electron work function, Φ

The minimum work needed to extract electrons from the Fermi level of a metal M across a surface carrying no net charge. It is equal to the sum of the potential energy and the kinetic Fermi energy taken with the reverse sign:

$$\Phi^M = -(V_e + \varepsilon_e^F)$$

whera V_e is the potential energy for electrons in metals and ε_e^F is the kinetic energy of electrons at the Fermi level.

Source:
PAC, 1986, *58*, 437 *(Interphases in systems of conducting phases (Recommendations 1985))* on page 441