

A Vancouver style for use with LaTeX (using natbib) – Example

We do not currently have any LaTeX style files for the Imperial College referencing formats. The following is an example of a Vancouver style output which uses the natbib package. Natbib allows more flexibility in citation format and the specified bibliography style allows the inclusion of URLs for electronic resources (url= field).

- To invoke the natbib package add `\usepackage[numbers]{natbib}` to the preamble. For round brackets around citations: `\usepackage[numbers,round]{natbib}`
- To insert a citation use the `\cite` command (see table below)
- To achieve a Vancouver style output use the `\bibliographystyle{unsrnat}` command

Note: Further information can be found in the **Citing and referencing in LaTeX - Using BibTeX** guide. The following website also provides much useful information:

http://en.wikibooks.org/wiki/LaTeX/Bibliography_Management

Original document:

The diagram illustrates the LaTeX code for a Vancouver style bibliography, with callouts explaining key commands:

- invokes use of the natbib package and sets citation format as numbers**: Points to the `\usepackage[numbers]{natbib}` command in the preamble.
- \cite command inserts numbers in square brackets**: Points to the `\cite` command in the text, which is used to cite references.
- command to use unsrnat style file (a Vancouver style)**: Points to the `\bibliographystyle{unsrnat}` command in the preamble.
- command to create bibliography using the named .bib file for the data**: Points to the `\bibliography{EVRWedit}` command in the preamble.

The LaTeX code shown is:

```
\documentclass{article}
\usepackage{amsmath}
\usepackage{amssymb}
\usepackage{graphicx}
\usepackage[numbers]{natbib}

\begin{document}

'Airplanes are by no means the only application of aerodynamics' \cite[p.~215]{RefWorks:1248}. The air flow over an automobile, the gas flow through the internal combustion engine powering an automobile, weather and storm prediction \cite{RefWorks:1247}, the flow through a windmill, the production of thrust by gas turbine jet engines and rocket engines \cite{RefWorks:1248,RefWorks:1246}, and the movement of air through building heating and ventilation systems are a few other examples of the application of aerodynamics \cite{RefWorks:1249}.

\bibliographystyle{unsrnat}
\bibliography{EVRWedit}

\end{document}
```

Natbib citation commands

Command	Action	Result
<code>\cite{1145}</code>	Citation appears as a number based on the order in which the sources are cited	e.g. aerodynamics [1]
<code>\cite[p.~22]{1145}</code>	Allows page number to be inserted (used for direct quotes)	e.g. aerodynamics [1, p. 22]
<code>\cite{1145,1150}</code>	Multiple citations appear	e.g. aerodynamics [1, 2]

Phototypeset document:

‘Airplanes are by no means the only application of aerodynamics’ [1, p. 215]. The air flow over an automobile, the gas flow through the internal combustion engine powering an automobile, weather and storm prediction [2], the flow through a windmill, the production of thrust by gas turbine jet engines and rocket engines [1, 3], and the movement of air through building heater and air-conditioning systems are just a few other examples of the application of aerodynamics [4].

References

- [1] N. Davids and M. K. Mani. Effects of turbulence on blood flow explored by finite element analysis. *Computers in biology and medicine*, 2(4):311–19, 1972. URL [http://dx.doi.org/10.1016/0010-4825\(72\)90018-2](http://dx.doi.org/10.1016/0010-4825(72)90018-2).
- [2] X. Dechamps, G. Degrez, M. Rasquin, and K. E. Jansen. Study of incompressible MHD flow in a circular pipe with transverse magnetic field using a spectral/finite element solver. In *44th AIAA Plasmadynamics and Lasers Conference*, page 13 pp., Reston, VA, USA, 2013. Univ. Libre de Bruxelles, Brussels, Belgium, American Institute of Aeronautics and Astronautics.
- [3] C. X. Lin and M. A. Ebadian. Developing turbulent convective heat transfer in helical pipes. *International Journal of Heat and Mass Transfer*, 40(16):3861–3873, 1997. URL [http://dx.doi.org/10.1016/S0017-9310\(97\)00042-2](http://dx.doi.org/10.1016/S0017-9310(97)00042-2).
- [4] F. Birgersson, S. Finnveden, and G. Robert. Modelling turbulence-induced vibration of pipes with a spectral finite element method. *Journal of Sound and Vibration*, 278(4-5):749–72, 2004. URL <http://dx.doi.org/10.1016/j.jsv.2003.10.024>.