Particle in a Box Overview

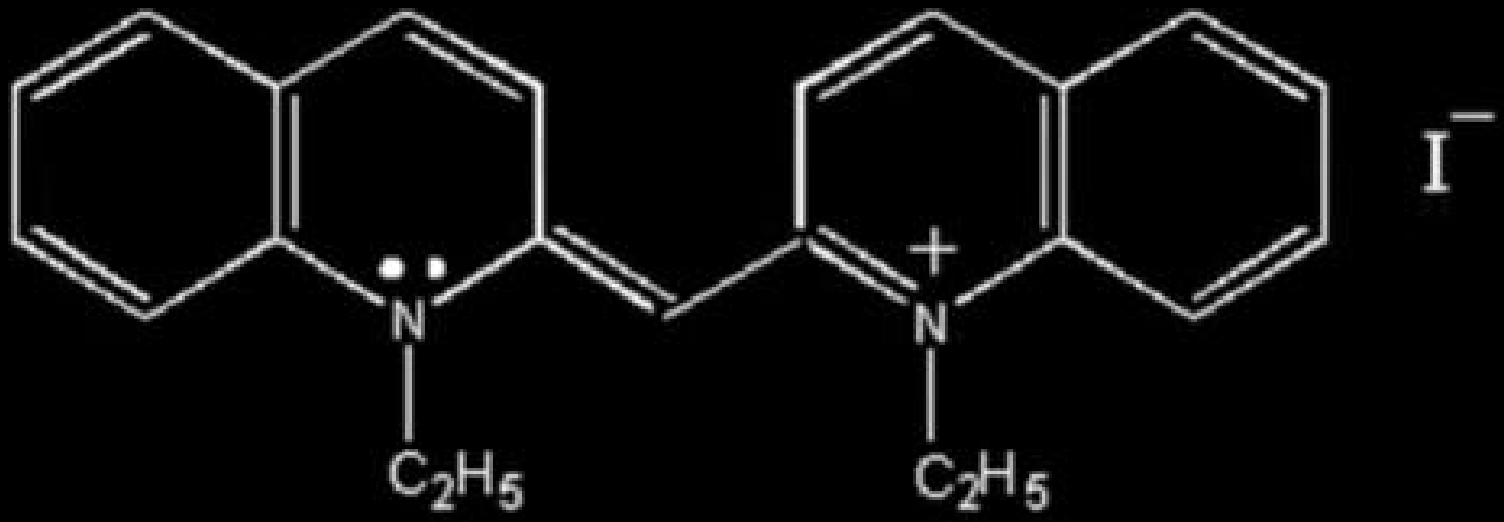
The first step in this lab is to download the documentation for the experiment: "Particle in a Box Guide". This gives you step-by-step guidance and you should keep it close by when watching the videos and when working out your solutions.

Particle in a Box Guide

Once you have downloaded the document you should then watch the introductory video which outlines the experiment.

You will the move on to the next lesson to complete the experiment.

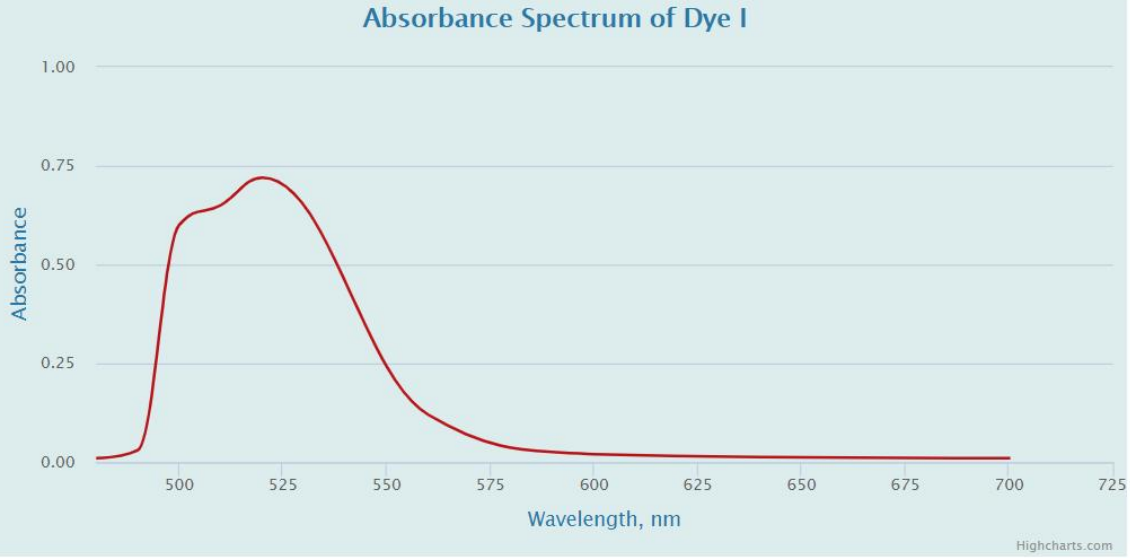
Compound (I)



1,1'-DIETHYL-2,2'-CYANINE IODIDE

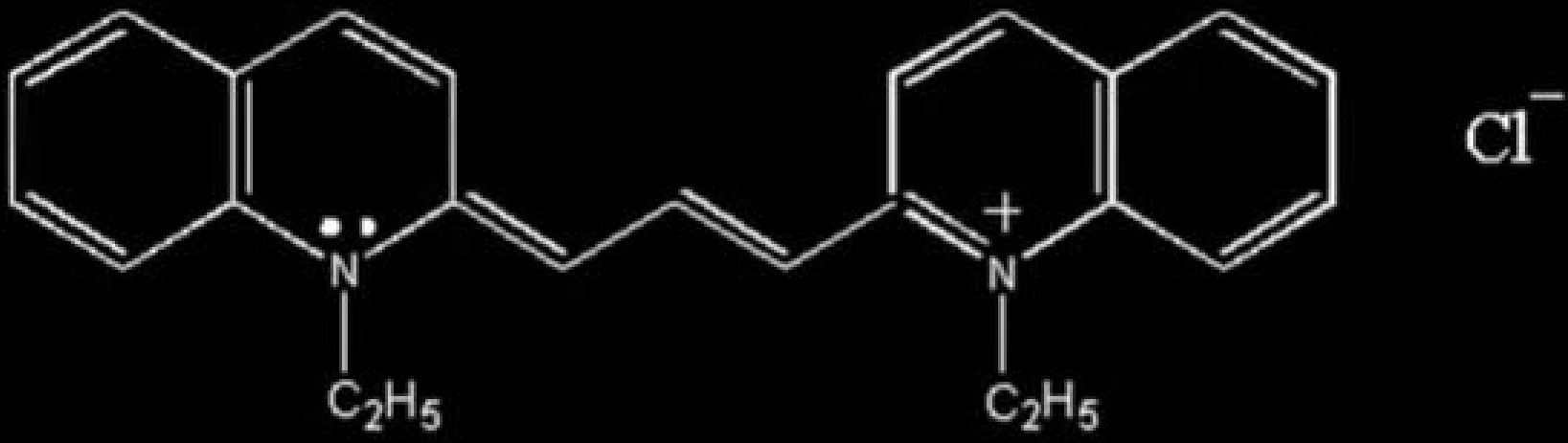
Click on each dye to plot its absorption spectrum

reset



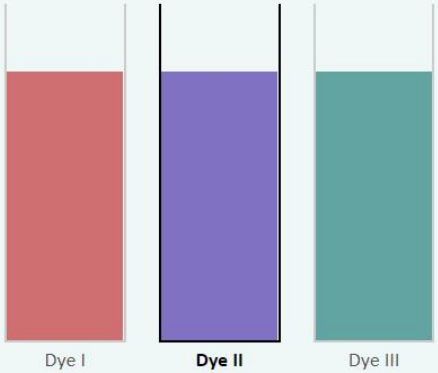
Developer: Sharon Gardner, University of Manchester, 2014

Compound (II)

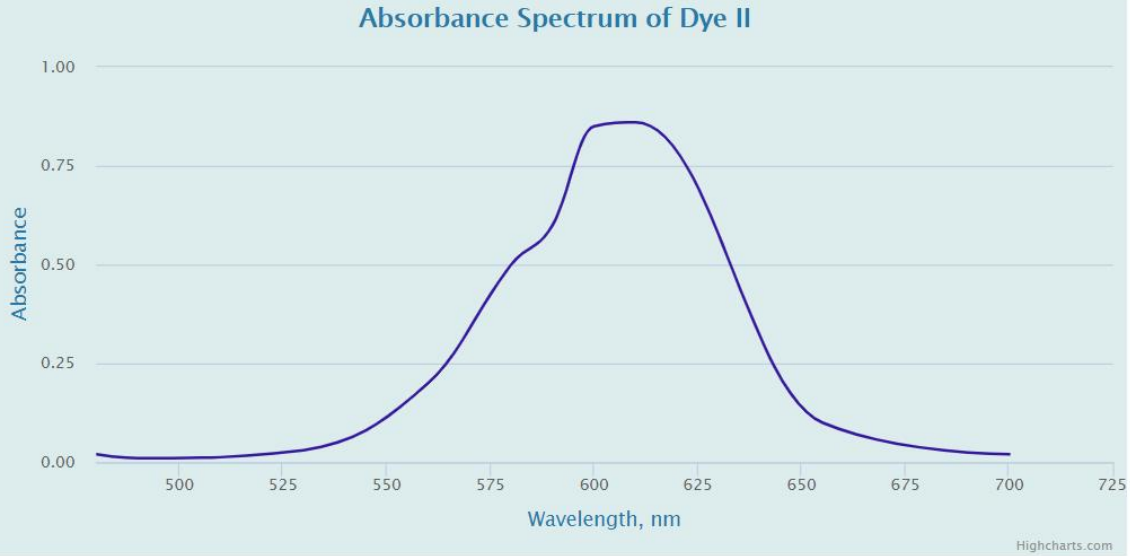


1,1'-DIETHYL-2,2'-CARBOCYANINE CHLORIDE

Click on each dye to plot its absorption spectrum

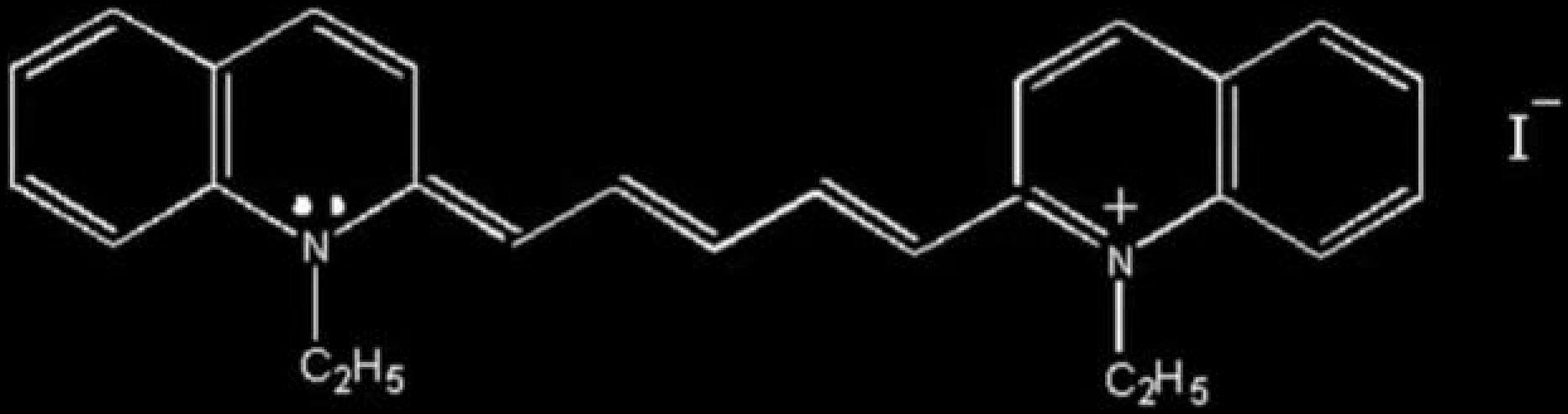


reset



Developer: Sharon Gardner, University of Manchester, 2014

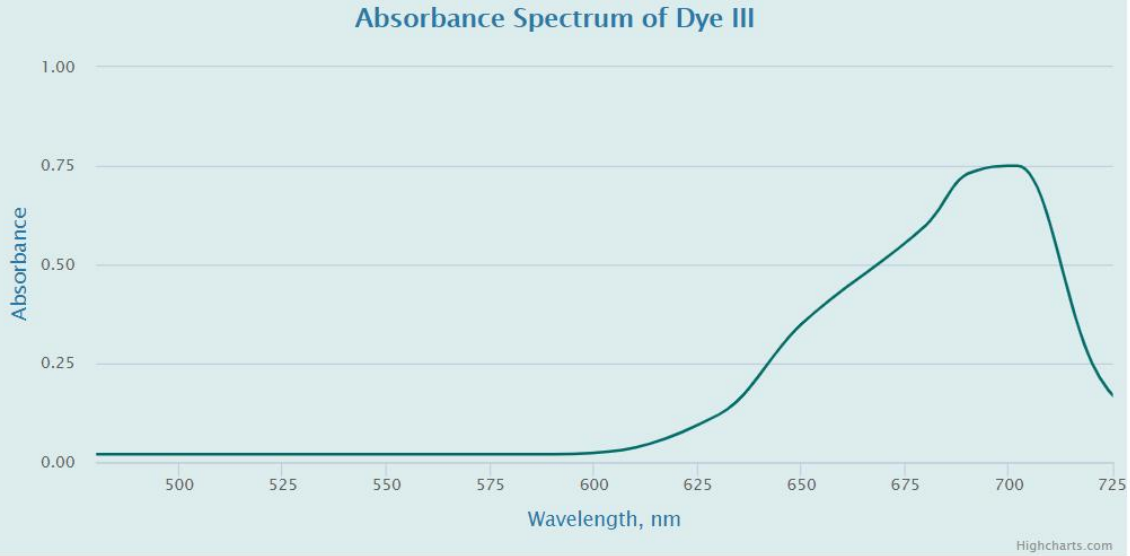
Compound (III)



1,1'-DIETHYL-2,2'-DICARBOCYANINE IODIDE

Click on each dye to plot its absorption spectrum

reset



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1. The *calculated energy* in eV and *experimental λmax* value measured for Dye, Compound (III) are respectively:

- ○ 1.0 eV and 626 nm
- ○ 3.4 eV and 702 nm
- ○ 1.7 eV and 626 nm
- ◉ 1.7 eV and 702 nm
- ○ 3.4 eV and 626 nm
- ○ 2.5 eV and 702 nm

✓ **Correct**