

Chemistry Laboratory Demonstration Videotaping Tips

For additional information on producing chemistry laboratory demonstration videos, see the document “Producing Lab Videos” on this site.

Stabilize the camera

Use a tripod to minimize camera shake. A small tabletop tripod can be useful for close-ups. If it becomes necessary to hold a camera by hand, move the camera closer to the subject rather than using the zoom to move in.

Use camera moves sparingly

When videotaping, be deliberate about camera moves. Avoid zooming or moving the camera unless there is a need to do so. If you do zoom or pan, rehearse the move a couple of times so you can execute it with confidence.

Choose the background carefully

Extraneous objects in the background can create confusion, so select a background that is uncluttered. Ideally, try to select a background that is not much brighter or darker than the subject (in order to reduce contrast/exposure issues). Avoid highly reflective backgrounds if possible.

Audio

Use a lavalier microphone (also called a “tie clip” microphone); it’s the easiest, least expensive way to get good narration. If you are using the in-camera microphone, you should try to get the camera as close to the instructor as possible in order to get the best sound.

Remember to get “pre-roll”

If you plan to edit the video, start taping a few seconds before your subject speaks and let the tape run a few seconds after your subject has finished speaking. Ask the instructor to hold their position during these intervals (as opposed to looking at the camera, laughing, etc). This will give you room to do fades and dissolves, and prevents cutting off words. If your talent can’t seem to stop “jumping the gun” turn off the beep indicator and/or put tape over the record light so they don’t know when you’re pressing record.

Finger slates

When recording multiple takes of a scene, you can hold up one, two or three fingers in front of the lens before each take (indicating take one, two or three). This will make logging the footage for editing much easier.

Practice with the equipment

Check the camera out and learn to use it. Practice doing short video under a variety of conditions. Keep notes on your experiences. (You may even wish to consider reading the operators manual☺)

Think in shot sequences

Try getting sequences of shots. For example, it’s a good idea to begin with a medium shot that shows the entire demonstration area, so students get an idea of the relative locations of all the equipment. This “mental map” will help them stay oriented during the close-ups. Ideally, the instructor will “freeze” while you are paused and resetting the camera for your next shot. That way, when you edit, there will be no loss of visual continuity (e.g. both hands on the table in one shot, then instantly having both hand in the air)