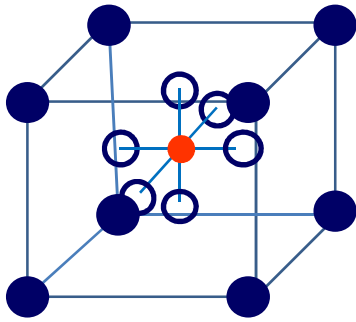
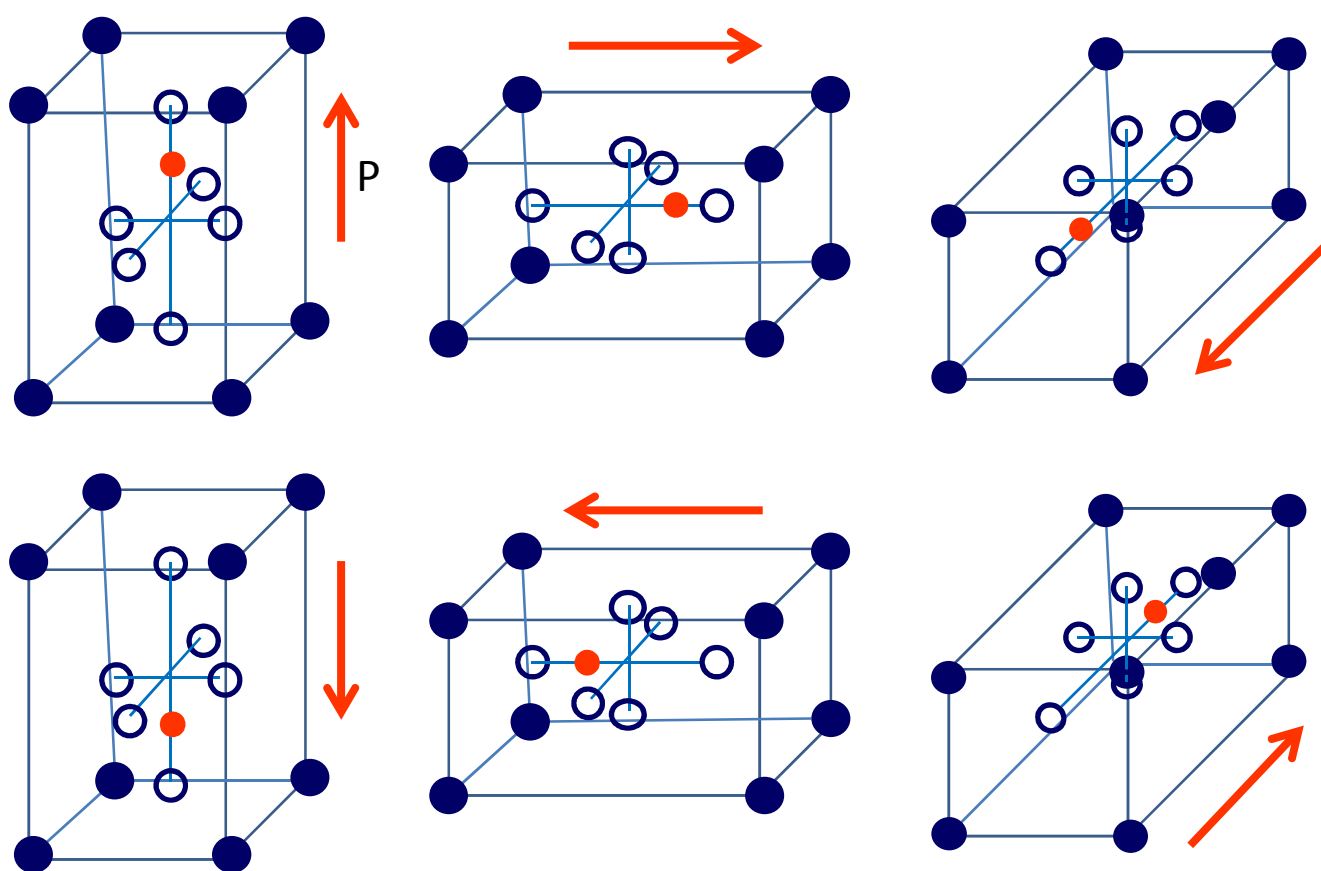


Perovskite structure of ferroelectric crystals, i.e. PZT

Cubic crystal, $T > T_c$



Tetragonal crystal $T < T_c$, spontaneous polarization



- Lead Pb^{2+}
- Oxygen O^{2-}
- Titanium, zircon Ti^{4+} , Zr^{4+}