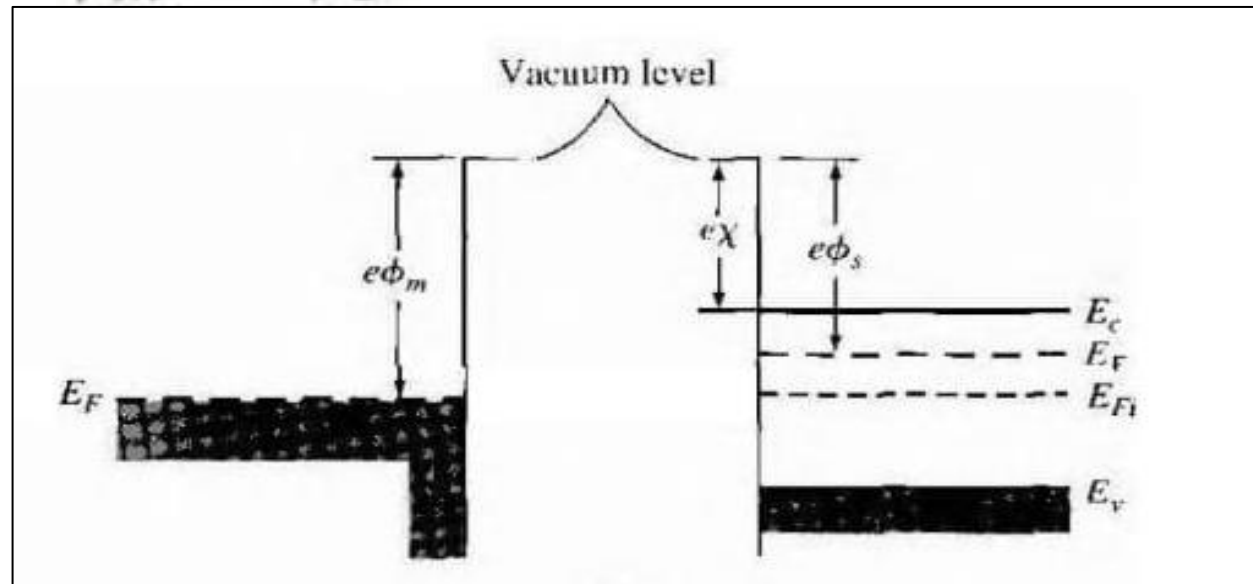


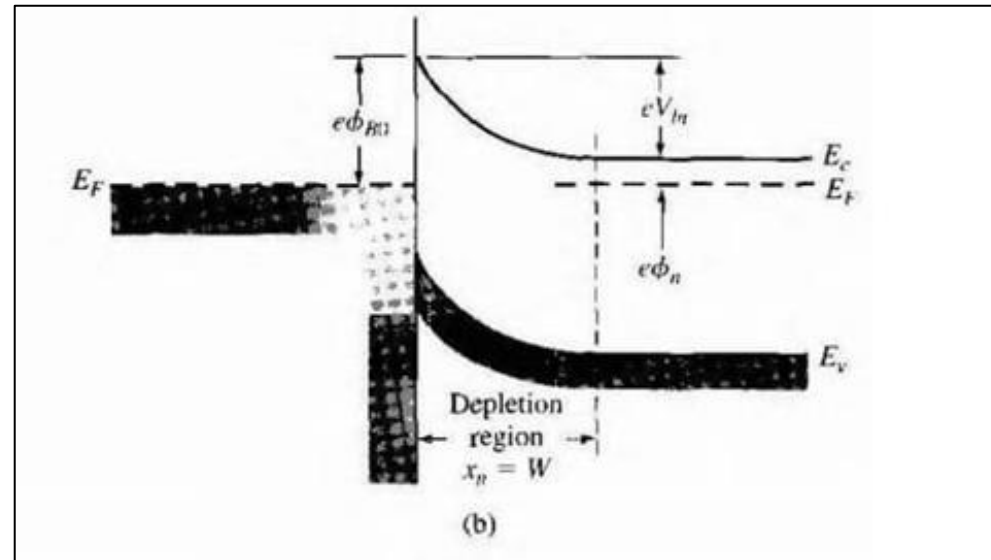
Metal-Semiconductor Heterojunctions

Metal and a n-type semiconductor

In this case the $\phi_m > \phi_s$.



The Energy-band diagram of metal and n-type semiconductor

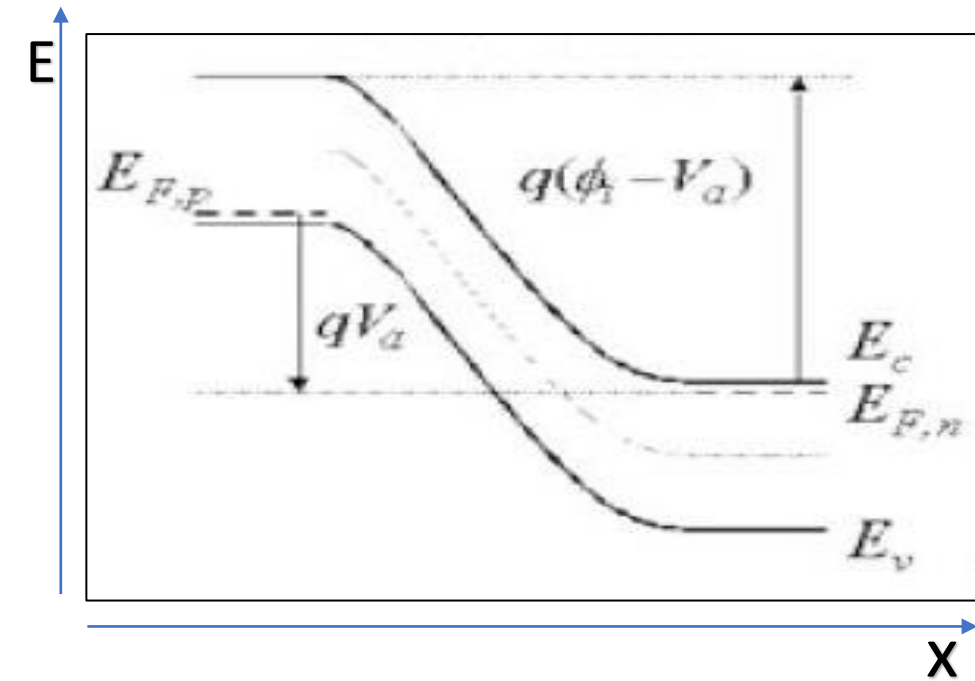


The energy-band diagram after contact

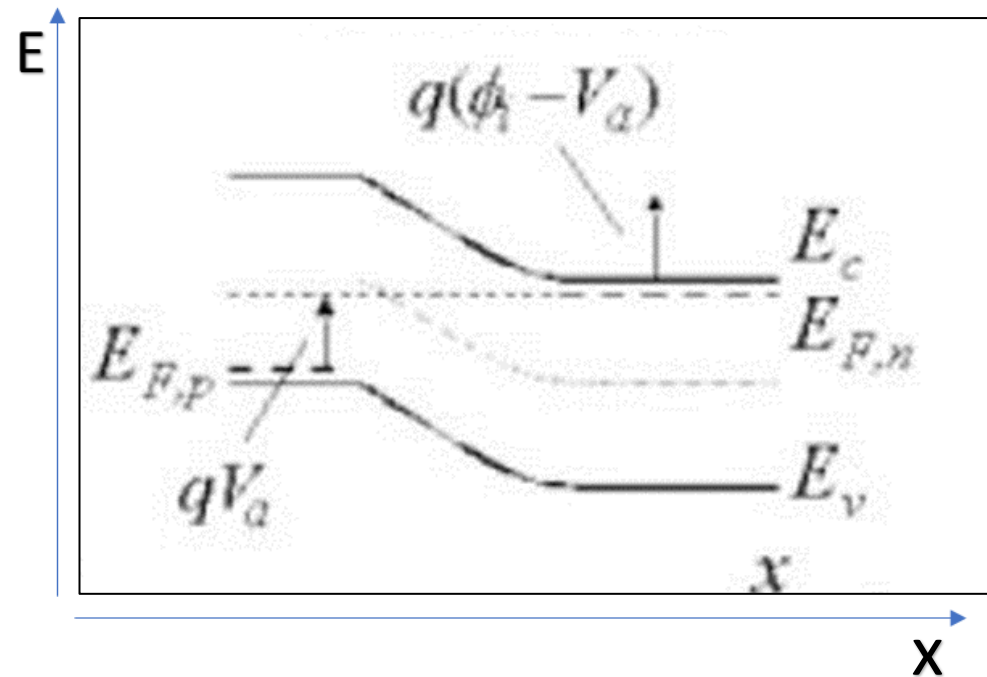
HOW??

Same electron potential across y-z plane

Now coming to the biasing:



REVERSE BIASING



FORWARD BIASING

CONCLUSION:

The forward biasing should be given w.r.t. metal for current flow.

