Radius of Strömgern Sphere:

$$r = R = \left[\frac{3}{4\pi} \cdot \frac{L(0)}{N_H^2 \propto (T)}\right]$$

Ionization Potential:

The potential energy of an energy level is given by the "Rydberg Formula":

$$E_n = -Z^2 \cdot \frac{m_e e^4}{8 \in_0^2 h^2} \cdot \left(\frac{1}{n^2}\right)$$

