Our problem is to show how light wave is acting when it hits from one medium to another medium, with polarization analysis included.

This procedure contains 2 part:

1. Snell’s law shows the direction of the light after reflection and refraction.
2. Fresnel Equation shows the energy relationship of s- and p- polarized electromagnetic wave when it hits at the interface. (reflectivity, transmissivity, and so on)

First we can achieve the