

# Animation using Script Commands

**Talk to a Teacher**

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

**National Mission on Education through ICT**

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

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**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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- ▶ **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

- ▶ 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



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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)



# 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>

