

ELF waves and frequency windows, resonance effects

Ref: Liboff et al 1990.

SMD electrolysis M.J.Nunnerley

None electrolytic splitting of the water molecule M.J.Nunnerley

If a molecule or structure has a natural resonant frequency, it may respond selectively to that frequency. For example, if you keep giving a pendulum a gentle push at just the right time at the end of its travel, the energy of each push builds up and is stored in the ever increasing violence of its motion. If you were suddenly to stop it by putting your hand in the way, the combined energy of each push is released in one go and could do more damage to your hand than the energy you gave it from each individual push.

In the same way, if an electrically charged atom or molecule has one or more natural resonant frequencies and you give it an electromagnetic pulse at that frequency, it may store the combined energy of each pulse as some sort of vibration. This could enable it to bring about a chemical reaction that would not have been possible from the energy of each pulse alone, but only at its resonant frequency. Some frequencies are especially effective in giving these effects. An example is 16Hz, which is the ion cyclotron resonance frequency of potassium ions in the Earth's magnetic field, that needs to be thought about with those that are using Potassium hydroxide as an electrolyte in an electrolysis cell!

Ion cyclotron resonance occurs when ions move in a steady magnetic field such as that of the Earth, and of course can be created artificially. They are deflected sideways by the magnetic field and go into orbit around its lines of force at a frequency that depends on the charge to mass ratio of the ion and the strength of the steady field. If they are simultaneously exposed to an alternating field at this frequency, they absorb its energy and increase the diameter of their orbits, which increases their energy of motion and chemical activity, this is very important to be understood.

There are several reasons for going into this and it all is to do with the way SMD electrolysis works from its basic form up to its more advanced form, which I have not gone into yet as it is still ongoing work. It is well known that ELF waves increases the surface tension in water as much as ten fold. If an emulsion of water and oil is made and then subject to ELF combined with a direct current, micro electrolysis cells are produced within the emulsion giving rise to a very much higher energy level to the oil. Even low grade waste oils can be elevated into a high grade fuel if the vibrational reaction of the ELF is controlled to give a high enough temperature for the reaction. This high temperature is created by the implosion of the small bubble reactors within the emulsion, as has been seen in sonoluminescence.

Going back to the pendulum at the beginning, the switch over of the square wave AC ELF wave is like putting your hand to stop the pendulum, all the energy is released in one go. This can be seen on an oscilloscope as a large current spike at transition, this has high electro chemical effects on both electrodes, electrolyte and any gases within the micro reactors.(see future paper on LENR or complex electro chemical reactions). The electro chemical complex reaction at the change over electrode in SMD, creates a type of electrical cell similar to a hydrogen cell, where electrons emitted can be collected and used for the second half of the cycle for free work.

This brings me to what will be put into another paper on energy extraction from electron movement, which shows that electrons can move in a full circle through chemical reactions and do work at the

same time, as electrons are not really destroyed, as in a hydrogen cell (see how a hydrogen cell works) the electrons move via a load (work) to return to complete the reaction of $2\text{H} + \text{O} = \text{H}_2\text{O} + \text{energy}$, the latter being consumed by the load, if not the reaction is not completed.

All energy has to be looked at from a chemical or electro chemical point of view, that is electron movement and exchange, if this does not happen then the energy is dormant, it does not move, but once moving, like the match to the stick of explosive, the energy is huge for very little input (chemical change in a big way, electron movement from one chemical structure to another + energy).

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