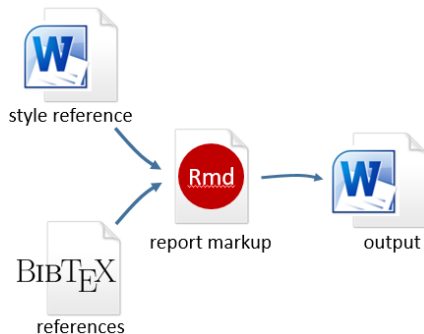


# Document design — References and Word styles

497 / 597 Reproducible Research

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# We will save references in bib format (from BiBTeX)

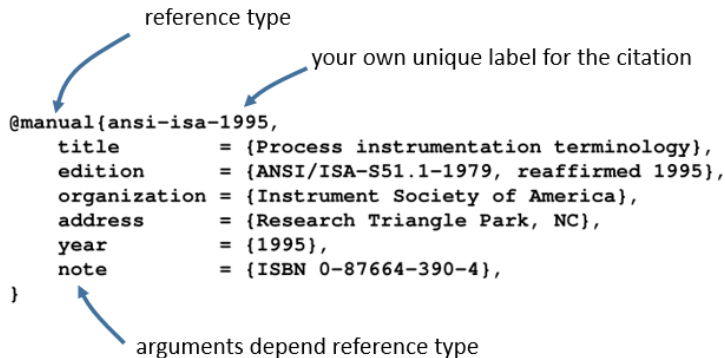
The basic steps for creating references and citations are

- ▶ create the bib file
- ▶ specify the bib file in the YAML header of the Rmd script
- ▶ add the citation to the report
- ▶ add a references heading

## Create the bib file

- ▶ Open a new text file in RStudio *File > New File > Text File*
- ▶ Save As **project\_name.bib** in the resources directory

# Create reference entries in the bib file



The diagram illustrates a BibTeX reference entry with three annotations:

- reference type**: Points to the `@manual` command.
- your own unique label for the citation**: Points to the `ansi-isa-1995` label.
- arguments depend reference type**: Points to the list of fields (title, edition, organization, address, year, note) enclosed in curly braces.

```
@manual{ansi-isa-1995,  
  title      = {Process instrumentation terminology},  
  edition    = {ANSI/ISA-S51.1-1979, reaffirmed 1995},  
  organization = {Instrument Society of America},  
  address    = {Research Triangle Park, NC},  
  year       = {1995},  
  note       = {ISBN 0-87664-390-4},  
}
```

See [verbosus](#) for B<sub>B</sub>T<sub>E</sub>X style examples (article, proceedings, book, etc.)

# Forcing capitalization in the reference

When knit, references are sometimes not capitalized the way you expect

In the bib file, place braces {} around letters you want capitalized

For example

```
@book{gandrud2015,  
  author    = {Christopher Gandrud},  
  title     = {Reproducible {R}esearch with {R} and {RS}tudio},  
  publisher = {CRC Press},  
  year      = {2015},  
  address   = {Boca Raton, FL},  
  edition   = {2},  
}
```

# Specify the bib file in the YAML header

- ▶ Add the bibliography argument to the YAML header
- ▶ Include the relative path

```
---  
title: "Load-cell calibration report"  
author: "name"  
date: "date"  
output: word_document  
bibliography: "../resources/project_name.bib"  
---
```

## Add the citation to the report

- ▶ Citation syntax has the form `[@ref_label]`
- ▶ `ref_label` is the reference label you assigned in the bib file
- ▶ In the Rmd file, add the citation at the appropriate location, for example,

```
The test procedure follows the ANSI/ISA standard  
[@ansi-isa-1995].
```

- ▶ When you knit the document, the citation is automatically formatted

The test procedure follows the ANSI/ISA standard (*Process Instrumentation Terminology* 1995).

# Add a references heading

- ▶ At the end of the Rmd script, add a references section heading

```
# References
```

- ▶ All references cited in your report will be automatically formatted and listed at the end of the report

## *References*

*Process Instrumentation Terminology*. 1995. ANSI/ISA-S51.1-1979, reaffirmed 1995. Research Triangle Park, NC: Instrument Society of America.



# Citations and references are formatted automatically

- ▶ Use a CSL file to change the format to suit your audience
- ▶ Find one online and download it, for example,

```
chicago-author-date.csl  
ieee.csl
```

- ▶ Download the CSL file and save it in your resources folder
- ▶ Edit the YAML header to specify the path to the CSL file

```
---  
csl: "../resources/chicago-author-date.csl"  
---
```