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 $BiBT_EX$. This makes a great deal of flexibility available when creating bibliographies, most of which is much more difficult with traditional $BiBT_EX$ 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.

^{*}This file describes v1.1t, last revised 2017/08/09.

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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

11**r**]

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

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.

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.

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.

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.

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.

subentry

articletitle

biblabel

chaptertitle

pageranges

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

v1.1f		v1.1n
General: Correct formatting of		General: Improved approach
report entries in chem-acs style	3	removing commas from jo
v1.1g		titles in Angew. Chem. st
General: Fix issue with inbook		Use \mkbibitalic not
entries which lack distinct		\mkbibemph in styles
author and bookauthor \ldots .	3	v1.10
v1.1h		General: Track biblatex chang
General: Fix appearance of author		v1.1p
names in text when exactly two		General: Ensure style works v
authors are given	3	both backends
v1.1i		v1.1q
General: Correct treatment of prefixes with acs style	3	General: Omit language field bibliography
v1.1j		
General: Update styles to use		Print year only for date fie
related information if available	3	v1.1r
v1.1k		General: Track biblatex core
General: Fix error in name		changes
formatting with biochem style $% \mathcal{A}_{\mathcal{A}}$.	3	v1.1s
v1.11		General: Remove a stray space
General: Fix extraneous comma in		v1.1t
author list with rsc style	3	General: Improve formatting
v1.1m		online entries in acs and
General: Move position of edition		biochem styles
for book records in angew style	3	Update some internals

3	General: Improved approach to removing commas from journal	
5	titles in Angew. Chem. style	3
	Use \mkbibitalic not	0
	\mkbibemph in styles	3
3	v1.10	
	General: Track biblatex changes	3
	v1.1p	
	General: Ensure style works with	
3	both backends	3
	v1.1q	
3	General: Omit language field in	
0	bibliography	
	Print year only for date fields	3
3	v1.1r	
	General: Track biblatex core	
	changes	3
3	v1.1s	
	General: Remove a stray space	3
	v1.1t	
3	General: Improve formatting for	
	online entries in acs and	_
_	biochem styles	
3	Update some internals	3