Water – the active medium of circular passage between energy, information and matter

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Introduction – long lived and long range mesoscopic level of water

Water exists on three levels: micro-, macro- and mesoscopic ones. For the conventional science, the mesoscopic structures exist only for extremely short pieces of nanoseconds and therefore cannot have any true meaning for the time framework of the living processes. And if they are stabilized by some external forces (e.g. hydrophilic surfaces), they are regarded as spanning only for 2-3 molecular layers. On the other hand, many branches of the unconventional science of water find mesoscopic water to have a long range ordering far from any surface (even to a meter length, see Pollack 2013) and stable structures even in terms of years (Anick 2007, Bellavite et al. 2014). These findings have broad experimental confirmations as well as more or less elaborated theoretical grounds, like the theory of coherent domains (Giudice, Vitiello 2008), the hypothesis of electronic plasma (Cartwright 2018), various theories of water clusters, nanobubbles, nanoparticles (NPs) etc.

Transference of molecular structures into mesoscopic water structures

From the basic research in homeopathy, as well as from the research in ultra-high dilutions (UHD) effects on physicochemical and biological processes, the possibility of transferring (or better said translating) the molecular structure into dynamic water structures is well recognized. Many researches demonstrate so called nanoassociates or NPs (Konovalov, Rhyzkina 2016, Rajendran 2015, Sedlak 2006, Malik 2015), even in solutions beyond Avogadro, where most probably no molecule (atom) of the originating substance is left. It seems these structures are more or less "translated" versions of the original molecules (atoms). The research shows they have similar, yet not identical biological effect as the original substance. Generally, the effect is milder (i.e. nobody would die from potassium cyanate in its UHD form), but may be on the other hand much more general in their effect.

From mesoscopic water structures back to biochemistry

The mechanism of UHD biological effects is still unknown. The first approximation would tell that they are provoked by the emulated original molecules that are "stored" in dynamic water clusters or NPs and probably maintained by a stabilizing coherent electric-phononic field (EPF). But how do they react with organism's biochemistry? As researches form various fields indicate, the molecular emulations should work on biochemical receptors. In the lack of any true knowledge, three possibilities for influencing the receptors may be envisioned: a) pure EPF vibration, b) water clusters (or NPs) emulating the original molecules and c) materialization of the original molecules (atoms), using the organism's biochemistry as well as its DC and AC electric fields. In the already published research we may find the support for all three hypotheses. In the presentation we will present arguments for all three possibilities and will try to find their common thread.

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