

Atom: The Energy Ball

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In the quark theory it was said that the nucleus of an atom consists of quarks or energy packets. However the nucleus may be considered as a solid sphere of mass which releases Electric wave's. The shells of an atom is created as magnetic waves move as tangents to the electric waves. On constantly being energized the waves of the shells return the energy back to the source or nucleus via the vacuous space.

Let wavelength of the electric waves be w_1 .

Let the radius of the atom be r up to a shell taken into consideration.

Let wavelength of the magnetic wave be w_2 .

By the problem,

$$r/w_1 = (1/\lambda * 2\pi r)/w_2$$

$$\text{or, } w_1 = \lambda w_2 / 2\pi$$

where,

' λ ' is the no of times the magnetic wave is intercepted by the electric during one complete revolution)

The 2 waves are bound by electromagnetic energy. When external energy is supplied to the magnetic wave then initially their speed of propagation increases and hence they shift to an outer shell. But due to this action ultimately speed of propagation decreases due to decrease of force with increasing distance. For some time the extra energy remains stored as heat energy but is later liberated into the surroundings.

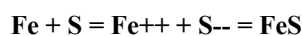
Sometimes energy may also transform into mass by $E = m * c^2$

With extra energy or energy deficit +ve or -ve ions are formed.

Atoms are mainly provided extra energy from sun. Atom is covered by a thin layer of mass.

Chemical Reactions

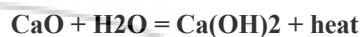
During chemical reaction every element or compound releases or absorbs energy which binds them together.



Inert Elements

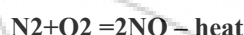
Atoms of inert elements are incapable of releasing or absorbing energy and so they do not react usually.

Exothermic and Endothermic Changes, Due to exothermic change energy is liberated.



Calcium hydroxide may break into Ca^{++} and $2OH^-$. Negligible amount of any of the 2 may convert into mass releasing some energy.

Due to endothermic change energy is absorbed.



This reaction requires great energy to occur which is converted to negligible amount of mass.



Some NO may break in this manner and their bonding energy must be absorbed. Mass can be defined as the real existence. However the mass content of an atom consists of a deciatom which is made up of milliatoms and this process continues further beyond yokto atoms. Molecules therefore may be termed kilatoms. Thus nothing in the universe is indivisible. Atoms may also be described as energy balls. Energy can also be defined as the universal truth.