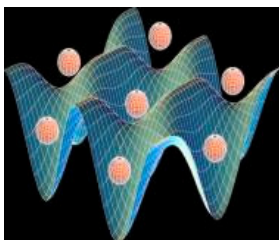


***Bio-Quantum Chemical Senses.:
Science of Quality N° 8***

“The macro word was created from a brain sensory reconstruction of information signals transduced through the entanglement effect empowered by the micro-word receptors.”

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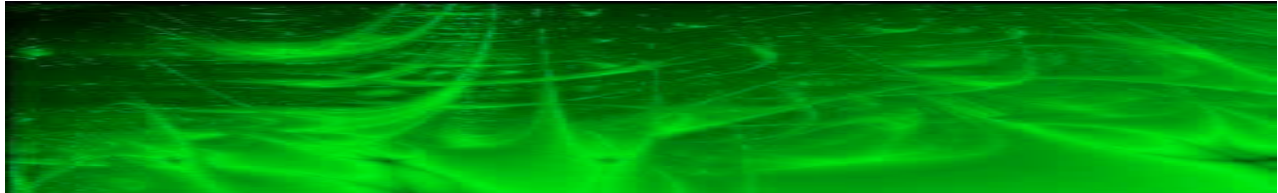
<http://qubit.nist.gov/>

Illustration Showing a Trapping Network model of a register and accumulator chemoreceptor.

Until now, two different approaches are taken into consideration by science for investigating chemoreception structures of olfactory and gustation biochemosensor. (1) One of them simply thinks that the odorant effect is related to the molecular shape in a key-lock interactivity between "odored" molecules and receptors. The other interpretation is that the odour of a molecular mixture can be related to molecular vibrations. Both of these theories cannot explain the perceived biochemical sensation of smell and taste. (2)

- Certainly the problem of scientific understanding of bio-chemical senses is complex. In fact, different chemo-receptors use various transduction pathways in a primary connection with diverse areas of the brain; besides, we know by direct daily experience, that gustation and olfaction work together; as a matter of fact, the role of olfaction in taste and visa versa is powerful.
- Today Bio-Quantum Chemical Senses theory considers that all living organisms utilise information processors, working like trapping network systems, able to catalyse the production of entangled quantum particles, in a way that it becomes possible to transfer simultaneously, molecular state information on the basis of “q.bits”.
- The replacement of classical information based on/off (0,1) by its quantum counterpart of “q.bits” ($|0\rangle; |1\rangle$), represents a novel opportunity for research of bio-quantum information. (3).
- In fact, the chemical receptors of smell and taste can be considered as selective generators of entangled q.particles, that permits transmitting at a distance, q.signal that are conceived as a superposition of the fundamental information energy.

Over the past decade, quantum information theory has developed into an important field of research despite the fact that quantum information, as a precise concept, remained undefined. Indeed, the new idea of viewing bio-quantum states as carriers of pure information energy signals, leads to interesting questions regarding the ability of living system to manage information in a way that otherwise never would have been asked, and hence, bio-quantum physics is corresponding to new insights about the evolution of nature by means of the use of superdense coding of information energy.(4)



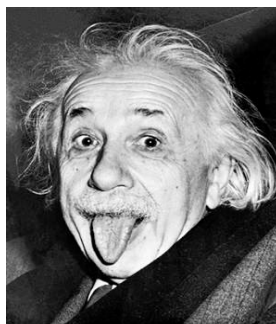
A biological chemosensorial reaction can be produced through a process of various bonding creation between chemo-receptors and the mixture of various molecules emitted in the environment. The mixed system of chemiosensorial active substances emits q.particles that trigger a biochemical transduction in informaton signals at a chemosensory receptor for a neuron transmission to some specific structure of the central nervous system.

The chemical bonds between sensory molecules and chemo-sensorial receptors produces a lower state of local energy, through emitting photons or phonons, o other ."q.ons -entities"into the cavity-traps of the receptors. The "q.ons " are immediately entangled in the particular catalytic receptors environment like taste papillae or olfactory epithelium receptors cells. Successively, dis-entangled processes break down space-time from an Euclidean condition of existence, generating delocalised information energy that exists as a fundamental quantum energy level over the Planck Constant limit.(5)

The collapse of the instable entangled energy to the sub-Planck dimension, belonging to the zero point of pure information energy, permits the utilization of information from a localized space-time dimension to an extendend frame of reference where space and time are bidimensional entities of pure information energy. Hence quantum-signals of pure information energy are the bases of responding to a chemical stimuli in order to activate the brain's recreation of a mediate reality of odours and gustation sensation, coming from the signals received from the nose and mouth. Therefore the signals units of quantum information produced in the chemioreceptors gives the odour and gustation perceptions, by means of the ability of recostruction of q.bits, into the brain's generation of sensory distinction of the various smelling and tasting sensations.

In conclusion, the chemical reeptors can be considered as a catalyst interface cavity apparatus for confining chemio-molecular stimulus in a trapped entangling transduction in q.signals of information energy, transmitted through a two state superposition of quantum systems carrying non -local information energy by means of q.bits units. (6)

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