PICS 3D – Evaluation (by Sudharsanan S – started on October 14th,2010)

Day 1 – Notes from the manual

PICS3D uses finite element analysis (FEM) to study various Photonic Integrated Circuit (PIC) components.

Applications of the software:

- 1. Fabry-Perot (FP) lasers.
- 2. Distributed Feedback (DFB) lasers.
- 3. Distributed Bragg Reflector (DBR) lasers.
- 4. Semiconductor Optical Amplifiers (SOA).
- 5. Waveguide photodetectors.
- 6. Vertical Cavity Surface Emitting Lasers (VCSELs).
- 7. External cavity lasers.
- 8. Fiber grating lasers.
- 9. Electrode absorption modulators (EAM).
- 10. Multi-section/Multi-electrode DFB or DBR lasers.
- 11. Multi-section photonic integrated circuit combining more than one of the above devices.