

Today

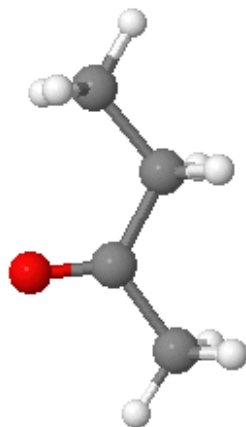
Make Lab Announcements

Review Syllabus

Introduce IR Spectroscopy Section 13.10

Next Class

Section 13.10 - 13.18
Infrared Spectroscopy

2-butanone vibrations

JSmol

no vibration
mode
mode
mode
mode
mode
mode
mode
mode
mode
mode

Of course, all the other Jmol script commands work as well:

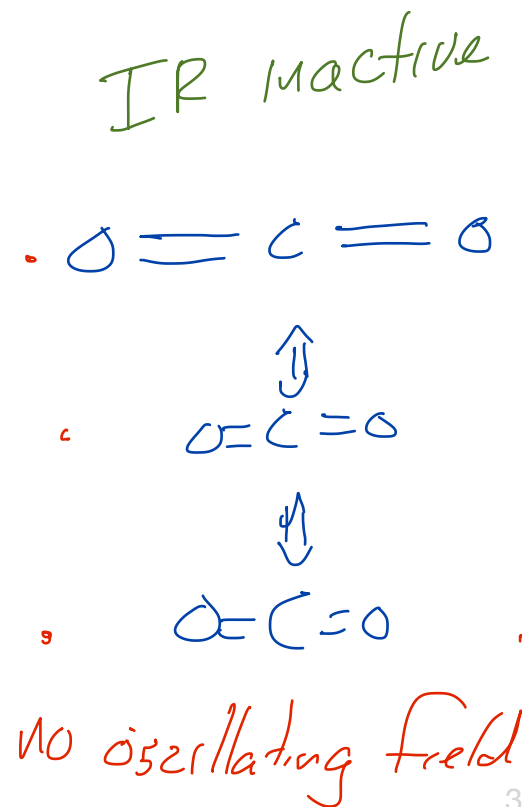
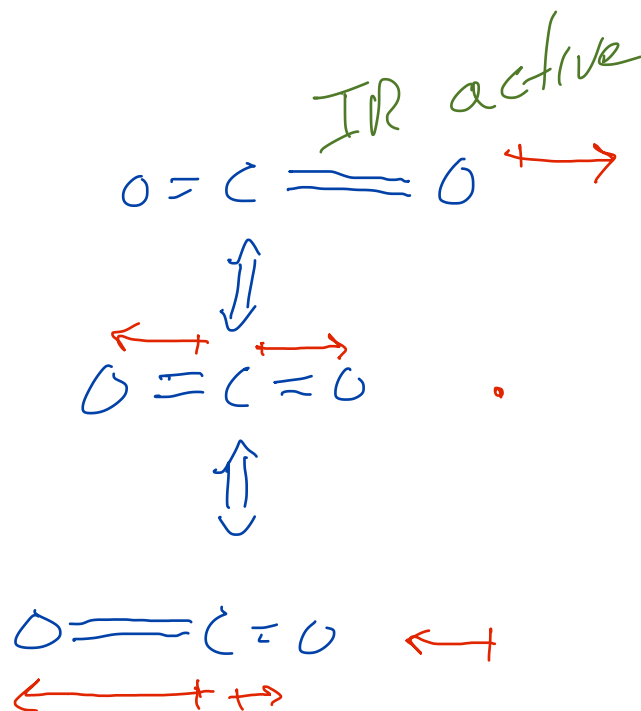
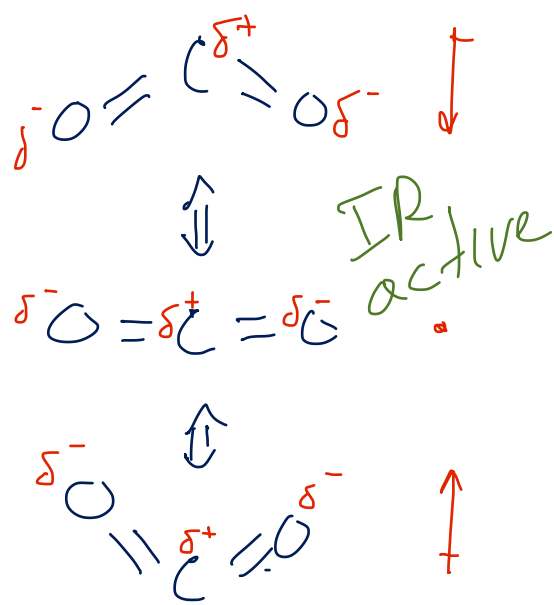
- vibration
- vectors
- color vectors yellow color vectors purple
- spacefill off spacefill 20% spacefill 100%
- wireframe on wireframe 0.1
- spin

A vibration that changes the dipole of a molecule creates an oscillating electric field that can interact with Infra-red light.
 "is" oscillating electric + magnetic fields

Molecules are constantly vibrating

vibrational modes are the simplified view of the vibrations of the molecule. They are all occurring

simultaneously - 2 \perp to each other



Vibrations can be "IR Active"

Section 13.10

