achemso — Support for submissions to American Chemical Society journals[*]

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Abstract

The achemso bundle provides a LATEX class file and BIBTEX style file in accordance with the requirements of the American Chemical Society. 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.

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[*]This file describes version v3.0a, last revised 2008/08/22.
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1 Introduction

Support for BibTeX bibliography following the requirements of the American Chemical Society (acs), along with a package to make these easy to have been 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 LaTeX 2ε 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 LaTeX package, which is loaded by the class. The package contains the parts of the bundle which might be appropriate for use with other document classes.[1] Thirdly, two 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 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.

2.1 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 key=value. The most important option is journal. This is the name of the target journal for the publication. The package is designed such that the choice of journal will set

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[1]For example, when writing a thesis.

up the correct bibliography style and so on. The journals currently recognised by the package are summarised in Table Table 1. If an unknown journal is specified, the package will fall-back on the `journal=jacsat` option.

manuscript   The second option is the `manuscript` option. This specifies the type of paper in the manuscript. The values here are `article`, `note`, `communication`, `review`, `letter` and `perspective`. The valid values will depend on the value of `journal`. The `manuscript` option determines whether sections and an abstract are valid. The value `suppinfo` is also available for supporting information.

Other options are provided by the package, but when used with the class these are silently ignored.

2.2   Manuscript meta-data

\title   When using the achemso class, the `\title` macro takes an optional argument. This is intended for a short version of the title, for use in running headers. The title in the running headers is designed to ensure that print-outs of the manuscript are easily identified.

\author
\affiliation
\altaffiliation
\email

Inspired by REVTeX4, 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.[2] 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.

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

\and
\thanks

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

The meta-data items should be given in the preamble to the LaTeX 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.

2.3   Bibliography notes

\bibnote   By loading the notes2bib package, the class 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 BibTeX.

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[2]This will usually be the university or company name.

3

Table 1: Values for `journal` option

Journal	Setting
Acc. Chem. Res.	achre4
ACS Chem. Biol.	acbcct
ACS Nano	ancac3
Anal. Chem.	ancham
Biochemistry	bichaw
Bioconjugate Chem.	bcches
Biomacromolecules	bomaf6
Biotechnol. Prog.	bipret
Chem. Res. Toxicol.	crtoec
Chem. Rev.	chreay
Chem. Mater.	cmatex
Cryst. Growth Des.	cgdefu
Energy Fuels	enfuem
Environ. Sci. Technol.	esthag
Ind. Eng. Chem. Res.	iecred
Inorg. Chem.	inoraj
J. Agric. Food Chem.	jafcau
J. Chem. Eng. Data	jceaax
J. Chem. Inf. Model.	jcisd8
J. Chem. Theory Comput.	jctcce
J. Comb. Chem.	jcchff
J. Med. Chem.	jmcmar
J. Nat. Prod.	jnprdf
J. Org. Chem.	joceah
J. Phys. Chem. A	jpcafh
J. Phys. Chem. B	jpcbfk
J. Phys. Chem. C	jpccck
J. Proteome Res.	jprobs
J. Am. Chem. Soc.	jacsat
Langmuir	langd5
Macromolecules	mamobx
Mol. Pharm.	mpohbp
Nano Lett.	nalefd
Org. Lett.	orlef7
Org. Proc. Res. Dev.	oprdfk
Organometallics	orgnd7

Some text.[1]

```
Some text \bibnote{This note text will be in
    the bibliography}.
```

2.4 Floats

scheme
chart
graph

The class defines three new floating environments: `scheme`, `chart` and `graph`.[3] These can be used as expected to include graphical content. The placement of these new floats and the standard `table` and `figure` floats is altered to be "here" if possible. The contents of all floats is automatically horizontally centred on the page.

Cross-referencing to floats automatically includes the name of the floating environment. For example, `\ref{table:one}` will yield "Table 1" without the user adding the "Table" part.

3 The package file

The package file is loaded by the class, but can also be loaded independently. The class contains only items focussed on submission; more generally-useful items are stored in the package.

3.1 Altering the behaviour of natbib

achemso comes with the natmove package, which adds cite-like functionality to natbib.[4] Thus citations may be made using all of the natbib commands (`\citeauthor`, `\citeyear`, *etc*.). For superscript citations, the number will be moved after punctuation as needed. The user should therefore write citations suitable for "in line" use and leave the positioning to the package.

Some text[2] some more text.
Some text ending a sentence.[2]

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

3.2 Package options

The `journal` and `manuscript` options have no effect when using the package without the class. Instead, the user can control various aspects of the behaviour of the package directly.[5] The options all relate to aspects of reference handling.

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).

maxauthors
usetitle

The `maxauthors` and `usetitle` options change the output of the BibTeX style files. `maxauthors` is the number of authors allowed before truncation to "et al." occurs. The default is 15, but can be increased (for example for supplementary information). Using the value 0 means that all authors will be added to the list. The `usetitle` option is a Boolean, and sets whether the title of a paper referenced appears in the bibliography. The default is `usetitle=false`.

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[3] This is done in the class as life is complex for packages due to differing mechanisms in memoir and koma-script.

[4] The code is a copy from cite with minor modifications.

[5] Using the package alone probably means a report or thesis is being written, and so prescriptive application of journal style is not appropriate.

Redefining the formatting of the numbers used in the bibliography usually requires modifying internal 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).

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. For this style, the `usetitle=true` option is the default.[6]

4   The 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 and micteplus packages must be loaded by the LaTeX file concerned, if the achemso package is not in use.

The BibTeX style files implement the bibliographic style specified by the ACS in *The ACS Style Guide*.[2] By default, article titles are not included in output using the `achemso.bst` file, but are with the `biochem.bst` file.

5   The class file

5.1   Setup code

The first task of the class is the usual identification.

```
1 \NeedsTeXFormat{LaTeX2e}
2 \LoadClass[12pt]{article}
3 \RequirePackage[etex=false]{notes2bib}[2008/06/21]
4 \RequirePackage{achemso}
5 \ProvidesClass{achemso}
6   [\acs@ver Submissions to ACS journals]
```

The necessary support is loaded.

```
7 \RequirePackage[T1]{fontenc}
8 \RequirePackage[scaled=0.90]{helvet}
9 \RequirePackage[margin=2.54cm]{geometry}
10 \RequirePackage{mathptmx,courier,setspace,graphicx,truncate,%
11   float,varioref}
12 \AtBeginDocument{\doublespacing}
```

5.2   Meta-data changes

For the meta-data, the REVTeX4 bundle provides a good model for the commands to give the author. First of all, the `\title` macro is given an optional argument.

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[6]More accurately, the default built into the BibTeX style file is to use article titles with the *Biochemistry* style.

`\gdef` is used here to avoid any odd grouping issues. The various title macros are all "trapped" in the preamble. As the argument of `\title` is needed in the document body, `\acs@title` is defined to store it without deletion.

```
13 \renewcommand*{\title}[2][]{%
14   \gdef\@title{#2}%
15   \gdef\acs@title{#2}%
16   \gdef\@shorttitle{#1}}
17 \@onlypreamble\title
```

`\acs@authorcnt`
`\acs@affilcnt`
`\acs@altaffilcnt`

Still following REVTEX4, the `\author` macro is redefined. In this way, each author is given as a separate `\author` argument.

```
18 \newcount\acs@authorcnt
19 \newcount\acs@affilcnt
20 \newcount\acs@altaffilcnt
```

`\author`

The affiliation count starts at two so that `\@fnsymbol` does not give a star.

```
21 \acs@affilcnt\@ne\relax
22 \acs@altaffilcnt\@ne\relax
23 \renewcommand*{\author}[1]{%
24   \global\advance\acs@authorcnt\@ne\relax
25   \expandafter\gdef
26     \csname @author@\@roman\the\acs@authorcnt\endcsname{#1}%
```

The affiliation counter needs to be one higher than the current value. This is best achieved using a group.

```
27   \begingroup
28     \advance\acs@affilcnt\@ne\relax
29     \expandafter\xdef
30       \csname @author@affil@\@roman\the\acs@authorcnt\endcsname
31         {\the\acs@affilcnt}%
32   \endgroup}
33 \@onlypreamble\author
```

`\and`
`\thanks`

Neither `\and` nor `\thanks` are used by the document class.

```
34 \renewcommand*{\and}{%
35   \ClassError{achemso}{\string\and\space not supported}
36     {The achemso class does not use \string\and\MessageBreak
37      see the documentation for details}}
38 \renewcommand*{\thanks}[1]{%
39   \ClassError{achemso}{\string\thanks\space not supported}
40     {The achemso class does not use \string\thanks\MessageBreak
41      see the documentation for details}}
```

`\affiliation`

Affiliations work in a similar manner, with a check to ensure that an author has been given. The `\affiliation` macro also saves the current affiliation for the check on the next run.

```
42 \newcommand*{\affiliation}[2][\relax]{%
43   \ifnum\acs@authorcnt>\z@\relax
44     \global\advance\acs@affilcnt\@ne
```

A group is used here so that the address only gets locally defined; a global definition occurs if the address is not a duplicate.

```
45     \begingroup
46       \expandafter\def
47         \csname @address@\@roman\acs@affilcnt\endcsname{#2}%
```

There is the possibility that the affiliation has been given already. So a check is made. If it has, then the new affiliation is thrown away.

```
48        \acs@tempcnta\acs@affilcnt\relax
49        \acs@ifdupaffil
50          {\begingroup
51             \acs@tempcntb\@ne\relax
52             \acs@switchfalse
53             \edef\acs@tempa{%
54               \csname @address@\@roman\acs@tempcnta\endcsname}%
55             \acs@ifdup@affil
```

The affiliation number needed is now in `\acs@tempcntb`. Each author needs to be checked to swap the affiliation marker as needed.

```
56             \acs@tempcnta\z@\relax
57             \edef\acs@tempa{\the\acs@affilcnt}%
58             \global\advance\acs@affilcnt\m@ne\relax
59             \acs@swapaffil
60           \endgroup}
61          {\expandafter\gdef
62             \csname @address@\@roman\acs@affilcnt\endcsname{#2}%
63           \ifx\relax#1\relax
64             \expandafter\gdef
65               \csname @affil@\@roman\acs@affilcnt\endcsname{#2}%
66           \else
67             \expandafter\gdef
68               \csname @affil@\@roman\acs@affilcnt\endcsname{#1}%
69           \fi}
70      \endgroup
71    \else
72      \ClassWarning{achemso}
73        {Affiliation with no author}%
74    \fi}
75 \@onlypreamble\affiliation
```

`\acs@swapaffil`   The authors are looped through to swap the incorrect affiliation marker.

```
76 \newcommand*{\acs@swapaffil}{%
77   \advance\acs@tempcnta\@ne\relax
78   \ifnum\acs@tempcnta>\acs@authorcnt\relax\else
79     \edef\acs@tempb{%
80       \csname @author@affil@\@roman\acs@tempcnta\endcsname}%
81     \ifx\acs@tempa\acs@tempb
82       \expandafter\xdef
83         \csname @author@affil@\@roman\acs@tempcnta\endcsname{%
84           \the\acs@tempcntb}%
85     \fi
86     \acs@swapaffil
87   \fi}
```

`\altaffiliation`   For the alternative affiliation, a second count is kept, and the affiliation is "attached" to the author.

```
88 \newcommand*{\altaffiliation}[1]{%
89   \ifnum\acs@authorcnt>\z@\relax
90     \global\advance\acs@altaffilcnt\@ne\relax
91     \expandafter\gdef
```

8

```
92         \csname @altaffil@\@roman\acs@authorcnt\endcsname{#1}%
93       \expandafter\xdef
94         \csname @author@altaffil@\@roman\acs@authorcnt\endcsname
95           {\the\acs@altaffilcnt}
96     \else
97       \ClassWarning{achemso}
98         {Affiliation with no author}%
99     \fi}
100 \@onlypreamble\altaffiliation
```

E-mail addresses are attached to authors as well.

```
101 \newcommand*{\email}[1]{%
102   \ifnum\acs@authorcnt>\z@\relax
103     \expandafter\gdef
104       \csname @email@\@roman\acs@authorcnt\endcsname{#1}%
105   \else
106     \ClassWarning{achemso}
107       {E-mail with no author}%
108   \fi}
109 \@onlypreamble\email
```

\@maketitle With the changes outlined above in place, a new \@maketitle macro is needed. This is partially a copy of the existing, but rather heavily modified.

```
110 \renewcommand*{\@maketitle}{%
111   \ifnum\acs@authorcnt<\z@\relax
112     \ClassError{achemso}{No authors defined}
113       {At least one author is required}%
114   \else
115     \newpage
116     \null
117     \vskip 2em%
118     \begin{center}%
119       {\LARGE\bfseries\sffamily
120        \renewcommand*{\acs@tempa}{suppinfo}%
121        \ifx\acs@manuscript\acs@tempa
122          Supporting information for:
123        \fi
124        \@title \par}%
125       \vskip 1.5em\relax
126       {\large\sffamily\frenchspacing \acs@authorlist}%
127       \vskip 1em%
128       {\itshape\acs@addresslist}%
129       \ifnum\acs@affilcnt>\tw@\relax
130         \acs@affilfoot
131       \else
132         \ifnum\acs@altaffilcnt>\@ne\relax
133           \acs@affilfoot
134         \fi
135       \fi
136       \vskip 1em\relax
137       {\sffamily E-mail: \acs@emaillist}%
138     \end{center}
139     \par
140     \vskip 1.5em\relax
```

```
141    \fi}
```

`\acs@authorlist`
`\acs@author@list` Two similar macros to enumerate the authors and their affiliations. The total number of affiliations (main and alternative) tracked using `\acs@tempcntc`.

```
142 \newcommand*{\acs@authorlist}{%
143    \acs@tempcnta\z@\relax
144    \acs@tempcntc\z@\relax
145    \acs@author@list}
146 \newcommand*{\acs@author@list}{%
147    \advance\acs@tempcnta\@ne\relax
148    \ifnum\acs@tempcnta>\acs@authorcnt\relax\else
149      \ifnum\acs@tempcnta=\acs@authorcnt\relax
150        \ifnum\acs@tempcnta=\@ne\relax\else
151          and
152        \fi
153      \fi
154      \csname @author@\@roman\acs@tempcnta\endcsname
155      \ifnum\acs@tempcnta=\acs@authorcnt\relax\else
156        ,%
157      \fi
```

The check for a star uses the e-mail address. The literal star is avoided as this gives an easier method to swap the symbol if needed.[7]

```
158      \begingroup
159        \@ifundefined{@email@\@roman\acs@tempcnta}
160          {\aftergroup\@firstoftwo}
161          {\aftergroup\@secondoftwo}%
162      \endgroup
163        {\def\acs@tempb{}}
164        {\protected@edef\acs@tempb{%
165          \acs@fnsymbol{\@ne}%
166          \ifnum\acs@affilcnt>\tw@\relax
167            ,%
168          \else
169            \ifnum\acs@altaffilcnt>\@ne\relax
170            ,%
171            \fi
172          \fi}}%
173      \ifnum\acs@affilcnt>\tw@\relax
174        \protected@edef\acs@tempb{\acs@tempb\@fnsymbol{%
175          \csname @author@affil@\@roman\acs@tempcnta
176            \endcsname}}%
177      \else
178        \ifnum\acs@altaffilcnt>\@ne\relax
179          \protected@edef\acs@tempb{\acs@tempb\@fnsymbol{%
180            \csname @author@affil@\@roman\acs@tempcnta
181              \endcsname}}%
182        \fi
183      \fi
184      \begingroup
185        \@ifundefined{@author@altaffil@\@roman\acs@tempcnta}
186          {\aftergroup\@gobble}
187          {\aftergroup\@firstofone}%
```

---

[7]For example, *J. Am. Chem. Soc.* uses a sans serif font, whereas *Organometallics* is serif.

```
188    \endgroup
189      {\global\advance\acs@tempcntc\@ne\relax
190       \advance\acs@tempcntc\acs@affilcnt
191       \ifnum\acs@affilcnt>\@ne\relax
192          \protected@edef\acs@tempb{\acs@tempb,}%
193       \fi
194       \protected@edef\acs@tempb{%
195          \acs@tempb\@fnsymbol{\acs@tempcntc}}}%
```

This line deliberately has no % at the end.

```
196      \textsuperscript{\acs@tempb}
197      \acs@author@list
198   \fi}
```

\acs@fnsymbol   The ACS have an extended list of symbols. The star at position one is left alone
                in case it is useful somewhere.

```
199 \newcommand*{\acs@fnsymbol}[1]{%
200   \ensuremath{\ifcase#1\or *\or \dagger\or \ddagger\or
201   \mathsection\or \|\or \bot\or \#\or @\else
202   \ClassError{achemso}{Too many affiliations}
203     {There are no symbols left: complain to the package
204       author}\fi}}
```

\acs@addresslist   A similar recursive approach is used for the addresses. Note that the loop starts
\acs@address@list   at one (due to the footnote symbol issue).

```
205 \newcommand*{\acs@addresslist}{%
206   \ifnum\acs@affilcnt>\@ne\relax
207     \acs@tempcnta\@ne\relax
208     \acs@address@list
209   \else
210     \ClassError{achemso}{No affiliations}
211       {At least one affiliation is needed}%
212   \fi}
213 \newcommand*{\acs@address@list}{%
214   \advance\acs@tempcnta\@ne\relax
215   \ifnum\acs@tempcnta>\acs@affilcnt\relax\else
216     \acs@ifdupaffil
217       {}
218       {\ifnum\acs@tempcnta=\acs@affilcnt\relax
219          \ifnum\acs@affilcnt>\tw@\relax
220            and
221          \fi
222        \fi
223        \csname @address@\@roman\acs@tempcnta\endcsname
224        \ifnum\acs@tempcnta=\acs@affilcnt\relax\else
225          ,
226        \fi}%
227     \acs@address@list
228   \fi}
```

\acs@ifdupaffil   There is the possibility of duplicated affiliations. These can be trapped if the two
\acs@ifdup@affil   stings are identical. This is tested here.

```
229 \newcommand*{\acs@ifdupaffil}{%
230   \begingroup
```

```
231       \acs@tempcntb\@ne\relax
232       \acs@switchfalse
233       \edef\acs@tempa{%
234         \csname @address@\@roman\acs@tempcnta\endcsname}%
235       \acs@ifdup@affil
236       \expandafter\expandafter\expandafter\endgroup
237       \ifacs@switch
238         \expandafter\@firstoftwo
239       \else
240         \expandafter\@secondoftwo
241       \fi}
242 \newcommand*{\acs@ifdup@affil}{%
243     \advance\acs@tempcntb\@ne\relax
```

Here, the loop has to stop before the two counters are equal.

```
244     \ifnum\acs@tempcntb=\acs@tempcnta\relax\else
245       \edef\acs@tempb{%
246         \csname @address@\@roman\acs@tempcntb\endcsname}%
247       \ifx\acs@tempa\acs@tempb
248         \expandafter\acs@switchtrue
249       \fi
```

If the switch is set, stop the recursion (this means that `\acs@tempcntb` is the number of the duplicate affiliation).

```
250       \ifacs@switch\else
251         \expandafter\acs@ifdup@affil
252       \fi
253   \fi}
```

`\acs@affilfoot`
`\acs@affil@foot`
`\acs@altaffil@foot`

The various affiliation markers need to be explained. `\acs@tempcntb` is used to count the total number (affiliations plus alternative affiliations), so that the signs are correct.

```
254 \newcommand*{\acs@affilfoot}{%
255   \acs@tempcnta\@ne\relax
256   \acs@tempcntb\@ne\relax
257   \acs@affil@foot
258   \acs@tempcnta\z@\relax
259   \acs@altaffil@foot}
260 \newcommand*{\acs@affil@foot}{%
261   \advance\acs@tempcnta\@ne\relax
262   \ifnum\acs@tempcnta>\acs@affilcnt\relax\else
263     \advance\acs@tempcntb\@ne\relax
264     \footnotetext[\acs@tempcntb]
265       {\csname @affil@\@roman\acs@tempcnta\endcsname}%
266     \acs@affil@foot
267   \fi}
268 \newcommand*{\acs@altaffil@foot}{%
269   \advance\acs@tempcnta\@ne\relax
270   \ifnum\acs@tempcnta>\acs@authorcnt\relax\else
271     \begingroup
272       \@ifundefined{@altaffil@\@roman\acs@tempcnta}
273         {\aftergroup\@gobble}
274         {\aftergroup\@firstofone}%
275     \endgroup
276       {\advance\acs@tempcntb\@ne\relax
```

```
277        \footnotetext[\acs@tempcntb]
278           {\csname @altaffil@\@roman\acs@tempcnta\endcsname}}%
279      \acs@altaffil@foot
280    \fi}
```

\acs@emaillist
\acs@email@list

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

```
281 \newcommand*{\acs@emaillist}{%
282    \begingroup
283      \renewcommand*{\UrlFont}{\sf}%
284      \acs@tempcnta\z@\relax
285      \acs@tempcntb\z@\relax
286      \acs@email@list
287      \expandafter\endgroup\expandafter\acs@tempcntb\number
288        \acs@tempcntb\relax
289    \ifnum\acs@tempcntb=\z@\relax
290      \ClassError{achemso}{No e-mail given}
291        {At lest one author must have a contact e-mail}%
292    \fi}
293 \newcommand*{\acs@email@list}{%
294    \advance\acs@tempcnta\@ne\relax
295    \ifnum\acs@tempcnta>\acs@authorcnt\relax\else
296      \begingroup
297        \@ifundefined{@email@\@roman\acs@tempcnta}
298          {\aftergroup\@gobble}
299          {\aftergroup\@firstofone}%
300      \endgroup
301        {\advance\acs@tempcntb\@ne\relax
302        \ifnum\acs@tempcntb>\@ne\relax
```

The lack of a percent sign here is deliberate.

```
303            ;
304          \fi
305        \expandafter\expandafter\expandafter\url\expandafter
306          \expandafter\expandafter{%
307            \csname @email@\@roman\acs@tempcnta\endcsname}}%
308      \acs@email@list
309    \fi}
```

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

```
310 \g@addto@macro{\document}{\maketitle}
```

5.3 Floats

scheme
chart
graph

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

```
311 \newfloat{scheme}{htbp}{los}
312 \floatname{scheme}{Scheme}
313 \newfloat{chart}{htbp}{loc}
314 \floatname{chart}{Chart}
```

```
315 \newfloat{graph}{htbp}{loh}
316 \floatname{chart}{Graph}
```

`\schemename`
`\chartname`
`\graphname`

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

```
317 \newcommand*{\schemename}{Scheme}
318 \newcommand*{\chartname}{Chart}
319 \newcommand*{\graphname}{Graph}
```

The standard floats should appear "here" by default.

```
320 \floatplacement{table}{htbp}
321 \floatplacement{figure}{htbp}
322 \floatstyle{plaintop}
323 \restylefloat{table}
```

`\acs@floatboxreset`

Floats are all centred.

```
324 \let\acs@floatboxreset\@floatboxreset
325 \renewcommand*{\@floatboxreset}{\centering\acs@floatboxreset}
```

varioref is used to control the appearance of cross-references.

```
326 \labelformat{scheme}{\schemename~#1}
327 \labelformat{chart}{\chartname~#1}
328 \labelformat{graph}{\graphname~#1}
329 \labelformat{figure}{\figurename~#1}
330 \labelformat{table}{\tablename~#1}
```

5.4   Page headers

`\ps@achemso`
`\@oddfoot`
`\@oddhead`

For reviewers, page headers indicating which manuscript the page belongs to would be useful. Rather than load fancyhdr, a low-level patch is made to the appropriate command. This is rather simply-minded but gives the desired output.

```
331 \newcommand*{\ps@achemso}{%
332   \renewcommand*{\@oddfoot}{\reset@font\hfil\thepage\hfil}%
333   \let\@evenfoot\@oddfoot
334   \renewcommand*{\@oddhead}{%
335     \reset@font
336     \@author@i
337     \ifnum\acs@authorcnt>\@ne\relax
338       \space et al.%
339     \fi
340     \hfil\relax
```

If the short title is empty, then the main title is used with some trimming. A check is made first, as the `\truncate` macro will left-align if the text is not actually too long.

```
341     \ifx\@empty\@shorttitle\@empty
342       \setbox\z@\hbox{\acs@title}%
343       \ifdim\wd\z@>0.45\textwidth\relax
344         \truncate{0.45\textwidth}{\acs@title}%
345       \else
346         \acs@title
347       \fi
348     \else
349       \@shorttitle
```

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```
350    \fi}%
351  \let\@evenhead\@oddhead}
352 \pagestyle{achemso}
```

5.5   Section headings

\acs@startsection
\@startsection
\acs@restsecnums

The applicable section headings depend on the journal and document type. First, numbering of sections is killed off by default.

```
353 \let\acs@startsection\@startsection
354 \renewcommand*{\@startsection}[6]{%
355   \if@noskipsec \leavevmode \fi
356   \par
357   \@tempskipa #4\relax
358   \@afterindenttrue
359   \ifdim\@tempskipa<\z@\relax
360     \@tempskipa -\@tempskipa \@afterindentfalse
361   \fi
362   \if@nobreak
363     \everypar{}%
364   \else
365     \addpenalty\@secpenalty\addvspace\@tempskipa
366   \fi
```

The change is here: a star makes no difference. \@ifstar means that any star is nicely got rid of.

```
367   \@ifstar
368     {\@ssect{#3}{#4}{#5}{#6}}
369     {\@ssect{#3}{#4}{#5}{#6}}}
370 \newcommand*{\acs@restsecnums}{%
371   \let\@startsection\acs@startsection}
```

\acs@section
\acs@subsection

The original section and subsection macros are saved.

```
372 \let\acs@subsection\subsection
373 \let\acs@section\section
```

\acs@killsecs
\acs@gobblesection
\section
\subsection
\subsubsection

To kill sections entirely, a different approach is needed. The set to gobble up the title and if necessary the star.

```
374 \newcommand*{\acs@killsecs}{%
375   \newcommand*{\acs@gobblesection}{%
376     \ClassWarning{achemso}
377       {Sections not allowed for this manuscript type}%
378     \@ifstar{\@gobble}{\@gobble}}
379   \let\section\acs@gobblesection
380   \let\subsection\acs@gobblesection
381   \let\subsubsection\acs@gobblesection
```

\bibsection

The bibliography is altered here.

```
382   \AtBeginDocument{
383     \renewcommand*{\bibsection}{\acs@section*{\refname}}}}
```

\acknowledgement
\suppinfo

Two macros are provided that will always give

```
384 \newcommand*{\acknowledgement}{%
385   \acs@subsection*{Acknowledgement}}
```

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```
386 \newcommand*{\suppinfo}{%
387   \acs@subsection*{Supporting Information Available}}
```

5.6 Miscellaneous changes

Although achemso avoids too much formatting, the class file makes a few changes to keep life simple. The name of the bibliography should be "Notes and References" if any notes are added.

```
388 \renewcommand*{\refname}{%
389   \ifnum\the\value{bibnote}>\z@\relax
390     Notes and
391   \fi References}
```

To provide a method for dealing with URLs and e-mail addresses, the url package is loaded.

```
392 \RequirePackage{url}
```

5.7 Finalisation

\acs@manuscript The article must have a type: if nothing else has been set, then "article" is used.

```
393 \@ifundefined{acs@manuscript}
394   {\newcommand*{\acs@manuscript}{article}}{}
```

Some settings are defined by the document type. At this stage, the journal file should have ensured that the type is valid.

```
395 \edef\acs@tempa{note}
396 \ifx\acs@manuscript\acs@tempa
397   \acs@killsecs
398 \fi
399 \edef\acs@tempa{review}
400 \ifx\acs@manuscript\acs@tempa
401   \acs@restsecnums
402 \fi
403 \edef\acs@tempa{suppinfo}
404 \ifx\acs@manuscript\acs@tempa
405   \acs@restsecnums
406   \acs@setkeys{maxauthors=0}
407 \fi
408 \if@filesw
409   \acs@writebib
410 \fi
```

6 The package file

6.1 Setup code

\acs@id The package file is designed to be usable with any document class. It sets up the
\acs@ver basics, but leaves some settings to the class file.

```
411 \NeedsTeXFormat{LaTeX2e}
412 \def\acs@id$#1: #2.#3 #4 #5-#6-#7 #8 #9${%
413   \def\acs@ver{#5/#6/#7\space v3.0a\space}}
```

```
414 \acs@id$Id: achemso.dtx 32 2008-08-22 08:09:56Z joseph $
415 \ProvidesPackage{achemso}
416   [\acs@ver Support for ACS journals]
417 \@ifclassloaded{achemso}{}
418   {\PackageInfo{achemso}{When using the achemso bundle
419     for\MessageBreak submission of articles to the ACS,
420     please\MessageBreak use the achemso document class.}}
421 \RequirePackage{notes2bib,mciteplus,xkeyval}
```

\acs@tempa   Some scratch macros are defined.
\acs@tempb
\acs@tempcnta
\acs@tempcntb
\acs@tempcntc
\ifacs@switch

```
422 \newcommand*{\acs@tempa}{}
423 \newcommand*{\acs@tempb}{}
424 \newcount\acs@tempcnta
425 \newcount\acs@tempcntb
426 \newcount\acs@tempcntc
427 \newif\ifacs@switch
```

6.2 Option handling

\acs@manuscript   The various keys are defined.
\acs@journal
\acs@maxauthors
\ifacs@super
\ifacs@usetitle
\ifacs@biochemistry

```
428 \define@boolkeys[acs]{key}[acs@]{
429   abbreviate,
430   biochem,
431   biochemistry,
432   super,
433   usetitle}[true]
434 \let\acs@key@biochem\acs@key@biochemistry
435 \define@cmdkeys[acs]{key}[acs@]{
436   maxauthors,
437   journal,
438   manuscript}
439 \define@choicekey*[acs]{key}{biblabel}
440   [\acs@tempa\acs@tempb]
441   {plain,brackets,fullstop,period}
442   {\ifcase\acs@tempb\relax
443     \def\@biblabel##1{##1}\or
444     \def\@biblabel##1{(##1)}\or
445     \def\@biblabel##1{##1.}\or
446     \def\@biblabel##1{##1.}\fi}
```

\acs@setkeys   A slight shortcut for setting keys.

```
447 \newcommand*{\acs@setkeys}{\setkeys[acs]{key}}
```

Default values for some of the options are set up here, before processing.

```
448 \acs@setkeys{
449   maxauthors=15,
450   super=true,
451   biblabel=brackets}
452 \ProcessOptionsX*[acs]<key>
```

\acs@cfgextension   A few fixed values are used in several places.
\acs@prefix

```
453 \newcommand*{\acs@cfgextension}{cfg}
454 \newcommand*{\acs@prefix}{acs-}
```

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6.3 `type` validation

<div style="margin-left: 2em;">`\acs@validtype`</div>

The `type` of manuscript needs to be validated by most journal files. A shortcut is provided here. This needs to happen before support files can be loaded.

```
455 \newcommand*{\acs@validtype}[2][article]{%
456   \acs@switchfalse
457   \@ifundefined{acs@manuscript}
458     {\newcommand*{\acs@manuscript}{#1}}
459     {\@for\acs@tempa:=#2\do{%
460       \ifx\acs@tempa\acs@manuscript
461         \acs@switchtrue
462       \fi}
463     \ifacs@switch\else
464       \ClassWarning{achemso}{Invalid manuscript type:
465         \MessageBreak changing to #1}%
466       \renewcommand*{\acs@manuscript}{#1}%
467     \fi}}
```

6.4 Removal of abstract

<div style="margin-left: 2em;">`\acs@killabstract`
`\acs@startgobble`
`\acs@endgobble`
`\acs@iffalse`</div>

To disable the abstract, a modified copy of the code from versions is used. This code comes here so that the journal support files can call `\acs@killabstract` immediately.

```
468 \newcommand*{\acs@killabstract}{%
469   \let\abstract\acs@startgobble}
470 \begingroup
471   \catcode`\{=\active
472   \catcode`\}=12\relax
473   \catcode`\(=1\relax
474   \catcode`\)=2\relax
475   \gdef\acs@startgobble(%
476     \ClassWarning(achemso)
477       (Abstract not allowed for this\MessageBreak
478        manuscript type)%
479     \@bsphack
480     \catcode`\{=\active
481     \catcode`\}=12\relax
482     \let\end\fi
483     \let{\acs@endgobble%}
484     \iffalse)%{
485   \gdef\acs@endgobble#1}(%
486     \def\acs@tempa(#1)%
487     \ifx\acs@tempa\@currenvir
488       \@Esphack\endgroup
489         \if@ignore
490           \global\@ignorefalse\ignorespaces
491         \fi
492       \else
493         \expandafter\acs@iffalse
494     \fi)
495 \endgroup
496 \newcommand*{\acs@iffalse}{\iffalse}
```

6.5 Loading appropriate support

If the package is being used with the class file, then the options `journal` and `type` are used to set up the correct settings.

```
497 \@ifclassloaded{achemso}
498   {\@ifundefined{acs@journal}
499     {\ClassInfo{achemso}{No target journal specified:
500       \MessageBreak using package defaults}%
```

The `type` option only applies when a particular journal is given as an option.

```
501     \@ifundefined{acs@manuscript}{}
502       {\ClassWarning{achemso}{The 'type' option is only
503         applicable\MessageBreak when the 'journal' option is
504         also specified}}}%
505     {\InputIfFileExists{\acs@journal.\acs@cfgextension}
506       {\ClassInfo{achemso}{Loading configuration for
507         journal\MessageBreak \acs@journal}}
508       {\ClassWarning{achemso}{Unknown journal
509         '\acs@journal'}%
510        \InputIfFileExists{jacsat.\acs@cfgextension}
511          {\ClassInfo{achemso}{Loading jacs
512            configuration\MessageBreak as a fall-back}}
513          {\ClassError{achemso}{Could not load
514            jacsat.cfg}{This is a core file of\MessageBreak
515            the achemso bundle: something is wrong with
516            \MessageBreak  your installation}}}}}%
```

If the class is not loaded, then an appropriate warning is given if either option is set.

```
517   {\@ifundefined{acs@journal}{}
518     {\PackageWarning{achemso}{The 'journal' option is only
519       applicable\MessageBreak when using the achemso document
520       class}}%
521    \@ifundefined{acs@manuscript}{}
522     {\PackageWarning{achemso}{The 'type' option is only
523       applicable\MessageBreak when using the achemso document
524       class}}}
```

6.6 Patching **natbib**

As in REVTₑX, the package needs to modify natbib to move punctuation before superscript citations. First, natbib is loaded with the `sort&compress` option active.

```
525 \ifacs@super
526   \RequirePackage[sort&compress,numbers,super]{natbib}
527 \else
528   \RequirePackage[sort&compress,numbers,round]{natbib}
529 \fi
530 \RequirePackage{natmove}
```

\nmv@activate The natmove package is slightly patched to get automatic bibnotes. This is true
\nmv@natcitex for superscript and standard citations.
\nmv@cite
\cite
```
531 \renewcommand*{\nmv@activate}{%
532   \let\nmv@natcitex\@citex
```

```
533   \let\@citex\nmv@citex
534   \let\nmv@cite\cite
535   \renewcommand*{\cite}[2][]{%
536     \nmv@ifmtarg{##1}
537       {\nmv@citetrue
538        \nmv@cite{##2}}
539       {\nocite{##2}%
540        \bibnote{Ref.~\citenum{##2}, ##1}}}}
541 \renewcommand*{\nmv@notactivate}{%
542   \let\nmv@cite\cite
543   \renewcommand*{\cite}[2][]{%
544     \nmv@ifmtarg{##1}
545       {\nmv@cite{##2}}
546       {\nocite{##2}%
547        \bibnote{Ref.~\citenum{##2}, ##1}}}}
```

6.7   General citation setup

\acs@bibstyle   The achemso package sets up the correct bibliography style.

```
548 %\end{macro}
549 \ifacs@biochemistry
550   \newcommand*{\acs@bibstyle}{biochem}
551 \else
552   \newcommand*{\acs@bibstyle}{achemso}
553 \fi
554 \expandafter\bibliographystyle\expandafter{\acs@bibstyle}
```

\bibliographystyle   If chapterbib is loaded, then multiple calls to \bibliographystyle need to be
\acs@bibliographystyle   allowed. In either case, the argument is gobbled.

```
555 \let\acs@bibliographystyle\bibliographystyle
556 \AtBeginDocument{
557   \@ifpackageloaded{chapterbib}
558     {\renewcommand*{\bibliographystyle}[1]{%
559       \expandafter\acs@bibliographystyle\expandafter{%
560         \acs@bibstyle}}}}
561 \renewcommand*{\bibliographystyle}[1]{%
562   \PackageWarning{achemso}{\string\bibliographystyle\space
563     ignored}}
```

\citenumfont   For on-line citations, italic numbers are required.

```
564 \ifacs@super\else
565   \newcommand*{\citenumfont}{\textit}
566 \fi
```

6.8   Controlling BibTeX

\acs@msg   achemso use the same system as biblatex and IEEEtrans to control output. A
\acs@writebib   special database is generated, which contains the necessary control entries.
\acs@out
\acs@stream

```
567 \edef\acs@msg{%
568   This is an auxiliary file used by the 'achemso' package.^^J%
569   This file may safely be deleted. It will be recreated as
570   required.^^J}
```

20

```
571 \newcommand*{\acs@writebib}{%
572   \immediate\openout\acs@out\acs@stream\relax
573   \immediate\write\acs@out{\acs@msg}%
```

A shortcut to producing the control sequences.

```
574   \edef\acs@tempa##1##2{\space\space##1\space=\space"##2",^^J}%
575   \immediate\write\acs@out{%
576     @Control\string{achemso-control,^^J%
577     \acs@tempa{ctrl-use-title}{\ifacs@usetitle yes\else no\fi}%
578     \acs@tempa{ctrl-etal-number}{\acs@maxauthors}%
579     \string}^^J}}
```

The writing system is designed to allow the class to re-write the control file if needed.

```
580 \if@filesw
581   \newwrite\acs@out
582   \newcommand*\acs@stream{\acs@prefix\jobname.bib}
583   \acs@writebib
584   \AtBeginDocument{\immediate\closeout\acs@out}
585 \fi
```

\bibliography The \bibliography macro is now patched to use the control database.
\acs@bibliography

```
586 \AtBeginDocument{
587   \let\acs@bibliography\bibliography
588   \renewcommand*{\bibliography}[1]{%
589     \acs@bibliography{\acs@prefix\jobname,#1}}}
```

The control citation is now added to the document. This needs to be after the beginning of the document. To avoid a natbib warning, this is done directly (without \nocite).

```
590 \g@addto@macro{\document}{%
591   \if@filesw
592     \immediate\write\@auxout{%
593       \string\citation\string{achemso-control\string}}%
594   \fi}
```

7   The configuration files

The configuration files for different journals are not very complex. Keeping everything separate simply helps with maintenance. The defaults are re-applied by the files so that any user options are over-written when using the class file. Several of the files are basically copies of `jacsat.cfg`.

7.1   *J. Am. Chem. Soc.*

The *J. Am. Chem. Soc.* is the basis of all of the configuration files.

```
595 \ProvidesFile{jacsat.cfg}
596   [\acs@ver achemso configuration: J. Am. Chem. Soc.]
597 \acs@setkeys{
598   abbreviate=true,
599   biblabel=brackets,
600   biochem=false,
```

```
601  maxauthors=15,
602  super=true,
603  usetitle=false}
604 \acs@validtype{article,communication,suppinfo}
605 \renewcommand*{\acs@tempa}{communication}
606 \ifx\acs@manuscript\acs@tempa
607   \acs@killabstract
608   \acs@killsecs
609 \fi
```

7.2 *Acc. Chem. Res.*

```
610 \ProvidesFile{achre4.cfg}
611   [\acs@ver achemso configuration: Acc. Chem. Res.]
612 \acs@setkeys{
613   abbreviate=true,
614   biblabel=plain,
615   biochem=false,
616   maxauthors=15,
617   super=true,
618   usetitle=false}
619 \acs@validtype{article,suppinfo}
620 \renewcommand*{\abstractname}{Conspectus}
```

7.3 *ACS Chem. Biol.*

```
621 \ProvidesFile{acbcct.cfg}
622   [\acs@ver achemso configuration: ACS Chem. Biol.]
623 \acs@setkeys{
624   abbreviate=true,
625   biblabel=fullstop,
626   biochem=true,
627   maxauthors=15,
628   super=false,
629   usetitle=true}
630 \acs@validtype{article,letter,review,suppinfo}
```

7.4 *ACS Nano*

```
631 \ProvidesFile{acbcct.cfg}
632   [\acs@ver achemso configuration: ACS Nano]
633 \acs@setkeys{
634   abbreviate=true,
635   biblabel=fullstop,
636   biochem=false,
637   maxauthors=15,
638   super=true,
639   usetitle=true}
640 \acs@validtype{perspective,article,suppinfo}
```

7.5 *Anal. Chem.*

```
641 \ProvidesFile{ancham.cfg}
642   [\acs@ver achemso configuration: Anal. Chem.]
643 \acs@setkeys{
644   abbreviate=true,
```

```
645  biblabel=brackets,
646  biochem=false,
647  maxauthors=15,
648  super=true,
649  usetitle=false}
650 \acs@validtype{article,suppinfo,note}
```

7.6 Biochemistry

```
651 \ProvidesFile{biochem.cfg}
652  [\acs@ver achemso configuration: Biochemistry]
653 \acs@setkeys{
654  abbreviate=true,
655  biblabel=fullstop,
656  biochem=true,
657  maxauthors=15,
658  super=false,
659  usetitle=true}
660 \acs@validtype{article,communication,suppinfo}
```

7.7 Bioconjugate Chem.

```
661 \ProvidesFile{bcches.cfg}
662  [\acs@ver achemso configuration: Bioconjugate Chem.]
663 \acs@setkeys{
664  abbreviate=true,
665  biblabel=brackets,
666  biochem=true,
667  maxauthors=15,
668  super=false,
669  usetitle=true}
670 \acs@validtype{article,communication,suppinfo}
```

7.8 Biomacromolecules

```
671 \ProvidesFile{bomaf6.cfg}
672  [\acs@ver achemso configuration: Biomacromolecules]
673 \acs@setkeys{
674  abbreviate=true,
675  biblabel=brackets,
676  biochem=false,
677  maxauthors=15,
678  super=false,
679  usetitle=true}
680 \acs@validtype{article,communication,suppinfo}
```

7.9 Biotechnol. Prog.

```
681 \ProvidesFile{bipret.cfg}
682  [\acs@ver achemso configuration: Biotechnol. Prog.]
683 \acs@setkeys{
684  abbreviate=true,
685  biblabel=brackets,
686  biochem=false,
687  maxauthors=15,
688  super=false,
689  usetitle=true}
```

```
690 \acs@validtype{article,review,suppinfo}
```

7.10   *Chem. Res. Toxicol.*

```
691 \ProvidesFile{crtoec.cfg}
692   [\acs@ver achemso configuration: Chem. Res. Toxicol.]
693 \acs@setkeys{
694   abbreviate=true,
695   biblabel=brackets,
696   biochem=true,
697   maxauthors=15,
698   super=false,
699   usetitle=true}
700 \acs@validtype{perspective,article,review,profile,suppinfo}
```

7.11   *Chem. Rev.*

For *Chem. Rev.,* the usual start.

```
701 \ProvidesFile{chreay.cfg}
702   [\acs@ver achemso configuration: Chem. Rev.]
703 \acs@setkeys{
704   abbreviate=true,
705   biblabel=brackets,
706   biochem=false,
707   maxauthors=0,
708   super=true,
709   usetitle=false}
710 \acs@validtype[review]{review}
```

\bibsection   Some changes are needed as the bibliography should be numbered. This is done with the \bibsection macro, as natbib sets this up rather than \thebibliography.

```
711 \AtBeginDocument{
712   \renewcommand*{\bibsection}{\section{\refname}}}
```

7.12   *Chem. Mater.*

```
713 \ProvidesFile{cmatex.cfg}
714   [\acs@ver achemso configuration: Chem. Mater.]
715 \acs@setkeys{
716   abbreviate=true,
717   biblabel=brackets,
718   biochem=false,
719   maxauthors=15,
720   super=true,
721   usetitle=false}
722 \acs@validtype{article,communication,suppinfo}
723 \renewcommand*{\acs@tempa}{communication}
724 \ifx\acs@manuscript\acs@tempa
725   \acs@killabstract
726   \acs@killsecs
727 \fi
```

7.13   *Cryst. Growth Des.*

```
728 \ProvidesFile{cgdefu.cfg}
729   [\acs@ver achemso configuration: Cryst. Growth Des.]
730 \acs@setkeys{
731   abbreviate=true,
732   biblabel=brackets,
733   biochem=false,
734   maxauthors=15,
735   super=true,
736   usetitle=false}
737 \acs@validtype{perspective,article,communication,suppinfo}
738 \renewcommand*{\acs@tempa}{communication}
739 \ifx\acs@manuscript\acs@tempa
740   \acs@killsecs
741 \fi
```

7.14 *Energy Fuels*

```
742 \ProvidesFile{enfuem.cfg}
743   [\acs@ver achemso configuration: Energy Fuels]
744 \acs@setkeys{
745   abbreviate=true,
746   biblabel=brackets,
747   biochem=false,
748   maxauthors=15,
749   super=true,
750   usetitle=false}
751 \acs@validtype{review,article,suppinfo}
```

7.15 *Environ. Sci. Technol.*

```
752 \ProvidesFile{esthag.cfg}
753   [\acs@ver achemso configuration: Environ. Sci. Technol.]
754 \acs@setkeys{
755   abbreviate=true,
756   biblabel=brackets,
757   biochem=false,
758   maxauthors=15,
759   super=false,
760   usetitle=true}
761 \acs@validtype{article,suppinfo}
```

7.16 *Ind. Eng. Chem. Res.*

```
762 \ProvidesFile{iecred.cfg}
763   [\acs@ver achemso configuration: Ind. Eng. Chem. Res.]
764 \acs@setkeys{
765   abbreviate=true,
766   biblabel=fullstop,
767   biochem=false,
768   maxauthors=15,
769   super=true,
770   usetitle=true}
771 \acs@validtype{article,communication,suppinfo}
772 \renewcommand*{\acs@tempa}{suppinfo}
773 \ifx\acs@manuscript\acs@tempa
774   \acs@setkeys{maxauthors=0}
```

```
775 \fi
```

7.17   *Inorg. Chem.*

```
776 \ProvidesFile{inoraj.cfg}
777   [\acs@ver achemso configuration: Inorg. Chem.]
778 \acs@setkeys{
779   abbreviate=true,
780   biblabel=brackets,
781   biochem=false,
782   maxauthors=15,
783   super=true,
784   usetitle=false}
785 \acs@validtype{article,communication,suppinfo}
786 \renewcommand*{\acs@tempa}{communication}
787 \ifx\acs@manuscript\acs@tempa
788   \acs@killabstract
789   \acs@killsecs
790 \fi
```

7.18   *J. Agric. Food Chem.*

```
791 \ProvidesFile{jafcau.cfg}
792   [\acs@ver achemso configuration: J. Agric. Food Chem.]
793 \acs@setkeys{
794   abbreviate=true,
795   biblabel=brackets,
796   biochem=false,
797   maxauthors=15,
798   super=false,
799   usetitle=true}
800 \acs@validtype{article,suppinfo}
```

7.19   *J. Chem. Eng. Data*

```
801 \ProvidesFile{jceaax.cfg}
802   [\acs@ver achemso configuration: J. Chem. Eng. Data]
803 \acs@setkeys{
804   abbreviate=true,
805   biblabel=brackets,
806   biochem=false,
807   maxauthors=15,
808   super=true,
809   usetitle=true}
810 \acs@validtype{article,suppinfo}
```

7.20   *J. Chem. Inf. Model.*

```
811 \ProvidesFile{jcisd8.cfg}
812   [\acs@ver achemso configuration: J. Chem. Inf. Model.]
813 \acs@setkeys{
814   abbreviate=true,
815   biblabel=brackets,
816   biochem=false,
817   maxauthors=15,
818   super=true,
819   usetitle=true}
```

```
820 \acs@validtype{article,suppinfo}
```

7.21 *J. Chem. Theory Comput.*

```
821 \ProvidesFile{jctcce.cfg}
822   [\acs@ver achemso configuration: J. Chem. Theory Comput.]
823 \acs@setkeys{
824   abbreviate=true,
825   biblabel=brackets,
826   biochem=false,
827   maxauthors=15,
828   super=true,
829   usetitle=false}
830 \acs@validtype{article,suppinfo}
831 \AtBeginDocument{\acs@restsecnums}
```

7.22 *J. Comb. Chem.*

```
832 \ProvidesFile{jcchff.cfg}
833   [\acs@ver achemso configuration: J. Comb. Chem.]
834 \acs@setkeys{
835   abbreviate=true,
836   biblabel=brackets,
837   biochem=false,
838   maxauthors=15,
839   super=true,
840   usetitle=false}
841 \acs@validtype{article,report,perspective,suppinfo}
```

7.23 *J. Med. Chem.*

```
842 \ProvidesFile{jmcmar.cfg}
843   [\acs@ver achemso configuration: J. Med. Chem.]
844 \acs@setkeys{
845   abbreviate=true,
846   biblabel=brackets,
847   biochem=false,
848   maxauthors=15,
849   super=true,
850   usetitle=true}
851 \acs@validtype{perspective,letter,article,suppinfo}
```

7.24 *J. Nat. Prod.*

```
852 \ProvidesFile{jnprdf.cfg}
853   [\acs@ver achemso configuration: J. Nat. Prod.]
854 \acs@setkeys{
855   abbreviate=true,
856   biblabel=brackets,
857   biochem=false,
858   maxauthors=15,
859   super=true,
860   usetitle=false}
861 \acs@validtype{article,communication,suppinfo}
862 \renewcommand*{\acs@tempa}{communication}
863 \ifx\acs@manuscript\acs@tempa
864   \acs@killabstract
```

```
865   \acs@killsecs
866 \fi
```

7.25   *J. Org. Chem.*

```
867 \ProvidesFile{joceah.cfg}
868   [\acs@ver achemso configuration: J. Org. Chem.]
869 \acs@setkeys{
870   abbreviate=true,
871   biblabel=brackets,
872   biochem=false,
873   maxauthors=15,
874   super=true,
875   usetitle=false}
876 \acs@validtype{article,communication,suppinfo}
877 \renewcommand*{\acs@tempa}{communication}
878 \ifx\acs@manuscript\acs@tempa
879   \acs@killabstract
880   \acs@killsecs
881 \fi
```

7.26   *J. Phys. Chem. A*

```
882 \ProvidesFile{jpcafh.cfg}
883   [\acs@ver achemso configuration: J. Phys. Chem. A]
884 \acs@setkeys{
885   abbreviate=true,
886   biblabel=brackets,
887   biochem=false,
888   maxauthors=15,
889   super=true,
890   usetitle=false}
891 \acs@validtype{letter,article,suppinfo}
```

7.27   *J. Phys. Chem. B*

```
892 \ProvidesFile{jpcbfk.cfg}
893   [\acs@ver achemso configuration: J. Phys. Chem. B]
894 \acs@setkeys{
895   abbreviate=true,
896   biblabel=brackets,
897   biochem=false,
898   maxauthors=15,
899   super=true,
900   usetitle=false}
901 \acs@validtype{letter,article,suppinfo}
```

7.28   *J. Phys. Chem. C*

```
902 \ProvidesFile{jpccck.cfg}
903   [\acs@ver achemso configuration: J. Phys. Chem. C]
904 \acs@setkeys{
905   abbreviate=true,
906   biblabel=brackets,
907   biochem=false,
908   maxauthors=15,
909   super=true,
```

```
910   usetitle=false}
911 \acs@validtype{letter,article,suppinfo}
```

7.29 *J. Proteome Res.*

```
912 \ProvidesFile{jprobs.cfg}
913   [\acs@ver achemso configuration: J. Proteome Res.]
914 \acs@setkeys{
915   abbreviate=true,
916   biblabel=brackets,
917   biochem=false,
918   maxauthors=15,
919   super=true,
920   usetitle=true}
921 \acs@validtype{review,article,suppinfo}
```

7.30 *Langmuir*

```
922 \ProvidesFile{langd5.cfg}
923   [\acs@ver achemso configuration: Langmuir]
924 \acs@setkeys{
925   abbreviate=true,
926   biblabel=brackets,
927   biochem=false,
928   maxauthors=15,
929   super=true,
930   usetitle=false}
931 \acs@validtype{letter,article,suppinfo}
```

7.31 *Macromolecules*

```
932 \ProvidesFile{mamobx.cfg}
933   [\acs@ver achemso configuration: Macromolecules]
934 \acs@setkeys{
935   abbreviate=true,
936   biblabel=brackets,
937   biochem=false,
938   maxauthors=15,
939   super=true,
940   usetitle=false}
941 \acs@validtype{communication,article,suppinfo}
```

7.32 *Mol. Pharm.*

```
942 \ProvidesFile{mamobx.cfg}
943   [\acs@ver achemso configuration: Mol. Pharm.]
944 \acs@setkeys{
945   abbreviate=true,
946   biblabel=brackets,
947   biochem=false,
948   maxauthors=15,
949   super=true,
950   usetitle=true}
951 \acs@validtype{article,suppinfo}
```

7.33 *Nano Lett.*

```
952 \ProvidesFile{nalefd.cfg}
953   [\acs@ver achemso configuration: Nano Lett.]
954 \acs@setkeys{
955   abbreviate=true,
956   biblabel=brackets,
957   biochem=false,
958   maxauthors=15,
959   super=true,
960   usetitle=false}
961 \acs@validtype[letter]{letter}
```

7.34   *Org. Lett.*

```
962 \ProvidesFile{orlef7.cfg}
963   [\acs@ver achemso configuration: Org. Lett.]
964 \acs@setkeys{
965   abbreviate=true,
966   biblabel=brackets,
967   biochem=false,
968   maxauthors=15,
969   super=true,
970   usetitle=false}
971 \acs@validtype[letter]{letter}
```

7.35   *Org. Proc. Res. Dev.*

```
972 \ProvidesFile{oprdfk.cfg}
973   [\acs@ver achemso configuration: Org. Proc. Res. Dev.]
974 \acs@setkeys{
975   abbreviate=true,
976   biblabel=brackets,
977   biochem=false,
978   maxauthors=15,
979   super=true,
980   usetitle=false}
981 \acs@validtype{highlight,article,review,suppinfo}
```

7.36   *Organometallics*

```
982 \ProvidesFile{orgnd7.cfg}
983   [\acs@ver achemso configuration: Organometallics]
984 \acs@setkeys{
985   abbreviate=true,
986   biblabel=brackets,
987   biochem=false,
988   maxauthors=15,
989   super=true,
990   usetitle=false}
991 \acs@validtype{communication,article,suppinfo}
```

8 Change History

9 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.

10 References

(1) This note text will be in the bibliography.

(2) *The ACS Style Guide*, 3rd ed.; Coghill, A. M., Garson, L. R., Eds.; Oxford University Press, Inc. and The American Chemical Society: New York, 2006.