The Scientific Journal of CosmoIntel
The First Scientific Journal in T-Consciousness Research

Refractometry of Pure Water and Normal Saline under the Influence of T-Consciousness Fields

Mohammad Ali Taheri[1], Firouz Payervand[2], Farzad Ahmadkhanlou[3],Sara Torabi[4], Farid Semsarha[5]

** Corresponding author: Firouz Payervand*
Email: fpayervand@yahoo.com

1- ScienceFact Research and Development Department, CosmoIntel Research Center, Ontario, Canada
2- Research and Development Consultant, Tehran, Iran
3- Department of Mechanical and Aerospace Engineering, University of California, Irvine, California, USA
4- Department of Plant Biology, School of Biology, College of Sciences, University of Tehran, Tehran, Iran
5- Institute of Biochemistry and Biophysics (IBB), University of Tehran, Tehran, Iran

DOI: doi.org/10.61450/joci.v3i13.171

Abstract

A change in the refractive index of light in a medium indicates effective molecular interactions in creating the optical density of that medium. In general, changes in molecular content resulting from the formation of solvent and solute molecular systems lead to changes in the refractive index of a solution. In continuation of studies on the effect of T-Consciousness Fields (TCFs) on water and its well-known solution on Earth's surface with medicinal value, normal saline, this study investigates the impact of TCFs on the refractive index of pure water and normal saline, compared to the control. According to the results, TCFs generally lead to an increase in the refractive index in the samples, indicating changes in molecular motion or, in other words, an increase in the optical density of both water and normal saline samples. In pure water samples, there is no significant difference in the effect of various TCFs, but in normal saline samples, the highest impact belongs to TCF3, followed by TCF 2 and 1. Further investigations into molecular changes in the samples are in the authors' research agenda.

Keywords: Refractive Index, Refractometry, Optical Density, Taheri Consciousness Fields, Pure Water, Normal Saline

Introduction

Refractometry is a technique that measures how light refracts when passing through a specific substance. It determines the refractive index, which can be used for identifying an unknown liquid compound or measuring the purity of a liquid compound [1]. The closer the refractive index is to the values mentioned in references for a specific compound, the purer the sample is. Molecules in the medium delay the passage of light waves from within the medium. The amount of delay depends on the number of molecules and, consequently, the density of the medium [2].

In fact, absolute refractive index values can be used to identify chemical species, just as measuring other physicochemical properties and the absorption of light density does [3]. The refractive and scattering spectra are used to describe the structural properties of analytes [4]. The most important application of this method is determining the quantity of completely defined binary system components in which pure components are significantly different in terms of refractive index, and there is an almost linear relationship between n and analyte concentration. For example, it can be used to determine the amount of protein or sugar in aqueous solutions [5].

According to Taheri, there are various T-Consciousness Fields (TCFs) with different functions. These fields are neither material nor energy in nature and therefore cannot be measured using quantitative instruments. The influence of TCFs is initiated through the mind of announcers, referred to as *Faradarmangar* [6]. In this way, it is possible to record and investigate their effects by comparing alterations in treated samples with control ones. In other words, indirectly evaluating the effects of these fields provides an opportunity to gain insight into this invisible part of the universe. This novel branch of knowledge, which uses scientific tools to reveal the effects of TCFs with non-physical nature, has been named *Sciencefact* by Taheri.

In this study, the refractive index of pure water and normal saline solution when exposed to TCFs was investigated. This involves changes in the optical density of these compounds, indicating changes in the type of interaction between pure water, normal saline molecules and light under the influence of TCFs. Moreover, this experiment, in addition to assessing the influence of T-Consciousness Fields on the optical density of water and related solutions, can also reveal the resulting changes within a very short period of time.

Method

The application of T-Consciousness Fields was carried out according to the protocol established by Cosmointel Research Center[1]. Further details are provided in the general considerations of this issue. The conditions of the TCF-treated and control samples in this study were identical, each performed in three replicates, with the only difference being the measurements taken before and after exposure to the TCFs. . The treatment with TCFs was instant and the readings were taken in the minimum time afterwards (within seconds). The precision of the refractometer (SCHMIDT HAENSCH ATR-L) used for RI measurements was equal to 0.00002.

Results and Discussion

The refractive index, Brix number, and temperature values for pure water and normal saline samples under the influence of TCFs and their corresponding controls are presented in Table 1. Moreover, the changes in the refractive index along with their statistical significance are shown in Figure 1.

\ www.cosmointel.com

Table 1. Values of refractive index, Brix number, and temperature in pure water and normal saline samples under the influence of T-Consciousness Fields (TCFs) and control (without the influence of TCFs).

Sample	Type	RI (n)	Brix (%)	Temp. (°C)
Pure Water	Control	1.33281±0.00001	0.11±0.01	20.16±0.09
	TCF1	1.33287±0.00001	0.07±0.01	20.02±0.01
	TCF2	1.33287±0.00001	0.09±0.01	20.03±0.03
	TCF3	1.33286±0.00000	0.1±0.00	20.02±0.01
Normal Saline	Control	1.33462±0.00000	1.28±0.00	22.24±0.00
	TCF1	1.33471±0.00001	1.26±0.00	21.10±0.01
	TCF2	1.33476±0.00000	1.28±0.00	20.52±0.01
	TCF3	1.33481±0.00001	1.27±0.01	20.24±0.00

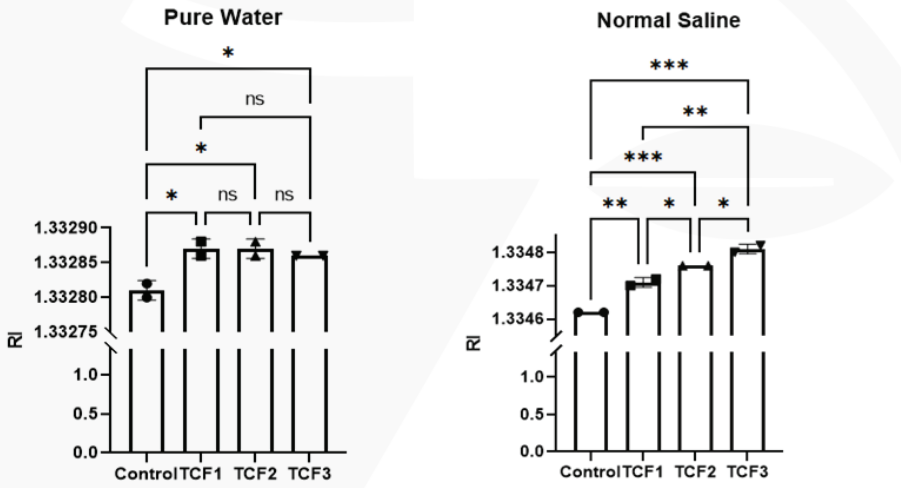


Figure 1. Changes in the refractive index of samples and controls in this study. Left side: Water samples, right side: Normal saline samples. *: p-value<0.05; **: p-value<0.003; ***: p-value<0.0005.

According to the data in Table 1, the temperature of the samples did not change, and the Brix number, which indicates the number of dissolved solids in the solution [7], was also approximately the same among the samples. Based on the presented results in Figure 1, in general, TCFs led to an increase in the refractive index in the samples, indicating changes in molecular motion or, in other words, the optical density of the samples. In the case of pure water, there was no significant difference in the effect of various TCFs, and on average, the TCFs increased the RI by three times the precision of the device (equivalent to 0.004%). In the normal saline sample, a significant difference in the effect of various TCFs was observed, with the highest impact belonging to TCF3, followed by TCF2 and 1, respectively. In this sample as well, TCFs increased the RI on average by seven times the precision of the device (equivalent to 0.01%).

In summary, this study provides evidence of the effects of TCFs on the structural characteristics of water and normal saline molecules. As mentioned in the introduction, these fields are non-physical in nature, and their influence is initiated through the mind. According to Taheri's theory, T-Consciousness represents another component of the universe, distinct from matter and energy. These components are likened to the sides of a triangle, with information representing the shared intersection of these sides. From this perspective, the information transmitted by TCFs can induce changes in treated samples relative to the control [6]. This experiment provides empirical evidence supporting the

proposed hypotheses. Further studies are required to gain a deeper understanding of the mechanisms and nature of the interactions between these non-physical fields and matter. Further investigation of other parameters related to optical density using complementary and validation methods is part of the authors' research agenda.

References

1. Ku, H. C., Wang, C. C., & Tu, C. H. (2008). Densities, viscosities, refractive indexes, and surface tensions for binary and ternary mixtures of tetrahydofuran,2-propanol, and 2, 2, 4-trimethylpentane. *Journal of Chemical & Engineering Data*, *53*(2), 566-573.

2. Masimov, E. A., & Abbasov, H. F. (2012). Refractometry determination of the hydration number of ions in diluted aqueous solutions of magnesium sulfate. *Russian Journal of Physical Chemistry A*, *86*(3), 399-401.

3. Liu, X., Hu, Y., Liang, M., Li, Y., Yin, J., & Yang, W. (2014). Measurement and correlation of the solubility of maleic anhydride in different organic solvents. *Fluid Phase Equilibria*, *367*, 1-6.

4. Reis, J. C. R., Lampreia, I. M., Santos, Â. F., Moita, M. L. C., & Douhéret, G. (2010). Refractive index of liquid mixtures: theory and experiment. *ChemPhysChem*, *11*(17), 3722-3733.

5. Vershkov, V. A., Petrov, V. G., Subbotin, G. F., Shelukhin, D. A., Afonin, A. Y., & Afonin, K. Y. (2022). Plasma Electron Density Measurements in TRT Refractometry. *Plasma Physics Reports*, *48*(8), 875-890.https://doi.org/10.1134/S1063780X22600463

6. 6. Taheri MA. (2013). Human from another outlook. Interuniversal Press. 2nd Edition. ISBN-13: 978-1939507006, ISBN-10: 1939507006 2013

7. 7. Dongare, M. L., Buchade, P. B., & Shaligram, A. D. (2015). Refractive index based optical Brix measurement technique with equilateral angle prism for sugar and Allied Industries. *Optik*, *126*(20), 2383-2385. https://doi.org/10.1016/j.ijleo.2015.05.137