

# A new Experimental Method in the perspective of the Benveniste's Research and the characterization of the Chakras

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# APEC 300: Electro-cutaneous Parameters Analyzer



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**APEC is able to perform on biological and non-biological materials, two fundamental types of measurement:**

- \* **exceedingly small potential differences;**
- \* **impedance at low frequencies.**

# APEC 300: Electro-cutaneous Parameters Analyzer



**The first two types of measurement can be performed on water and aqueous solutions, inorganic solid bodies, on districts of the human body and cell cultures.**

# APEC 300: Electro-cutaneous Parameters Analyzer

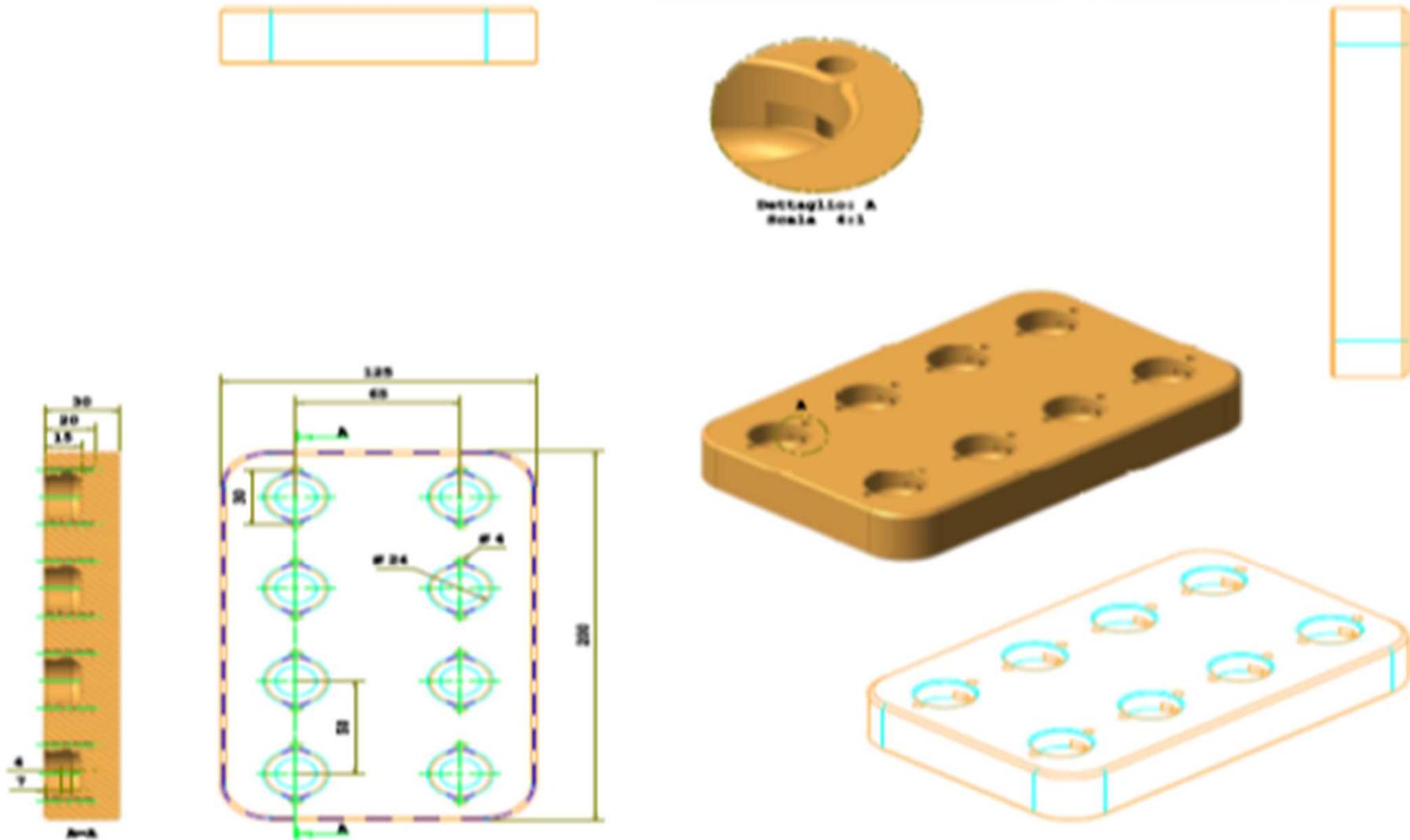


The possibility of a more “at hand” measure, by APEC 300, of *potential variations* of about ten nV (nanoVolt), together with analyzing the spectrum in ultra-low frequency region, could provide some interesting and reliable results in a less demanding way.

# The Sensitivity of Water to Magnetic Fields

To show if there is a different behavior between water and water stimulated by a very low intensity field many experiments have been carried out in June 2019 measuring the *potential difference* (p.d.) of tap water and mineral water, first and after the stimulation, that is, in the series of the performed experiments, without or with the application of a very low intensity magnetic field. Because some research on “water memory” have been realized assessing as “low” the acting magnetic field when its value was about some millitesla (mT), considering that the “constant” geomagnetic field ranges in the interval (40 – 70) mT, we have chosen as the stress a magnetic field one million times smaller than geomagnetic field. In this way, the definition of “extremely weak field” makes sense; and the possible coupling actions between the stimulating magnetic field and the geomagnetic one, are completely negligible.

The trays structure to perform p.d. water at the ends of the diameter of each tray.



# The Sensitivity of Water to Magnetic Fields

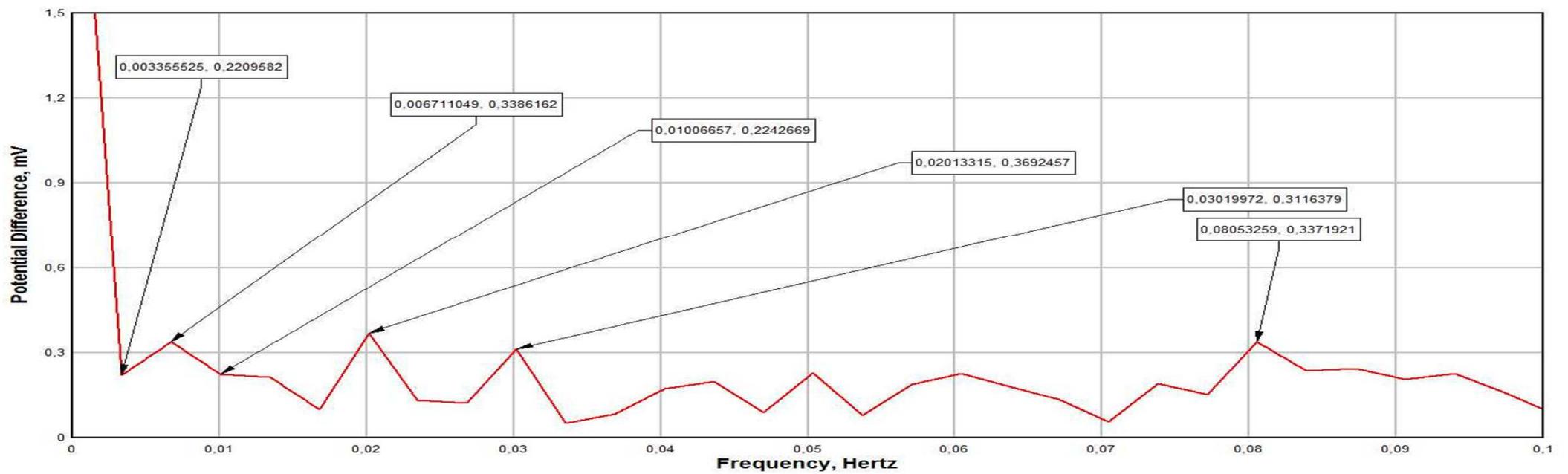
Tap water, mineral and deionized water were examined. There are several parameters to be taken into consideration when measuring the electric potential difference (p.d.) of the water.

The first parameter examined is the time course of the p.d. Specifically it was measured, before and after stimulation, the average value  $V_m$  (the average of all the individual readings of the potential in the 300 seconds of measurement) and the difference  $\Delta V$  between the maximum and minimum value of the p.d. APEC-300 is endowed with an its internal software able of producing, for each measurement of the potential level as a function of time, a frequency analysis, that is, the *Fourier components* to the different orders.

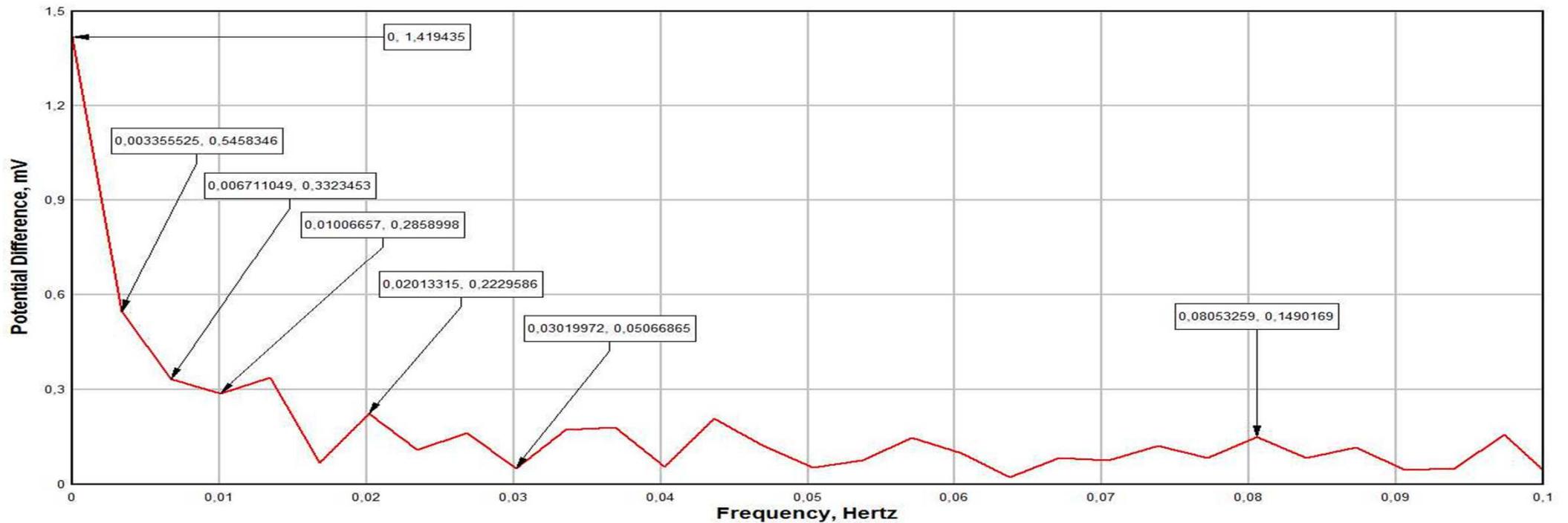
# The Sensitivity of Water to Magnetic Fields

**This particular performance allows to associate to each measure a kind of electromagnetic footprint, typical of an inanimate body, an aqueous solution, of the body district, of the organism, – animal, vegetable – or the cell culture, which are under examination.**

**It is important to immediately note that in a series of measurements of water we have collected data showing that the part of frequency spectrum at the right 0.1 Hz does not provide interesting features, while the maximum information is obtained in (0, 0.1) Hz, that is, in an extremely low frequency range (Ultra Low Frequencies). Therefore, we have carried out more accurate measures just in that range, as reported in Figs**



Frequency spectrum of mineral water, before stimulation. Full Scale 50 mV; duration measurement, 300 s.



Frequency spectrum of mineral water, after stimulation. Full Scale 50 mV; duration measurement, 300 s.

# The Sensitivity of Water to Magnetic Fields

The stimulation with low magnetic field in all types of water resulted in a variation in the value of the modulus of the average p.d. (Vm); and determined the decrease in the amplitude of the excursions over time in the water potential - (the oscillations; in Table III the OSC column). In mineral water, stimulation with the magnetic field at 50 Hz (65.7 and 133.50  $\mu\text{T}$ ) always causes a decrease in the potential at zero frequency; it also increases the first component of the spectrum in the interval (0, 0.1) Hz. The opposite behavior is observed when the magnetic stimulation is very intense (2T).

# The Sensitivity of Water to Magnetic Fields

Apart the discussed behaviors, a relevant remark is that a “very low” stress, very low in the precise sense we have claimed, gives to water a greater energy than when is not stimulated. It is just a first step that enables to assert that there is an observable well quantified response of water under a weak stress. Is it true also if the stress is an “extremely weak field”? The answer will be the object of our research, in the perspective if the stress energy stored in water can be an information factor at the base of its “memory”.

# **A new experimental method to verify the behavior of the chakras**

**The doctrine of the seven chakras describes the functioning of the human organism on the basis of energy centers present in the body. This theory seems to date back to 3000 B.C. and was developed in the geographical area of India, Nepal and Tibet. The oriental medicine believes that the practice of Reiki is able to act on the chakras, in particular on the "Forehead Chakra", also referred to as the *Third Eye*. The "Forehead Chakra" is located between the eyebrows of the face**

# **A new experimental method to verify the behavior of the chakras**

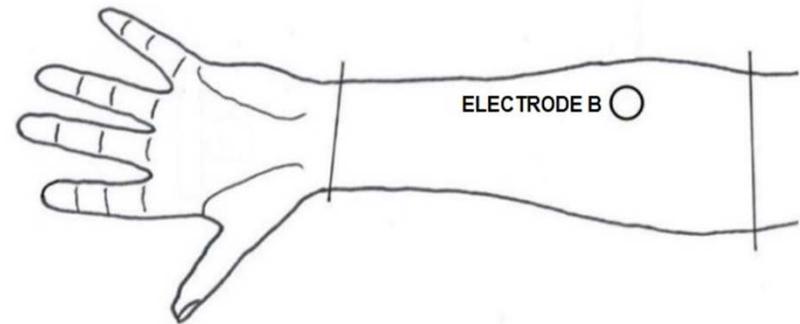
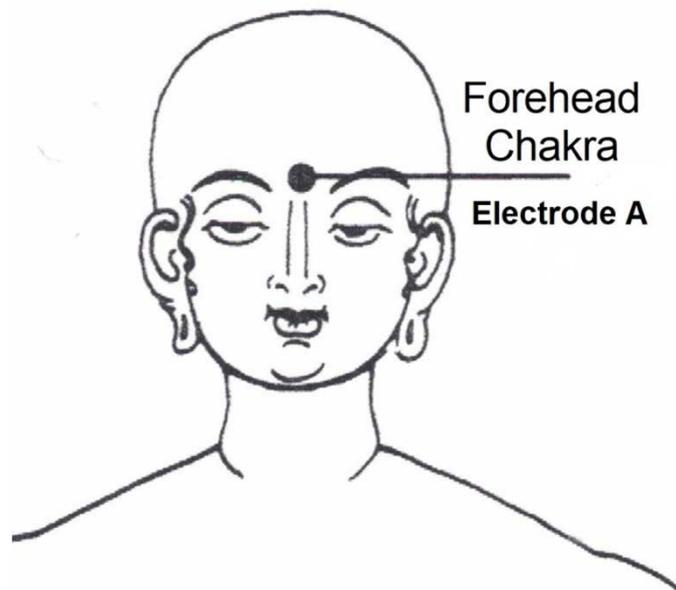
**The influence of Reiki requires further experimental evidence and the interpretation of why it is effective.**

**Without expecting an interpretative theory of the phenomenon in question, which sometimes requires generations of scientists, we have submitted the hypothesized “cause-effect” correlation to experimental verification, that is, to measurements performed by the group of researchers of CIRPS engaged in the project Quantitative analysis of the bioelectrical potential and impedance that characterize particularly active skin points in normal subjects.**

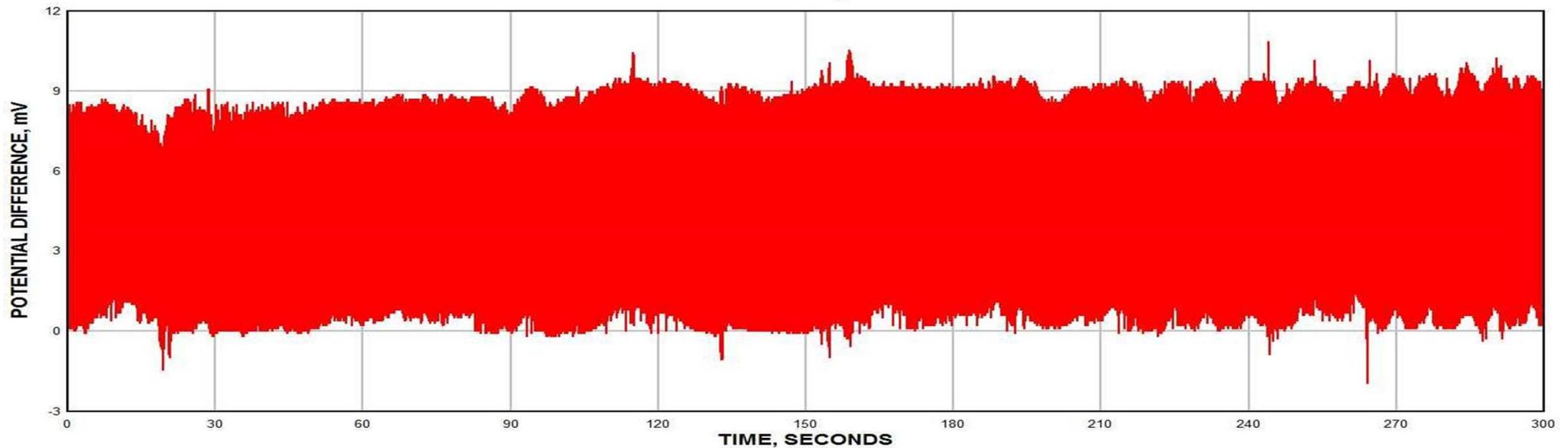
# **A new experimental method to verify the behavior of the chakras**

**Therefore, we have experimentally verified the possible action of the Reiki on the skin potential of the Forehead Chakra, following a measurement protocol prepared by the coordinator of BEM section of CIRPS, Prof. Massimo Scalia, who together Prof. Sperini have designed the device of advanced electronics used for the experimental tests: APEC 300. The latter was created by the electronic engineer Mauro Santilli. All these three researchers have followed with us the phase of measurements, given their operational delicacy.**

# A new experimental method to verify the behavior of the chakras

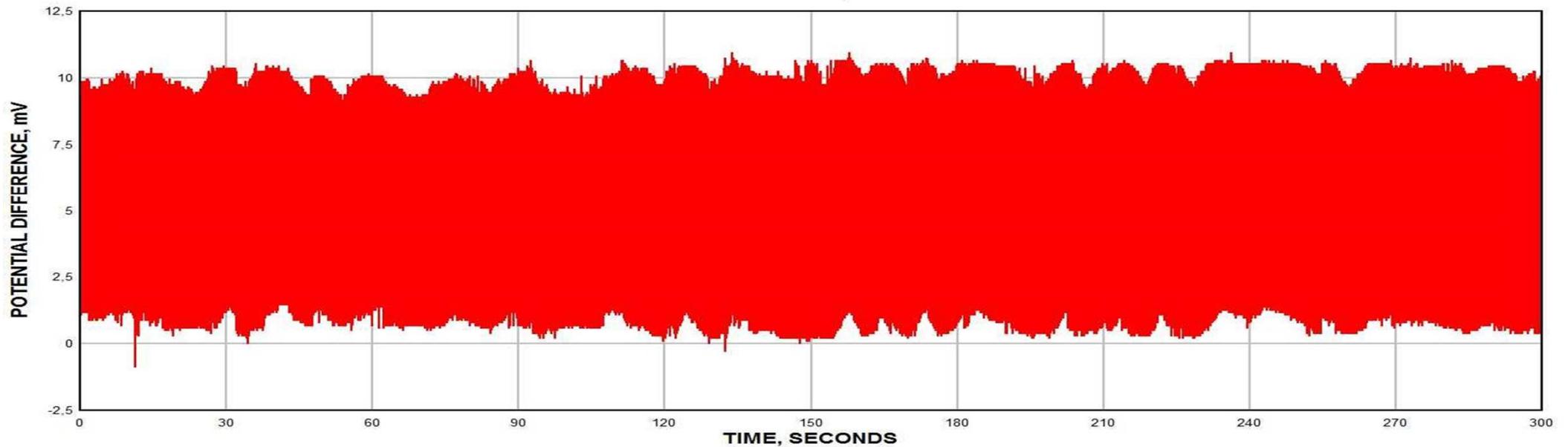


**SUBJECT 1**  
Vm = 4,642586 mV  
 $\Delta V = \text{Max} - \text{Min} = 8,60 \text{ mV}$



**Subject 1. Time course of skin potential. Full scale 50 mV. Duration Measurement between Forehead Chakra and forearm before stimulation 300 s**

**SUBJECT 1**  
Vm = 5,506005 mV  
 $\Delta V = \text{Max} - \text{Min} = 9,97 \text{ mV}$

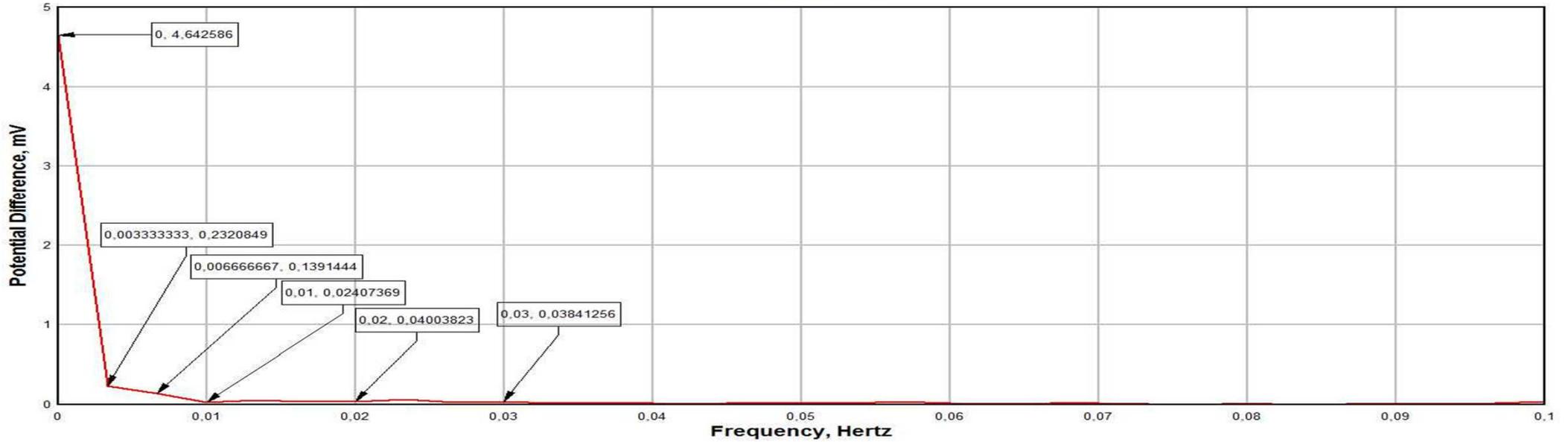


**Subject 1. Time course of skin potential. Full scale 50 mV. Duration Measurement between Forehead Chakra and forearm after stimulation 300 s**

$V_m$ , indicates the measure of the average value of the skin potential;  $\Delta V$ , is the extent of the oscillation of the skin potential in absolute value. In the sixth column, the + sign indicates that the use of Reiki has resulted in an increase in the average value of the potential of the Forehead Chakra; the - sign, on the other hand, means an decrease in the potential of the palm of the Forehead Chakra. In the seventh column OSC indicates the excursions of the skin potential (D means that they decrease, A, that they increase). The minus sign indicates that the potential of the Forehead Chakra is negative compared to that of the forearm.

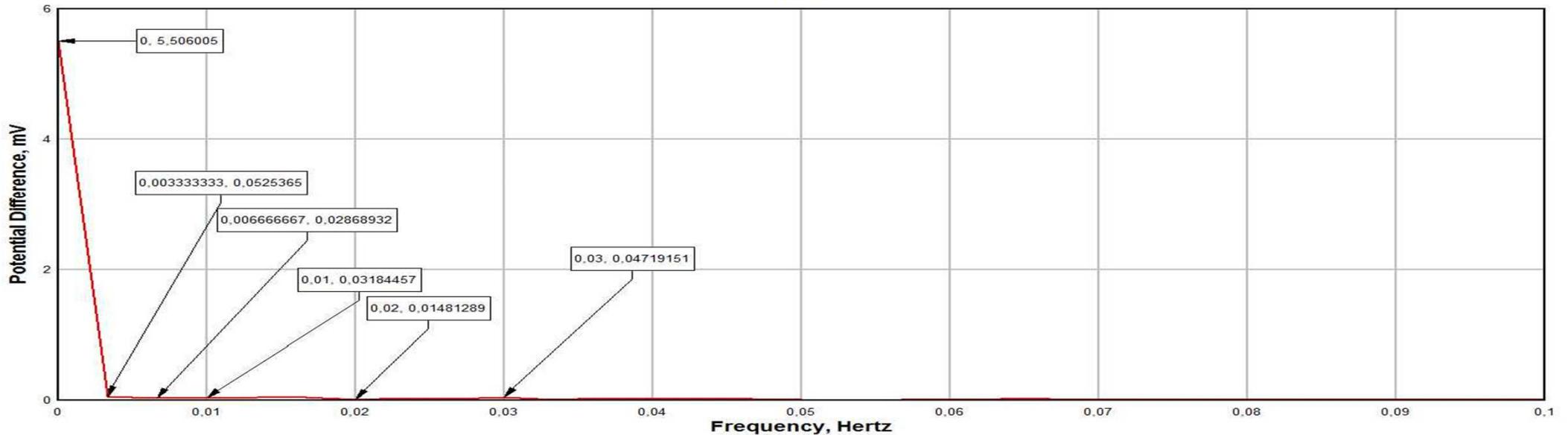
MEASURE SUBJECT	BEFORE REIKI		AFTER REIKI			V	OSC
	$V_m$ mV	$\Delta V$ mV	$V_m$ mV	$\Delta V$ mV			
1	4,64	8,60	5,51	9,97		+	A
2	6,38	12,02	10,26	10,63		+	D
3	-7,35	7,62	-3,48	9,29		+	A
4	1,47	11,44	2,36	26,29		+	A
5	-6,70	2,84	-2,37	2,25		+	D
6	-2,10	8,01	0,43	8,15		+	A
7	0,96	9,38	2,89	9,29		+	D
8	-5,48	9,29	1,24	10,17		+	A
9	-5,65	8,99	-3,40	8,80		+	D
10	5,71	5,57	9,48	9,38		+	A

**SUBJECT 1**  
**SPECTRUM 0 - 0.1 Hz**



**Subject 1. Spectrum of skin potential. Full scale 50 mV; Duration Measurement between Forehead Chakra and forearm before stimulation 300 s.**

**SUBJECT 1**  
**SPECTRUM 0 - 0.1 Hz**



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MEASURE SUBJECT	BEFORE REIKI		AFTER REIKI			V	OSC
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6	-2,10	8,01	0,43	8,15		+	A
7	0,96	9,38	2,89	9,29		+	D
8	-5,48	9,29	1,24	10,17		+	A
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# Frequency spectrum data for 0 - 0.0033 - 0.0066 - 0.01 Hz for all the tests performed

MIS	Before Reiki				After Reiki			
	Peak Value V [mV]							
	Frequency [Hz]							
	0	0,0033	0,0066	0,01	0	0,0033	0,0066	0,01
1	4,64	0,23	0,14	0,02	5,51	0,05	0,02	0,03
2	6,38	1,32	0,72	0,44	10,26	0,12	0,07	0,04
3	7,35	0,89	0,34	0,12	3,48	0,33	0,08	0,05
4	1,47	0,44	0,27	0,15	2,36	0,15	0,17	0,07
5	6,70	0,92	0,34	0,14	2,37	0,42	0,19	0,16
6	2,10	0,43	0,25	0,15	0,43	0,47	0,26	0,20
7	0,96	0,25	0,10	0,05	2,89	0,42	0,20	0,12
8	5,48	1,54	0,29	0,32	1,24	0,26	0,14	0,08
9	5,65	0,42	0,16	0,15	3,34	0,40	0,04	0,14
10	5,71	5,50	1,76	1,01	9,48	0,15	0,22	0,17

# Results and Discussion

**For all measures, an increase in skin potential was observed after stimulation with Reiki. In other words, the active cutaneous point of the forehead chakra has proved to be "receptive" to stimulation by treatment with Reiki.**

**Furthermore, the measurements indicate that in general, the first three components of the potential spectrum of the Forehead Chakra decrease with a tendency to disappear. The exceptions to this trend are highlighted in red in table.**

# Results and Discussion

It has been hypothesized that the use of Reiki is able to modify our Forehead Chakra parameters, in particular the electrical activity of the skin.

In physiology, it was preferred to study through measurements of skin *impedance* at zero frequency, while, for historical and mainly for technical reasons, the measurement of skin potential has been little used.

On the contrary, we believe that the measure of the skin potential, especially the frequency spectrum of the skin potential, are tools capable of characterize *particularly active skin points in normal subjects* (Chakra).

# Results and Discussion

**This preliminary study with APEC-300, in the case in which external stimulation is realized by the Reiki, indicates that in the transition from the physiological state of normality to that of “excitation” it is possible to measure: a change in the modulus of the amplitude of the skin potential  $V_m$  (between the Forehead Chakra and forearm of the left hand);**

**a increase in the skin potential  $V$  in the time course of the measurements;**

**a decrease in the amplitude of the peak value  $V$  of the three component (0.00333; 0,00666; 0,01 Hz) of the skin potential spectrum.**

# Results and Discussion

**The number of tests performed is low to adequately support the statistical validity of the association between the presence, or absence, of the “stimulation”, the Reiki, and a measurable difference in skin potential or in skin potential spectrum between “before” and “after” stimulation. Anyway, even if our results are statistically limited, they are more rigorously drawn than the comparable ones in literature and our conclusion are generally in line with those of the articles published on the subject.**

**Thanks for your  
attention!**