

The biblatex-chem bundle — biblatex styles for chemistry*

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Abstract

The `biblatex-chem` bundle is a set of styles for creating bibliographies using `biblatex` in the style of a number common chemistry journals. The bundle comprises styles based on the conventions of the Royal Society of Chemistry, American Chemical Society and *Angewandte Chemie*. It therefore covers the journal styles of, for example:

- *Angewandte Chemie*
- *Biochemistry*
- *Chemical Communications*
- *Chemistry—A European Journal*
- *Dalton Transactions*
- *Journal of the American Chemical Society*
- *Organic & Biomolecular Chemistry*

amongst others.

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1 Introduction

The `biblatex` package introduces a completely new method for controlling the creation of bibliographies using `bibtex`. This makes a great deal of flexibility available when creating bibliographies, most of which is much more difficult with traditional `bibtex` styles.

In order to use `biblatex`, an entirely new set of appropriate supporting styles are needed. This bundle provides a number of styles for chemistry, following the rules of some of the most important journals in the field.

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2 The styles

Currently, the bundle contains four `biblatex` styles:

- `chem-acs`: American Chemical Society style
- `chem-angew`: *Angewandte Chemie* style
- `chem-biochem`: *Biochemistry* style
- `chem-rsc`: Royal Society of Chemistry style

These can all be loaded in the usual way:

```
\usepackage[style=chem-<name>]{biblatex}
```

The four styles can be used to follow the current layout rules of all of the journals currently published by the American Chemical Society and the Royal Society of Chemistry, plus the journals published by Wiley which use the *Angewandte Chemie* format.

The styles use the standard `biblatex` database requirements, although they are somewhat selective in which fields are used (for example, `language` is never printed). This means that a database designed for traditional `biblatex` use may need some editing for optimal output. The accompanying example database `biblatex-chem.bib` shows examples of all of the supported entry types with common fields filled in.

3 Style options

All of the styles here add a small number of package options to the standard set provided by `biblatex`. This allows the styles to cover the variations seen between different journals without needing a very large number of files: the American Chemical Society in particular varies the exact details between journals.

`articletitle` The `articletitle` option is a switch for including the title of journal articles in the output. For the styles `chem-acs`, `chem-angew` and `chem-rsc` this is turned off on loading, and you therefore need to use for example

```
\usepackage[
  style=chem-rsc,
  articletitle
]{biblatex}
```

or

```
\usepackage[
  style=chem-rsc,
  articletitle=true
]{biblatex}
```

to include titles. In the case of the `chem-biochem` style, the titles are included as standard: this can be turned off using

```
\usepackage[
  style=chem-biochem,
  articletitle=false
]{biblatex}.
```

biblabel The format of the numbers used in the bibliography varies from journal to journal even if the same general style is used. The `biblabel` option allows the user to easily set the format used. This option takes a value from the list: `parens`, `brackets`, `plain` and `dot`. For example

```
\usepackage[
  style=chem-angew,
  biblabel=plain
]{biblatex}
```

would use the style of *Angewandte Chemie* but with nothing added to the numbers in the bibliography.

chaptertitle The inclusion of chapter titles in `inbook` and `incollection` entries is not consistent in chemistry journals; the *ACS Style Guide* recommends their use, but does not require it.¹ As a result, the styles here provide the `chaptertitle` option to allow the inclusion of chapter titles if required.

```
\usepackage[
  style=chem-rsc,
  chaptertitle
]{biblatex}
```

doi When a journal article has no pages but does have a DOI the later used in the bibliography. Some journal styles require that the DOI is included in all cases. This behaviour can be turned on by setting the `doi` option.

```
\usepackage[
  style=chem-angew,
  doi
]{biblatex}
```

pageranges Some journals only allow the first page of a range to be used, even if the data for the full range is available. The `pageranges` option can be used to turn off printing of the range for these journals.

```
\usepackage[
  style=chem-rsc,
  pageranges=false
]{biblatex}
```

subentry In common with the standard `biblatex` numeric styles, all of the styles here support the `subentry` option. With this turned on, entries of type `set` are given individual labels within the bibliography.

```
\usepackage[
  style=chem-acs,
  subentry
]{biblatex}
```

The result is very similar to the behaviour of the `mciteplus` package.

Different ACS journals use varying combinations of bibliography styles (`chem-acs` or `chem-biochem`), citations styles, bibliography labels and article title inclusion. In general, the user will need to consult a recent issue of the journal concerned to check which options to use.

4 New styles

The current set of styles here is intended to form a strong base for chemists. However, there will be the need for other styles to be created. The package author welcomes suggestions for other styles for inclusion. It would also be good to keep all chemistry-related `biblatex` styles in one bundle. Others working on chemistry styles for `biblatex` are welcome to send them to the bundle maintainer so they can be incorporated here.

5 Errors and omissions

Creating a `biblatex` style is a complex task, particularly as chemistry journals only give complete rules for the layout of references to journal articles. The examples and test database provided with this bundle should be consulted to see how the formatting is intended to work. Feedback on errors and omissions in either the database or the styles is very welcome.

References

- (1) *The ACS Style Guide*, ed. A. M. Coghill and L. Garson, Oxford University Press, Inc. and The American Chemical Society, New York, 2006.