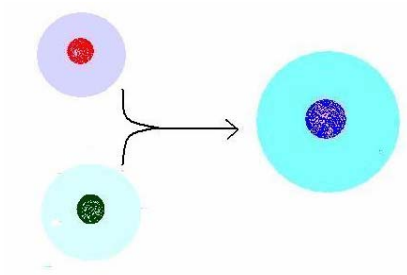


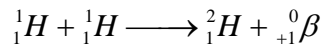
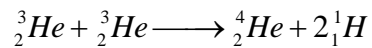
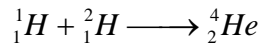
Nuclear Fusion

Nuclear fusion is just opposite of nuclear fission, where small nuclei are combined into one large nucleus that might also liberate energy.



Due to the nature of this reaction, there is no problem of nuclear waste.

Our sun mostly made up of hydrogen and helium with interior temperature of about 15 million degree Celsius. It has been known that fusion reactions occur constantly in the sun and also in stars. The following fusion reactions are believed to take place in the sun:



Fusion reactions take place only at very high temperature and hence they are also known as **thermonuclear reactions**. Fusion reaction of light nuclei always releases energy. When the reaction is an uncontrolled chain reaction, it results in a thermonuclear explosion like in a **hydrogen bomb**. Currently, research is being carried out with a hope to achieve controlled fusion reaction, thereby making **fusion power** a feasible means of producing electricity. If successful, it may provide cheaper, cleaner & most abundant energy for the demanding world ours.
