

# A short presentation on molecules in $\text{\LaTeX}$

J. Hammersley

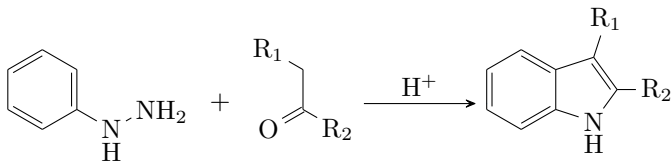
[www.overleaf.com](http://www.overleaf.com)

November 20, 2020

- 1 Introduction
  - The chemistry packages
- 2 Using chemistry packages with  $\text{\LaTeX}$ 
  - Chemical equations with `mhchem`
- 3 Where to go next. . .

# 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  $\text{\LaTeX}$ , check out this free introductory course by Overleaf founder Dr John Lees-Miller: [www.overleaf.com/blog/7](http://www.overleaf.com/blog/7)
- You can also find more quick tips and tricks on the help pages at [www.overleaf.com/help](http://www.overleaf.com/help)



# The chemistry packages

We focus on two  $\text{\LaTeX}$  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](http://www.tex.ac.uk/ctan/macros/generic/chemfig/chemfig_doc_en.pdf)

## The `mhchem` package

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

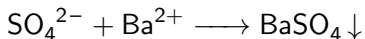
<http://mirror.ox.ac.uk/sites/ctan.org/macros/latex/contrib/mhchem/mhchem.pdf>

# Chemical equations with mhchem

- The mhchem package lets you write chemical equations in L<sup>A</sup>T<sub>E</sub>X 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:

$\text{CO}_2 + \text{C} \longrightarrow 2 \text{CO}$  is created with `\ce{C02 + C -> 2C0}`

- More complicated reactions are still easy to write:



is created with

`\ce{S04^2- + Ba^2+ -> BaS04 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  $\text{\LaTeX}$ , including the two we focused on here (plus the Beamer package used for the overall presentation style).
- For more help on using  $\text{\LaTeX}$ , see the links on the Overleaf help page: [www.overleaf.com/help](http://www.overleaf.com/help) or check out our free introductory course: [www.overleaf.com/blog/7](http://www.overleaf.com/blog/7).

Follow @overleaf on Twitter for all the latest news and updates.

Happy  $\text{\LaTeX}$ ing!