

Water self organization through cyclotron resonance after application of μ T, ULF magnetic field for long range proton transport opening new bio-magnetics

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The authors have proposed a hypothetical model for water self organization after application of a μ T, ULF magnetic field in a short time through cyclotron resonance of water molecules in the geomagnetic field in which same size molecules gradually gather each other through their rotation with the same cyclotron frequency generating a small magnetic moment in each molecule. After that the proton transport becomes long range order over each molecule which decreases the water electric resistivity and activates various bio-effects[1]-[4].

The cyclotron frequency $fc(n)$ of the water molecular cluster $H_3O^+(H_2O)_n$ ($n = 1, 2, 3 \dots$) is expressed as $fc(n) = q^+ B_{dc} / 2\pi m_n$ (q^+ : the proton charge, B_{dc} : the dc magnetic field as the geomagnetic field, and m_n : the water molecular cluster mass).

Theoretical value of the maximum $fc(n)$ is 41.2 Hz for $n = 0$ for $B_{dc} = 5 \times 10^{-5}$ T (the geomagnetic field in Japan), which is supported in experiments with a highly purified water showing a high decreasing ratio of the electric resistivity through 20 hours after application of a 1 μ T sinusoidal magnetic field with a frequency $f \approx fc(n)$ ($n = 1 \sim 10$) [3].

Interesting applications of the water proton activation such as the phagocytic activation of the human neutrophils [2], an improvement for human blood flow, and quicker growing of fishes and plants will be presented.

References

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