 }%
2088 \def\@oddhead{%
2089 \let\@evenhead\@oddhead
2090 }
2091 \pagestyle{acs}

\acs@space@pre@title Length adjustments for the title.
\acs@space@post@title
2092 \setlength\acs@space@pre@title{16mm}
\acs@space@post@author
2093 \setlength\acs@space@post@title{0mm}
\acs@space@post@address
2094 \setlength\acs@space@post@author{0mm}
\acs@space@post@email
2095 \setlength\acs@space@post@address{0mm}

```

```

2096 \setlength\acs@space@post@email{-1mm}
2097 \setlength\acs@maketitle@width{152.4mm}

```

\acs@contact@details Contact details are different here.

```

2098 \def\acs@contact@details{%
2099   Received \today; E-mail: \acs@email@list
2100 }

```

\acs@maketitle@extras No keywords or abbreviations for *J. Am. Chem. Soc.*.

```

2101 \let\acs@maketitle@extras\relax

```

Getting the floats correct is a difficult task “by hand”; using the caption package makes this a lot easier.

```

2102 \floatstyle{plaintop}
2103 \restylefloat{scheme}
2104 \floatstyle{plain}
2105 \DeclareCaptionLabelSeparator{perquad}{.\quad}
2106 \captionsetup{
2107   singlelinecheck = off,
2108   labelfont       = {bf,it,sf},
2109   textfont        = sf,
2110   labelsep        = perquad
2111 }
2112 \captionsetup[figure]{textfont=rm}

```

\acs@table A patch or \table.

```

\table
2113 \newcommand*\acs@table{}
2114 \let\acs@table\table
2115 \def\table{%
2116   \capsize
2117   \acs@table
2118 }

```

The bibliography has to be adjusted.

```

2119 \AtBeginDocument{%
2120   \def\bibsection{%
2121     \@startsection
2122       {section}
2123       {1}
2124       {\z@}{\z@}{2.5mm}%
2125       {\normalfont\acksizes\bfseries}
2126       {\hrule\nobreak\vspace{1.2mm}\noindent\refname}%
2127   }%
2128   \let\bibfont\refsize
2129   \setlength{\bibhang}{0.61cm}%
2130   \setlength{\bibsep}{0mm}%
2131 }
2132 </jacsat>
2133 <*langd5>
2134 \ProvidesFile{achemso-langd5.cfg}
2135 [2018/07/12 v3.11b achemso configuration: Langmuir]
2136 \def\acs@type@list{article,letter,supinfo}
2137 \SectionNumbersOff

```



```

2138 </langd5>
2139 <*mamobx>
2140 \ProvidesFile{achemso-mamobx.cfg}
2141 [2018/07/12 v3.11b achemso configuration: Macromolecules]
2142 \SectionNumbersOff
2143 \setkeys{acs}{doi = true}
2144 </mamobx>
2145 <*mpohbp>
2146 \ProvidesFile{achemso-mpohbp.cfg}
2147 [2018/07/12 v3.11b achemso configuration: Mol. Pharm.]
2148 \setkeys{acs}{keywords = true}
2149 \def\acs@type@list{article,suppinfo}
2150 \SectionNumbersOff
2151 </mpohbp>
2152 <*nalefd>
2153 \ProvidesFile{achemso-nalefd.cfg}
2154 [2018/07/12 v3.11b achemso configuration: Nano Lett.]
2155 \setkeys{acs}{keywords = true}
2156 \def\acs@type@default{letter}
2157 \def\acs@type@list{letter}
2158 \SectionNumbersOff
2159 </nalefd>
2160 <*orlef7>
2161 \ProvidesFile{achemso-orlef7.cfg}
2162 [2018/07/12 v3.11b achemso configuration: Org. Lett.]
2163 \def\acs@type@default{communication}
2164 \def\acs@type@list{communication}
2165 \SectionNumbersOff
2166 \setkeys{acs}{layout = twocolumn}
2167 \RequirePackage{xcolor}
2168 \definecolor{orglett}{RGB}{128,0,0}
2169 </orlef7>
2170 <*oprdfk>
2171 \ProvidesFile{achemso-oprdfk.cfg}
2172 [2018/07/12 v3.11b achemso configuration: Org. Proc. Res. Dev.]
2173 \def\acs@type@list{article,highlight,review,suppinfo}
2174 \SectionNumbersOff
2175 </oprdfk>
2176 <*orgnd7>
2177 \ProvidesFile{achemso-orgnd7.cfg}
2178 [2018/07/12 v3.11b achemso configuration: Organometallics]
2179 \SectionNumbersOff
2180 </orgnd7>

```

## 9 Change History

v1.0	General: Initial release of package by Mats Dahlgren . . . . . 1	v3.0	General: 1
v2.0	General: Re-write of package by Joseph Wright . . . . . 1	v3.1	General: 1

Added \alsoaffiliation macro . . . . .	1	New tocentry section . . . . .	1
v3.10		v3.2b	
General: Add starred (subs)sections to TOC . . . . .	1	General: New email option . . . . .	1
Update address printing to reflect new ACS style . . . . .	1	v3.2c	
v3.10a		General: Added \fax macro . . . . .	1
General: Add article titles for <i>Chem.</i> <i>Mater. and Chem. Rev.</i> . . . . .	1	Added \phone macro . . . . .	1
v3.10b		Fix so that email option is turned on by default . . . . .	1
\acs@tocentry@text: Define \acs@tocentry@text in all cases . . . . .	37	v3.3	
v3.10c		General: \altaffiliation macro checks for duplicate entries and uses only one footnote . . . . .	1
General: Add support for ACS <i>Omega</i> and <i>ACS Energy Lett.</i> . . .	1	New layout option . . . . .	1
v3.10d		v3.3a	
General: Improve handling of DOI values . . . . .	1	General: New etalmode option . . .	1
v3.10e		v3.4	
General: Tweak <i>Macromolecules</i> formatting . . . . .	1	General: More detail on installation Require cleveref, dropping varioref use . . . . .	1
v3.10f		v3.5	
General: Various formatting updates . . . . .	1	General: New BibTeX style file . . . .	1
v3.10h		v3.5a	
General: Add style for ACS <i>Biomater. Sci. Eng.</i> . . . . .	1	General: Modify JACS Communication to print abstract . . . . .	1
Add style for ACS <i>Earth Space</i> <i>Chem.</i> . . . . .	1	v3.5c	
Add style for ACS <i>Infect. Dis.</i> . . .	1	General: Bug fix for \mciteSubRef macro . . . . .	1
Add style for ACS <i>Sensors</i> . . . . .	1	Update <i>Org. Lett.</i> style . . . . .	1
Style update for <i>J. Chem. Theory.</i> <i>Comput.</i> . . . . .	1	v3.6	
Update supplementary information text . . . . .	1	General: Drop cleverref use . . . . .	1
v3.10i		v3.7	
General: Fix issue with \doi command . . . . .	1	General: New chaptertitle option for bibliography . . . . .	1
Style update for <i>Biochemistry</i> . . .	1	Rename usetitle option to articletitle . . . . .	1
Updates for <i>Org. Lett.</i> . . . . .	1	v3.8	
v3.11		General: Extend journal list to current ACS range . . . . .	1
General: Print article titles for all journals . . . . .	1	Introduce \latin command to support ACS <i>Nano</i> requirements	1
v3.11a		v3.8a	
\acs@tocentry@text: Print abstract at full size . . . . .	37	General: Minor style improvements for some journals . . . . .	1
v3.11b		v3.8b	
General: Correct handling of and others in bibliography . . . . .	1	General: Improve output ordering for <i>J. Phys. Chem. Lett.</i> . . . . .	1
v3.2		v3.8c	
General:	1	General: Improve ACS <i>Photonics</i> style . . . . .	1
		v3.8d	
		General: Fix bug in keyword printing . . . . .	1

v3.8e	General: Minor style changes for <i>J. Med. Chem.</i> and ACS <i>Appl. Mater.</i> . . . . . <b>1</b>	v3.8l	General: Fix printing of phone/fax numbers . . . . . <b>1</b>
v3.8g	General: Fix issue with <i>J. Phys.</i> <i>Chem.</i> formatting . . . . . <b>1</b>	v3.8m	General: <i>J. Phys. Chem. Lett.</i> uses a non-standard size for the TOC graphic . . . . . <b>53</b>
v3.8i	General: Fix issue with <i>Chem. Res.</i> <i>Toxicol.</i> formatting . . . . . <b>1</b>	v3.8n	General: Drop use of keywords for <i>J. Phys. Chem. A, B and C</i> . . . . <b>52</b>
v3.8j	General: Remove <i>Biotechnol. Prog.</i> configuration . . . . . <b>1</b> Update article title requirements for all journals . . . . . <b>1</b> Update keyword requirements for all journals . . . . . <b>1</b>	v3.9	General: New doi option . . . . . <b>1</b>
v3.8k	General: Format date correctly for in press bibliography entries . . . <b>1</b>	v3.9a	General: Update style for ACS <i>Central Sci.</i> . . . . . <b>1</b>
		v3.9b	\citenumfont: Allow for setting super after loading . . . . . <b>41</b> General: Update <i>J. Agric. Food Chem.</i> style . . . . . <b>1</b>

## 10 Index

Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

Symbols	985, 1002, 1203, 1509, 2065, 2072	\@listi . . . . . 1343, 1357
\! . . . . . 1523	\@esphack . . . . . 206, 210	\@m . . . . . 1063, 1525
\# . . . . . 833, 1754	\@evenfoot . . . 2073, 2082	\@makeother . . . . . 183
\. . . . . 1521, 1525	\@evenhead . . . 2072, 2089	\@maketitle . . . . . 597
\? . . . . . 1522	\@firstofone . . . 123, 127	\@maketitle@title@hook . . . . . 597, 1762
\@Esphack . . . . . 1155	\@firstoftwo . . . . . . . . . . 28, 393, 501, 1463	\@mciteNatbibCiteCmdList . . . . . 1422, 1423, 1427
\@abbreviations . . . . . . . . 546, 557, 559	\@floatboxreset . . . . . . . . 1041, 1042	\@mciteSubRef . . . . 1430
\@address@i . . . . . 853	\@fnsymbol . . . . 611, 664, 879, 880, 896	\@mcitereflabelprefix . . . . . 1430
\@affil@i . . . . . 889	\@for . . . . . 770, 1285	\@minus . . . 1344, 1346, 1349, 1358, 1360
\@afterindentfalse . . . . . 1060, 1071	\@gobble . . . . . 325, 1201	\@mkboth . . . . . 2064
\@afterindenttrue . . . . . . 1059, 1070	\@gobbletwo . . . . . 2064	\@namedef . . . . . 144
\@arabic 1381, 1382, 1383	\@ifclassloaded . . . . 10	\@nameuse . . . . . 38, 103, 117, 688, 738, 819, 863, 873, 903, 923, 987, 993
\@auxout . . . . . 284	\@ifpackageloaded . . . . . . 1449, 1543	\@ne . . . 343, 346, 370, 400, 418, 423, 439, 481, 507, 684, 702, 723, 745, 755, 848, 860, 861, 867,
\@bsphack . . . . . 174, 1145	\@ifstar 1063, 1074, 1078	
\@checkend . . . . . 1205	\@ifundefined . . 148, 451	
\@citex 223, 224, 1530, 1531	\@ignorefalse . . . . 1157	
\@currenvir 1154, 1186, 1191, 1193, 1323	\@ixpt . . . 1279, 1340, 2037, 2040, 2046	
\@dblarg . . . . . 1063, 1064	\@keywords 546, 564, 566	
\@empty 332, 557, 564, 658, 675, 694, 962, 965, 971,	\@listI . . . . . 1343, 1357	

868, 883, 887,	494, 511, 770,	\{ ..... 185
890, 899, 910,	772, 960, 962,	\} ..... 186
919, 942, 945,	963, 966, 967,	\^ ..... 197
946, 981, 1763, 1765	971, 973, 978,	\  ..... 831, 1752
\@nil 1463, 1465, 1500, 1513	985, 986, 990,	
\@oddfoot 2066, 2073, 2076	991, 1002, 1003,	\_ ..... 1851
\@oddhead 2065, 2088, 2089	1004, 1153, 1154,	
\@onelevel@sanitize 192	1285, 1286, 1322,	
\@onlypreamble ....	1323, 1391, 1392,	
.. 336, 352, 385,	1395, 1396, 1409,	A
492, 527, 536,	1411, 1423, 1424	\abbreviations .... 546
545, 550, 555,	\@tempb 402, 404, 509,	\abovecaptionskip 1348
1092, 1096, 1102,	511, 960, 963,	\abovedisplayshortskip
1108, 1170, 1175	965, 967, 1410, 1411	..... 1345, 1359
\@plus ..... 1344,	\@tempcnta .... 390,	\abovedisplayskip .
1345, 1346, 1349,	400, 403, 407,	..... 1344,
1358, 1359, 1360	415, 427, 440,	1347, 1358, 1361
\@restonecolfalse .	453, 458, 468,	\abstract 1132, 1167, 1172
..... 1226, 1244	472, 479, 496,	abstract (environ-
\@restonecoltrue ..	507, 510, 514,	ment) ..... 2025
..... 1224, 1242	677, 684, 688,	\abstractname .....
\@roman 344, 347, 371,	697, 703, 710,	.. 1562, 1913, 1919
374, 377, 403,	716, 734, 738,	\AbstractOff ..... 6,
424, 426, 441,	747, 765, 771,	1166, 1299, 1816,
444, 447, 451,	782, 788, 857,	1863, 1923, 1936
452, 455, 457,	859, 860, 863,	\AbstractOn 6, 1166, 1921
478, 482, 484,	865, 866, 867,	acknowledgement (envi-
510, 521, 530,	869, 873, 881,	ronment) ....
539, 688, 716,	890, 899, 900,	..... 6, 1118, 1307
734, 738, 746,	903, 905, 919,	\acknowledgementname
765, 771, 782,	920, 930, 942,	..... 1119, 1124,
788, 863, 869,	943, 944, 951,	1327, 1329, 1914
873, 903, 911,	979, 981, 982,	\acksize ..... 1325,
923, 944, 951,	983, 984, 987, 993	1335, 2036, 2125
983, 984, 987, 993	\@tempcntb . 416, 423,	\acs@abbreviations@print
\@secondoftwo .....	424, 426, 430,	..... 556, 1014
. 30, 395, 503, 1463	469, 882, 910,	\acs@abstract .....
\@secpenalty . 1062, 1073	911, 914, 923,	.. 1131, 1172, 1917
\@sect ..... 1063, 1064	931, 933, 945, 946	\acs@abstract@end .
\@setfontsize .....	\@tempskipa .....	..... 1131, 1168
1279, 1340, 1353,	1058, 1060, 1062,	\acs@abstract@extras
1356, 2037, 2040,	1069, 1071, 1073	..... 1009, 1995
2043, 2046, 2049,	\@tempswafalse ....	\acs@abstract@iffalse
2052, 2055, 2058	.... 389, 495, 1284	..... 1131
\@ssect ..... 1074, 1075	\@tempwattrue .....	\acs@abstract@print 1221
\@startsection 1055,	.... 405, 512, 1287	\acs@abstract@start
1066, 1090, 1094,	\@thanks ..... 655,	..... 1131, 1167
1113, 1256, 2121	658, 661, 662, 675	\acs@abstract@text
\@tempa ..... 190,	\@title ..... 329, 613	..... 1222, 1236
191, 192, 194,	\@viipt 1279, 2046, 2049	\acs@activate@biblabel
198, 203, 262,	\@xipt . 1353, 1356, 2058	..... 108
268, 271, 274,	\@xipt ..... 1337, 2040	\acs@address@list .
278, 279, 388,	\@xpt ... 1353, 1356, 2037	..... 631, 839
404, 414, 467,	\\ ..... 650	\acs@address@list@auxi
		..... 839

\acs@address@list@auxii	\acs@author@affil@alt@aux	\acs@bib@write . . . .	253
..... 839	..... 781	\acs@bib@write@aux	253
\acs@affil@alt@cnt	\acs@author@affil@aux	\acs@biblabel@brackets	
..... 337,	..... 732	..... 129	
481, 482, 485,	\acs@author@cnt . . .	\acs@biblabel@fullstop	
497, 514, 726,	..... 337, 343,	..... 129	
754, 849, 886, 893	344, 348, 366,	\acs@biblabel@period	129
\acs@affil@alt@list	430, 435, 451,	\acs@biblabel@plain	129
..... 894, 909	452, 455, 457,	\acs@bibliography .	
\acs@affil@alt@lista@aux	475, 478, 484,	..... 168, 291	
..... 909	520, 521, 529,	\acs@bibliographystyle	
\acs@affil@cnt . . . .	530, 538, 539,	..... 1440	
..... 337, 346,	599, 678, 697,	\acs@bibstyle	1433, 1444
349, 370, 371,	702, 703, 709,	\acs@collect .	1180, 1276
374, 377, 407,	710, 914, 943, 982	\acs@collect@aux .	1180
418, 425, 439,	\acs@author@fnsymbol	\acs@collect@begins	
440, 441, 444,	..... 611, 664,	..... 1178, 1189,	
447, 723, 745,	722, 751, 759,	1199, 1201, 1203	
789, 840, 848,	777, 794, 797,	\acs@collect@begins@	
859, 866, 883, 905	862, 872, 880, 1743	..... 1180	
\acs@affil@ifdup ..	\acs@author@fnsymbol@aux	\acs@collect@body	1180
..... 367, 386, 436	..... 797	\acs@collect@content	
\acs@affil@ifdup@aux	\acs@author@fnsymbol@loop	1176, 1176, 1184,	
..... 386, 417, 470	..... 797	1192, 1195, 1210	
\acs@affil@list . . .	\acs@author@fnsymbol@loop@aux@i	\acs@collect@empty@toks	
877	..... 797	..... 1177, 1188	
\acs@affil@list@aux	\acs@author@fnsymbol@loop@aux@ji	\acs@collect@toks .	
877	..... 797	1176, 1181, 1182,	
\acs@affil@marker@cnt	\acs@author@fnsymbol@loop@aux@m	1185, 1188, 1219	
.. 340, 746, 748,	..... 797	\acs@contact@details	
751, 755, 756,	\acs@author@fnsymbol@loop@aux@Q	..... 639, 671, 2098	
759, 772, 773,	..... 797	\acs@email@list . . .	
777, 787, 789,	\acs@author@fnsymbol@symbol	..... 672, 926, 2099	
790, 794, 858,	..... 797	\acs@email@list@aux	926
861, 862, 868,	\acs@author@footnotes	\acs@email@list@font	926
872, 887, 888,	.. 682, 721, 749,	\acs@endabstract ..	
889, 900, 901,	750, 757, 758,	..... 1131, 1173	
902, 920, 921, 922	774, 775, 791, 792	\acs@etal@firstonly	96
\acs@affil@swap	624, 676	\acs@etal@truncate .	96
368, 412	\acs@author@list@and	\acs@etal@truncatefalse	
\acs@affil@swap@aux	..... 686, 701	..... 106	
412	\acs@author@list@comma	\acs@etal@truncatetrue	
\acs@alsoaffil@find	..... 689, 701	..... 107	
434	\acs@author@list@main	\acs@floatboxreset	1041
\acs@altaffil@foot@aux	..... 679, 682	\acs@fnsymbol@org .	877
..... 912, 918	\acs@author@star	\acs@footnote@cnt .	
\acs@altaffil@ifdup	690, 715	..... 340, 615,	
..... 477, 493	\acs@author@star@aux	748, 756, 773,	
\acs@altaffil@ifdup@aux	715	790, 858, 888,	
..... 493	\acs@autonote . . . .	901, 921, 1763, 1765	
\acs@author@affil .	..... 213	\acs@iffalse . . . .	1165
..... 691, 732	\acs@bib@file . . . .	\acs@ifundefined . .	
\acs@author@affil@also	..... 201, 247,	..... 24, 35,	
..... 692, 764	260, 261, 265, 288		
\acs@author@affil@also@aux	\acs@bib@message		
..... 764	247, 261		
\acs@author@affil@alt	\acs@bib@name ..		
..... 693, 781	247, 260		

98, 112, 716, 733,  
 765, 782, 869,  
 911, 944, 983, 984  
 \acs@journal .....  
 .... 80, 1363, 1365  
 \acs@keyval@bool ..  
 34, 51, 54, 57, 60,  
 63, 66, 69, 72, 75, 78  
 \acs@keywords@print  
 ... 556, 1018, 1999  
 \acs@killabstract 1299  
 \acs@killsecs .... 1300  
 \acs@layout 80, 1392, 1396  
 \acs@layout@nine ..  
 ..... 1337, 2024  
 \acs@layout@shared  
 .. 1307, 1393, 1397  
 \acs@layout@ten .. 1337  
 \acs@maketitle@extras  
 ..... 1022, 2101  
 \acs@maketitle@extras@hook  
 .. 1022, 1738, 1793  
 \acs@maketitle@suppinfo  
 ..... 613, 648  
 \acs@maketitle@width  
 .... 575, 606, 2097  
 \acs@manuscript ...  
 .. 80, 649, 1286,  
 1292, 1295, 1371,  
 1374, 1378, 1690,  
 1815, 1827, 1862,  
 1922, 1935, 2016  
 \acs@manuscript@communication  
 ..... 138,  
 1815, 1827, 1862,  
 1922, 1935, 2016  
 \acs@manuscript@letter  
 ..... 138, 1690  
 \acs@manuscript@note  
 ..... 138, 1371  
 \acs@manuscript@review  
 ..... 138, 1374  
 \acs@manuscript@suppinfo  
 .... 138, 649, 1378  
 \acs@maxauthors . 80, 278  
 \acs@niib@after@text  
 ..... 154,  
 162, 172, 207, 211  
 \acs@niib@create ..  
 .... 143, 313, 1450  
 \acs@niib@no@write  
 ..... 178, 209  
 \acs@niib@text ....  
 ..... 155, 163, 173  
 \acs@niib@write 176, 181  
 \acs@niib@write@aux@i  
 ..... 181  
 \acs@niib@write@aux@ii  
 ..... 181  
 \acs@nmv@activate . 213  
 \acs@number@list 673, 957  
 \acs@number@list@aux@i  
 ..... 957  
 \acs@number@list@aux@ii  
 ..... 957  
 \acs@par .... 1305, 1332  
 \acs@section .....  
 1048, 1104, 1119,  
 1122, 1127, 1228,  
 1257, 1329, 1807  
 \acs@sections@none  
 ..... 1077,  
 1098, 1099, 1100  
 \acs@sections@none@aux  
 ..... 1077  
 \acs@setkeys ..... 1298  
 \acs@space@post@address  
 .... 575, 634, 2092  
 \acs@space@post@author  
 .... 575, 627, 2092  
 \acs@space@post@email  
 .... 575, 642, 2092  
 \acs@space@post@title  
 .... 575, 619, 2092  
 \acs@space@pre@title  
 .... 575, 604, 2092  
 \acs@startsection .  
 ..... 1056, 1094  
 \acs@startsection@alt  
 ..... 1067, 1090  
 \acs@startsection@orig  
 .. 1048, 1113, 1256  
 \acs@subsection ...  
 ..... 1048, 1105  
 \acs@subsubsection  
 ..... 1048, 1106  
 \acs@table ..... 2113  
 \acs@title@footnote  
 ..... 612, 653  
 \acs@title@footnote@check  
 ..... 614, 653  
 \acs@title@short 329, 572  
 \acs@title@short@print  
 ... 556, 1740, 1795  
 \acs@tocentry@height  
 ..... 1264,  
 1272, 1274, 1655,  
 1830, 1907, 2002  
 \acs@tocentry@print  
 .. 1238, 1276, 1992  
 \acs@tocentry@print@aux  
 ..... 1238, 1997  
 \acs@tocentry@text  
 ..... 1238, 1993  
 \acs@tocentry@width  
 ..... 1265,  
 1273, 1275, 1656,  
 1831, 1908, 2003  
 \acs@type@check ...  
 ..... 1281, 1370  
 \acs@type@default .  
 1281, 1302, 1805,  
 1987, 2156, 2163  
 \acs@type@list ....  
 1281, 1303, 1561,  
 1567, 1573, 1579,  
 1586, 1592, 1598,  
 1610, 1616, 1627,  
 1634, 1640, 1646,  
 1653, 1661, 1676,  
 1683, 1688, 1697,  
 1709, 1721, 1726,  
 1781, 1797, 1806,  
 1823, 1836, 1842,  
 1848, 1872, 1880,  
 1886, 1893, 1899,  
 1905, 1942, 1947,  
 1959, 1971, 1988,  
 2009, 2136, 2149,  
 2157, 2164, 2173  
 \acs@validtype ... 1301  
 \acs@warning 5, 22, 36,  
 99, 113, 354, 360,  
 382, 462, 489,  
 524, 533, 542,  
 600, 736, 843,  
 934, 1085, 1141,  
 1291, 1364, 1443  
 \active ..... 1136, 1146  
 \addpenalty . 1062, 1073  
 \addvspace .. 1062, 1073  
 \advance 343, 346, 370,  
 400, 418, 423,  
 439, 481, 507,  
 684, 748, 756,  
 773, 789, 790,  
 860, 861, 867,  
 868, 888, 899,  
 901, 910, 919,  
 921, 942, 945, 981

\affilfont	591, 630	\bibsection	85, 88
\affiliation	5, 365	..	1124, 1807, 2120
\affilsize	587, 629, 2036	\bibsep	2130
\aftergroup	393,	biochem (option)	8
	395, 1010, 1393, 1397	biochemistry (option)	8
\alsoaffiliation	5, 434	\bot	832, 1753
\altaffiliation	5, 474		
\and	5, 353	C	
\arabic	1380	\c@figure	1381
articletitle (option)	7	\c@footnote	615
\AtBeginDocument	..	\c@scheme	1382
	213, 258,	\c@table	1383
	291, 297, 328,	\capsize	2036, 2116
	1047, 1308, 1384,	\captionfont	2061
	1448, 1554, 2119	\captionsetup	1927,
\AtEndDocument	...		1953, 1965, 1977,
	287, 1236, 1240		1990, 2106, 2112
\AtEndOfClass	...	\catcode	185,
	122, 123, 1125, 1783		186, 197, 1136,
\AtEndOfPackage	126, 127		1137, 1138, 1139,
\author	5, 342		1146, 1147, 1461
\authorfont	591, 591, 622	\centering	1043
\authorsize	587, 621, 2036	\changes	1664, 1665, 1851
		chaptertitle (option)	7
		chart (environment)	..
			6, 1028
B		\chartname	1034
\begin	605, 606,	\citation	285
	607, 1200, 1213,	\cite	154, 159, 225,
	1261, 1264, 1810		226, 237, 238, 1528
\begingroup	26, 182,	\citenum	232, 243
	345, 387, 413,	\citenumfont	1386, 1401
	466, 476, 660,	\ClassWarning	5
	663, 928, 958,	\closeout	288
	1109, 1112, 1135,	\columnsep	1319
	1190, 1255, 1390,	\csname	..
	1460, 1481, 1996		27, 344, 347, 371,
\belowdisplayshortskip	...		374, 377, 403,
	1346, 1360		424, 426, 441,
\belowdisplayskip	...		444, 447, 452,
	1347, 1361		455, 457, 478,
\bfseries	594, 2125		482, 484, 510,
\bibfont	2128		521, 530, 539,
\bibhang	2129		734, 746, 771,
biblabel (option)	8		788, 951, 1191, 1193
\bibliography	291		
\bibliographystyle	..	D	
	1436, 1438, 1440	\dagger	827, 1746
\bibnote	8, 143, 143, 232, 243	\ddagger	828, 1747
\bibnotemark	8, 143	\DeclareCaptionLabelSeparator	2105
\bibnotetext	8, 143		152, 157, 161
\bibnumfmt	129,		
	130, 131, 132, 1387		
		\def	91, 94, 129, 130,
			131, 132, 149, 154,
			190, 191, 194, 214,
			293, 342, 353,
			359, 388, 401,
			414, 467, 494,
			508, 597, 685,
			821, 929, 978,
			980, 1042, 1126,
			1153, 1189, 1198,
			1213, 1222, 1302,
			1303, 1322, 1338,
			1339, 1352, 1380,
			1391, 1395, 1406,
			1409, 1410, 1430,
			1435, 1442, 1477,
			1482, 1518, 1561,
			1562, 1567, 1573,
			1579, 1586, 1592,
			1598, 1610, 1616,
			1627, 1634, 1640,
			1646, 1653, 1661,
			1676, 1683, 1688,
			1697, 1709, 1721,
			1726, 1738, 1743,
			1762, 1781, 1793,
			1797, 1805, 1806,
			1807, 1823, 1836,
			1842, 1848, 1872,
			1880, 1886, 1887,
			1893, 1899, 1905,
			1926, 1947, 1959,
			1971, 1987, 1988,
			2009, 2036, 2039,
			2042, 2048, 2054,
			2057, 2062, 2063,
			2066, 2075, 2076,



<b>E</b>			1204, 1269, 1399,	504, 516, 517,
<code>\edef</code> . . . . .	262, 986,		1466, 1488, 1998	525, 534, 543,
	990, 1184, 1192,	<code>\endinput</code> . . . . .	15, 2017	561, 568, 601,
	1199, 1423, 1427	<code>\ensuremath</code> . .	798, 1744	640, 651, 669,
<code>\else</code> . . . . .	29, 177,	environments:		680, 696, 699,
	217, 269, 272,	abstract . . . . .	2025	705, 706, 712,
	276, 280, 324,	acknowledgement		713, 728, 729,
	376, 381, 394,	. . . . .	6, 1118, 1307	761, 762, 807,
	406, 446, 461,	chart . . . . .	6, 1028	814, 816, 837,
	488, 502, 513,	graph . . . . .	6, 1028	844, 848, 849,
	523, 532, 541,	scheme . . . . .	6, 1028	854, 891, 892,
	557, 564, 659,	suppinfo 6, 1118, 1307		895, 907, 916,
	678, 694, 702,	tocentry . . . . .	6, 1276	938, 948, 955,
	725, 753, 805,	etalmode (option) . . . . .	7	969, 970, 974,
	814, 816, 842,	<code>\everypar</code> . . .	1061, 1072	995, 999, 1006,
	852, 885, 943,	<code>\expandafter</code> .	26, 27,	1016, 1020, 1057,
	964, 965, 971,	28, 30, 176, 178,		1060, 1062, 1068,
	982, 989, 1002,	193, 194, 216,		1071, 1073, 1148,
	1061, 1072, 1160,	218, 255, 323,		1159, 1162, 1209,
	1207, 1214, 1225,	325, 344, 347,		1216, 1227, 1234,
	1232, 1243, 1249,	371, 374, 377,		1245, 1251, 1288,
	1290, 1328, 1404,	401, 402, 405,		1296, 1330, 1373,
	1414, 1426, 1437,	408, 424, 426,		1377, 1389, 1394,
	1471, 1496, 1513,	431, 441, 444,		1398, 1407, 1417,
	1757, 1764, 2016	447, 452, 455,		1428, 1439, 1473,
<code>\email</code> . . . . .	5, 519	471, 472, 478,		1498, 1499, 1512,
email (option) . . . . .	3	482, 484, 498,		1515, 1527, 1546,
<code>\emailfont</code> 591, 637, 2062		501, 503, 508,		1692, 1759, 1766,
<code>\emailsize</code> 587, 636, 2036		509, 512, 515,		1818, 1829, 1865,
<code>\emergencystretch</code> 1311		521, 530, 539,		1925, 1938, 2018
<code>\emph</code> . . . . .	1664, 1665,	639, 661, 679,	<code>\floatname</code> . . . . .	
	1677, 1851, 2030	698, 746, 770,	. . 1029, 1031, 1033	
<code>\end</code> . . . . .	643, 644,	787, 799, 804,	<code>\floatplacement</code> . . .	
	645, 1148, 1186,	806, 815, 841,	. . . . . 1037, 1038	
	1198, 1200, 1208,	851, 884, 894,	<code>\floatstyle</code> 1039, 1939,	
	1214, 1266, 1268	906, 915, 949,	1941, 2102, 2104	
<code>\endabstract</code> . .	1009,	950, 954, 998,	<code>\footnote</code> . . . . .	612
	1134, 1168, 1173	1110, 1161, 1182,	<code>\footnotemark</code> . . . . .	654
<code>\endcsname</code> . . . . .		1191, 1193, 1201,	<code>\footnotesize</code> . . . .	2060
	27, 344, 348, 371,	1215, 1219, 1287,	<code>\footnotetext</code> . . . . .	
	374, 377, 403,	1444, 1470, 1472,	. 655, 889, 902, 922	
	424, 426, 441,	1497, 1500, 1514,	<code>\frenchspacing</code> . . . .	
	444, 447, 453,	1518, 1545, 2017	623, 1518, 1519, 1526	
	456, 457, 479,		<code>\futurelet</code> . . . . .	1491
	483, 485, 510,	<b>F</b>		
	521, 530, 539,	<code>\fax</code> . . . . .	5, 528	
	734, 747, 771,	<code>\fbox</code> . . . . .	1262	
	788, 951, 1191, 1193	<code>\fi</code> . 31, 169, 179, 219,		
<code>\endgroup</code> 26, 193, 350,		256, 269, 272,	<b>G</b>	
	397, 420, 471,	276, 280, 326,	<code>\g@addto@macro</code> . . . .	
	487, 666, 668,	334, 379, 383,	655, 1009, 1026,	
	939, 975, 1115,	396, 409, 410,	1027, 1742, 1954,	
	1117, 1155, 1164,	429, 432, 449,	1966, 1978, 1991	
		463, 490, 499,	<code>\gdef</code> . . 330, 331, 344,	
			371, 374, 377,	
			441, 444, 447,	
			482, 521, 530,	



539, 547, 552,	754, 803, 814,	1104, 1105, 1106,
1140, 1152, 1239,	816, 840, 847,	1113, 1132, 1134,
1462, 1465, 1993	848, 849, 859,	1148, 1149, 1167,
\geometry ..... 1312	866, 883, 886,	1168, 1172, 1173,
\global .... 333, 343,	893, 905, 914,	1191, 1256, 1295,
370, 439, 481,	933, 943, 946,	1299, 1300, 1306,
615, 1157, 1219,	982, 1496, 1525, 1763	1324, 1343, 1357,
1222, 1483, 1765	\ifx . 27, 332, 373, 404,	1441, 1494, 1504,
graph (environment) .	443, 511, 557,	1505, 1511, 1530,
..... 6, <u>1028</u>	564, 649, 658,	1531, 1532, 2060,
\graphname ..... <u>1034</u>	694, 962, 965,	2061, 2064, 2065,
	971, 985, 1002,	2072, 2073, 2089,
	1154, 1203, 1214,	2101, 2114, 2128
<b>H</b>	1286, 1323, 1371,	\LoadClass ..... 4
\hfil ... 2070, 2080, 2084	1374, 1378, 1392,	\long ..... 190, 1198,
\hrule .. 2026, 2033, 2126	1396, 1411, 1495,	1213, 1222, 1339,
	1509, 1513, 1690,	1352, 1462, 1465
	1815, 1827, 1862,	\loop ..... 859, 866
	1922, 1935, 2016	
<b>I</b>	\ignorespaces .... 1158	<b>M</b>
\if@filesw .... 175, 254	\immediate . 201, 260,	\maketitle ... 1026,
\if@ignore ..... 1156	261, 265, 284, 288	1027, 1742, 1954,
\if@nobreak . 1061, 1072	\in@ ..... 1423	1966, 1978, 1991
\if@noskipsec 1057, 1068	\input ..... 1368	\MakeUppercase ... 1004
\if@restonecol 1230, 1247	\InputIfFileExists 1363	manuscript (option) ... 3
\if@tempswa 392, 500, 1290	\intertextsep ..... 1349	\mathchardef . 1517, 1520
\if@twocolumn 1223, 1241	\itshape ..... 591	maxauthors (option) ... 7
\ifacs@abbreviations		\MessageBreak 12, 18,
..... 41, 1013		100, 114, 356, 362,
\ifacs@articletitle	<b>J</b>	737, 935, 1142,
..... 41, 269	\jobname .. 168, 252, 294	1292, 1365, 1549
\ifacs@biochem . 41, 1434	journal (option) ..... 3	
\ifacs@chaptertitle		<b>K</b>
..... 41, 272		\keywords ..... <u>546</u>
\ifacs@doi ..... 41, 276		
\ifacs@email .... 41, 638	<b>L</b>	<b>N</b>
\ifacs@etal@truncate	\LARGE ..... 590	\nabla ..... 836, 1757
..... 96, 280	\large ..... 588	\natmovechars .....
\ifacs@hyperref . 41, 322	\lastskip ..... 1479	..... 9, 1500, <u>1555</u>
\ifacs@keywords 41, 1017	\latin ..... 7, <u>297</u> , 1677	\newcommand 5, 22, 25,
\ifacs@super ... 41, 1402	layout (option) ..... 3	34, 80, 81, 82, 83,
\ifcase ..... 826, 1745	\leavevmode .....	106, 107, 120, 129,
\ifdim ..... 1060, 1071	.. 1057, 1068, 1478	130, 131, 132, 138,
\iffalse .... 1150, 1165	\let ... 122, 123, 126,	139, 140, 141, 142,
\IfFileExists .... 1420	127, 162, 183, 223,	143, 165, 172, 173,
\ifin@ ..... 1425	224, 225, 237,	181, 189, 200, 209,
\ifNAT@super .. 215, 1544	292, 333, 596,	222, 236, 248,
\ifnmv@cite . 1467, 1469	611, 612, 664,	252, 253, 259,
\ifnum ..... 166,	675, 879, 880,	365, 386, 399,
366, 407, 424,	896, 960, 963,	412, 422, 434,
430, 435, 475,	1041, 1047, 1049,	465, 474, 493,
497, 514, 520,	1051, 1053, 1055,	506, 519, 528,
529, 538, 599,	1066, 1090, 1094,	537, 546, 549,
678, 697, 702,	1098, 1099, 1100,	551, 554, 556,
703, 709, 710,		563, 570, 587,
723, 726, 745,		588, 589, 590,
		591, 592, 593,

594, 595, 647,	\newwrite . . . . .	247	biblabel . . . . .	8
648, 653, 657,	\nmv@activate <u>1528</u> , <u>1545</u>		biochem . . . . .	8
671, 676, 682,	\nmv@after . . . . .		biochemistry . . . . .	8
683, 701, 708,	.. <u>1475</u> , <u>1482</u> , <u>1487</u>		chaptertitle . . . . .	7
715, 720, 732,	\nmv@cite <u>225</u> , <u>229</u> , <u>237</u> ,		doi . . . . .	7
744, 764, 769,	<u>240</u> , <u>1532</u> , <u>1536</u> , <u>1539</u>		email . . . . .	3
781, 786, 797,	\nmv@citefalse <u>1483</u> , <u>1538</u>		etalmode . . . . .	7
802, 810, 813,	\nmv@citetrue . <u>228</u> , <u>1535</u>		journal . . . . .	3
818, 824, 825,	\nmv@citex <u>224</u> , <u>1468</u> , <u>1531</u>		layout . . . . .	3
839, 846, 856,	\nmv@citex@end <u>1486</u> , <u>1494</u>		manuscript . . . . .	3
877, 878, 898,	\nmv@citex@get@next		maxauthors . . . . .	7
909, 918, 926,	. . . . . <u>1484</u> ,		super . . . . .	7
927, 941, 957,	<u>1490</u> , <u>1505</u> , <u>1511</u>	\or	826, 827, 828, 829,	
977, 1008, 1012,	\nmv@citex@loop . . .		830, 831, 832,	
1022, 1025, 1034,	. . . . . <u>1493</u> , <u>1511</u>		833, 834, 835,	
1035, 1036, 1046,	\nmv@citex@moving .		1745, 1746, 1747,	
1048, 1050, 1052,	. . . . . <u>1470</u> , <u>1476</u>		1748, 1749, 1750,	
1054, 1056, 1067,	\nmv@citex@nat . . . .		1751, 1752, 1753,	
1077, 1084, 1089,	<u>223</u> , <u>1472</u> , <u>1482</u> , <u>1528</u>		1754, 1755, 1756	
1093, 1097, 1103,	\nmv@citex@next <u>1490</u> ,			
1124, 1130, 1131,	<u>1495</u> , <u>1504</u> , <u>1509</u>		P	
1133, 1165, 1166,	\nmv@citex@punct . .	\P . . . . .	829, 1751	
1171, 1178, 1179,	. . . . . <u>1491</u> , <u>1493</u>	\p@ . . . . .	1344, 1345,	
1180, 1197, 1212,	\nmv@citex@punct@aux		1346, 1348, 1349,	
1218, 1221, 1238,	. . . . . <u>1500</u> , <u>1508</u>		1358, 1359, 1360	
1254, 1271, 1277,	\nmv@citex@punct@undouble	\PackageInfo	11, 17, 1548	
1278, 1281, 1282,	. . . . . <u>1493</u>	\PackageWarning	. . . . . 22	
1283, 1298, 1301,	\nmv@citex@sfac . . .	\pagestyle	. . . 598, 2091	
1305, 1307, 1335,	. . . . . <u>1496</u> , <u>1517</u>	\par . . . . .	560, 567, 573,	
1336, 1337, 1351,	\nmv@ifmtarg . . . . .		617, 625, 632,	
1433, 1440, 1458,	<u>227</u> , <u>239</u> , <u>1458</u> , <u>1534</u>		853, 863, 873,	
1459, 1468, 1475,	\nmv@natbib@detect		972, 1015, 1019,	
1476, 1486, 1490,	. . . . . <u>213</u> , <u>1542</u>		1058, 1069, 1306,	
1493, 1503, 1507,	\nmv@xifmtarg . . . . . <u>1458</u>		1324, 1739, 1794	
1508, 1528, 1529,	\nobreak . . . . . <u>2126</u>	\parallel . . . . .	1749	
1542, 1555, 1677,	\nocite . . . . . <u>167</u> , <u>231</u> , <u>242</u>	\parindent . . . . .	1320	
2045, 2051, 2113	\noexpand . . . . . <u>1186</u> , <u>1193</u> , <u>1423</u>	\perp . . . . .	1750	
\newcount . . . . . 337,	\noindent . . . . . <u>2029</u> , <u>2126</u>	\phone . . . . .	5, <u>528</u>	
338, 339, 340, 341	\normalfont . . . . . <u>2125</u>	\plainref . . . . .	<u>1046</u> , <u>1430</u>	
\newcounter . . . . . 148	\normalsize . . . . .	\printbibnotes . . . . .	<u>143</u>	
\newenvironment . . .	. . . . . <u>587</u> , <u>589</u> , <u>1239</u> ,	\ProcessOptionsX . . .	<u>137</u>	
.. 1118, 1121, 1276	<u>1335</u> , <u>1336</u> , <u>1339</u> ,	\protected@edef . . .		
\newfloat 1028, 1030, 1032	<u>1340</u> , <u>1342</u> , <u>1352</u> ,	. . . . . <u>721</u> , <u>749</u> , <u>757</u> ,		
\newif . . . . . 41,	<u>1353</u> , <u>1355</u> , <u>1356</u>	<u>774</u> , <u>791</u> , <u>966</u> , <u>1003</u>		
42, 43, 44, 45, 46,	\null . . . . . 603	\providecommand	298, 1422	
47, 48, 49, 96, 1467	\number . . . . . 799	\ProvidesClass . . . . .	2	
\newlength . . . . . 575,		\ProvidesFile . . . . .	1558,	
577, 579, 581,			1565, 1571, 1577,	
583, 585, 1272, 1273			1583, 1589, 1596,	
\newpage . . . . . 602, 1226,			1603, 1614, 1625,	
1233, 1244, 1250,			1632, 1638, 1644,	
1742, 1954, 1966,			1651, 1659, 1667,	
1978, 1991, 2000			1681, 1686, 1695,	
\newtoks . . . . . 1176, 1177			1702, 1712, 1724,	
	O			
	\onecolumn . . . . . 1224, 1242			
	\openout . . . . . 260			
	options:			
	articletitle . . . . . 7			

1730, 1770, 1779,	979, 981, 982,	\SectionsOff . . . . . 6,
1786, 1803, 1811,	1058, 1069, 1137,	1097, 1300, 1372,
1821, 1834, 1840,	1138, 1139, 1147,	1641, 1648, 1654,
1846, 1853, 1859,	1310, 1311, 1324,	1817, 1828, 1864,
1869, 1876, 1884,	1344, 1345, 1346,	1924, 1937, 2023
1891, 1897, 1903,	1347, 1348, 1349,	\SectionsOn . . . . .
1911, 1933, 1945,	1358, 1359, 1360,	. 6, 1097, 1375, 1783
1957, 1969, 1981,	1361, 1461, 1479,	\setcitestyle 1412, 1415
2006, 2013, 2134,	1484, 1495, 1504,	\setkeys . . . 109, 133,
2140, 2146, 2153,	1517, 1520, 2101	302, 1298, 1379,
2161, 2171, 2177	\renewcommand . . . . .	1560, 1568, 1574,
\ProvidesPackage 8, 1455	. . 226, 238, 329,	1580, 1585, 1591,
\ps@acs . . . . . 595, 2075	1381, 1382, 1383,	1599, 1605, 1617,
\ps@jacs . . . . . 2063	1386, 1387, 1413,	1628, 1635, 1647,
\ps@plain . . . . 596, 2063	1416, 1533, 1913,	1669, 1689, 1698,
	1914, 1915, 1917,	1704, 1714, 1732,
	1942, 1992, 1995	1772, 1788, 1813,
Q	\renewenvironment .	1855, 1866, 1871,
\Q . . . . . 1461	. . . . . 1321, 2025	1878, 1900, 1948,
\quad . . . . . 2105	\repeat . . . . . 864, 875	1960, 1972, 1983,
\quotation . . . . . 1918	\RequirePackage . 33,	2008, 2019, 2143,
	314, 315, 323,	2148, 2155, 2166
R	1403, 1405, 1419,	\setlength . 576, 578,
\ref . . . . . 1046	1421, 1457, 2167	580, 582, 584,
\refname . 1127, 1807,	\reset@font . . . . .	586, 1274, 1275,
1887, 1926, 2126	. . 2067, 2077, 2083	1319, 1320, 1655,
\refsize . . . . 2036, 2128	\restylefloat . . . . .	1656, 1830, 1831,
\relax 27, 162, 166, 185,	. . 1040, 1940, 2103	1907, 1908, 2002,
186, 197, 260,	\romannumeral . . . . . 815	2003, 2092, 2093,
288, 343, 365,		2094, 2095, 2096,
366, 370, 373,	S	2097, 2129, 2130
390, 400, 407,	\S . . . . . 830, 1748	\sf . . . . . 926
415, 416, 418,	scheme (environment)	\sfcode . . . . . 1521,
423, 425, 430,	. . . . . 6, 1028	1522, 1523, 1525
434, 435, 439,	\schemename . . . . . 1034	\sffamily 592, 594, 672,
440, 443, 468,	\section . . . 558, 565,	1259, 2028, 2062,
469, 472, 475,	571, 1049, 1098, 1104	2068, 2078, 2085
481, 496, 497,	\SectionNumbersOff 6,	\singlespacing 1260, 1308
507, 514, 520,	1089, 1593, 1600,	\skip@ . . . . . 1479
529, 538, 599,	1611, 1629, 1662,	\space . 203, 263, 268,
677, 678, 684,	1678, 1691, 1699,	271, 274, 275,
697, 702, 703,	1708, 1727, 1737,	278, 355, 361,
709, 710, 723,	1776, 1782, 1800,	687, 704, 967, 1443
726, 745, 747,	1814, 1826, 1837,	\spacefactor . . . . . 1496
748, 754, 755,	1843, 1849, 1856,	\stepcounter . . . 153, 158
756, 772, 773,	1861, 1873, 1879,	\string . . . . 202, 203,
788, 789, 790,	1881, 1888, 1894,	204, 266, 282,
881, 882, 883,	1906, 1916, 1952,	285, 355, 361, 1443
886, 887, 888,	1964, 1976, 1989,	\subsection . . . . .
890, 893, 899,	2010, 2015, 2137,	. . 1051, 1099, 1105
900, 901, 905,	2142, 2150, 2158,	\subsection . . . . .
910, 914, 919,	2165, 2174, 2179	. . 1053, 1100, 1106
920, 921, 930,	\SectionNumbersOn .	super (option) . . . . . 7
931, 933, 942,	. . . . . 6, 1089, 1376	
943, 945, 946,		

suppinfo (environ- ment) <a href="#">6</a> , <a href="#">1118</a> , <a href="#">1307</a>	\thescheme ..... <a href="#">1382</a>	\vspace ..... <a href="#">604</a> , <a href="#">619</a> , <a href="#">627</a> , <a href="#">634</a> ,
\suppinfofname ..... .. <a href="#">1122</a> , <a href="#">1124</a> , <a href="#">1915</a>	\thetable ..... <a href="#">1383</a>	<a href="#">642</a> , <a href="#">1326</a> , <a href="#">2027</a> , <a href="#">2032</a> , <a href="#">2034</a> , <a href="#">2126</a>
\suppsize ... <a href="#">1335</a> , <a href="#">2036</a>	\titlefont .... <a href="#">591</a> , <a href="#">609</a>	
	\titlesize <a href="#">587</a> , <a href="#">610</a> , <a href="#">2036</a>	
	tocentry (environ- ment) .... <a href="#">6</a> , <a href="#">1276</a>	<b>W</b>
<b>T</b>	\tocentryname <a href="#">1257</a> , <a href="#">1277</a>	\write . <a href="#">201</a> , <a href="#">261</a> , <a href="#">265</a> , <a href="#">284</a>
\table ..... <a href="#">2113</a>	\tocsize .... <a href="#">1258</a> , <a href="#">1278</a>	<b>X</b>
\tableofcontents . <a href="#">1109</a>	\today ..... <a href="#">2099</a>	\xdef <a href="#">347</a> , <a href="#">426</a> , <a href="#">452</a> , <a href="#">455</a> , <a href="#">478</a> , <a href="#">484</a> , <a href="#">662</a> , <a href="#">1111</a>
\textbf ..... <a href="#">1327</a> , <a href="#">1919</a> , <a href="#">2030</a> , <a href="#">2069</a> , <a href="#">2079</a> , <a href="#">2086</a>	\toks@ <a href="#">661</a> , <a href="#">665</a> , <a href="#">1110</a> , <a href="#">1114</a>	
\textit ..... <a href="#">1406</a> , <a href="#">1416</a>	\tolerance ..... <a href="#">1310</a>	<b>Z</b>
\textsuperscript .. <a href="#">695</a>	\triangle .... <a href="#">835</a> , <a href="#">1756</a>	\z@ ..... <a href="#">166</a> , <a href="#">366</a> , <a href="#">390</a> , <a href="#">415</a> , <a href="#">416</a> , <a href="#">435</a> , <a href="#">468</a> , <a href="#">469</a> , <a href="#">475</a> , <a href="#">496</a> , <a href="#">497</a> , <a href="#">520</a> , <a href="#">529</a> , <a href="#">538</a> , <a href="#">599</a> , <a href="#">677</a> , <a href="#">678</a> , <a href="#">722</a> , <a href="#">726</a> , <a href="#">754</a> , <a href="#">840</a> , <a href="#">849</a> , <a href="#">850</a> , <a href="#">857</a> , <a href="#">865</a> , <a href="#">881</a> , <a href="#">882</a> , <a href="#">886</a> , <a href="#">893</a> , <a href="#">930</a> , <a href="#">931</a> , <a href="#">933</a> , <a href="#">979</a> , <a href="#">1060</a> , <a href="#">1071</a> , <a href="#">1345</a> , <a href="#">1359</a> , <a href="#">2124</a>
\textwidth ..... <a href="#">586</a>	\tw@ ..... <a href="#">709</a>	
\thanks ..... <a href="#">5</a> , <a href="#">353</a>	\twocolumn ..... .. <a href="#">1231</a> , <a href="#">1248</a> , <a href="#">1309</a>	
\the ..... <a href="#">150</a> , <a href="#">166</a> , <a href="#">349</a> , <a href="#">427</a> , <a href="#">453</a> , <a href="#">458</a> , <a href="#">472</a> , <a href="#">479</a> , <a href="#">485</a> , <a href="#">665</a> , <a href="#">1114</a> , <a href="#">1182</a> , <a href="#">1185</a> , <a href="#">1219</a>	<b>U</b>	
\thebibnote ..... <a href="#">143</a>	\unskip ..... <a href="#">1480</a>	
\thefigure ..... <a href="#">1381</a>	\url ..... <a href="#">949</a>	
\thepage ..... <a href="#">1370</a> , <a href="#">2069</a> , <a href="#">2079</a> , <a href="#">2086</a>	\UrlFont ..... <a href="#">929</a>	
	<b>V</b>	
	\value ..... <a href="#">150</a> , <a href="#">166</a>	
	\vbox ..... <a href="#">1265</a>	