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

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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.

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.

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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- 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.

`doi` `eprint` `isbn` `url`

The standard style options `doi`, `eprint` `isbn` and `eprint`, as described in the biblatex manual. However, these options are turned off as standard by the styles in the biblatex-chem 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 `doi` option is `false`

`subentry`

In common with the standard biblatex numeric styles, all of the styles in the bundle support the boolean `subentry` option. With this set `true`, entries of type `set` are given individual labels within the bibliography.

`articletitle`

The use of article titles varies between individual journals. The boolean option `articletitle` is available is control this behaviour. The standard settings for the chem-acs, chem-angew and chem-rsc styles have this option turned off, while the chem-biochem sets this option `true`.

`biblabel`

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 `biblabel` option allows the user to easily set the format used. This option takes a value from the list: `parens`, `brackets`, `plain` and `dot`.

`chaptertitle`

The option boolean `chaptertitle` option is provided to allow flexibility for the inclusion of chapter titles for `inbook` and `incollection` entries. The standard setting is `false` for all styles in the bundle.

`pageranges`

The use of full page ranges varies between journals and indeed between different papers in individual journals. The `pageranges` 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 `true` 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

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General: Styles revised to work with biblatex v1.6 3
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General: Further documentation improvements 3
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General: Fix a few log warnings: no change to output 3
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