## **Schrödinger Equation**

$$i\hbar\frac{d}{dt}|\psi(t)\rangle=\hat{H}|\psi(t)\rangle$$

where  $|\psi(t)\rangle$  is the state vector of the quantum system,  $\hat{H}$  is the Hamiltonian operator, and  $\hbar$  is the reduced Planck constant.