

Animation Kit for [PACUPP](#)

You may save this PDF document to your computer if you wish.

Animation Kit Instructions

1. The animation kit is included with your [PACUPP download](#). It is in a folder (directory) named *animation_kit*. This document is *animation_kit/animation_kit_instructions.pdf*.
2. In Jmol, get exactly the molecular view that you want to animate. Things to consider:
 - A. Usually you will want to turn on **quality**. The command **q** toggles quality rendering.
 - B. **Size** your browser window so that Jmol is the size you want for your animation. Large sizes will generate larger animation files. To avoid an unnecessarily large presentation file (.pptx), don't make the size larger than needed for a clear animation when projected. About 500 pixels on a side is usually large enough.
 - C. **Zoom** your molecule to fill Jmol. If there is a lot of empty space around the molecule, that empty space will be in your animation, taking up wasted space in your slide.
3. Set the **animation speed**: Drag the file *animation_kit/playback-slow.spt* and drop it onto your molecular view. (Later, if you repeat this step, you may try different speeds.)
4. **Create** the animation file:
 - A. Decide whether you want rocking or spinning. If rocking through 40, 60, or 90 degrees is sufficient, the animation file will be smaller. If you need to show all sides of the molecule, you can spin (360°), but the animation file will be larger.
 - B. Decide whether to rock or spin around the X (horizontal) or Y (vertical) axis.
 - C. Drag the appropriate file and drop it onto the molecule. For example, if you want to rock 60 degrees around the Y axis, drag and drop the file **rock-y-60.spt**. The molecule will begin to move. Wait until it stops moving. This may take several minutes.
5. **Rename** the animation file: The previous step will create a file whose name begins **rock** or **spin**, and ends in **.gif**. Rename it to something appropriate (**keeping .gif as the end of the file name!**), because if you make another animation, it will overwrite this file.
6. Drag the .gif file and **drop it into a slide** in your presentation. Resize and position as desired. In Google Slides, it will animate automatically. In older versions of PowerPoint, it will animate only when you go into *Slide Show/Projection* mode. (Optional: you can preview the animation by dragging the .gif file and dropping it into a web browser window.)

Repeat steps 2-6 to make additional animations.

If you have any problems with the animation kit, we'd like to help, and to know how to improve it. Please contact m0lviz@yahoo.com

Options

Making other rocking angles or playback speeds (optional):

The files **playback....spt** contain Jmol commands that set the frame capture rate and playback speed. If you wish, you can try other values by duplicating one of these files and editing it with a [plain text editor](#).

The files **rock....spt** contain Jmol commands that determine the rocking angle. If you wish, you can try other angles by duplicating one of these files and editing it with a [plain text editor](#). Note that the value at the end of the command is *half* of the full sweep angle.