

## **TUNABLE OPTICAL MODULATOR FOR OPTICS APPLICATIONS**

**G. G. SARATE AND V.T. INGOLE**

### **Abstract**

Voltage tunable optical modulator is investigated. The tunable central wavelength is achieved by controlling the voltage across electrodes. Tunable optical modulator is made up of strips of waveguide made up of titanium indiffused lithium niobate. The design approach of modulator for various fabrication parameters for central wavelength  $1.55 \mu\text{m}$  is studied. The linear relationship is obtained between bandwidth and various tuning voltages. The DC response function of modulator is studied. The relation between optical output powers versus applied voltage is obtained.

-----  
**Keywords:** optical modulator, tunable, optics