

## **The effect of strong electric field in case of acetonitrile and water mixtures**

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This study reveals the hydrogen bond network as a key tool analysis to study the formation of water in nano-domains. The linear response of the system's polarization via the external electric field was analyzed for the binary mixture of water and acetonitrile. The study closes with some remarks on the non linear effects reviewed by the structural deformation between the acetonitrile molecules in the case of high external electric fields.