

## *Conductors in Electrostatic Equilibrium*

- The Electric Field is zero everywhere inside the conductor
- Any excess charge on an isolated conductor must reside entirely on its surface.
- The E-field just outside a charged conductor is perpendicular to the conductor's surface.
- On irregularly shaped conductors, charge tends to accumulate where the radius of curvature of the surface is the smallest (i.e. at the sharp points).
- The electric potential,  $V$ , is constant everywhere on the surface of a charged conductor in electrostatic equilibrium.