

# biblatex-chem – A set of **biblatex** implementations of chemistry-related bibliography styles\*

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Released 2019/12/03

## 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.

## 1 Introduction

The **biblatex** package introduces a completely new method for controlling the creation of bibliographies using  $\text{BIB}\text{T}_{\text{E}}\text{X}$ . This makes a great deal of flexibility available when creating bibliographies, most of which is much more difficult with traditional  $\text{BIB}\text{T}_{\text{E}}\text{X}$  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.

## 2 The styles

The bundle currently contains four **biblatex** style files, each of which has its own demonstration document:

- The **chem-acs** style, which covers most American Chemistry Society journals.

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\*This file describes v1.1y, last revised 2019/12/03.

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- The `chem-angew` style, which covers *Angewandte Chemie Chemistry – A European Journal*.
- The `chem-biochem` style, which covers *Biochemistry* and a small number of other American Chemistry Society journals.
- The `chem-rsc` style, which covers all Royal Society of Chemistry journals.

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. 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.

<code>doi</code>	The standard style options <code>doi</code> , <code>eprint isbn</code> and <code>eprint</code> , as described in the <code>biblatex</code> manual. However, these options are turned off as standard by the styles in the <code>biblatex-chem</code> bundle. This reflects the fact that these entries may be present in reference databases but are not generally included in published bibliographies. Note that DOI values are printed for journal articles with no pages given, even if the <code>doi</code> option is <code>false</code>
<code>eprint</code>	
<code>isbn</code>	
<code>url</code>	
<code>subentry</code>	In common with the standard <code>biblatex</code> numeric styles, all of the styles in the bundle support the boolean <code>subentry</code> option. With this set <code>true</code> , entries of type <code>set</code> are given individual labels within the bibliography.
<code>articletitle</code>	The use of article titles varies between individual journals. The boolean option <code>articletitle</code> is available to control this behaviour. The standard settings for the <code>chem-acs</code> , <code>chem-angew</code> and <code>chem-rsc</code> styles have this option turned off, while the <code>chem-biochem</code> sets this option <code>true</code> .
<code>biblabel</code>	The format of the numbers used in the bibliography (the “bibliography label”) varies from journal to journal even if the same general style is used. The <code>biblabel</code> option allows the user to easily set the format used. This option takes a value from the list: <code>parens</code> , <code>brackets</code> , <code>plain</code> and <code>dot</code> .
<code>chaptertitle</code>	The option boolean <code>chaptertitle</code> option is provided to allow flexibility for the inclusion of chapter titles for <code>inbook</code> and <code>incollection</code> entries. The standard setting is <code>false</code> for all styles in the bundle.
<code>pageranges</code>	The use of full page ranges varies between journals and indeed between different papers in individual journals. The <code>pageranges</code> boolean option is available to turn on and off printing of full page ranges, thus allowing printing of only the first page even when the database contains the full page range. This option is set <code>true</code> as standard.

## 4 Related entries

References to related literature can be handled automatically by the Biber back-end. This is particularly useful for references to *Angewandte Chemie*, which should be given both to the German and English editions of the journal. The example database shows this in action, with a paper in the German version linked to one in the English edition (see the entry `Dehnicke1981`).

## 5 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.

## 6 Errors and omissions

Suggestions for improvement and bug reports can be logged in the package issue database, found at <https://bitbucket.org/josephwright/biblatex-chem/issues>, or can be sent by e-mail to `joseph.wright@morningstar2.co.uk`.

## Change History

v1.0	General: First stable release . . . . . 3	v1.1a	General: Reintroduce <code>chaptertitle</code> option for <code>chem-angew</code> and <code>chem-rsc</code> styles 3
v1.0a	General: Format “ <i>et al.</i> ” in italics when using <code>chem-rsc</code> style . . . . . 3		Turn off standard <code>eprint</code> and <code>isbn</code> options by default . . . . . 3
v1.0b	General: Require <code>biblatex v1.1</code> . . . . . 3		Turn off standard <code>url</code> option by default . . . . . 3
	Use new <code>maxbibnames</code> option such that bibliographies print all authors but citations use truncated lists when necessary . . 3	v1.1b	General: Further documentation improvements . . . . . 3
v1.0c	General: Add version history for stable releases . . . . . 3		Re-introduce the <code>biblabel</code> option . . . . . 3
v1.0d	General: Corrections for formatting of optionally-included article and chapter titles . . . . . 3	v1.1c	General: Correct bug in entries with no date in <code>chem-acs</code> and <code>chem-acs</code> styles . . . . . 3
	Include additional punctuation tracker corrections for non-English bibliographies . . . . . 3	v1.1d	General: Fix a few log warnings: no change to output . . . . . 3
v1.1	General: Styles revised to work with <code>biblatex v1.6</code> . . . . . 3	v1.1e	General: Print edition only once for <code>manual</code> entries in <code>chem-angew</code> and <code>chem-rsc</code> styles . . . . . 3

v1.1f	General: Correct formatting of <b>report</b> entries in <b>chem-acs</b> style	3	v1.1o	General: Track <b>biblatex</b> changes	.. 3
v1.1g	General: Fix issue with <b>inbook</b> entries which lack distinct <b>author</b> and <b>bookauthor</b>	.. 3	v1.1p	General: Ensure style works with both backends	.. 3
v1.1h	General: Fix appearance of author names in text when exactly two authors are given	.. 3	v1.1q	General: Omit <b>language</b> field in bibliography	.. 3
v1.1i	General: Correct treatment of prefixes with <b>acs</b> style	.. 3		Print year only for date fields	.. 3
v1.1j	General: Update styles to use <b>related</b> information if available	3	v1.1r	General: Track <b>biblatex</b> core changes	.. 3
v1.1k	General: Fix error in name formatting with <b>biochem</b> style	.. 3	v1.1s	General: Remove a stray space	.. 3
v1.1l	General: Fix extraneous comma in author list with <b>rsc</b> style	.. 3	v1.1t	General: Improve formatting for <b>online</b> entries in <b>acs</b> and <b>biochem</b> styles	.. 3
v1.1m	General: Move position of edition for book records in <b>angew</b> style	3		Update some internals	.. 3
v1.1n	General: Improved approach to removing commas from journal titles in <i>Angew. Chem.</i> style	.. 3	v1.1u	General: Update some aspects of name formatting	.. 3
	Use <code>\mkbibitalic</code> not <code>\mkbibemph</code> in styles	.. 3	v1.1v	General: Documentation tweaks	.. 3
			v1.1w	General: Bring <b>related</b> support in line with <b>biblatex</b> core	.. 3
			v1.1x	General: Better formatting when article titles are included	.. 3
			v1.1y	General: Add a missing space	.. 3