**Interesting Device Structures**

1) Different VCSEL structures with DBR and/or PCM mirrors
2) Resonance cavity enhanced photodetectors
3) Photonic crystal based waveguides and devices

**Observations**

- Different VCSEL structures with DBR and/or PCM mirrors
- Resonance cavity enhanced photodetectors
- Photonic crystal based waveguides and devices

**Simulation Examples**

- A compact Hybrid grating resonator
- VCSEL with PCM mirror
- Conventional VCSEL with rectangular current aperture

**Figure 2.** Schematic of various laser structure.

**Figure 3.** Laser simulator different part.

**Figure 4.** Schematic of a typical device structure and FMM procedure.

**Figure 5.** Several simulated structure and their results.

**References**