GLIMPSES INTO THE PHYSICAL BEHAVIOUR OF ULTRA-HIGH DILUTIONS

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The physical nature of ultra-high dilutions has always been a matter of controversy, some hard-line physicists thinking that, beyond the Avogadro number, any ' dilution ' is no more than the solvent used for its preparation.

Actually, this assumption has been proven to be wrong and many respectable scientists have shown that ultra-high dilutions had a special structure which looked to be specific of the original substance used for their preparation.

Nuclear Paramagnetic Resonance was one of the first techniques to demonstrate this fact thanks to publications made by Rustum Roy, D. Anick, J-L. Demangeat and others.

With totally different methods, ***calorimetry and electrical conductivity,*** Vittorio Elia did confirm these findings.

Our own personal approach equally reached the same conclusions with a completely new technique in the field : ***low-temperature thermoluminescence*.** Assuming that , in the original liquid ultra-high dilution, do exist some ' statistically significant structures ', the material is frozen into ice assuming, then, that these ' transient ' structures would become 'stable defects ' in the crystal lattice which could be activated by irradiation at liquid nitrogen temperature. Then, should the material be rewarmed under controlled conditions, these odd points would emit light by a process of thermally activated luminescence. This is actually the case and the resulting glow-peaks show that ultra-high dilutions show completely different patterns than those generated by the dilution fluid itself. Moreover these emission spectra are specific of the nature of the original substance as well as of the nature of the gas phase and can be quantified by a mathematical deconvolution treatment developped by R.K. Gartia. Recently our results have been duly confirmed by R. Van Wijke and al.