Water Cluster Alignment Frequency in Deionised Water

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Abstract: *The most common detailed difference between alignment frequencies of 1,69 THz - belonging to water clusters $(H_2O)_{2x13 \ to \ 101x13}$ on one side and water cluster $(H_2O)_{13}$ on the other side - coincide with the resonance frequency of 1.16 GHz detected through spiral-coupled passive micro-resonator sensor in the deionized water.*

Keywords: *Detailed alignment frequency of water clusters, resonant frequency detected in the deionised water*

1. INTRODUCTION

Let us see if the resonance frequency of 1.16 GHz detected through spiral-coupled passive micro-resonator sensor in the deionized water [1] could be explained by the detailed alignment frequency significant for forming water clusters from $(H_2O)_{13}$ to $(H_2O)_{13 \ x \ 101}$[2].

2. HUNDRED AND ONE WATER CLUSTERS FORMED FROM $(H_2O)_{13}$ UNITS

Water cluster $(H_2O)_{13}$ possesses the lowest alignment frequency amongst first 106 water clusters [2]. Frequency value of just mentioned the most favourable water cluster yielding 1,69 THz remains the same for all subsequent hundred clusters made of $(H_2O)_{13}$ units, i.e. from the cluster $(H_2O)_{13}$ to the cluster $(H_2O)_{13 \ x \ 101}$. Formation of water clusters $(H_2O)_{13 \ x \ n}$ for n=2 to n=101 is therefore energetically acceptable since the needed frequency equivalence of energy does not surpass 1,16 GHz as presented in Table1.

Table1. *Alignment frequency of water clusters $(H_2O)_{13 \ x \ n}$ for n=1 to n=101 including added detailed frequency difference*

Multiple n	Water cluster 13n	Frequency (THz)	Added frequency (GHz)
1	$(H_2O)_{13}$	1,687028244	0,00
2	$(H_2O)_{26}$	1,687900285	0,87
3	$(H_2O)_{39}$	1,688061771	1,03
4	$(H_2O)_{52}$	1,688118288	1,09
5	$(H_2O)_{65}$	1,688144462	1,12
6	$(H_2O)_{78}$	1,688158674	1,13
7	$(H_2O)_{91}$	1,688167233	1,14
8	$(H_2O)_{104}$	1,688172803	1,14
9	$(H_2O)_{117}$	1,688176589	1,15
10	$(H_2O)_{130}$	1,688179305	1,15
11	$(H_2O)_{143}$	1,688181363	1,15
12	$(H_2O)_{156}$	1,688182872	1,15
13	$(H_2O)_{169}$	1,688184051	1,16
…	…	…	--
101	$(H_2O)_{1313}$	1,688190828	1,16

We can see in Table1 that 89% of the concerned water clusters $(H_2O)_{\textbf{13 x n}}$ for n=2 to n=101 yielding the approximate frequency of 1,69 THz can be formed from $(H_2O)_{13}$ units with the help of about 1500 - times lower frequency of 1,16 GHz.

3. CONCLUSION

Cluster alignment frequency may play a role in the formation of $(H_2O)_{13 \times n}$ clusters from n=2 to n=101 in distilled water. If so, icosaedron, the fifth Platonic solid with 30 edges, 20 faces and 12 vertices (corner points) could be the original element of such clusters with one water molecule in each vertex of the icosahedron and one water molecule inside the solid.
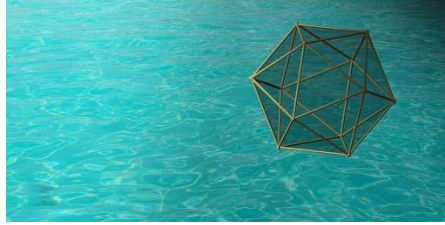

Figure1. *Water as Icosahedron [3]*

DEDICATION

To Plato

REFERENCES

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[2] Janez Špringer (2022) "Coincidental Role of Water Cluster Alignment Frequency at Rainfall and Water Vapour Events" International Journal of Advanced Research in Physical Science (IJARPS) 9(3), pp.4-7, 2022.

[3] https://commons.wikimedia.org/wiki/File:Ikosaeder_Wasser_(Platon).jpg