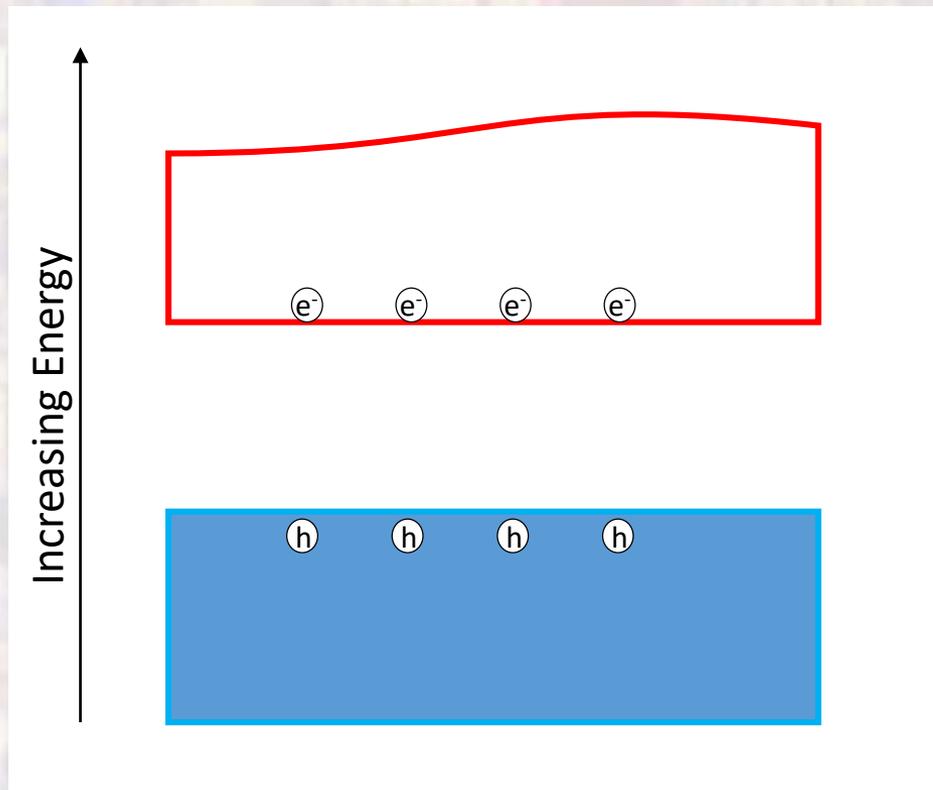


# Doping – Energy Bands

Last updated 2/9/19

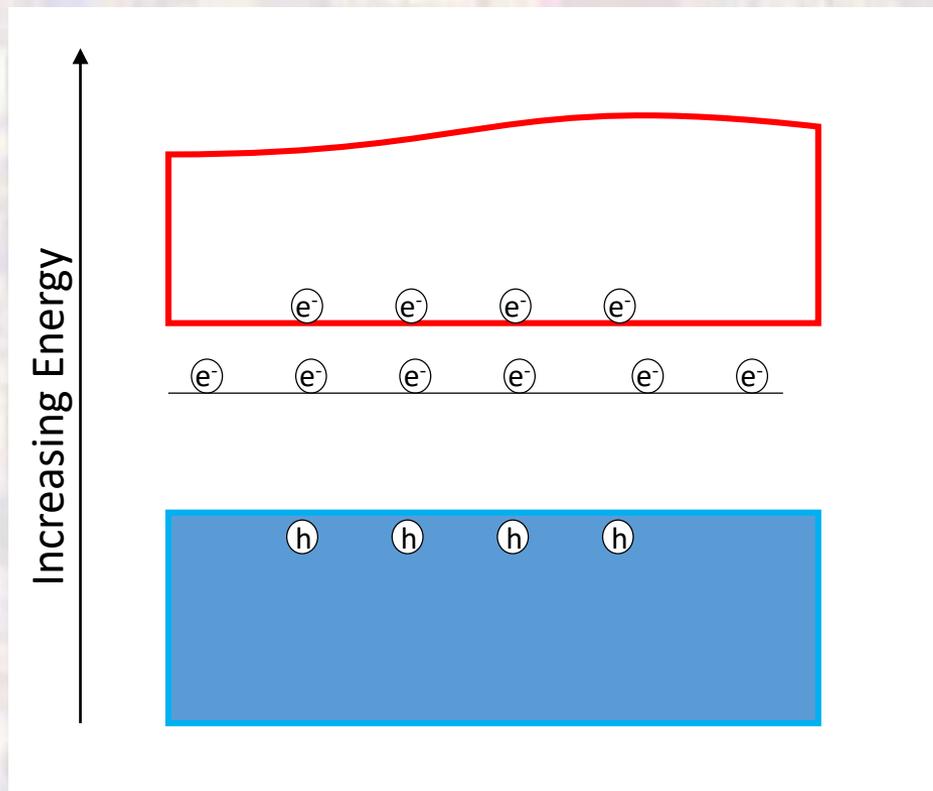
# Doping – Energy Bands

- Semiconductor – pure
  - Limited number of free electrons and holes



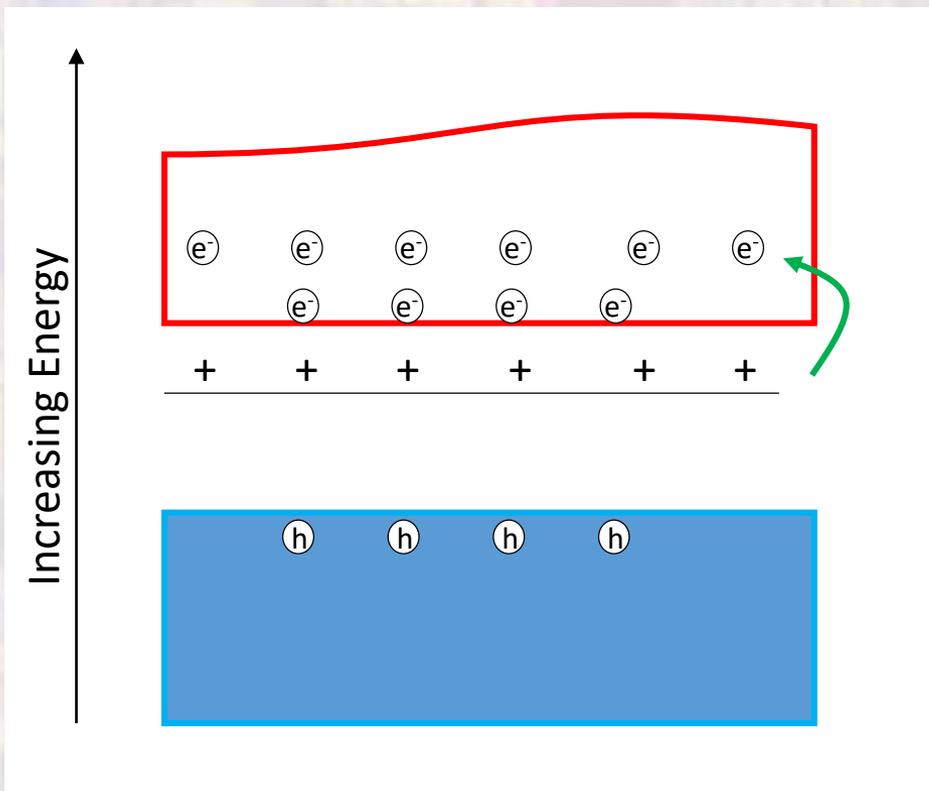
# Doping – Energy Bands

- Semiconductor – Doped
  - Donor (Phosphorous)



# Doping – Energy Bands

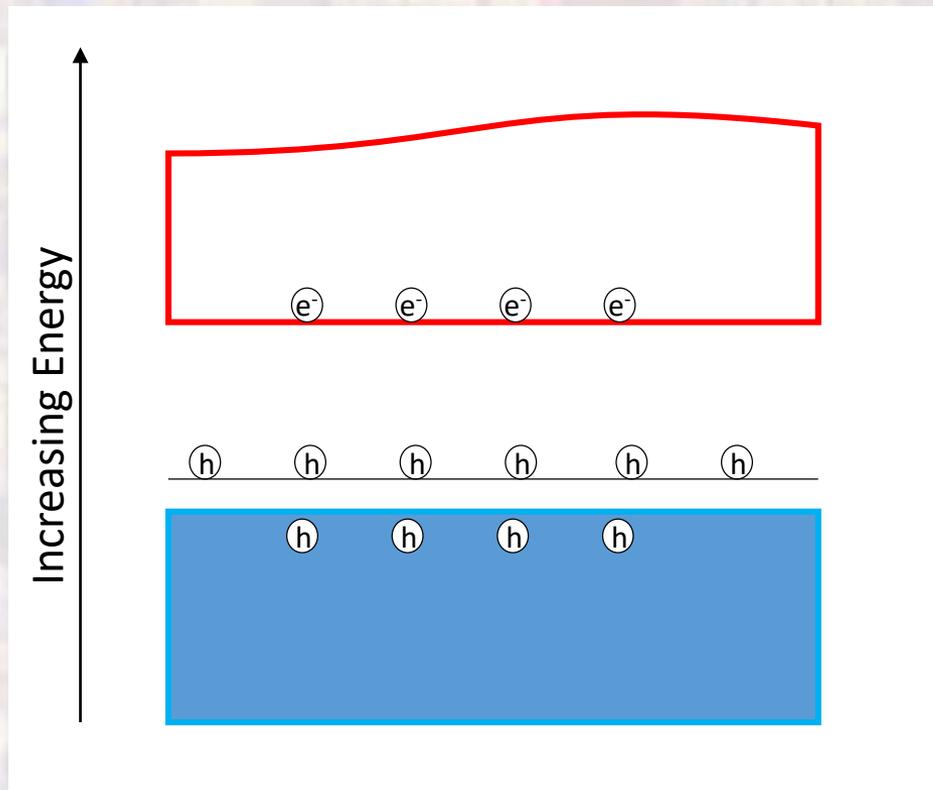
- Semiconductor – Doped
  - Donor (Phosphorous)



Binding Energy  
0.044eV

# Doping – Energy Bands

- Semiconductor – Doped
  - Acceptor (Boron)



# Doping – Energy Bands

- Semiconductor – Doped
  - Acceptor (Boron)

