

## Chemistry

The chemistry of the four alternative energy forms discussed at this site is similar to some extent for nuclear and solar power, while wind and hydro power are hardly concerned with chemistry. But it must be noted that the chemistry of batteries that may be used on home water and wind systems is also important. For information on [batteries](#), see the science concept page associated with it. The same batteries that are used for home water and wind systems could also be used on a home solar system, or a system for some other alternative energy form.

It is ironic that nuclear power is often considered the atomic power form when the science concepts behind solar power are also found in the atom. Solar power's chemistry primarily involves the movement of charged electrons (called photons) through a series of holes in connected electron clouds. The area that electrons occupy (called electron clouds) is on the outer edge of the atom, but still within the atom. Two layers of silicon form the modern solar cell and creates the bridge for electricity from the sun to the earth.

Nuclear power's chemistry is concerned with the nucleus of the atom, where the neutrons and the protons reside. Uranium is broken down when it is bombarded with a single neutron. Then it decays to two atoms, and also gives off three neutrons, that continues the reaction (called a chain reaction). When the uranium atom splits, obviously it's previous electron cloud is disrupted to form two new separate electron clouds.

Nuclear power and solar power are similar because the main energy creating process occurs with the atom.