



Second lecture

Quarter-Wave plates

Msc. Eman Ahmed

Fourth Stage

Department of medical physics

Al-Mustaqbal University-College

2022- 2023

Quarter-Wave plates

Quarter-wave plates are used to turn linearly polarized light into circularly polarized light and vice versa. To do this, the wave plate must be oriented so that equal amounts of fast and slow waves are excited. This is achieved by orienting an incident linearly polarized wave at 45° to the fast (or slow) axis, as shown in Figure 1.

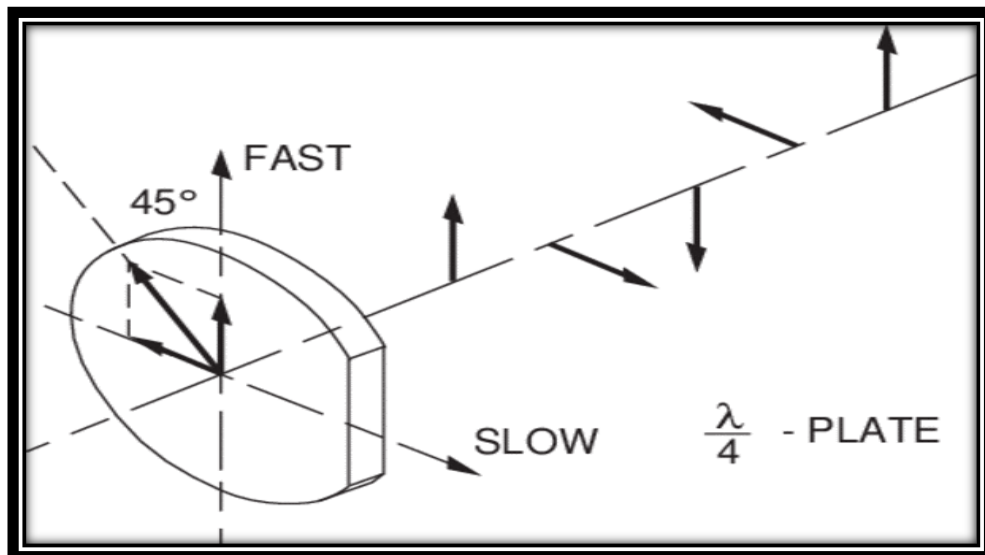
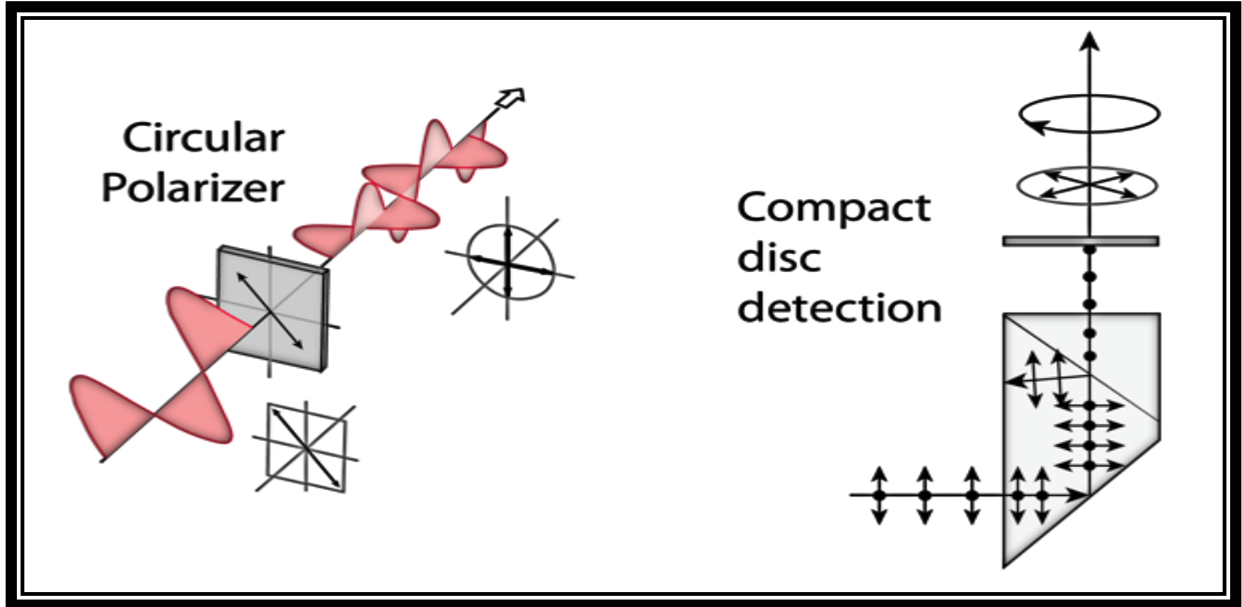


Figure 1. Turning linearly polarized light into circularly polarized light.

Quarter-Wave Plate Applications



Linear to Circular Polarization

