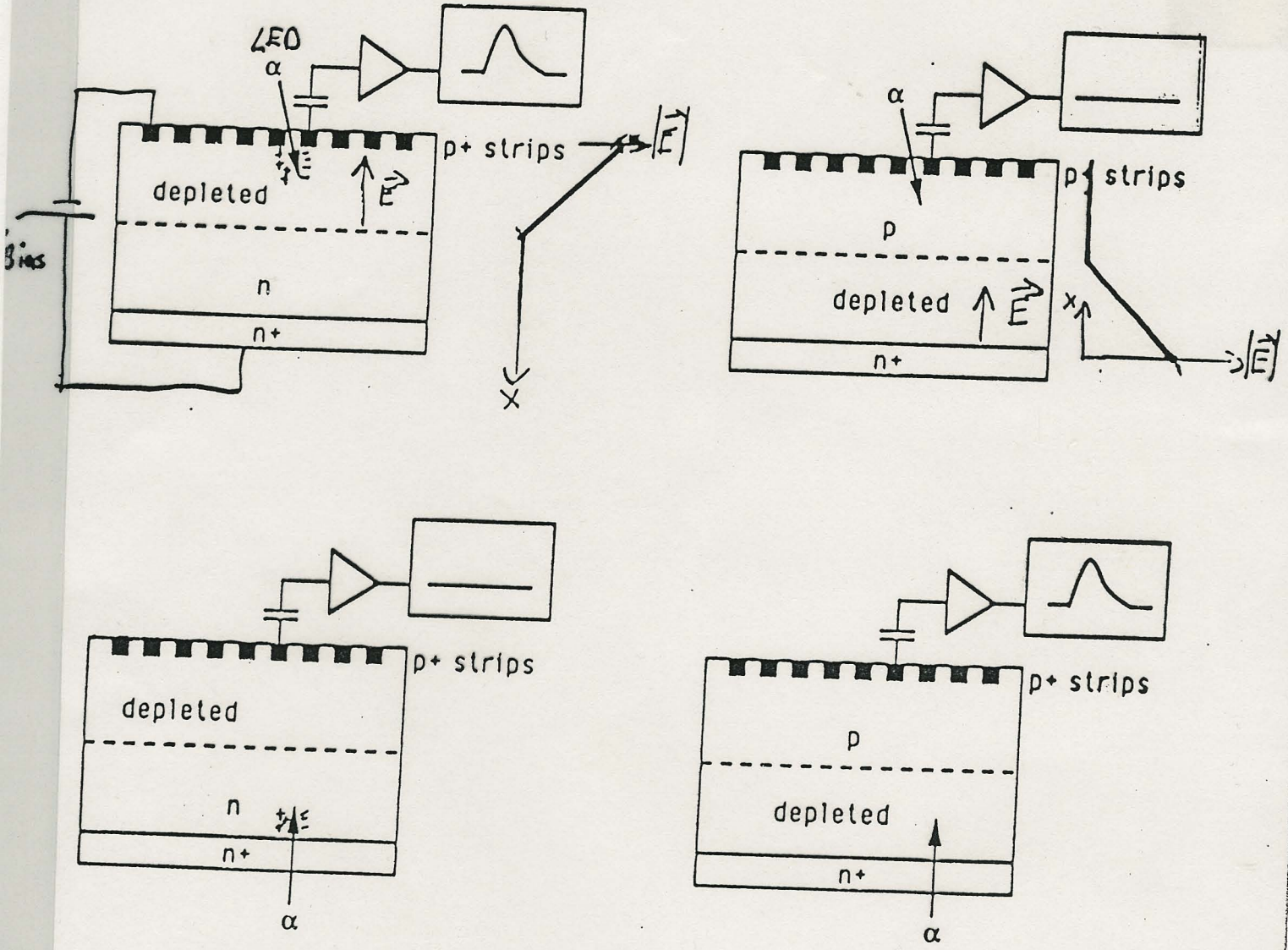
direct evidence for type inversion

before type inversion

after type inversion



LED: $\lambda = 820\ nm \Rightarrow h\nu = 1.5\,eV$

mean free path in Si $\approx 30\ \mu m$