RAMA
UNIVERSITY

www.ramauniversity.ac.in

FACULTY OF ENGINEERING AND TECHNOLOGY

Department of Biotechnology

(Rasmol, MOLMOL, Pymol)

Rasmol

What is Rasmol?

Rasmol is most popular 3D molecular graphics viewer.

It is particularly good at viewing and rotating prote molecules, although it also works perfectly with smaller molecules.

abc

Rasmol is a molecular visualization software

raster display of molecules
Raster=display of pixels on monitor
pixel=one dot on monitor

Protein Explorer, Chime, Jmol, pymol are other similar softwares used

abc

To use Rasmol, your computer need Rasmol software and PDB data file

✓ Rasmol Software is available for Windows and Linux.

✓ PDB files for various molecules are available on Internet

Getting and installing Rasmol

Google “Rasmol”
And get installation file for windows/Linux
www.umass.edu/microbio/rasmol/

For linux
Run command “apt-get install rasmol”
Or search and install from
Linux Synaptic manager

Introduction to PyMol

- What is pymol for?
  - Looking at pdb files (protein, nucleic acid, ligands, etc.)
  - Making publication quality figures (of models and maps)
  - NOT for model building

- Where can I get it?
  - pymol.sourceforge.net
  - Current version: 0.99
  - pymol.sourceforge.net/html/ -for the manual

- Other important links
  - www.rcsb.org
  - www.igs.cnrs-mrs.fr/Caspr2/RMSDcalc.cgi

XYZ

abc

MOLMOL Tutorial

Introduction

This document shows the use of MOLMOL in some examples. It is meant to be used together with the manual (users guide). Each example will first show a picture and give commented step by step instructions on how it can be created.

XYZ

abc

Notation

The commands are listed with all arguments in the way they appear in the log window and history. They can be entered on the command line in this form, but this is not what you would normally do. Every command can be activated from a pulldown menu, and the arguments can be entered in the dialog box that will appear. If this is the preferred way, it will be indicated with the notation Menu->Submenu->Entry below the command. Frequently used commands or combinations can also be activated from the buttons on the right side of the window. This is indicated by Button:name. Some actions are normally done with the mouse, this is indicated by Mouse. Other actions are most conveniety carried out by using one of the dialog boxes, this is indicated by Dialog:name. The dialogs can be opened by clicking the corresponding buttons (selection, style, color).

Whenever a command appears in the text, it can be used as link to the corresponding online manual page.

XYZ

abc

XYZ

abc

XYZ

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XYZ

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XYZ

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XYZ

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XYZ

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MCQs

1. A
2. A
3. A
4. A
5. A
6. A
7. A
8. A
9. A
10. A