Schrodinger's equation is an equation used to describe the behavior and behavior of subatomic particles such as electrons in atoms and molecules. It is a fundamental equation of quantum mechanics which helps to explain the complex behavior of electrons within atoms. The equation was formulated by the Austrian physicist Erwin Schrödinger in 1926. The equation represents a wave-like behavior of electrons and describes the probability of an electron occupying a particular energy state. In mathematical form, Schrodinger's equation is written as: $i\blacksquare\partial/\partial t\Psi = H\Psi$ where 'i' is the square root of -1, '$\blacksquare$' is the reduced Planck's constant, 't' is the time, 'Ψ' is the wavefunction, and 'H' is the Hamiltonian operator. The left hand side of the equation describes the time evolution of the wave function which is a mathematical description of the electron. The right hand side is known as the Hamiltonian operator and is composed of a combination of the potential energy terms and kinetic energy terms of the system. The Hamiltonian operator is a mathematical system which describes the energy of the electron. Through the use of Schrodinger's equation, quantum scientists are able to understand the behavior of electrons in molecules and atoms and ultimately explain the behavior of chemistry and materials.