

Installation of VMD

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

Rani Parvathy

IIT Bombay

2 September 2021



Learning Objectives



Learning Objectives

- ▶ **Download and install VMD 1.9.3 on**



Learning Objectives

- ▶ **Download and install VMD 1.9.3 on**
 - ▶ **Ubuntu Linux 20.04 OS**



Learning Objectives

- ▶ **Download and install VMD 1.9.3 on**
 - ▶ **Ubuntu Linux 20.04 OS**
 - ▶ **Windows 10 OS**



Learning Objectives

- ▶ **Download and install VMD 1.9.3 on**
 - ▶ **Ubuntu Linux 20.04 OS**
 - ▶ **Windows 10 OS**
- ▶ **Open a pdb file**



Learning Objectives

- ▶ **Download and install VMD 1.9.3 on**
 - ▶ **Ubuntu Linux 20.04 OS**
 - ▶ **Windows 10 OS**
- ▶ **Open a pdb file**
- ▶ **Change coloring and rendering**



Learning Objectives

- ▶ **Download and install VMD 1.9.3 on**
 - ▶ **Ubuntu Linux 20.04 OS**
 - ▶ **Windows 10 OS**
- ▶ **Open a pdb file**
- ▶ **Change coloring and rendering**
- ▶ **About sequence viewer**



System Requirements



System Requirements

► **Ubuntu Linux v20.04 OS**



System Requirements

- ▶ **Ubuntu Linux v20.04 OS**
- ▶ **Firefox web browser v92**



System Requirements

- ▶ **Ubuntu Linux v20.04 OS**
- ▶ **Firefox web browser v92**
- ▶ **Windows 10 OS**



System Requirements

- ▶ **Ubuntu Linux v20.04 OS**
- ▶ **Firefox web browser v92**
- ▶ **Windows 10 OS**
- ▶ **Chrome web browser v89**



System Requirements

- ▶ **Ubuntu Linux v20.04 OS**
- ▶ **Firefox web browser v92**
- ▶ **Windows 10 OS**
- ▶ **Chrome web browser v89**
- ▶ **VMD 1.9.3**



System Requirements

- ▶ **Ubuntu Linux v20.04 OS**
- ▶ **Firefox web browser v92**
- ▶ **Windows 10 OS**
- ▶ **Chrome web browser v89**
- ▶ **VMD 1.9.3**
- ▶ **A working internet connection**



Pre-requisites



Pre-requisites

To follow this tutorial



Pre-requisites

To follow this tutorial

- ▶ **Learner must be familiar with basic computer skills**



Pre-requisites

To follow this tutorial

- ▶ **Learner must be familiar with basic computer skills**
- ▶ **For pre-requisite tutorials, please visit this site**

<https://spoken-tutorial.org/>



Code Files



Code Files

- ▶ The files used in this tutorial are provided in the **Code files** link



Code Files

- ▶ The files used in this tutorial are provided in the **Code files** link
- ▶ Please download and extract the files



Code Files

- ▶ The files used in this tutorial are provided in the **Code files** link
- ▶ Please download and extract the files
- ▶ Make a copy and then use them while practising



Download Link



Download Link

- ▶ The official website for VMD is shown here

<https://www.ks.uiuc.edu/Research/vmd/>



Download Link

- ▶ The official website for VMD is shown here

<https://www.ks.uiuc.edu/Research/vmd/>

- ▶ VMD is acronym for Visual Molecular Dynamics



Summary



Summary

- ▶ **Downloaded and installed VMD 1.9.3 on**
 - ▶ **Ubuntu Linux 20.04 OS**
 - ▶ **Windows 10 OS**
- ▶ **Loaded a PDB file**
- ▶ **Changed rendering and coloring**
- ▶ **About sequence viewer**



Assignment



Assignment

- ▶ **Open 1AKI.pdb file in VMD**
- ▶ **Explore coloring methods, CPK and VDW representations**
- ▶ **Explore sequence viewer window and secondary structure details of the protein**



About the Spoken Tutorial Project

- ▶ Watch the video available at https://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- ▶ It summarises the Spoken Tutorial project



About the Spoken Tutorial Project

- ▶ Watch the video available at https://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- ▶ 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**



Forum for specific questions

- ▶ **The Spoken Tutorial forum is for specific questions on this tutorial**
- ▶ **Please do not post unrelated and general questions on them**
- ▶ **This will help reduce the clutter**
- ▶ **With less clutter, we can use these discussion as instructional material**



Acknowledgements

Spoken Tutorial Project is supported by

- ▶ **National Mission on Education through ICT (NMEICT)**
- ▶ **Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT)**

MoE, Government of India

