

Analysis of Compounds

Talk to a Teacher

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

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Learning Objectives



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Learning Objectives

We will learn about



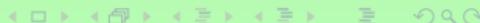
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Learning Objectives

We will learn about

- **Molecular contextual menu**



Learning Objectives

We will learn about

- Molecular contextual menu
- **Save the molecule in .mol format**



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Learning Objectives

We will learn about

- Molecular contextual menu
- Save the molecule in `.mol` format
- **Add and edit a reaction**



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Learning Objectives

We will learn about

- Molecular contextual menu
- Save the molecule in `.mol` format
- Add and edit a reaction
- **Add reaction conditions and reagents on the reaction arrow**



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Learning Objectives

We will learn about

- Molecular contextual menu
- Save the molecule in .mol format
- Add and edit a reaction
- Add reaction conditions and reagents on the reaction arrow
- Convert reaction molecules into 3D



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System Requirement

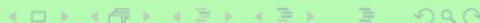


System Requirement

- **Ubuntu Linux OS v 12.04**



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System Requirement

- **Ubuntu Linux OS v 12.04**
- **GChemPaint v 0.12.10**



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System Requirement

- **Ubuntu Linux OS v 12.04**
- **GChemPaint v 0.12.10**
- **Internet connectivity**



Pre-requisites



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Pre-requisites

You should be familiar with



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Pre-requisites

You should be familiar with

- **GChemPaint**



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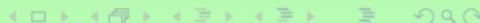
Pre-requisites

You should be familiar with

- **GChemPaint**
- **If not, for relevant tutorials, please visit <http://spoken-tutorial.org>**



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Assignment

- 1 Select other **Amino Acids** from **Templates** list
- 2 Obtain their **Composition** and **Isotopic pattern**



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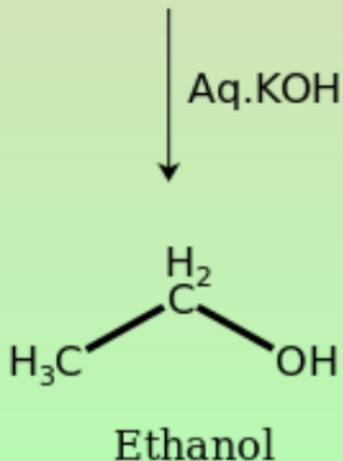


Assignment

- 1 Convert **Benzene** structure from 2D to 3D



Chemical Reaction



Summary I

We have learnt,

- **NIST** web book page for this molecule
- **PubChem** page for this molecule
- Find molecular weight of the compound using **Chemical Calculator**
- Obtain graph of mass spectrum of a molecule



Summary II

- Save the molecule in `.mol` format
- Add reaction conditions and reagents on the reaction arrow
- Add and edit a reaction
- Convert reaction molecules into 3D structures



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Assignment

Draw chemical reaction of

- 1 Propene (C_3H_6) & Bromine molecule (Br_2), with Carbontetrachloride (CCl_4) as a catalyst
- 2 Benzene (C_6H_6) & Chlorine molecule (Cl_2), with Anhydrous Aluminum Chloride ($AlCl_3$) as a catalyst



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About the Spoken Tutorial Project

- Watch the video available at http://spoken-tutorial.org/What_is_a_Spoken_Tutorial
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Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- Conducts workshops using spoken tutorials
- Gives certificates to those who pass an online test
- For more details, please write to contact@spoken-tutorial.org



Acknowledgements

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- It is supported by the National Mission on Education through ICT, MHRD, Government of India
- More information on this Mission is available at <http://spoken-tutorial.org/NMEICT-Intro>

