# A short presentation on molecules in LATEX

J. Hammersley

www.overleaf.com

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#### Introduction

- In these slides we show how Overleaf can be used with standard chemistry packages to easily create professional presentations.
- If you're new to IATEX, check out this free introductory course by Overleaf founder Dr John Lees-Miller: www.overleaf.com/blog/7
- You can also find more quick tips and tricks on the help pages at www.overleaf.com/help

## The chemistry packages

We focus on two LaTeX chemistry packages:

### The chemfig package

This package provides the command which draws molecules. Created by Christian Tellechea, a detailed user guide can be found here:

www.tex.ac.uk/ctan/macros/generic/chemfig/chemfig\_doc\_en.pdf

#### The mhchem package

The mhchem package provides simple commands for type setting chemical molecular formulae and equations. Created by Martin Hensel, a detailed user guide can be found here:

http://mirror.ox.ac.uk/sites/ctan.org/macros/latex/contrib/mhchem.pdf

# Chemical equations with mhchem

- The mhchem package lets you write chemical equations in LATEX with the minimum of effort.
- The example below shows how the standard representation of a reaction (on the left) is created from the simple code on the right:

$$\mathrm{CO_2} + \mathrm{C} \longrightarrow 2\,\mathrm{CO}$$
 is created with \ce{CO2} + C -> 2CO}

• More complicated reactions are still easy to write:

$$SO_4^{2-} + Ba^{2+} \longrightarrow BaSO_4 \downarrow$$
 is created with 
$$\ce{SO4^2- + Ba^2+ -> BaSO4 v}$$

## Where to go next...

- This short example was designed to introduce you to using Overleaf for scientific presentations.
- This is made possible by the many great packages that have been developed for LATEX, including the two we focused on here (plus the Beamer package used for the overall presentation style).
- For more help on using LATEX, see the links on the Overleaf help page: www.overleaf.com/help or check out our free introductory course: www.overleaf.com/blog/7.

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Happy L⁴TEXing!