

# Mass Changes of Pure Silica in Temperatures up to 1000 °C under the Influence of Consciousness Bond Field: A Study of Taheri Consciousness Theory

Bahareh Kazazi<sup>1\*</sup>, Mohammad Ali Taheri<sup>2</sup>

1. Civil Engineering, CEO of Hoobe Construction Company, Tehran, Iran.

2. Sciencefact R&D Department, CosmoIntel Inc. Research Center, Ontario, Canada.

## ABSTRACT

According to Taheri's theory, T-Consciousness can be converted into matter and energy and vice versa. Consciousness Bond Field is one of many Taheri Consciousness Fields (TCFs) founded and introduced by Mohammad Ali Taheri as new Fields. These Fields are neither matter nor energy; therefore, do not possess a quantity, but they have direct effects on both matter and energy. In other words, although TCFs cannot be directly measured, we can investigate their effects indirectly through reproducible experiments. The current study aimed to investigate this hypothesis by measuring the mass change of pure silica through a heating process. Samples made of 95% pure silica powder with a particle size of approximately 1700 nm from one pack and under the same conditions were submitted to the following thermal analyses: DTA (Differential thermal analysis), DSC (Differential scanning calorimetry), and TGA (Thermal gravimetric analysis). The analyses were performed on two sets of experimental samples, one group of samples under the effect of Consciousness Bond Field, and the other group was used as control samples. The 6 mg samples were heated with a growth rate temperature of 10 °C, in the temperature range of 25 to 1000 °C, in Air, under ASTM-E1131. The results demonstrated no changes in the structure of pure silica, such as melting or transformation, glassification, etc. On the other hand, the samples exposed to the T-Consciousness Field lost an average of 722% at a temperature of 350 degrees and a total of 141% at the final temperature more mass compared to the control samples. Based on the objective observations of the results, it is clear that this significant difference does not have any plausible material explanation, and therefore it indicates the existence of the T-Consciousness Field that was applied. It also provides proof of Taheri's theory of the exchange of T-Consciousness with matter and energy.

\* Corresponding author:

Bahareh Kazazi  
Civil Engineering, CEO of Hoobe Construction Company, Tehran, Iran.

Email: baharkazazi@gmail.com

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## INTRODUCTION

Throughout history, humans have been curious about the world around them. Many efforts have been made in this direction, leading to the discovery of many principles, laws, and fields, such as gravitational field, electromagnetic field, electric field, etc. One of the most fundamental concepts of Taheri's theory of Consciousness is that although T-Consciousness is neither matter nor energy, matter, and energy, as well as physical events, and laws are driven by T-Consciousness. According to Taheri's theory, T-Consciousness can be converted into matter and energy and vice versa [1-2-3]. Many studies have investigated the behavior and properties of materials, including cement mortar under TCFs that began a decade ago [2]. Since then, the research has continued to study cement in various functions, including strength [4] penetration of gamma-neutron radiation [5], penetration of chlorine ions [6], concrete cancer [7], as well as the behavior and intrinsic properties of other materials such as pure aluminum [8-9] or different methods of nanomaterial synthesis [10-11]. Although this study aimed to investigate the function and general behavior of materials, this study revealed many crucial points about T-Consciousness Fields' effects on materials. Among the facts are that despite having less water absorption, the number of cement elements was changed, more specifically the test of cement mass showed that the mass of samples had increased [12]. Also, in another study, the number of crystal defects in aluminum samples increased by around 1000% despite having no energy or force [8] being applied to the material. Another study that evaluated the effect of T-Consciousness Fields was testing the copper density. The results of that study showed that the copper density increased after increasing the length by heat

[13] which did not follow the law of conservation of mass & energy.

These findings suggested the possibility of exchange between T-Consciousness, matter, and energy, and therefore the current study aimed to further investigate the possibility of influencing mass balance by applying T-Consciousness Fields.

The nature of consciousness and its place in science has received much attention in the current century. Many philosophical and scientific theories have been proposed in this area. In the 1980s, Mohammad Ali Taheri introduced novel fields with a non-material/non-energetic nature named Taheri Consciousness Fields (TCFs). In this perspective, T-Consciousness is one of the three existing elements of the universe apart from matter and energy. According to this theory, there are various TCFs with different functions, which are the subcategories of a networked universal internet called the Cosmic Consciousness Network (CCN). The major difference between the theory of TCFs and other theoretical concepts about consciousness is related to the practical application of the TCFs. TCFs can be applied to all living and non-living creatures, including plants, animals, microorganisms, materials, etc.

Mohammad Ali Taheri, the founder of Erfan Keyhani Halqeh, a school of thought, introduced a new science in 2020 as a branch of this school. He coined the term Sciencefact for this new science because it utilizes scientific investigations to prove the existence of T-Consciousness as an irrefutable phenomenon and a fact. Although science focuses solely on the study of matter and energy and Sciencefact, by contrast, explores the effects of the [non-material/non-energetic] TCFs, Sciencefact has provided a common ground between the two by conducting reproducible laboratory experiments in various scientific fields, and it has used the scientific approach in proving TCFs.



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The influence of the TCFs begins with the Connection between CCN as the Whole Taheri Consciousness of the universe and the subjects of study as a part. This Connection called "Ettesal" is established by a certified and trained individual who has been entrusted with the TCFs. The human mind has an intermediary role (Announcer) which plays a part by fleeting attention to the subject of study and then the main achievement obtained as a result of the effects of the TCFs. These Fields cannot be directly measured by science, but it is possible to investigate their effects on various subjects through reproducible laboratory experiments.

The research methodology in the study of T-Consciousness has been founded on the process of Assumption, Argument, and Proof, in which the basic Assumption is: The Cosmos was formed by a third element called T-Consciousness that is different from matter and energy.

The Argument: The existence of TCFs can be demonstrated by its effects on matter and energy (e.g., humans, animals, plants, microorganisms, cells, materials, etc.)

The Proof: is the scientific verification of the effects of TCFs on matter and energy (according to the Argument) through various reproducible scientific experiments.

Accordingly, to investigate and verify the existence, effects, and mechanisms of TCFs, the following five research phases (Phases 0 through 4), and the aims of each phase are outlined below.

Phase-0 studies aim to prove the existence of TCFs by observing their effects. The nature of T-Consciousness and what it is will not be addressed in this phase. Phase-1 explores the varied effects of different TCFs. Phase-2 examines the reason behind the varied effects of these fields. Phase-3 investigates the mechanism of TCFs effects on matter and energy.

Finally, Phase-4 draws significant conclusions, particularly with regard to the mind and memory of matter and their relation to the T-Consciousness, etc. [1, 2, 3]

The present research was carried out with the approach of investigating the possibility of changes in the mass of pure silica under the TCF and studying Taheri's theory of T-Consciousness in accordance with Phase-0 of the studies.

## Materials and Methods

### *The Analyses of Pure Silica*

First, 95% pure silica powder was selected. XRF (X-ray fluorescence), XRD (X-ray diffraction), and DLS (Dynamic Light Scattering) tests were performed before the experiment to determine the material information. The material was then divided into two groups; one container, for applying TCF, and the other was used as the control sample. Three samples were taken from each container and the following thermal analyses were performed on each of them two times:

DTA (Differential thermal analysis), DSC (Differential scanning calorimetry), TGA (Thermal gravimetric analysis)

The mass value of all samples was 6 mg for all samples, and the growth rate of temperature was 10 ° C in the temperature range of 25 to 1000, in Air, pan Al2O3, following ASTM-E1131-08(2014) by the following two devices:

**1- TGA 209 F3Tarsus, Rate 40ml/min**

**2- SDT Q600 V20.9 Build20-, American TA**

### *Application of Taheri Consciousness Fields*

One of the introduced TCFs is called the Consciousness Bond Field and was applied to the

samples according to the protocols regulated by the COSMOintel research center (www.COSMOintel.com). A request for Connection to the CCN to utilize TCFs can be placed through the COSMOintel website in the "Assign Announcement" section. This access is available for everyone at no cost. In order to study and experience this Connection, the researchers can register on the website at any time in order to report the experiment to the COSMOintel research center. Certain details of the experi-

ment must be provided to the center; for example, the characteristics or number and name of samples and controls must be specified. This entire experiment was carried out as a double-blind method where lab technicians were completely unaware of the TCFs.

The purity percentage of the sample and material specifications is given below.

**1- The XRF (X-ray fluorescence) analysis under the standard ASTM E 1621-21 is shown in the table.**

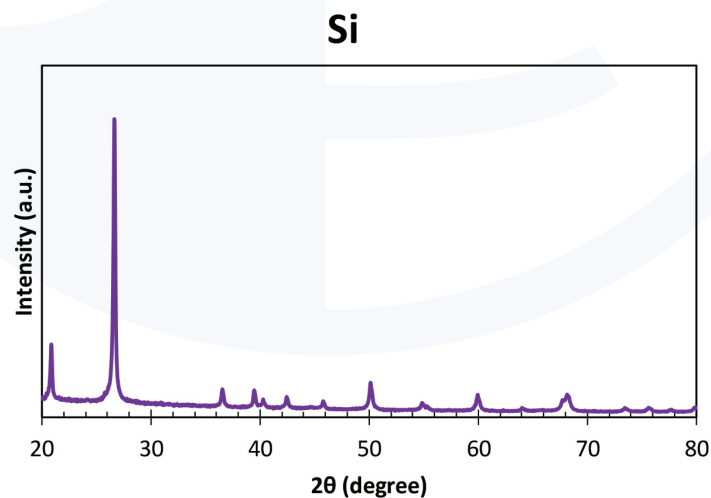
**Table 1 .** The XRF Analysis Results of Pure Silica Prior to the Experiments

Sample No.	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	CaO	MgO	Na <sub>2</sub> O	K <sub>2</sub> O	TiO <sub>2</sub>	MnO	P <sub>2</sub> O <sub>5</sub>	LOI
	%	%	%	%	%	%	%	%	%	%	%
XRF	94.41	0.091	2.034	0.067	N	0.024	N	0.053	0.029	0.007	2.86
Sample.no	S	Cl	Ba	Co	Cr	Cu					
	ppm	ppm	ppm	ppm	ppm	ppm					
XRF	30	N	100	29	410	25					

**2- XRD (X-ray diffraction) analysis is shown in Figure 1.**

The XRD (X-ray diffraction) Standard:

BSIBS En139251-2 and the Generator Settings: 40 mA, 40 kV, Anode Material: Cu, Step Size [°2Th.]: 0.0260.



**Figure 1.** The XRD Analysis Results of Pure Silica Prior to the Experiments



X'Pert Plus HighScore was used to identify the material phase. According to Figure 1, and by matching this diffraction pattern with the reference diffraction patterns, it was determined that the diffraction pattern was related to the quartz phase (SiO<sub>2</sub>) with the

reference code JCPDS No. 01-078-1252.

The Rietveld method using the MAUD software was used to accurately examine the small values obtained from the XRD test related to the samples. Table 2 presents the results:

**Table 2 .** Quantitative results of X-ray test by the Rietveld method

Sample	a (Angstrom)	c (Angstrom)	Crystallite Size (nm)	Microcirculation
Si	4.918	5.410	69.639	4.10×10 <sup>7</sup>

### 3- DLS (Dynamic Light Scattering)

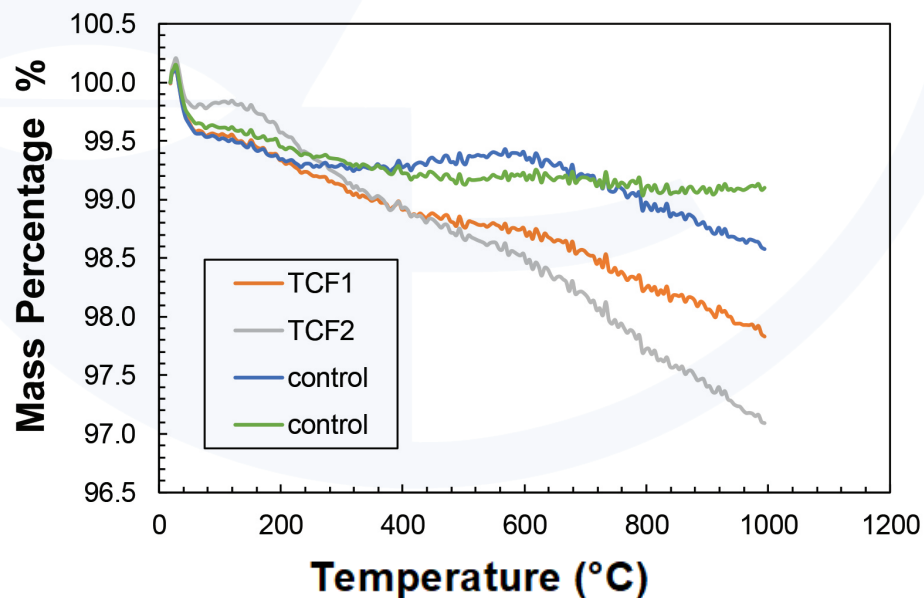
The analysis was performed with the following specifications by HORIBA SZ-100.

Scattering Angle: 90, Temperature of the Holder: 25.2 °C, Dispersion Medium Viscosity: 0.892 mPa·s. Count Rate: 286 kCPS, Dispersant Name: Water

It was found that the average particle size was in the range of 1700 nm.

### Results and Discussion

During the first run of experiments following the mentioned specifications, 4 samples were analyzed in device number (1). The result of this analysis is shown in Figure 2.



**Figure 2.** The mass reduction diagram (TGA), for the study and control samples.

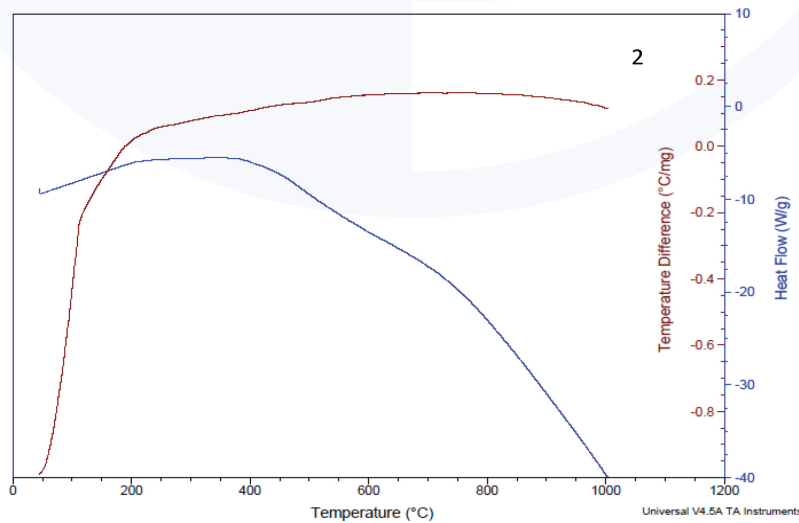
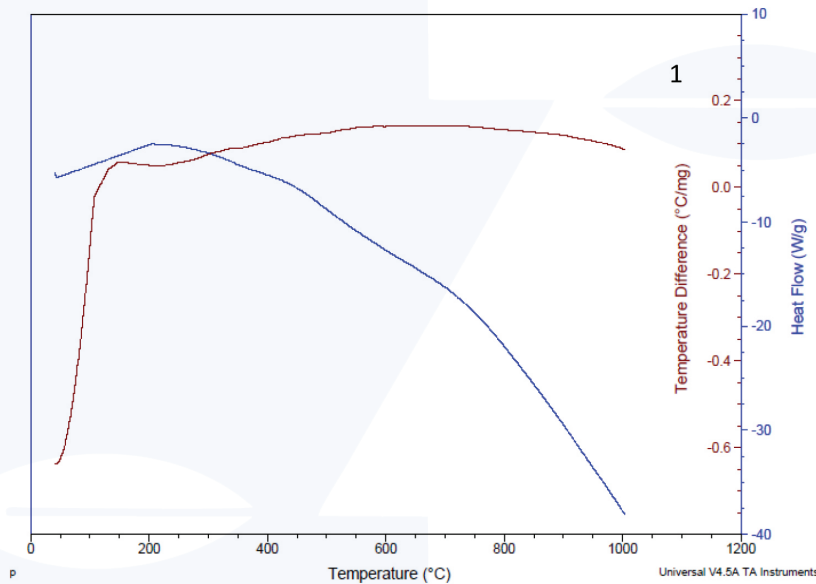
**Table 3 .** Numerical comparison of mass changes

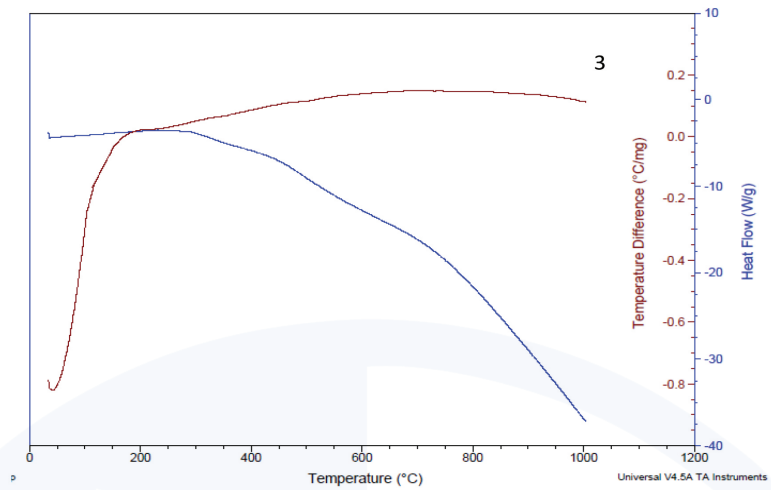
Sample.no	TCF1	TCF2	Control1	Control2
Residual Mass	97.15	97.8	98.6	99.2
Change Mass%	2.97%	2.3%	0%	0%

Silica is reported to have a melting point of around 1700 °C, and it is not expected to change up to a temperature of 1000 °C [14]. The behavior of the control sample of silica is consistent with the known behavior of pure silica, however, the samples under the effect of TCF, shows a loss of mass. Considering the importance of the obtained results and to find out

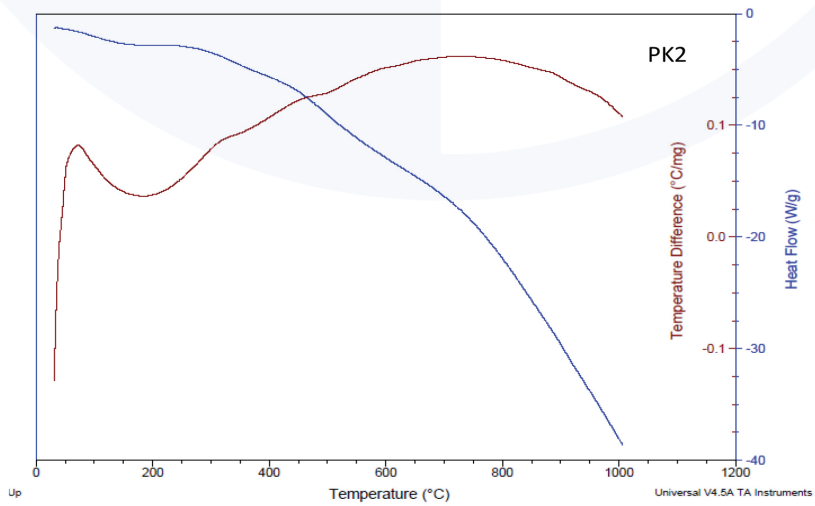
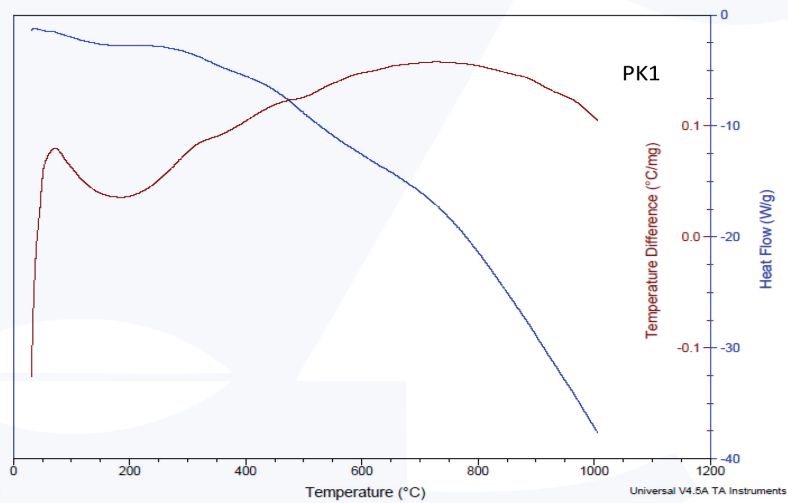
the repeatability of the results, the experiments by repeated by a different device to obtain the DSC/DTA results. The following analyzes were performed on the device number (2).

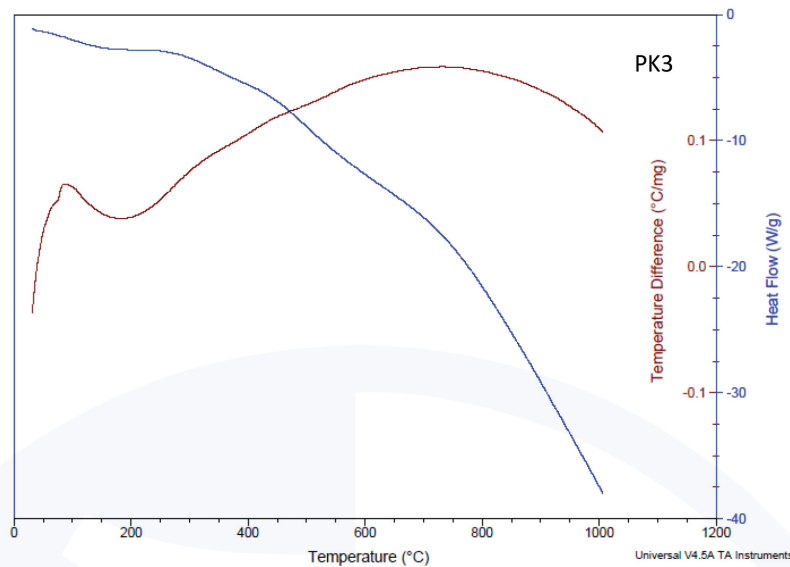
Figure 3,4 illustrates the thermal properties of the studied samples exposed to TCF (demarked as pk), the control group obtained from the DC and DTA tests:





**Figure 3.** The DTA-DSC analysis graph of the control samples (1,2,3)





**Figure 4.** The DTA-DSC analysis graph of the TCF samples (PK1, PK2, PK3)

DTA analysis is a method that has a lot in common with the DSC. In this method, both the sample and the reference are heated precisely the same in order to change the phase. The temperature difference between the reference and the sample is checked in this process. DSC and DTA both give us the same information about thermal analysis. The DTA analysis method is based on measuring the temperature difference between the unknown sample and the control sample according to the same heating program [15].

In the DSC test, the control and unknown samples are kept at the same temperature, and the energy difference required to maintain isotherm is plotted in terms of temperature changes. The DSC method is slightly more quantitative than the DTA method [15].

By examining the results of the analyses, the physical properties of the material, such as melting and evaporation temperatures, and other phase changes of the material, such as crystal structure change temperature, can be obtained, or as a chemical-thermal analysis,

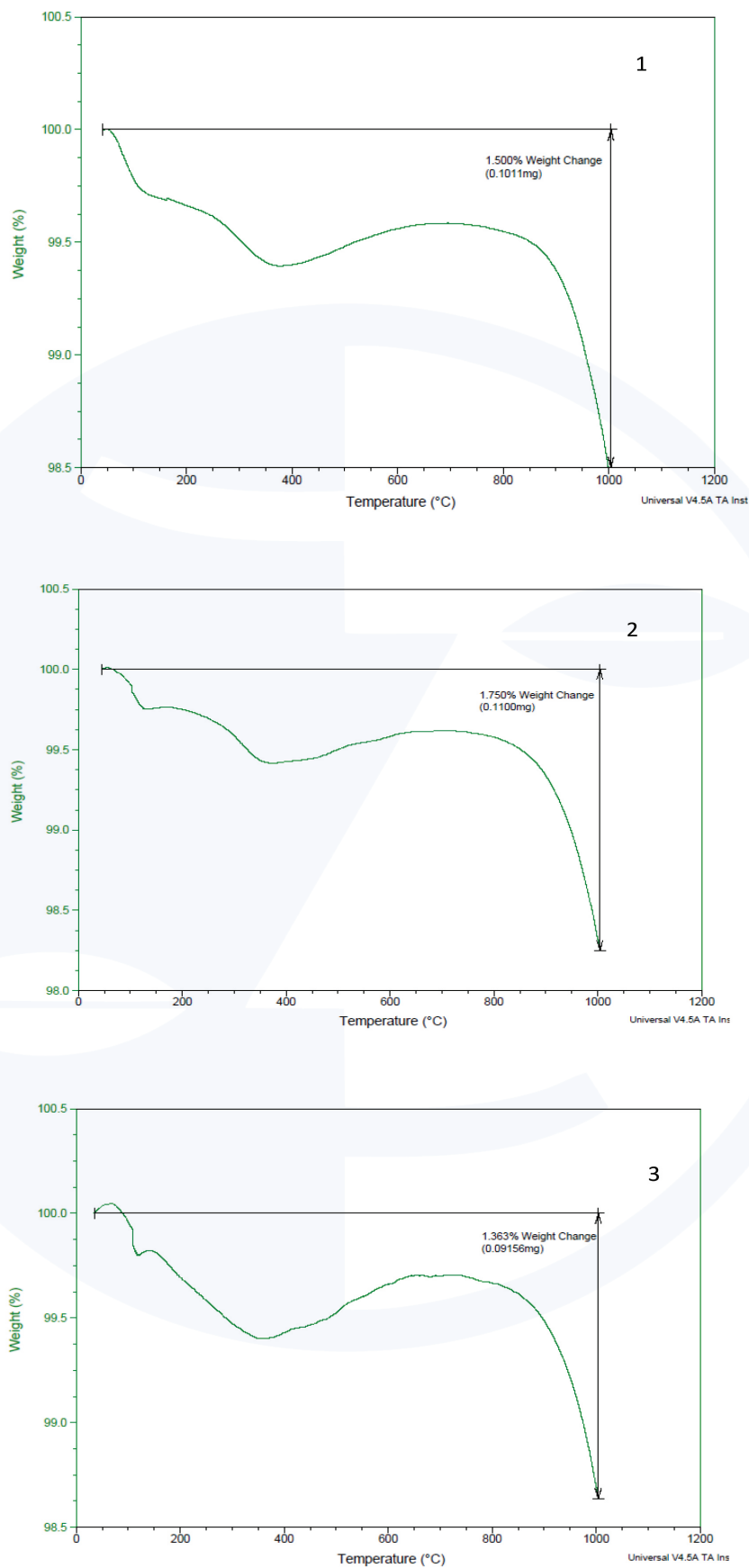
the decomposition or oxidation temperature of the material or enthalpy changes can be calculated [15, 16].

In order to obtain information about the structural changes of matter, it is necessary for certain peaks to occur in these graphs, the surfaces below the peak and their angles representing the acquisition of changes. The graphs of the control sample and under the TCF Show that the material has not had any structural and specific changes up to the temperature of 1000 °C. Given the purity of silica at this temperature and the melting point of around 1700 °C, this behavior is expected [14].

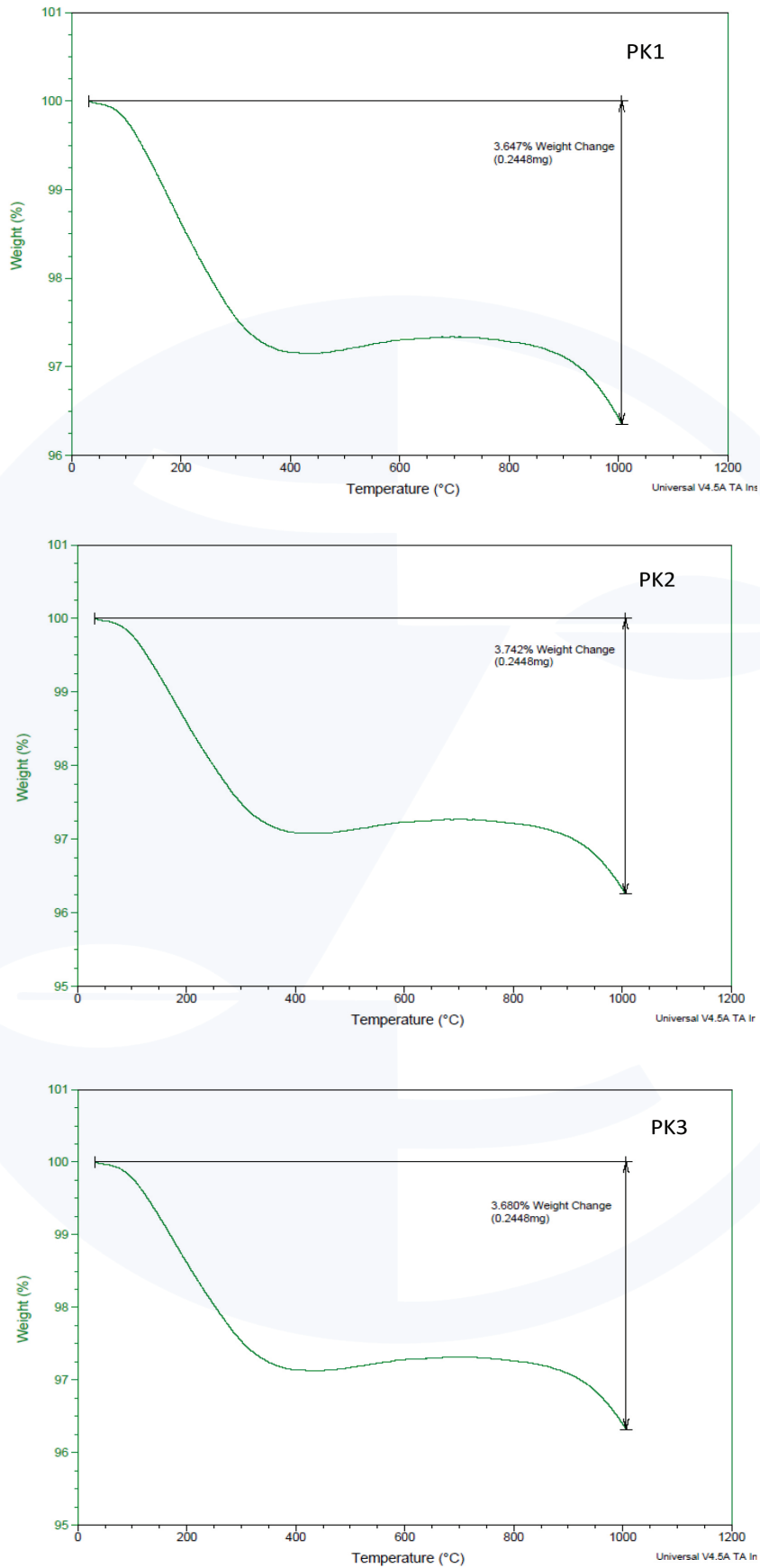
### *The TGA (Thermal Gravimetric Analysis) Analysis*

Thermal analysis or thermal gravimetric analysis is a thermal decomposition method that is measured by changing the temperature over a mass of a sample. Figures 5 and 6 show the details of the TGA analysis as follows:





**Figure 5.** The mass reduction diagram [TGA], the codes 1 to 3 under the control.



**Figure 6.** The mass reduction diagram [TGA], the codes PK1 toPK3 under the TCF



Figure 7 illustrates the results of the TGA test of control samples to investigate their

thermal properties considering the mass loss.

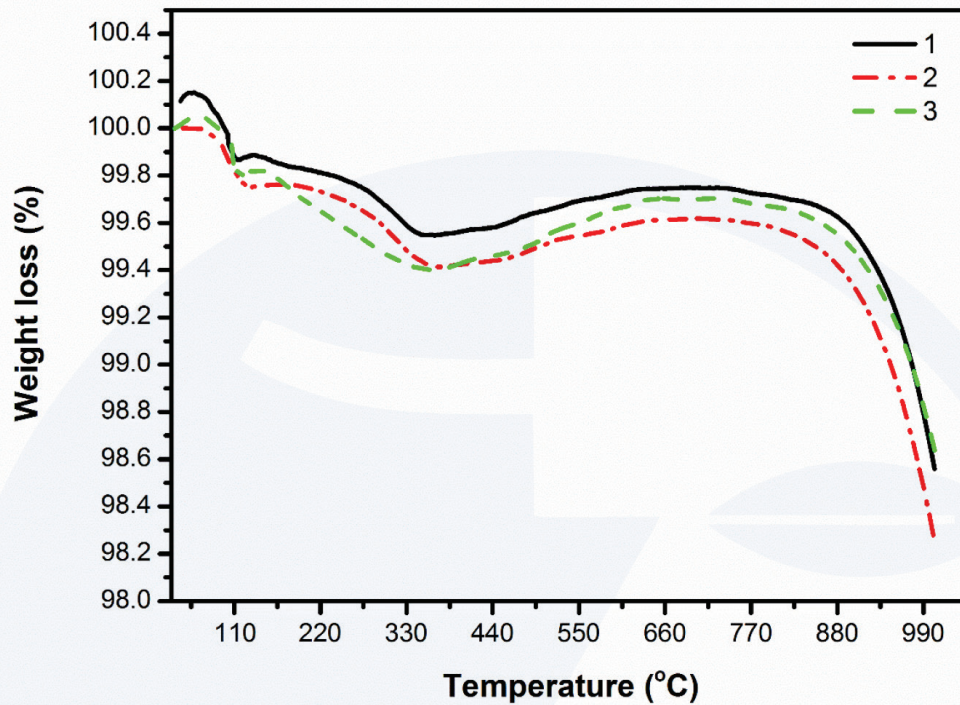


Figure 7. The TGA curves for control samples

According to Figure 7, three stages of the weight loss and one stage of the weight gain can be seen in the samples. In the first stage of the weight loss, at temperatures, less than 120 °C, the physically absorbed water evaporates to the surface of the samples [17]. At this stage, the values of 0.14, 0.20, and 0.25% of their initial mass have been reduced, in samples 1, 2, and 3 respectively. In the second stage of the weight loss, at temperatures between 120 °C to 350 °C, the structurally absorbed water may have evaporated [18, 19]. As a result of its location within the pores of the structure, this water requires a higher temperature to evaporate. Therefore, the weight loss that occurred in the second stage for samples 1, 2, and 3 was equal to 0.32%, 0.34%, and 0.40% by weight of the

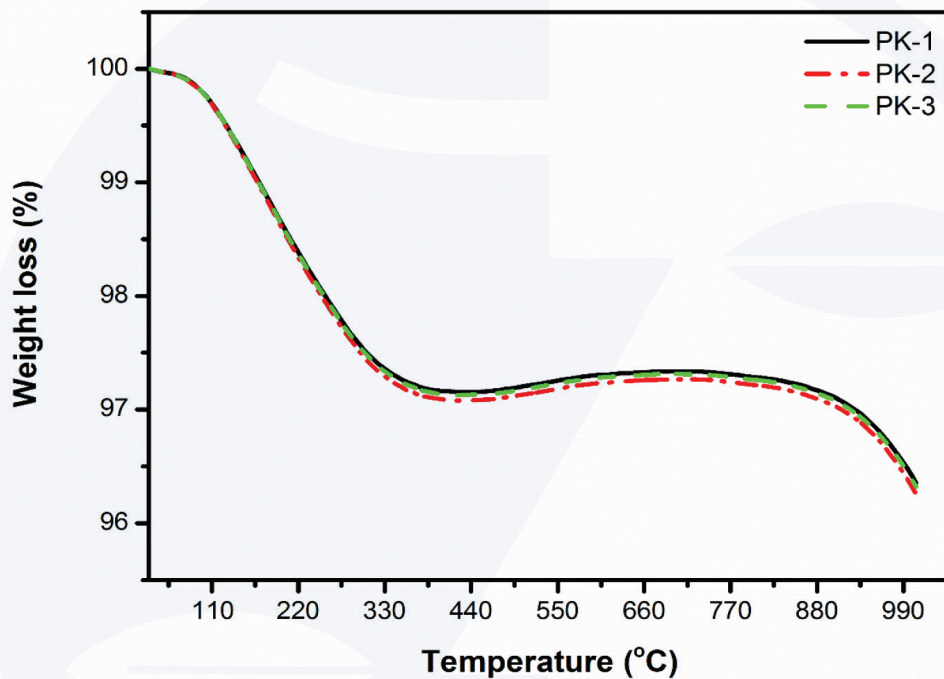
raw material, respectively. The weight gain of the samples in the temperature range of 350 to 880 °C may be due to a test error (warm air error) [20].

In fact, with the heating of the air in contact with the body of the chamber, and the movement of this air with a lower density upwards and back again, after cooling at the top of the chamber, from the middle to the bottom to the collision of this airflow to the sampling vessel in the middle of the chamber, the apparent mass of the sample increases. The weight loss diagram moves upwards (weight gain). This effect can only be seen in samples where the amount of weight loss caused by heating is very small, such as the silica samples used in this study [21].

The final weight loss stage was observed at temperatures ranging between 880 and 1000 °C. At the end of this stage, the total weight loss of all stages for samples 1, 2, and 3 was 1.5%, 1.75%, and 1.36%, respectively. The samples' mean mass reduction of all these phases, in-

cluding surface absorption water and structural absorption, was 1.53%. This behavior is generally expected from the natural behavior of pure silica with a melting point of around 1700 °C.

The results of the TGA test for the PK samples are shown in Figure 8.



**Figure 8.** The TGA curves for the PK samples under the TCF

According to Figure 8, two stages of the weight loss and one stage of the weight gain can be seen in the samples. According to the figure, it is understood that, unlike numerical samples, the weight changes in each stage are very close to each other in these samples. In the first stage, the weight loss at temperatures below 350 °C has been again in the surface water absorption range and probably the structural water in these samples [18,19]. Therefore, the weight loss that occurred in

the first stage for the PK1, PK2, and PK3 samples was equal to 2.85, 2.93, and 2.87% respectively by weight of the raw material. This is while all samples had the same structure and the same storage conditions. The results demonstrate that the mass reduction in these samples was higher than in the control samples. The weight gain of the samples in the temperature range of 350 to 880 °C, may also be the result of a test error (warm air error) [20].

The final weight loss stage was observed in the temperature range of 880 to 1000 °C. At the end of this stage, the total weight loss of all stages for PK1, PK2, and PK3 samples was 3.65%, 3.74%,

and 3.68%, respectively. The mean value of the total mass reduction was 3.69%, which was significantly higher than the control samples. A comparison of mass changes is summarized in Table 4:

**Table 4 .** Numerical comparison of mass changes

Groups	Total mass reduction Mean in 350 °C	Total mass reduction Mean
The mean mass reduction in the samples under the TCF	2.88	3.69
The mean mass reduction in the control samples	0.35	1.53
Changes percent	722.85%	141%

### Conclusion

The results demonstrate that the samples exposed to the T-Consciousness Field lost a significantly higher amount of mass, compared to the control samples. A 722.85% mass difference is remarkably observed up to 350 °C. As the temperature rises, eventually, 141% more mass is lost in the samples under the TCF. Due to the sameness of the material used in the experiment and the test conditions, the difference cannot be explained by material factors. According to the XRF analysis, pure silica lost less than 3% of mass weight after being placed at a temperature of 1100 °C for 1.5 hours. This mass reduction was a result of water and light elements., while the silica samples under the effect of TCF lost higher

amounts of mass weight at a lower temperature compared to the control samples in a similar condition.

Overall, it was found that the Consciousness Bond Field has affected the thermal behavior of Silica and the weight mass according to Phase-0 and Taheri's theory:

T-Consciousness transforms into matter and energy, and vice versa.

It appears that these changes have not been solely the result of the burning of reaction of pure silica, although this requires further investigation. Considering that this study took place based on Taheri's theory of T-Consciousness, and is not bound to any specific material, the authors suggest the investigation of TCFs on other materials.

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