

IMPERIAL COLLEGE LONDON  
DEPARTMENT OF MATERIALS

# Characterisation Exercise Report

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## Abstract

This is the abstract. It stands alone from the body of the report but should be included in the 6 page limit.

## 1 A section

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

### 1.1 A subsection

Subsections can be used too. They will be numbered. Avoid using these too much as they can break up the flow of the writing.

### 1.2 Figures

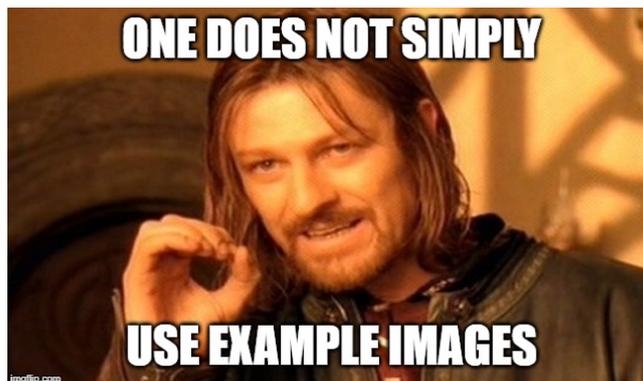


Figure 1.1: A caption. This is descriptive and directs the reader to the important parts of the figure. This figure has the label *fig:example*.

### 1.3 Technical Typesetting

You can include inline maths  $1 + 1 = 2$  and numbered equations,

$$1 + 1 = 2 \tag{1.1}$$

The package `siunitx` can be used to typeset numbers and quantities with units. The `\SI{num}{units}` command can be used for this. For example, the command `\SI{9.81}{\metre\per\second}` will be typeset as  $9.81 \text{ m s}^{-1}$ . Exact usage and extra commands can be found in the [siunitx user manual](#).

You can refer to the items (using the `\ref{label}` command. For example, the command `\ref{fig:example}` which is then typeset as 1.1 and is a hyperlink to the relevant caption.

Chemical formulae can be typeset using the `mhchem` package. For example, the command `\ce{H2O}` will be typeset as  $\text{H}_2\text{O}$  and the command `\ce{Ba(Zr_x Ti_{1-x})O3}` will be typeset as  $\text{Ba}(\text{Zr}_x\text{Ti}_{1-x})\text{O}_3$ . Refer to the [mhchem user manual](#) for more details.

## 2 Citations

All sources should be cited, the `\autocite` command from Bib $\text{\LaTeX}$  is the best to use. For example, the command `\autocite{BrandonD.G2008Mcom}` is typeset as [1]. Some other commands can be useful, these can be investigated in section 3.9 of the [Bib \$\text{\LaTeX}\$  user manual](#).

## References

- [1] D. G Brandon. *Microstructural characterization of materials*. eng. Chichester, England, 2008.