Considerations of This Issue

1-1 T-Consciousness and the New Science of Sciencefact

Over the past few decades, the nature of consciousness and its role within scientific inquiry have garnered increasing attention. Numerous philosophical and scientific theories have been proposed to explore this domain. In the 1980s, Mohammad Ali Taheri introduced a novel perspective by identifying non-material, non-energetic phenomena termed *T-Consciousness Fields* (TCFs). According to Taheri, T-Consciousness exists alongside matter and energy as one of the three fundamental components of the universe, yet it is distinct from both. His theory posits the existence of a diverse array of TCFs, each with specific functionalities. Furthermore, TCFs are viewed as a subset of a broader system referred to as the *Cosmic Internet Network*, known in his framework as the *Cosmic Consciousness Network* (CCN).

What distinguishes Taheri's theory from other conceptualizations of consciousness is its emphasis on applicability. Unlike abstract or purely theoretical models, TCFs are asserted to influence both living and non-living systems—including plants, animals, microorganisms, materials, molecules, and atoms. In 2020, Taheri introduced the concept of *Sciencefact*, a term coined to assert the factual basis of T-Consciousness and its observable effects through scientific methodology. Sciencefact is part of the broader "Erfan-e-Keyhani-e-Halgheh" school of thought, also founded by Taheri. While conventional science limits itself to the study of matter and energy, Sciencefact extends this inquiry by examining the effects of TCFs—despite their immaterial and non-energetic nature—on material and energetic systems.

Sciencefact serves as a bridge between empirical science and the conceptual framework of TCFs by applying repeatable laboratory experiments across diverse scientific disciplines. These studies investigate how TCFs influence physical, chemical, and biological systems. The influence of a TCF begins with a process known as *Etesal* (connection), which links the subject under study to the Whole Consciousness via the Cosmic Consciousness Network. This connection is initiated by a trained practitioner, referred to as a *Faradarmangar*, who acts as a mental intermediary. The practitioner's brief and focused mental attention serves only to announce the connection; the resulting effects are attributed to the TCF itself. Although TCFs cannot be measured directly through conventional scientific instruments, their effects can be examined through replicable experimental outcomes (Taheri, 2013).

1-2 Methodology of T-Consciousness Fields Research

The research methodology followed in the study of T-Consciousness is based on *Assumption, Argument, and Proof*:

The basic *Assumption* is that the universe is formed by a third element, called T-Consciousness, and that is different from matter and energy.

The *Argument* is that the existence of TCFs can be shown through their effects on matter and energy (e.g., humans, animals, plants, microorganisms, cells, materials, molecules, atoms, etc.)

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

1-3 Study phases in Sciencefact

To investigate and validate the existence, effects, and mechanisms of T-Consciousness Fields (TCFs), a structured five-phase research framework has been established, comprising Phases 0 through 4. Each phase serves a distinct purpose:

Phase 0: focuses on providing initial evidence for the existence of TCFs by observing their measurable influence on matter and energy. At this stage, the underlying nature of T-Consciousness itself is not explored; the emphasis is solely on empirical validation of the fields' effects.

Phase 1: is dedicated to examining the various observable impacts of different TCFs. This phase aims to identify and categorize the diverse range of effects these fields can have across a spectrum of subjects.

Phase 2: shifts the focus toward understanding *why* these effects occur. It involves the exploration of potential reasons and underlying principles that may account for the observed phenomena associated with TCFs.

Phase 3: delves deeper into the *mechanisms* through which TCFs exert their influence on matter and energy. This phase seeks to elucidate the processes and pathways by which non-material fields can affect physical systems.

Phase 4: serves as a culmination of the preceding phases, aiming to draw broader conclusions regarding TCFs—particularly their implications for concepts such as the "mind" and "memory" of matter, and how these may relate to T-Consciousness. This phase seeks to integrate findings into a more comprehensive theoretical and philosophical context.

1-4 Using T-Consciousness Fields

The samples in this study were subjected to T-Consciousness Fields (TCFs) following the established protocols outlined on the Research Management on Consciousness Fields website (www.cosmointel.com).

Researchers can initiate a request for *Etesal* (connection) to the Cosmic Consciousness Network—necessary for the application of TCFs—by submitting an "Assign Announcement" form via the website. This access is freely available to the public, and researchers may register at any time to explore and study the effects of TCFs in experimental settings.

To ensure transparency and rigor, researchers are required to provide comprehensive details about their experiments when making a request. This includes specifying the number, identity, and roles of the control and experimental samples. All experiments in this study were conducted using a double-blind protocol: laboratory technicians involved in the measurements were entirely unaware of the TCF theory, while the *Faradarmangar* (the individual trained to facilitate the consciousness connection) at the COSMOintel research center had no knowledge of the experimental design or sample details. This double-blind setup, widely recognized as a gold standard in scientific research—particularly in the fields of medicine and psychology—ensures impartiality and strengthens the validity of the findings.

2- Overview of Studies in This Issue

The effects of T-Consciousness Fields (TCFs) on a variety of materials and physical properties—including magnetic and electromagnetic characteristics—have been previously examined and documented. The present study shifts the focus to investigating the influence of TCFs on the electrical properties of a circuit by treating its components and analyzing associated variables. Specifically, this includes assessing the distinct effects of various TCFs, evaluating their influence over multiple time intervals, and examining changes in measurement sensitivity at the system level.

Exploring the effects of TCFs on electrical components presents both a complex challenge and a promising research direction. A key advantage of this field lies in its simplicity of experimental implementation and monitoring, which offers an accessible and replicable path for researchers. The core objective of this investigation is to assess the impact of TCFs on the electrical behavior of a standard resistor by measuring voltage variations across it, using a custom-designed measurement circuit. The study is based on the hypothesis that TCFs are capable of influencing the electrical properties of physical objects.

To test this hypothesis, a statistically significant number of 10 kΩ DIP (Dual In-line Package) resistors were subjected to experimentation. This approach was chosen to ensure the repeatability of observed behaviors and to develop a preliminary model quantifying the nature and extent of TCF influence on these components. The voltage across the resistor was calculated using the classic voltage divider principle, with two resistors (R_1 and R_2) placed in series with an ideal voltage source (V_s), as illustrated in Figure 1. The voltage across the second resistor (R_2) was then used as the primary metric for analyzing the impact of TCF exposure.

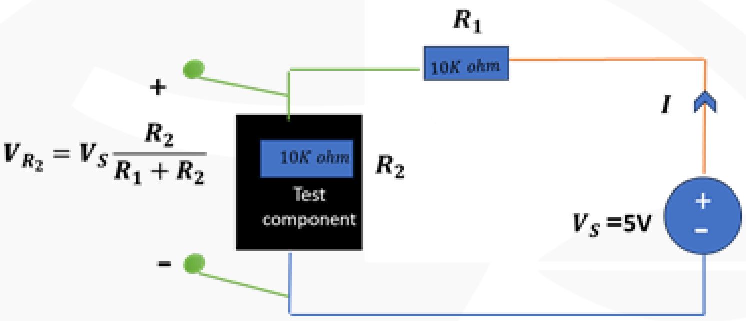

Figure 1. Voltage Divider Circuit

A single resistor can be conceptually divided into two components. The first component is the **ideal resistance**—in this case, precisely 10 kΩ—which represents the theoretical electrical resistance value under perfect conditions. The second component accounts for the **intrinsic noise** generated within the resistor, which originates from the manufacturing process and material imperfections. This internal noise contributes to slight fluctuations in the actual resistance value and introduces variability in electrical measurements.

Similarly, the measurement circuit as a whole can also be understood as comprising two distinct parts. The first is the ideal theoretical model, which assumes perfect conductivity in the wires, flawless mechanical connections, and the absence of any external disturbances. The second component consists of practical non-idealities in the system, such as wire resistance, contact imperfections, environmental interferences, and other sources of external noise that affect the accuracy and stability of voltage measurements. Therefore, equation 1 can be written as:

(1)

$$\overset{\text{The resistor under measurement}}{\text{Recorded voltage} = \boxed{\text{Corresponding voltage of the 10 k}\Omega\text{ resistor + internal noise of the component}}}$$

$$\underset{\text{Connections and communications of the board, wiring, etc.}}{+\boxed{\underbrace{\text{Theoretical voltage of wires and connectors}}_{=0} + \text{External noise}}}$$

In this experiment, voltage measurements reflect the aggregate influence of all contributing factors, as outlined in Equation 1. These include the ideal circuit behavior, internal noise originating from component imperfections, and external noise introduced through environmental and systemic factors. The recorded voltage therefore represents a comprehensive output, encompassing both predictable electrical behavior and stochastic fluctuations.

When a T-Consciousness Field (TCF) is applied, its effect on the circuit can be modeled as an additional voltage component that modifies the overall measured voltage. This component, resulting from the interaction between the TCF and the system, is referred to as the **T-Consciousness Voltage**.

A more detailed schematic representation of the system—expanding upon the idealized configuration shown in Figure 1—is presented in **Figure 2**. In this enhanced model, the **combined internal and external noise** is denoted by , while the **influence of the T-Consciousness Field** is explicitly represented as V_{TCF}.

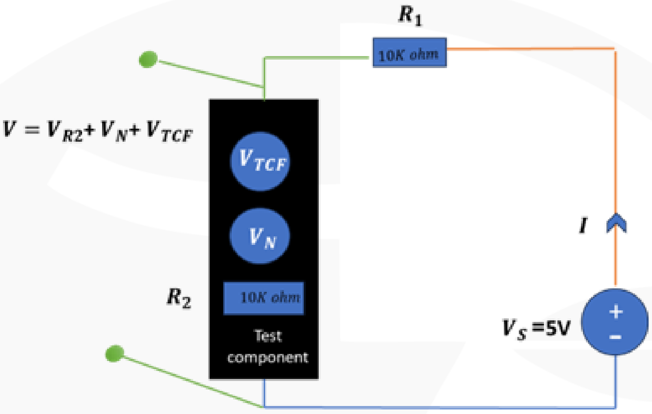

Figure 2. Circuit Model of Component, Noise, and T-Consciousness Field

Sources of noise (V_N) include the following factors, which can cause errors in measurement and are therefore considered potential sources of error:

1. Measurement device error (clock noise, breadboard noise, wire length effects, etc.)
2. Manufacturing imperfections
3. Environmental noise
4. Power supply error

Based on the closed circuit shown in Figure 3, the above factors are examined and discussed as follows:

- Measurements conducted in the absence of the resistor component consistently recorded values of five volts at the power supply and zero volts at the ground terminal, indicating negligible influence from environmental noise. Filtering was incorporated within the power supply and other sections of the circuit, and the stabilized power supply voltage remained at five volts after filtering. Furthermore, no periodic noise sources—such as clock signal interference or mains electricity artifacts—were detected during the measurements.
- While errors arising from manufacturing inconsistencies in the resistor, mechanical instability in the breadboard-resistor interface, and wire-specific characteristics (e.g., length, material) were not explicitly isolated or measured, these factors are recognized as the primary contributors to internal and external noise in the circuit.
- The TCF was applied specifically to the 10 kΩ resistor. Consequently, its influence is considered to manifest within both the internal noise of the component and potentially the ideal resistive element itself, though external noise is not directly targeted by the field. However, changes in the physical characteristics of the resistor—induced by the TCF—can indirectly affect

the external noise sources, such as those arising from mechanical and wiring connections. Therefore, the recorded voltage—comprised of the ideal resistor response, internal noise, and external noise (as per Equation 1)—serves as an indirect measure of TCF influence, particularly with respect to noise behavior.

- In the current experiments, the T-Consciousness voltage is not independently assessed in terms of its isolated effect on the ideal resistance. Such precision requires instrumentation beyond the scope of this study and remains a future objective for the research team.
- To avoid signal pre-processing and filtering, the measurement circuit was assembled manually using a breadboard, discrete wires, and other fundamental components, rather than relying on pre-fabricated platforms such as Arduino or printed circuit boards (PCBs). The rationale behind this design choice is twofold: (1) to ensure that recorded values reflect the unprocessed, raw electrical behavior of the system, and (2) to preserve the contribution of external noise, which is typically suppressed in PCB-based systems. In the context of this study, the presence and variability of such noise are not only expected but are also considered desirable, based on the following assumptions:

   1. Variations in the voltage across the resistor can modulate the behavior of external noise, making it an indicator of TCF influence.

   2. Since the measured voltage represents a resultant value encompassing all influencing factors, the removal of external noise would simplify Equation 1 to a less informative form, thereby omitting potentially meaningful variations related to TCF effects.

Therefore, equation 1 can be written as equation 2 as follows:

(2)

$$\text{Recorded voltage} = \text{Corresponding voltage of the 10 k}\Omega\text{ resistor} + \text{Internal noise of the component} + \underbrace{\text{Theoretical voltage of wires and connectors}}_{=0} + \underbrace{\text{External noise}}_{\approx 0}$$

$$\rightarrow \text{Recorded voltage} = \text{Corresponding voltage of the 10 k}\Omega\text{ resistor} + \text{Internal noise of the component}$$

In this case, the measured value becomes closer to the actual value, and the noise is reduced. This requires higher precision in signal recording because, under these conditions, any changes are only reflected in the internal noise and the 10 kΩ resistance.

2-1-1. Equipment for the Experiment

100 pieces of 10 kΩ, 1.4-watt DIP resistors with 5% tolerance (all components were from the same manufacturing batch). 9 breadboards.

Equipment for Constructing the easurement Device

Microcontroller: Atmega32A; 1 breadboard (brand: ATMEL, model: u-35460k, THU2306); LED lamp; Push button; 4 capacitors: 100 nF; 2 capacitors: 18 pF; 1 capacitor: 100 µF; 1 inductor: 10 µH; Crystal oscillator: 8 MHz; Resistor: 10 kΩ; USB-TTL interface; Power adapter: 5V, 2A.

2-1-2. Research Methodology

The microcontroller was programmed using CodeVision (v3.14). Circuit simulations were done in Proteus 8.17. The CodeVision file can be viewed in Appendix 1. Using the USB-TTL interface, the readings from the component under test were recorded in an Excel file via MATLAB (2022a) (see Appendix 2). The electrical circuit of the measurement device is illustrated in Figure 3.

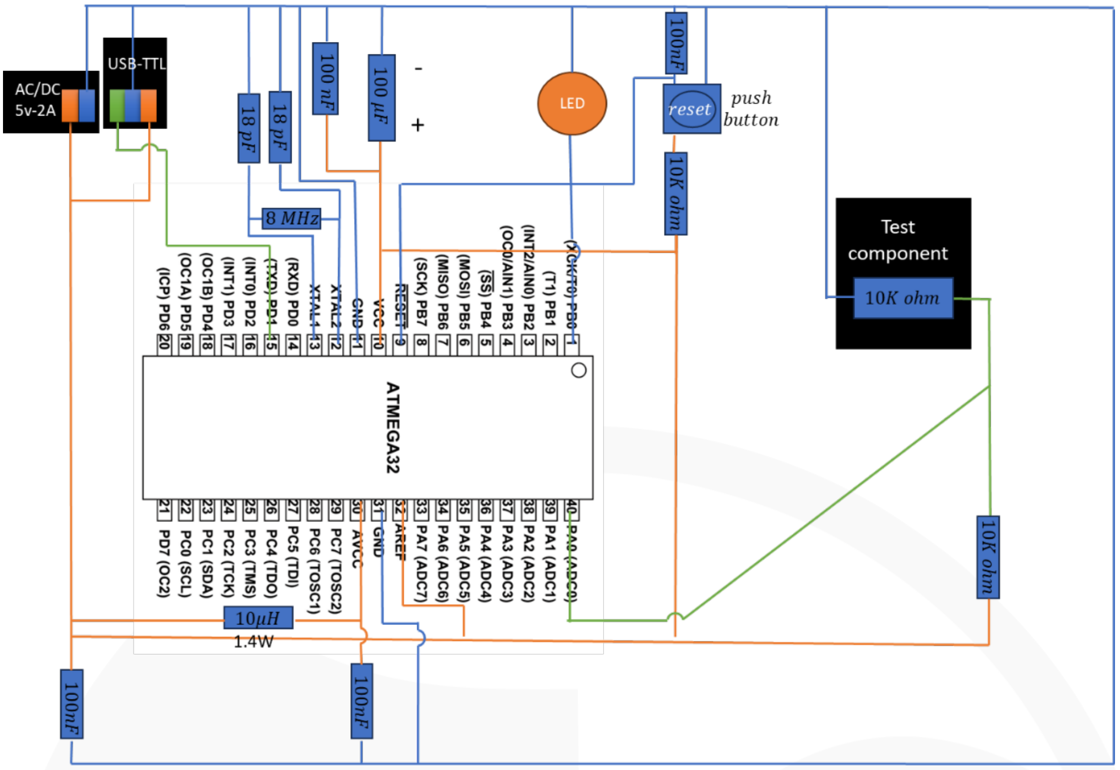

Figure 3. Measurement circuit used in the studies presented in this issue.

2-1-3. Component Readings and Testing

A total of 100 resistor components were examined, of which 20 were used solely as controls, and the remaining 80 were test-control samples. Eighty 10 kΩ DIP resistors were installed on eight breadboards and tested. In this test:

- The first 20 components were treated with T-Consciousness Field 1 (TCF1).
- The second 20 components were treated with T-Consciousness Field 3 (TCF3).
- The next 20 components were treated with T-Consciousness Field 2 (TCF2) for $V{\downarrow} \propto {\downarrow}R2$.
- An additional 20 components were placed on another breadboard in the subsequent phase of the experiment and treated with **TCF2** for $V{\uparrow} \propto {\uparrow}R2$.

All resistors used in this study were sourced from the same manufacturing batch to ensure consistency and reduce variability due to production differences. For testing each component, two wires were used to connect the ground and the microcontroller input to the terminals of the resistor under examination. Care was taken to minimize the space between the wires, although they were not twisted into a pair, in order to retain environmental noise influences relevant to the study.

For each resistor, the data collection process was divided into two phases. In the first phase, six consecutive series of voltage samples were recorded without the application of any T-Consciousness Fields (TCFs), serving as the control condition. In the second phase, following the application of the designated TCF, six additional series of samples were collected using the same procedure. Thus, each test session spanned approximately 12 minutes—six minutes under control conditions and six minutes under TCF influence.

During each one-minute sampling interval, 5,800 voltage measurements were recorded, resulting in a total of 69,600 data points per component across the entire 12-minute period. Additionally, 20 external control components were evaluated in a similar manner to the 80 primary test-control components. However, unlike the internal samples, these external controls were not subjected to any TCF treatment during the entire 12-interval sampling process.

The samples were recorded using the 10-bit ADC (Analogue-to-Digital Converter) of the Atmega32 microcontroller. The sampling process was conducted as follows:

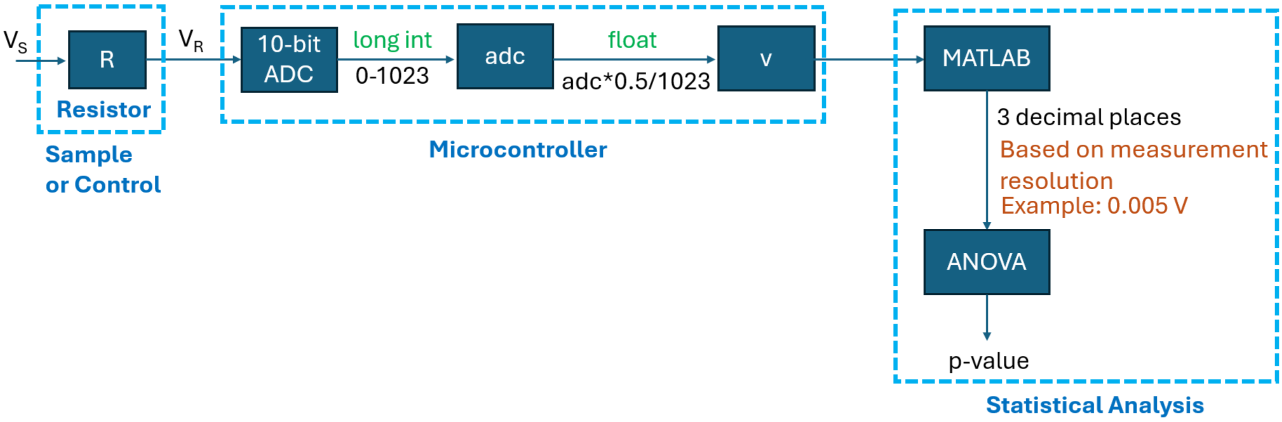

Figure 4. Block diagram of the measurement and data recording process using the microcontroller.

Samples were recorded using the 10-bit Analog-to-Digital Converter (ADC) of the Atmega32 microcontroller. The ADC values ranged from 0 to 1023, with a voltage resolution of approximately 0.0049 V. To convert the ADC output to voltage, Equation 3 is used, and the result is rounded to three decimal places.

$$MeasuredVoltage = adc\,\frac{v_{ref}}{2^{bit}-1} = adc\,\frac{5}{2^{10}-1} = adc\,\frac{5}{1023} = (abc * 0.004887)_{|3\,decimals} \tag{3}$$

The resulting voltage values were rounded to three decimal places for consistency in analysis, as presented in Table 1.

Table 1. Permissible Voltage Values Recorded for the Resistor Under Study in This Issue's Research.

ADC Output	Mathematical Calculations	Output Value **(Converted to Voltage)**
0	0*0.004887	**0.000**
1	1*0.004887	**0.005**
….	…	**…**
505	505*0.004887	**2.468**
506	506*0.004887	**2.473**
507	507*0.004887	**2.478**
508	508*0.004887	**2.483**
509	509*0.004887	**2.488**
510	510*0.004887	**2.492**
511	511*0.004887	**2.497**
512	512*0.004887	**2.502**
513	513*0.004887	**2.507**
514	514*0.004887	**2.512**
515	515*0.004887	**2.517**
516	516*0.004887	**2.522**
517	517*0.004887	**2.527**
518	518*0.004887	**2.531**
…	…	**…**
1023	1023*0.004887	**4.999**

When interpreting the graphs presented in various sections of this study, it is essential to recognize that the analyses are not based on a single series of outputs from an individual component. Rather, from a statistical standpoint, multiple sampling series across several components are collected and analyzed collectively. For instance, histograms are constructed using aggregated data from multiple components to provide a more robust and representative view of the distribution. As a result, the binning of values is calibrated to accommodate the combined dataset, ensuring meaningful statistical interpretation. Values that fall outside the defined binning range are reported as averaged figures, as explained in the methodological details of each respective section.

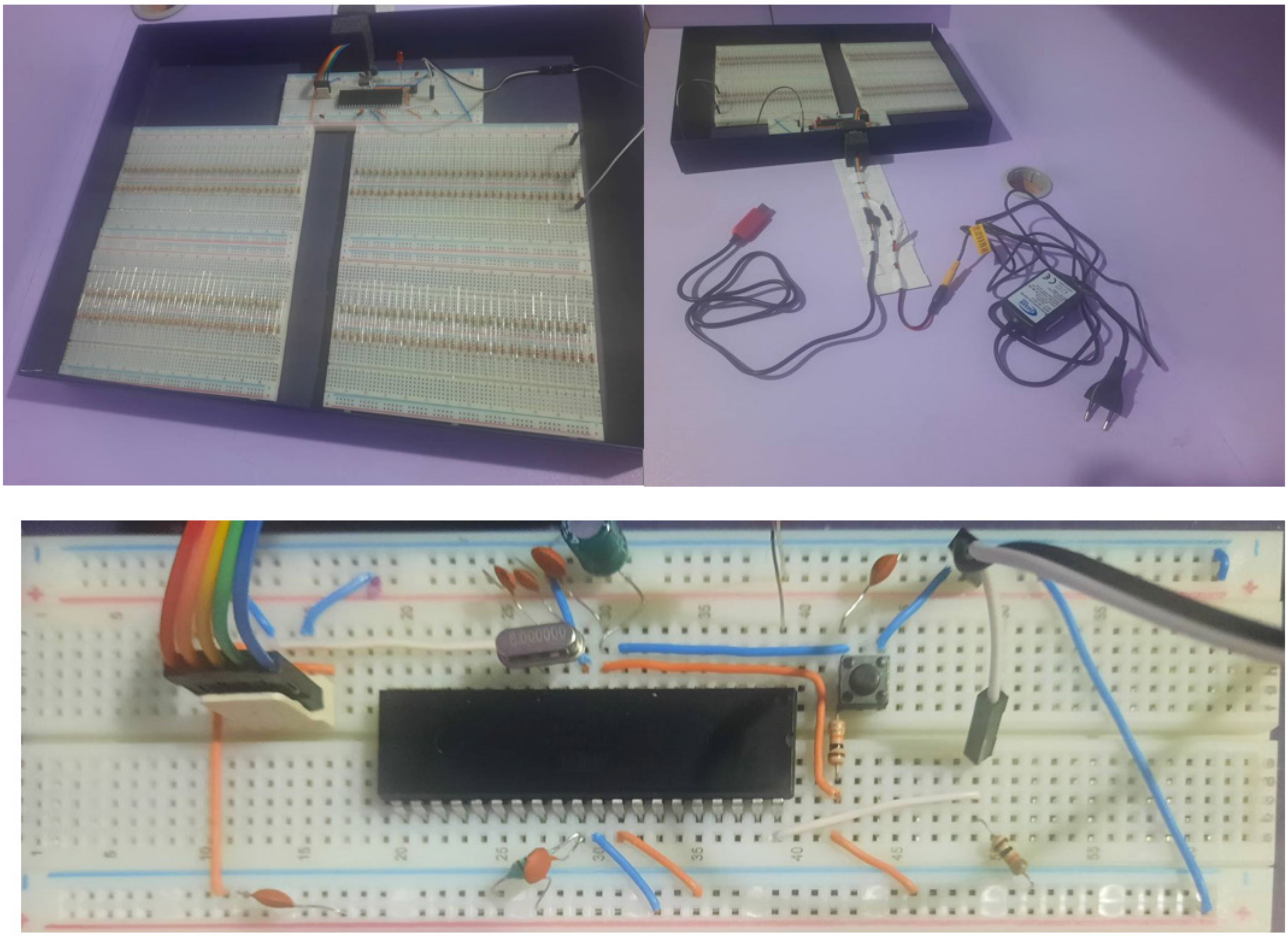

Figure 5. Measurement Circuit and Resistor Test Components

2-1-4- Analysis Method

In this study, each resistor component was subjected to twelve measurements: six control readings and six test readings under the influence of various types of T-Consciousness Fields (TCFs). To analyze these control and test populations, the first step was to determine the appropriate number of components required for statistical analysis.

The selection criterion was based on the distribution pattern of the recorded voltage values (outputs) from the research system, as well as the Shannon entropy and minimum entropy values calculated from an initial, diverse set of control components. For individual-to-population comparisons, a single control component was chosen as a reference point. Since using three samples is standard in population studies, population sizes were set as multiples of three, up to 27 components. Accordingly, four population sizes were selected: 1, 3, 9, and 27 components.

Based on this approach and the results in the first section of the findings, nine out of the 20 components exposed to TCFs (and their corresponding controls) were randomly selected for further analysis.

In the next stage, both control and test populations were analyzed for frequency distribution and the statistical significance of differences. For each sample, 313,200 voltage values were recorded. This comprised data from nine randomly selected resistor components, with 5,800 consecutive voltage values recorded per component in each of the six-measurement series. The total voltage data for each sample was grouped into equal intervals, and a frequency distribution graph was generated using the averaged values for each sample (5,800 averages per component).

Subsequently, the control and TCF-exposed populations were divided into temporal subpopulations: 1 to 6 for controls and 7 to 12 for tests. Three supplementary analyses were performed on these subpopulations:

1. The mean voltage values of control and test samples were compared to identify significant trends.

2. Shannon and minimum entropy values were calculated for each subpopulation. Their temporal trends were analyzed using paired-point comparisons between control and test samples.

3. Changes in mean voltage, minimum entropy, and Shannon entropy were tracked over time relative to the corresponding control values at each time interval.

2-1-5. Method for Calculating Mean Voltage

Due to the lack of data independence and the presence of repeated measurements, the statistical method of Repeated Measures ANOVA was employed for analysis. Before applying this method, the assumptions of normality and sphericity were assessed. As both assumptions were met, Repeated Measures ANOVA was deemed appropriate. The p-value obtained for each field was used to determine whether the changes in mean voltage over time followed a random or non-random trend. This method was thus used to evaluate the statistical significance of mean voltage changes throughout the study.

With this foundation, the first three studies presented in this issue examine the effects of different types of T-Consciousness Fields on Dual In-line Package (DIP) resistors. Specifically, a total of 100 DIP resistors (1.4W, 5% tolerance), all from the same brand and production batch, were tested. The allocation was as follows:

- 20 resistors were assigned to the study of T-Consciousness Field 1,
- 40 resistors to the study of T-Consciousness Field 2 (in two subgroups with distinct objectives), and
- 20 resistors to the study of T-Consciousness Field 3.

For each resistor, voltage across its terminals was measured 12 times: six times as a control (without T-Consciousness Field treatment) and six times during exposure to one of the T-Consciousness Fields described earlier. These measurements were conducted over a 12-minute period.

Additionally, an external control group of 20 resistors underwent the same 12 sequential voltage measurements over 12 minutes but without exposure to any T-Consciousness Field.

2-2. Concept and Calculation Method of Shannon and Minimum Entropy in the Studies of This Issue

Entropy, as used in communication theory, is a measure of the uncertainty associated with an information source (Karmeshu, 2003). It can also be interpreted as the average number of bits required to encode or store information. According to this theory, a system is assumed to be in a state of maximum uncertainty—or maximum entropy—prior to receiving information. This uncertainty may decrease once information is received.

Importantly, an information system is typically open, meaning it can interact with its environment. From the perspective of statistical mechanics and microscopic analysis, entropy is defined as a measure of energy distribution among the microstates of a system within an ensemble (Shannon & Weaver, 1949; Shannon, 2001; Coles et al., 2017). In this context, entropy is expressed by the following equation:

4)

$$S = -\sum_i p_i \ln(p_i)$$

In this equation, *pi* represents the probability of the system being in state *i*. In the present study, *pi* is derived from the distribution of randomly generated numbers across the entire probable range. According to the entropy equation, entropy reflects the weighted probabilities of information states. In other words, a decrease in entropy corresponds to an increase in information content, indicating that the system becomes more predictable and controllable. Thus, changes in entropy can be interpreted as indicators of information generation or loss.

Additionally, **minimum entropy** serves as a measure of the degree of randomness in the generated values. It is calculated using the following equation:

5)

$$S_{\min} = -\log_2 P_{\max}$$

where $P_{\max}$ represents the probability of the most frequent value in the distribution of generated data.

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