

Could water be used as a sensor of brain activity?

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Abstract

In current study we used water as a "sensor" of brain activity. We suggested completely new application of the Antonov's method - a measurement the energy spectra of intermolecular H-bonds of the water during the evaporation of drops in a unique set up. To test the sensitivity of water energy spectrum to be affected by different brain activity we put on the left and the right half of the human scalp water filled test glasses on positions C3 and C4, together with EEG, BVP, SC, T and Resp sensors. On each side 3 test glasses (one control, second with thermal insulation and third with EM isolation), were influenced by brain activity during fulfillment of different cognitive tasks - rest, reading and listening music. Preliminary results demonstrated clear differences of the water energy spectra taken from both sides. The idea to use combination of Antonov's method with classical neurophysiological methods was to collect a further data for deepening our understandings on intermolecular energy spectrum, which could be measured objectively but poor interpreted. Water could be used as a sensor which might encode and store influences from different functional stages and processes of the brain at least.