

# Overview of GChemPaint

**Talk to a Teacher**

**<http://spoken-tutorial.org>**

**National Mission on Education through ICT**

**<http://sakshat.ac.in>**

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# Learning Objectives



# Learning Objectives

**We will learn to,**



# Learning Objectives

We will learn to,

- **Install GChemPaint along with all its utility files**



# Learning Objectives

We will learn to,

- Install **GChemPaint** along with all its utility files
- **View menubar of GChemPaint and its utility softwares**



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# Learning Objectives

We will learn to,

- Install **GChemPaint** along with all its utility files
- View menubar of **GChemPaint** and its utility softwares
- Use **GChemPaint** *User Manual*



# Learning Objectives

We will learn to,

- Install **GChemPaint** along with all its utility files
- View menubar of **GChemPaint** and its utility softwares
- Use **GChemPaint** *User Manual*
- Use different **GChemPaint** utility softwares



# Learning Objectives





# Learning Objectives

**We will also**



# Learning Objectives

We will also

- **Relation between GChemPaint and Jmol Application**



# Learning Objectives

We will also

- Relation between **GChemPaint** and **Jmol Application**
- **Various structures that can be drawn using GChemPaint**



# System Requirement



# System Requirement

- Ubuntu Linux OS v 12.04



# System Requirement

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



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



# System Requirement

- **Ubuntu Linux OS v 12.04**
- **GChemPaint v 0.12.10**
- **GChemCalc v 0.12.10**
- **GChem3D v 0.12.10**



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# System Requirement

- **Ubuntu Linux OS v 12.04**
- **GChemPaint v 0.12.10**
- **GChemCalc v 0.12.10**
- **GChem3D v 0.12.10**
- **GChemTable v 0.12.10**



# System Requirement

- **Ubuntu Linux OS v 12.04**
- **GChemPaint v 0.12.10**
- **GChemCalc v 0.12.10**
- **GChem3D v 0.12.10**
- **GChemTable v 0.12.10**
- **Jmol Application v 12.2.2**



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# Pre-requisites

- **Knowledge of high school Chemistry**



# Pre-requisites

- Knowledge of high school Chemistry
- Internet connectivity



# GChemPaint



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# GChemPaint

- **GChemPaint** is a 2D chemical structure editor for Gnome-2 desktop



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# GChemPaint

- **GChemPaint** is a 2D chemical structure editor for Gnome-2 desktop
- It has **GChemCalc**, **GChem3D** and **GChemTable** as its utility features





# GChemPaint

- **GChemPaint** is a 2D chemical structure editor for Gnome-2 desktop
- It has **GChemCalc**, **GChem3D** and **GChemTable** as its utility features
- **GChemPaint** is available only on Linux



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# GChemPaint

- **GChemPaint** is a 2D chemical structure editor for Gnome-2 desktop
- It has **GChemCalc**, **GChem3D** and **GChemTable** as its utility features
- **GChemPaint** is available only on Linux
- **GChemPaint is included in the Gnome Chemistry Utils**



# Installation Ubuntu Linux



# Installation Ubuntu Linux

- **GChemPaint** and all its utility files



# Installation Ubuntu Linux

- **GChemPaint** and all its utility files
- **Ubuntu Linux OS** using *Synaptic Package Manager*



# Installation Ubuntu Linux

- **GChemPaint** and all its utility files
- **Ubuntu Linux OS** using *Synaptic Package Manager*
- **For more information on *Synaptic Package Manager*,**



# Installation Ubuntu Linux

- **GChemPaint** and all its utility files
- **Ubuntu Linux OS** using *Synaptic Package Manager*
- **For more information on *Synaptic Package Manager*,**
- **Please refer to the Linux series**  
<http://spoken-tutorial.org>



# Installation on Ubuntu Linux





# Installation on Ubuntu Linux

- gchempaint



# Installation on Ubuntu Linux

- gchempaint
- libgcu0



# Installation on Ubuntu Linux

- gchempaint
- libgcu0
- gcu-plugin



# Installation on Ubuntu Linux

- gchempaint
- libgcu0
- gcu-plugin
- libgcu-dbg



# Installation on Ubuntu Linux

- gchempaint
- libgcu0
- gcu-plugin
- libgcu-dbg
- gcu-bin



# User Manual



# User Manual

- User Manual briefly explains how to use **GChemPaint** and its utilities



# User Manual

- User Manual briefly explains how to use **GChemPaint** and its utilities
- **GChemPaint** provides user manual at <http://gchemutils.nongnu.org/paint/manual/index.htm>





# Jmol Application



# Jmol Application

- **Free and Open Source Molecular Viewer**



# Jmol Application

- Free and Open Source **Molecular Viewer**
- Create and view 3 dimensional models of chemical structures



# Jmol Application

- Free and Open Source **Molecular Viewer**
- Create and view 3 dimensional models of chemical structures
- **View secondary structures of proteins and macromolecules**



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# Jmol Application

- Free and Open Source **Molecular Viewer**
- Create and view 3 dimensional models of chemical structures
- View secondary structures of **proteins** and **macromolecules**
- Please refer to Jmol Application series <http://spoken-tutorial.org>



# GChemPaint Series



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# GChemPaint Series



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# GChemPaint Series

- Use Templates and Residues





# GChemPaint Series

- Use Templates and Residues
- Form molecules and bonds



# GChemPaint Series

- Use Templates and Residues
- Form molecules and bonds
- **Aromatic Molecular structures**



# GChemPaint Series

- Use Templates and Residues
- Form molecules and bonds
- Aromatic Molecular structures
- **Orbital overlap**



# GChemPaint Series

- Use Templates and Residues
- Form molecules and bonds
- Aromatic Molecular structures
- Orbital overlap
- **Resonance Structures**



# GChemPaint Series

- Use Templates and Residues
- Form molecules and bonds
- Aromatic Molecular structures
- Orbital overlap
- Resonance Structures
- **View 3D structures**



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# GChemPaint Series

- Use Templates and Residues
- Form molecules and bonds
- Aromatic Molecular structures
- Orbital overlap
- Resonance Structures
- View 3D structures
- View Periodic Table trends



# Summary I

**We have learnt to,**

- **Install GChemPaint along with all its utility files**
- **View menubar of GChemPaint and its utility softwares**
- **Use GChemPaint User Manual**



# Summary II

- Use GChemPaint utility softwares
- Relation between GChemPaint and Jmol Application
- Quick look at different structures that can be drawn in GChemPaint



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# About the Spoken Tutorial Project

- Watch the video available at [http://spoken-tutorial.org/What\\_is\\_a\\_Spoken\\_Tutorial](http://spoken-tutorial.org/What_is_a_Spoken_Tutorial)
- It summarises the Spoken Tutorial project



# About the Spoken Tutorial Project

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- It summarises the Spoken Tutorial project
- If you do not have good bandwidth, you can download and watch it



# 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](mailto:contact@spoken-tutorial.org)



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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>

