

## 6F40.10 - RAYLEIGH SCATTERING



Key words: optics, rayleigh scattering, sunset, milk, jar

### Equipment List:

1. Jar,
2. Light source,
3. Slit to direct the light source,
4. Low-fat milk,
5. Extra cup

### How to assemble and operate:

- Set up the light source followed by the slit and consequently jar filled with water. Turn off all the lights in the room.
- Turn on the light and slowly add milk into the water. It is convenient to start with little amounts of milk to slowly increase the effect and then try one where we add more milk from the start to make a more drastic effect.
- Observe the change of color. A good idea is to explain why we need low fat milk, showing how the jar looks blue whereas the other light looks reddish and combine this demo with explanation of how the sunset works

### Description/Theory:

This demonstration shows the behavior of sunset through rayleigh scattering. It is a clear way to demonstrate the behavior of light in the atmosphere and gain student's interest.

### Comments/Notes: