

”Autothixotropy” of Water - an Unknown Physical Phenomenon

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Abstract

From 1978 to 1986 a series of measurements were performed in order to verify the gravitational law in fluids as deduced by Horák. In 1978 a peculiar phenomenon was observed in the measurements which compelled the author¹ to use another method.

In the Department of Physics of Pedagogical University at Hradec Králové, the original experimental device was reconstructed with the purpose of creating the best conditions for the observation of the phenomenon. There a series of until now unknown phenomena ongoing in water was observed. It was incidentally discovered that the phenomena never appeared in the water which was deionized.

In accordance with the generally accepted terminology, the above described complex of phenomena could appropriately be called the *autothixotropy* of water.

Looking for an interpretation of our observations, a hypothesis based on the origination of macroscopic clusters of water molecules, where the cores are the salt ions contained in the water, seems to be plausible.

The relevant article appeared, in its preliminary form, in July 2003 on the web at the address:
<http://arxiv.org/abs/physics/0307046>