Build Molecules

Spoken Tutorial Project
http://spoken-tutorial.org
National Mission on Education through ICT
http://sakshat.ac.in

Madhuri & Viswa Janani
IIT Bombay

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Learning Objectives

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We will learn to:

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- **Import molecules from database**

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- **Rotate, zoom in and zoom out**

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- **Set up force field and optimize geometry**

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- **Working Internet connection**

Pre-requisites

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- **Knowledge of basic Chemistry**

Download Link

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- **To download Avogadro use the link sourceforge.net/projects/avogadro**

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- Build DNA molecules and Peptides

Assignment

1. **Create a protein sequence using the following amino acid residues: Glu, Leu, Asn, Cys, His**

2. **Optimize the geometry using UFF force field**

3. **Save the image as .cml file**

Assignment

1. **Build RNA sequence using the Nucleic acids: AUGC**
2. **Optimize geometry using MMFF94 force field**
3. **Save the image as .cml file**

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

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- **More information on this Mission is available at http://spoken-tutorial.org/NMEICT-Intro**