

Animation using Script Commands

Talk to a Teacher

<http://spoken-tutorial.org>

National Mission on Education through ICT

<http://sakshat.ac.in>

Snehalatha Kaliappan
IIT Bombay

3 August 2015



Learning Objectives



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- ▶ **Animations using Jmol script commands**



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- ▶ **For demonstration: Ethane and Hemoglobin**



Learning Objectives

Jmol Script Commands



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Keywords used for animations
move, delay, slab, loop and capture



Pre-requisites



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System Requirements

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- ▶ **Java(JRE) version 7**



Animation commands

- ▶ **move**: Rotate, Zoom and Translate
- ▶ **delay**: Pause a script
- ▶ **slab**: Percentage of the molecule to be displayed on panel



Animation commands

- ▶ **loop**: Causes the script to restart at the beginning, with an optional time delay
- ▶ **capture**: Captures animations as animated GIF files
- ▶ <http://chemapps.stolaf.edu/jmol/docs/>



Move command

```
move [x-rotation] [y-rotation]  
[z-rotation] [zoom-factor]  
[x-translation] [y-translation]  
[z-translation] [slab-cutoff]  
[seconds-total]
```



Summary

- ▶ Create animation of ethane and hemoglobin using script commands with key words **move**, **delay**, **loop** and **slab**
- ▶ Save the animation as GIF file using **capture** command



Assignment

- ▶ Take a molecule of your choice and create animation using **move** and **delay** commands
- ▶ Change display, color and size of bonds to create animation



About the Spoken Tutorial Project

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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

- ▶ **Spoken Tutorial Project is a part of the Talk to a Teacher project**
- ▶ **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>

