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RESEARCH ARTICLE

Clathrate Hydrate Crystals and Charge Transfer Interaction Characterize High Dilutions of Two Homeopathic Drugs *Cannabis sativa* and *Colchicum autumnale*

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ABSTRACT

High dilutions (HD) of drugs used in homeopathy are mostly devoid of original drug molecules. Water structure has been reported to carry the information of original drug molecules. We have defined the water structure in terms of free water molecules, hydrogen bond strength and number of hydrogen bonds. We have also reported that charge transfer interaction (CT) has been associated with HDs. In the present study we have analysed two drugs *Cannabis sativa* and *Colchicum autumnale*, and two potencies 6cH and 30cH by electronic and vibrational spectroscopy. The UV-Vis spectra of each potency show two peaks one at 200 nm and another 220 nm wave length. The first peak belongs to the absorbance by clathrate hydrate crystal (CHC), the second peak at higher wave length has been assigned to the CT interaction. In the CT interaction dissolved oxygen serve as electron acceptor and water or ethanol as electron donor. Dissolved oxygen might have been introduced in the solvent medium (EtOH-water) of the potencies during their preparation by mechanical agitation or succussion. CT interaction appears to

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