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Abbreviations

HP: Hybrid-Plasma; AC: Alternating Current

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Research Article

Hybrid-Plasma is an Energy Generator: A Novel Method of Energy Production

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Abstract

Introduction: Our previous reports have documented the discovery, properties and applications of a new form of nonthermal plasma which has an indefinite life span. Plasmas are defined as physico-chemical reactions involving ions, free electrons and neutral atoms. In the present study we measured the energy of Hybrid-Plasma (HP) whose major components are water (H₂0) and Hydrogen Peroxide (H₂0₂) Methods: Two electrically activated misters containing either distilled H₂0 or H₂0₂ were placed in a 36-quart plastic container with 2 aluminum foil strips applied on either side of the container to serve as electrodes. The same procedure was performed in a 6.5quart container. An ion counter was also placed at the bottom of the container which was sealed with snap covers. A digital voltmeter connected to the 2 electrodes were used to determine electrical current for the next 5 minutes during the first hour and then again at 24 hours. Results: The ion counter registered maximal levels as soon as the combined water misters were started. Alternating Current (AC) levels progressively increased in the first hour and was greatest at 24 hours.

Conclusions: Our newly discovered HP can serve as an electrical generator of AC current that persists for several days.

Introduction

In our recent publications [1-4] we described a newly discovered form of water, Hybrid-Plasma (HP) part gas/part water. Unlike similar forms of non-thermal plasmas, HP does not require external energy input for its formation. Moreover, HP displays multiple applications including anti-oxidant, anti-aging and anti-dehydration properties. In the present report, we demonstrate the induction of Alternating Current (AC) when HP is formed in an enclosed space. The analysis of HP indicated the major components consisted of hydrogen peroxide and water. In the present study we demonstrated that HP can be formed directly by combining mist composed of water and hydrogen peroxide in an enclosed space. Moreover, confined HP is associated with electrical current generation induced by an ionic reaction of water and hydrogen peroxide.

Methods

An ion counter (Andes, NT-C101A) was also placed at the bottom of the container. When the misters were activated the ion counter was removed as soon as it registered >2999X10³ ion/sec (maximum for this device) and the container sealed with snap covers. A similar procedure was performed in a 6.5quart container. A digital voltmeter connected to each of the 2 electrodes was used to determine electrical current for the first 5 minute intervals during the first hour and then again at 24 hours.



Figure 1: Two electrical misters containing either distilled water or hydrogen peroxide were placed in a 36-quart plastic container with 2 aluminum foil strips applied on either side of the container to serve as electrodes.

Results

At the start of the misting procedure the ion counter registered maximum levels, >299910X3 negative Ion counts/sec. The ion counter was removed and the containers sealed with snap covers.

Table 1: Alternating Current (AC) Generator.

36Quart	1st hour	6.5Quart
378		142
443		164
458		198
407		152
882		248
770		230
267	24 hours	119
515	Average	179
223	SD	48
	P value	<0.0006

(Table 1) shows the average 5 minute changes in the measured AC current during the first hour after misting with $\rm H_20$ and $\rm H_20_2$ were started and the average value after 24 hours. In each of the plastic containers. There was a progressive increase in the measured AC during the first hour and a further increase in the 24-hour value. However, here was a significant difference in the values obtained in the larger vs the smaller container, p<0.05.

Discussion

Major findings

The accumulation of misting of combined H_20 and H_20_2 in a confined space resulted in an immediate production of HP as indicated by the ion counter registered >3 million counts/sec (maximum for this ion counter). Moreover, there was a progressive increase in the measured AC over the first hour and a further increase measured at 24 hours in the large and small sealed plastic containers. However, the values recorded in the large container were significantly greater than in the smaller container indicating the ionic reactions within the larger space has greater energy production.

Background

Since our initial discovery that we could segregate free water molecules [1] from bulk water leading to an inherent kinetic ionic reaction, (plasma), we have shown many different methods for producing this unique form of non-thermal plasma, HP [2-4] (patent pending). In the present report we have now provided direct evidence, by combining the components of HP, H₂0 and H₂0₂, that AC electrical energy is a measurable by product which can be accumulated and stored. The latter is suggested but the period of time requires corroboration.

Limitations

It is interesting to note that the formation of HP in the present study was dependent on the application of electrical energy to activate the misters. On the other hand, we have described methods for producing HP without the application of an external energy input [2-4]. However, we have not determined the ancillary energy generation for these methods. For example, A body of confined water will generate HP in "head space" above the liquid [3]. Based on the present findings that a larger container generates more AC, we can speculate that the head space above the water contained in the large city storage tanks could serve as a generating source of electrical power.

Conclusions

We have demonstrated that combined mist of H_20 and H_20_2 , the two major components of HP can generate AC current in a confined vessel. The larger container allows for greater levels of AC generation. Potential applications of these finding are discussed.

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