

## **Abstract**

Tin doped zinc oxide thin films were deposited by reactive evaporation under various tin doping levels ranging from 1% to 8%. The deposition was done using Edwards Auto 306 coating unit at room temperature (25°C) and  $5.0 \times 10^{-5}$  mbar of chamber pressure. The optical transmittance spectra was obtained using UV-Vis-NIR spectrophotometer 3700 DUV in the visible wavelength 380-750nm. The doped films showed high transmittance >75% although slightly lower than that of undoped films. The band gap ranged from 2.95-3.95eV with the lowest value been attained at 4% tin doping. For the electrical characterization, sheet resistivity was carried using the four point probe at room temperature (25°C). The sheet resistivity ranged from 24.3-26.7Ωcm although it decreased with increase in doping concentration.