

## Image menu

- **Image Settings...**: Display mode can be set to Alpha Carbons Only, Main Chain Only, or Main Chain & Side Chain, with or without H-atoms;  $\hat{C}M$  is the keyboard shortcut to swap one mode for the next (the OptionKey reverses the swapping order). There is an option to show side chains of selected residues when the Main Chain Only mode is turned on. The rotation axis can be set through this dialog or by using the  $\hat{C}B$  keyboard shortcut to swap from one axis to the next (the OptionKey reverses the swapping order). Hetero-atoms, water molecules and H-Bonds can be visualized or not. Use  $\hat{C}H$  to show or hide H-bonds. B-Factor Display can be set; Stereo Angle and Motion Speed can be chosen; The information concerning interatomic distances & angles (obtained after clicking on 2,3 or 4 atoms) can be displayed or not ('Show Length & Angle Info' Button).

Stereo Angle can be set dynamically on a stereo image with the help of the two shortcuts  $\hat{C}\blacklozenge$  and  $\hat{C}\emptyset$  (the stereo angle is displayed).

- **Pen Settings...**: The pen Size, Pattern & Color for all structure elements can be selected. Pen size can be adjusted from 1 to 4 points; pattern can be set to gray, ltgray, dkgray or black; 7 colors can be chosen (this doesn't however apply completely to selected blocks —Selected—): black, yellow, magenta, red, blue, green, cyan, white.

- **Reset Image & Pen Settings**: Initialize zoom factor, rotation angles etc.

- **Animate...**: Calculate a number of Frames separated by Increment degrees; these frames are then played back at a Speed (°/sec); an animation sequence can be saved (Animate & Save) and Replay(ed) later. Up to 360 frames (depending only on available memory) can be played.

- **Replay** a saved animation.

- **Stereo**: Display a stereo pair of the structure in memory; stereo angle can be set in Image/Image Settings as well as with the help of the  $\hat{C}\blacklozenge$  and  $\hat{C}\emptyset$  shortcuts (the stereo angle is displayed); To displace the stereo pair on the screen use the usual 'Drag with the SpaceBar down' procedure. To modify the distance between both stereo images (or even to interchange them!), drag with the SpaceBar down AND with the OptionKey down (the pixel distance between both structures is displayed).

- **Rotate**:

Any structure motion can be stopped by pressing any key or the mouse.

- \* **Reset**: Bring the Zoom and Rotate conditions to standard setting.

- \* **Right & Left**: ( $\hat{C}R$  &  $\hat{C}L$ ) Control the direction of rotation (Right=clockwise).

- \* **Wobble**: ( $\hat{C}W$ ) Wobble the structure by 20° around the Z-axis (vertical).

- \* **Tumble**: ( $\hat{C}T$ ) Tumble structure around its rotation atom (handy with very small structures).

- **Zoom**:

Any structure motion can be stop by pressing any key or the mouse.

- \* **Zoom In & Zoom Out**: ( $\hat{C}+$  &  $\hat{C}-$ ) Zoom the image around the rotation atom (which doesn't move). The zoom factor is indicated in Å/cm in the Report window.

If the zoom operation is performed with the ControlKeyDown, the visible surrounding of the rotation atom will be changed instead of the zoom factor. Releasing keys will stop zooming.

- **Recenter**: ( $\hat{C}=\text{)$  Bring the rotation atom to the center of the Image window. If the rotation atom belongs to a non visible part of the structure, the gravity center of the structure (based on CA atoms) is brought to the center of the Image window. If the OptionKey was down when this menu item was selected, it will bring the rotation atom to the center of the Image window and set the zoom factor to a value which will make the structure as big as possible.

- **Swap Mode**: ( $\hat{C}M$ ) Swap the display mode between Side Chain, Main Chain, Backbone. If the Shift key is down, the swap order is reversed.

- **Show/Hide H-Bonds**: ( $\hat{C}H$ ) Swap the display mode of H-Bonds.

- **Show/Hide I-Bonds**: ( $\hat{C}I$ ) Swap the display mode of I-Bonds.

- **Motion StepWise**: Decomposes motion (Zoom, Rotate & Turn Bond) into steps; step increment can be set in Image/Image Settings;

- **Motion Structure2**: ( $\hat{C}2$ ) Allows motion only of the second structure;