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Kin Onn, Low, Kee Tong, Khoo, Ying Yao, Koon, Jia Xin, Chua & Jia Xin, Chua

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Oxygen has been shown able to be released from aqueous water when the water flows through magnetic fields. Such a production process is called magnetosynthesis and it is successful when the principle of induced current took place. Oxygen produced from this newly discovered process possessed properties differently when compared to the photosynthesis process. This study can be made when the magnetosynthesis process was carried out closed to the saturation point of oxygen dissolution equilibrium in aqueous water. At the saturation point, the exchange of oxygen atoms or molecules between these two processes has happened. This interchange state allowed a unique single steep-drop characteristic to be observed. The single steep-drop characteristic of the magnetosynthesis process provides two pieces of evidence on the properties of oxygen; they are heavier by mass and higher by oxidative power. The unique properties as discovered are supported by Einstein's Special Relativity Theory. In this matter, gamma-ray flashes are thought to produce when the hydrogen-electron pairs are formed. A mechanism where gamma-ray flashes could be produced was proposed and sufficient evidence for gamma-ray flashes to occur was outlined. The gamma-ray flashes are the clue in the inter-permutable between the mass and energy. This is the clue to let the special relativity theory take a place.

Keywords: magneto synthesis process, oxygen, oxidative power, einstein's special relativity theory, gamma-ray flashes, aqueous water.

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Production of Oxygen from Aqueous Water using the Principle of Induced Current

Part 2: Properties of Oxygen and their relationship to Einstein's Special Relativity Theory

Kin Onn, Low^α, Kee Tong, Khoo^σ, Ying Yao, Koon^ρ, Jia Xin, Chua^ω & Jia Xin, Chua[¥]

ABSTRACT

Oxygen has been shown able to be released from aqueous water when the water flows through magnetic fields. Such a production process is called magnetosynthesis and it is successful when the principle of induced current took place. Oxygen produced from this newly discovered process possessed properties differently when compared to the photosynthesis process. This study can be made when the magnetosynthesis process was carried out closed to the saturation point of oxygen dissolution equilibrium in aqueous water. At the saturation point, the exchange of oxygen atoms or molecules between these two processes has happened. This interchange state allowed a unique single steep-drop characteristic to be observed. The single steep-drop characteristic of the magnetosynthesis process provides two pieces of evidence on the properties of oxygen; they are heavier by mass and higher by oxidative power. The unique properties as discovered are supported by Einstein's Special Relativity Theory. In this matter, gamma-ray flashes are thought to produce when the hydrogen-electron pairs are formed. A mechanism where gamma-ray flashes could be produced was proposed and sufficient evidence for gamma-ray flashes to occur was outlined. The gamma-ray flashes are the clue in the inter-permutable between the mass and energy. This is the clue to let the special relativity theory take a place.

Keywords: magneto synthesis process, oxygen, oxidative power, einstein's special relativity theory, gamma-ray flashes, aqueous water.

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I. LITERATURE REVIEW

The author in their previous paper (Low et al., 2021) reported oxygen molecules can be free off from aqueous water in the case the stream of aqueous water move through magnetic fields. The authors carried out more work aimed to find out the properties of the oxygen produced from aqueous water. The authors thought that when a new natural process is discovered; there might be accompanied by some unexpected consequences. The authors examined the periodic table (Coplean.& Shrestha, 2016; Moss & Lide, 2019); the atomic mass of the oxygen was reported by scientists (Coplean.& Shrestha, 2016; Moss & Lide, 2019) is not a fixed value, indeed it is in a range. Not just oxygen; many other elements are also in a range value; however, some are fixed. Table 2 showed some examples of elements with a fixed value whereas Table 1 showed those are in a range. This analysis showed that some elements can adjust their mass although the number of protons, neutrons, and electrons in their atomic structure is the same. According to the Einstein special relativity theory, the higher the mass of an atom, the higher the stored energy in this atom. This is refer to the famous equation, $E=mc^2$. When this atom losses partial mass, it shall be transmuted into a form of energy and to be released; however Einstein did not figure out the method of how the mass of them can be reduced and the form of energy can be released. On the other hand, Einstein also did not point out how

mass can be gained from energy by transmutation.

Table 1: List of Elements with Range of Atomic Weights

At No	Symbol	Name	Minimum Atomic Wt	Maximum Atomic Wt
1	H	hydrogen	1.007 84	1.008 11
3	Li	lithium	6.938	6.997
5	B	boron	10.806	10.821
6	C	carbon	12.0096	12.0116
7	N	nitrogen	14.006 43	14.007 28
8	O	oxygen	15.999 03	15.999 77
12	Mg	magnesium	24.304	24.307
14	Si	silicon	28.084	28.086
16	S	sulfur	32.059	32.076
17	Cl	chlorine	35.446	35.457
18	Ar	argon	39.792	39.963
35	Br	bromine	79.901	79.907
81	Tl	thallium	204.382	204.385
82	Pb	lead	206.14	207.94

Source: Moss & Lide (2019) <<https://iupac.qmul.ac.uk/AtWt/>>.

Table 2: List of Elements with Fixed Atomic Weights

At No	Symbol	Name	Atomic Wt
2	He	Helium	4.002 602(2)
4	Be	Beryllium	9.012 1831(5)
9	F	Fluorine	18.998 403 163(6)
10	Ne	Neon	20.1797(6)
11	Na	Sodium	22.989 769 28(2)
13	Al	Aluminium	26.981 5384(3)
15	P	Phosphorus	30.973 761 998(5)
19	K	Potassium	39.0983(1)
20	Ca	Calcium	40.078(4)
21	Sc	Scandium	44.955 908(5)
22	Ti	Titanium	47.867(1)
23	V	Vanadium	50.9415(1)
24	Cr	Chromium	51.9961(6)
25	Mn	Manganese	54.938 043(2)
26	Fe	Iron	55.845(2)

27	Co	Cobalt	58.933 194(3)
28	Ni	Nickel	58.6934(4)
29	Cu	Copper	63.546(3)
30	Zn	Zinc	65.38(2)
31	Ga	Gallium	69.723(1)
32	Ge	Germanium	72.630(8)
33	As	Arsenic	74.921 595(6)
34	Se	Selenium	78.971(8)

Source: Moss & Lide (2019) <<https://iupac.qmul.ac.uk/AtWt/>>.

When the authors studied the available energies in science; the authors found that the most closely related form of energy that relates to the inter-transmutable concept of energy and mass as pointed out by Einstein is the gamma rays. In 1900, French chemist Paul Villard (Lucas, 2015) observed the existence of gamma rays when he was investigating radiation from radium. The gamma rays are emitted by a nucleus in an excited state. The emission of gamma rays does not alter the number of protons and neutrons in the nucleus (Maghraby, 2017). Such emission shall be accompanied by a reduction in mass. This is fundamental to the atomic bomb. A large number of gamma rays emissions were reported by Tore Straume (Straume, 1995) when atomic bombs happened at Hiroshima and Nagasaki.

Terrestrial Gamma-ray flashes were observed by scientists (Smith et al., 2005) from the earth's upper atmosphere. They were initially found out that when cosmic rays particles (mostly protons) that arrive at the top of the earth's atmosphere collide with thunderclouds shall emit gamma-ray flashes. In their further report (Dwyer & Smith, 2012), they found that even thunderclouds were not in sight, they detected gamma-ray flashes in the middle of the Sahara Dessert. They pointed out that gamma-ray flashes can be produced when there are charged particles such as electrons. Dwyer and Smith (Dwyer & Smith, 2012) did not put in conclusion the reason gamma-ray flashes can be produced when charged particles such as electrons are present. They claimed surprise for two and a half centuries scientists still have an incomplete understanding not only of how thunderclouds make gamma rays but even of how they make simple lightning.

1.1 Introduction

Upon observation that oxygen can be produced from aqueous water, the authors performed further experiments by repeating several magnetic treatments on the water stream. This aimed to study the properties of oxygen molecules that are just produced by the magnetic treatment. When more experiments are repeated up to a saturation point, oxygen captured in water due to magnetic treatment shall be saturated; perhaps at this point, a comparison between those available in the atmosphere and those in the water can be made. Such comparison can reveal the difference in properties of the oxygen.

II. METHODOLOGY

This work started with advanced filtration on normal tap water. Once tap water is filtered to drinking water quality and with low dissolved oxygen content, the proposed magnetosynthesis experiments can be carried out. All samples of water; before filtration, after filtration, and after the magnetosynthesis process was performed with advanced measurement on pH, conductivity, dissolved oxygen, and oxidative-reductive potential.

2.1. Preparation of Materials, Apparatus, and Instruments

In this research, it is vital to prepare magnetic materials with micron or nano sizes. The authors have selected iron oxides which are well known for their soft magnetic behavior and the oxides are of pigment grade so that their particle size can be small to provide a maximum number of magnetic

particles. The authors were used suitable apparatus to contain iron oxides so that magnetic particles can be in-placed to provide fixed sites of magnetic field for water treatment. After the water was treated with the described magnetic field, a few testing instruments were employed to obtain relevant data to support the proposed oxygenation mechanism.

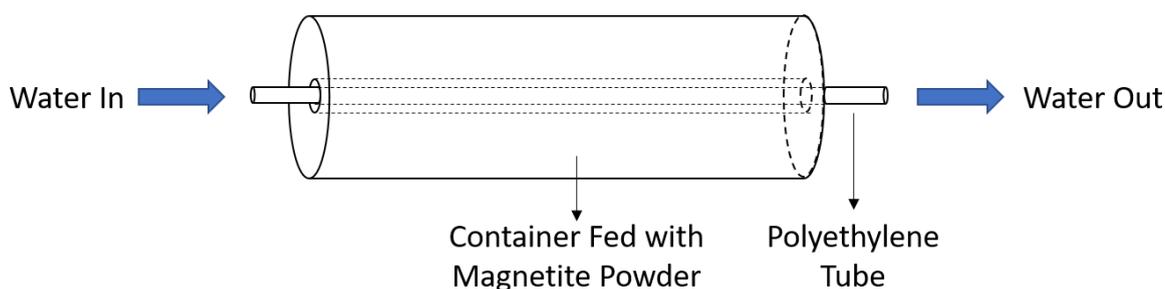
2.1.1. Materials

A kind of magnetic material to represent any magnetic source was prepared in this study using micronized iron oxide particles (magnetite powder). The magnetite powder was prepared using the method described in a United States patent (Kin Onn Low, 2008) with the patent number US7347893B2 to provide the magnetic fields for the water treatment. The magnetite powder consists of 80 - 90 % Fe_3O_4 and 10 - 20 % carbon with other trace elements such as SiO_2 ,

Al_2O_3 , etc. The powder as described in the patent possessed pigmentation power to many kinds of engineering materials, such power elaborated in the patent has pointed the mean size of the powder to below 1 micrometer.

2.1.2. Apparatus: Magnetic Treatment Device

The apparatus to provide the magnetic treatment to the water was prepared by feeding magnetite powder (as prepared from Section 2.1.1) into a cylindrical container (base diameter of 6.5 cm and height of 20 cm) with an internal tubular hollow tube of 1 cm diameter at the center of the container. The hollow tube was used to accommodate a foreign polyethylene tube with a 6.35 mm internal diameter as illustrated in Figure 1. This container was constructed using stainless steel SS304.



Source: Self sketching from the experimental setup

Figure 1: Illustration of water flowing through the container fed with magnetite powder.

2.1.3. Apparatus: Water Filtration System

A system of water filtration was prepared in this study so that a water source of sufficiently clean and low dissolved oxygen content can be obtained. This is essential because relatively clean water can avoid unnecessary disturbance to the final experimental results. Aqueous water with low dissolved oxygen content is necessary for this experiment so that when oxygen frees off from aqueous water molecules, it can be identified easily by further measurements.

This water filtration system was set up by connecting filters in sequence as shown in Figure 2. The functions of each filter are listed in Table 3.

Table 3: Functions of filters

Sequence	Types of Filter	Function
1	Pre-carbon	Removal of chlorine, pigments, and heavy metals
2	Anti-bacteria Silver Carbon	Anti-bacteria and viruses
3	Alkaline Minerals Enhancer	Supply of cations minerals such as <i>Ca</i> , <i>Mg</i> , <i>Na</i> and <i>K</i>
4	Carbon Block	Removal of ethylene, dichloride, bleach, pesticide, and odors

Source: Million Water Sdn Bhd <<https://www.millionwater.com/technology/>>

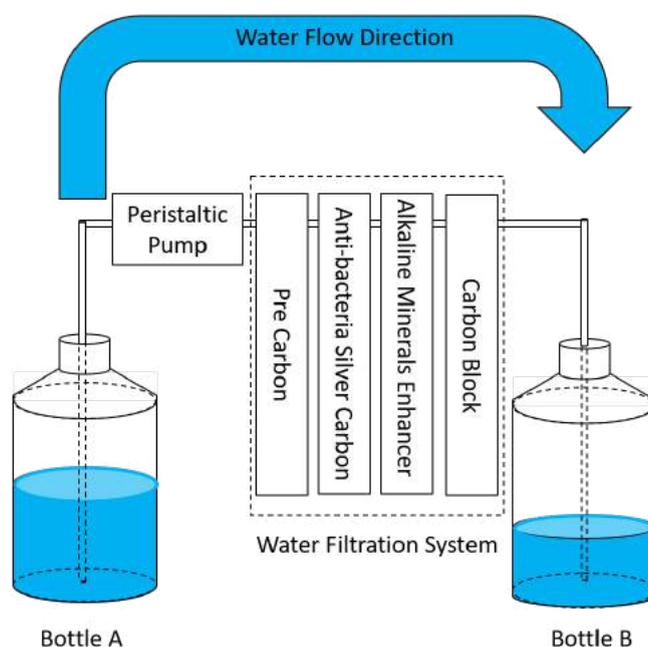
In the following discussion, the filters will be labeled according to their sequences in Table 3, i.e. 1 for pre-carbon, 2 for anti-bacteria carbon, 3 for alkaline minerals enhancer, and 4 for carbon block filter. The sequence of filters can be altered according to researchers' requirements.

2.1.4. Apparatus: Water Pumping System

The water pumping system was employed to provide flow ability to the intended water. This is essential so that the aqueous water can move from the water source to the destination. This

movement is crucial to ensure the aqueous water move through the prepared magnetic field.

The water pumping system in this study was made up of 2 polypropylene bottles, 1 peristaltic pump, and polyethylene tubes with diameters of 6.35 mm. The peristaltic pump was used to pump the aqueous water from one bottle (Bottle A) to another bottle (Bottle B) using an interconnected polyethylene tube. All the fittings were tightened to prevent water from leaking during the pumping process. This water pumping system is illustrated in Figure 2.



Source: Self sketching from the experimental setup.

Figure 2: Illustration of the water pumping system with the filtration system

2.2. Experimental Procedures

The experiments can be carried out when all materials and apparatus described in Section 2.1 are ready. The experiment will start by filtering the tap water to desired properties and then

follow by magnetic treatment of the filtered water. During the magnetic treatment, the production of oxygen occurs and that produced oxygen can be tested using the proposed instruments.

2.2.1. Filtration of Tap Water

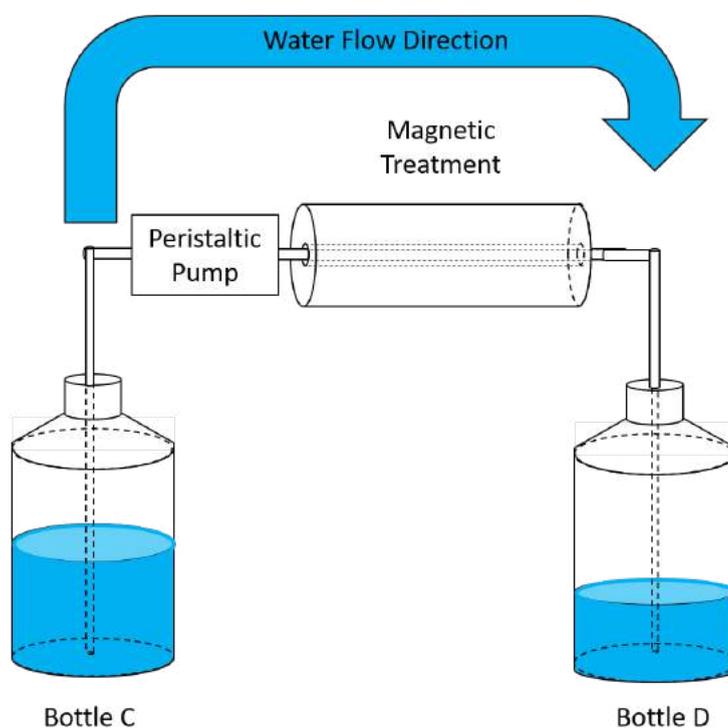
The water source was supplied as tap water. The tap water is filtered using all 4 filters in Section 2.1.3 to serve two purposes. The first purpose is to reduce the dissolved oxygen content, whereas the second purpose is to simulate the naturally available earth rainwater which is composed of, *Mg*, *Na* and *K* ions (Salve et al., 2008).

2.2.2. Oxygenation Experiment (using Magnetic Field)

The magnetic field was provided by the device as described in Section 2.1.2. A sample of the original water source was kept as a reference. The oxygenation experiment was conducted repeatedly from the first cycle to more cycles as

shown in Figure 3. In the first cycle, aqueous water from a water source was flown to the magnetic field and collected for analysis. The production of water sources is as described in Section 2.1.4. The aqueous water sample from the first cycle was collected for analysis. This was repeated for the subsequent cycles and all collected aqueous water samples were analyzed. All results of the analysis were presented in Figure 4.

Experiments with repeated 10 cycles were conducted in this study. The interval duration between each cycle was less than 10 minutes and all relevant analyses were performed as described in Section 2.3.



Source: Self sketching from the experimental setup.

Figure 3: Illustration of the water magnetic treatment

2.3. Instrumentation

The water source as well as all samples collected in Section 2.2.2 were immediately tested for dissolved oxygen level (DO), and oxidation-reduction potential (ORP) using the instrument as listed in Table 4. All measurements were conducted using their standard operating procedures as provided by their respective manufacturers.

Table 4: Devices for water testing

Property	Device	Manufacturer
DO	ProODO Optical Dissolved Oxygen Meter	YSI
ORP	ULTRAPEN™ PT3 ORP Pen	Myron L ®

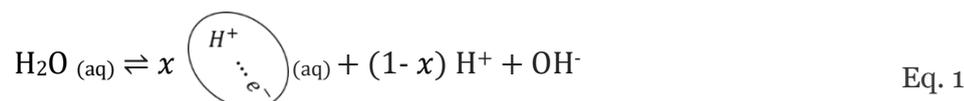
Source: Devices information.

III. THE MAGNETO SYNTHESIS PROCESS AND ITS MECHANISM

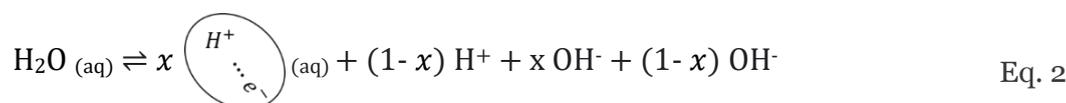
The authors in their previous work (Low et al., 2022) had discussed this mechanism where oxygen can be free off from aqueous water during the magneto synthesis process. This magneto synthesis process begins from the generation of electrons when the water, H₂O molecules move in any magnetic field. The generated electrons, e⁻ are negatively charged particles and thus are affinitive to the positively charged hydrogen ions present in

the aqueous state. Once they are successfully paired, the system of water has lost the hydrogen ions. Such losses result in the in-situ increment in the concentration of the hydroxyl, OH⁻ ions in the original water molecular system, hence pH shall increase.

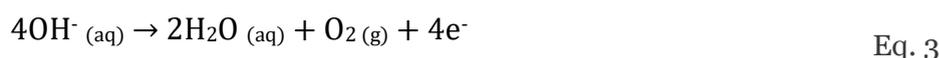
When x mole of the electron can be produced from the principle of induced current, the overall dissociation equilibrium of the water during the magnetosynthesis process can be represented by the following equation:-



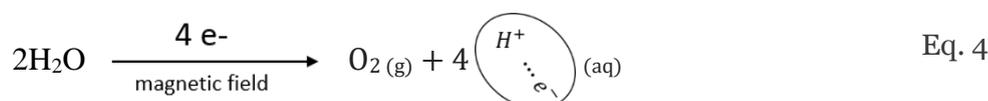
When the hydroxyl ions became excessive to the water system; the above equation can be written as:-



Hence x mole of OH⁻ is excessive to the original water system. According to Le Chatelier's principle, the excessive OH⁻ is forced to be dissociated according to:-



These equations implied that x mole of OH⁻ will produce $\frac{x}{4}$ mole of oxygen molecules, however, when these equations are combined, the variable x can be omitted. The overall equilibrium of water during the magnetosynthesis process can be written as: 66



Eq. 4 is a very important equation; it implied the following matters:

- When 4e⁻ can be produced by the principle of induced current and can be captured by the water, Eq. 4 could take place. However, the capture of e⁻ by water does not happen at all times; its dependency is not known at the time moment.
- When the capture of e⁻ took place, every 4e⁻ can trigger 2 molecules of water to dissociate one

molecule of oxygen. This shall coproduce 4 pairs of hydrogen-electron pairs.

- Two pairs of hydrogen-electron pairs were initially thought to combine to form a molecule of hydrogen gas consisting of 2 atom hydrogen and they share 2e⁻ at their valence shell. However, the authors had experimented by using a hydrogen meter to try to detect hydrogen production, the result was not detected. Hence, the conversion of

hydrogen-electron pairs in aqueous water to produce hydrogen gas is not yet successful. Such conversion perhaps can be assisted by other additives in the water.

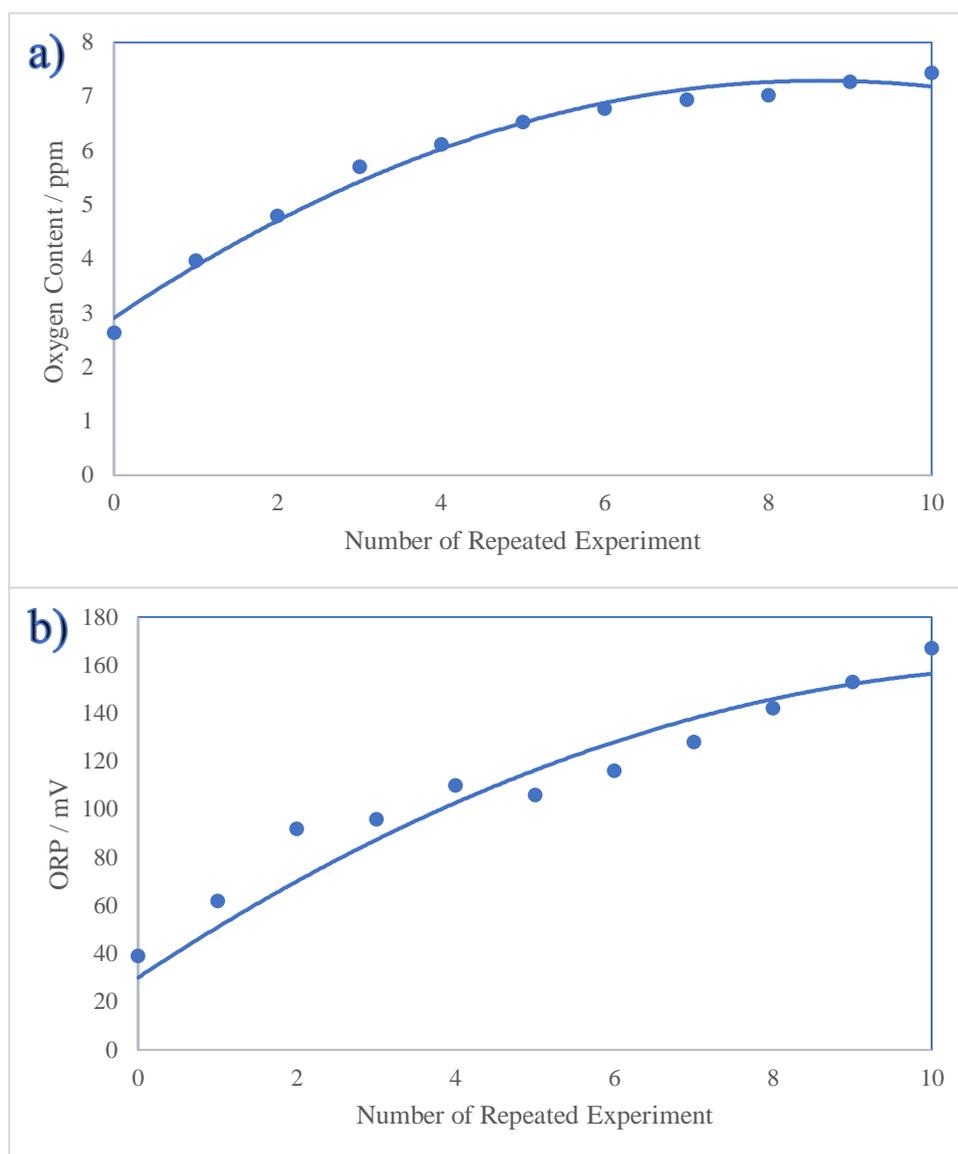
d) Since the detection of hydrogen gas were not positive; perhaps the hydrogen-electron pairs can exist in the following manners

I. The hydrogen-electron pairs will be dissociated. Such dissociation is followed by electron discharge (perhaps this is the reason for lightning) and the dissociated hydrogen ions (proton) cause the water to turn acidic (reason of distilled water or rainwater is acidic) (Kanokvalai et al., 2013; Khoon et al., 2011; Low et al., 2022). It is felt likely that such dissociation will only be triggered whenever there is a process where energy (any form of energy) is utilized, during energy utilization, electrons paired to hydrogen will be broken off and to be utilized by the process. Common processes in the discussion are lightning where massive electrons are pulled down to earth. Another process is the condensation of steam to make distilled water, where energy is to be absorbed to condense the steam.

II. In the case there is no process where energy is utilized the hydrogen-electron pairs are thought to continue to exist in the aqueous water. However, when electrons continue to be produced by the magnetic field, these electrons are affinitive to the positively charge hydrogen ions although the ion is already paired with one electron. The authors felt likely that such collision is possible due to the mass of the proton (hydrogen ion) being 1836 times the mass of an electron (NIST, 2019). Such collision to the hydrogen-electron pair will be able to produce gamma-ray flashes as proposed in Section 5 3 .

IV. RESULTS

The authors had presented the results for the production of oxygen from aqueous water in their previous paper (Low et al., 2022). These results are for 10 cycles of water flowing through the magnetic field. The authors had confirmed oxygen production each time aqueous water was flowing through the magnetic field. These results are presented in Figure 4.



Source: Data collected from the experiment

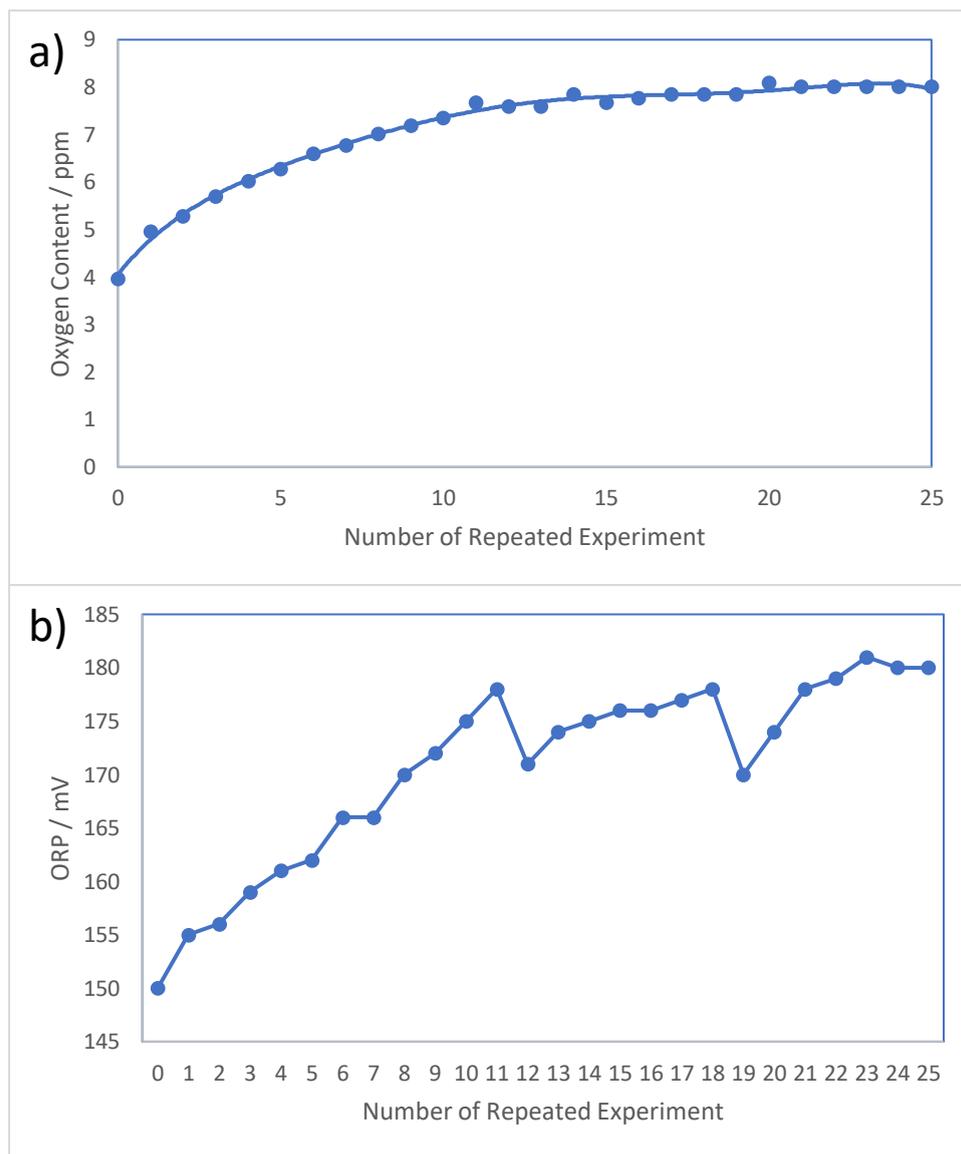
Figure 4: Relationship of (a) DO and (b) ORP of the water in repeated oxygenation experiments

In the subsequent sections, the authors think that when the number of cycles increases by more than 10 cycles, the content of oxygen that can be produced may exceed the saturation point. The study of the properties of oxygen can be done when the oxygen produced from water started to mix with the oxygen from the atmosphere when the saturation point is approaching.

4.1 Results: Multi-cyclical Oxygenation Experiment Approaching Saturation Point

The authors think that their previous experiments as reported in Section 4.0 did not perform an adequate number of cycles for further observations and discussions. A continuous experiment was performed to obtain more cycles.

The experiment was continued to 25 cycles of oxygenation event. The entire 25 cycles took about four hours to complete; this includes the measurements of DO and ORP of each cycle. The results of these 25 cycles are plotted in Figure 5.



Source: Data collected from the experiment

Figure 5: Variations of (a) DO and (b) ORP with number of repeated experiments

The sample of water that was exposed to the air (without any magnetic treatment) for 4 hours recorded an increment of oxygen content from 3.97 to 5.7 ppm, whereas the ORP increases from 150 to 173 mV. In these 4 hours, the same water source (control sample) was undergone 25 cycles of oxygenation treatment using a magnetic field. All oxygen contents in each cycle are continuously increased until they reached saturation at 8.01 ppm when the experiment progressed to the 21st cycle. Further cycles did not show further increment in DO or oxygen content; hence, saturation point was reached. However, the ORP increment has a single step-drop-like stair at the

11th to 12th cycles. The increment showed a continuous trend until it reached another single step-drop at the 18th to 19th cycle.

The result obtained in this multi cyclical experiment confirmed the findings In Section 4.0. The multi-cyclical experiment has once again confirmed the oxygenation mechanism in Section 3.0. In this multi cyclical experiment, the authors are in the purpose to study the oxygenation in more cycles so that the phenomenon of oxygenation during the saturation of dissolved oxygen in the aqueous water can be studied. Some unexpected observations occurred in the period

before, during, and after the saturation of oxygen dissolution in the water. The steep-drop characteristic of the curve drawn in Figure 5(b) is not coincident and it carried a lot of information for discussion in the following sections.

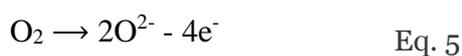
V. DISCUSSIONS

The observations in the multicycle oxygenation experiments up to the saturation dissolved oxygen point in the aqueous water revealed that the oxygen produced by the magnetosynthesis process possessed different properties from the oxygen normally available in the atmospheric air. The authors had observed that the oxidative power of the oxygen produced from the magnetosynthesis process is higher and this is surprised to find it out in modern science. These sections are discussed in detail the effect of this finding for future investigation and development in many new branches of science.

5.1 Discussion

The Oxidative Power and Its Relationship to Einstein Special Relativity Theory

When a molecule of oxygen is used to oxidize a substance, its partial equation of oxidation can be written as:

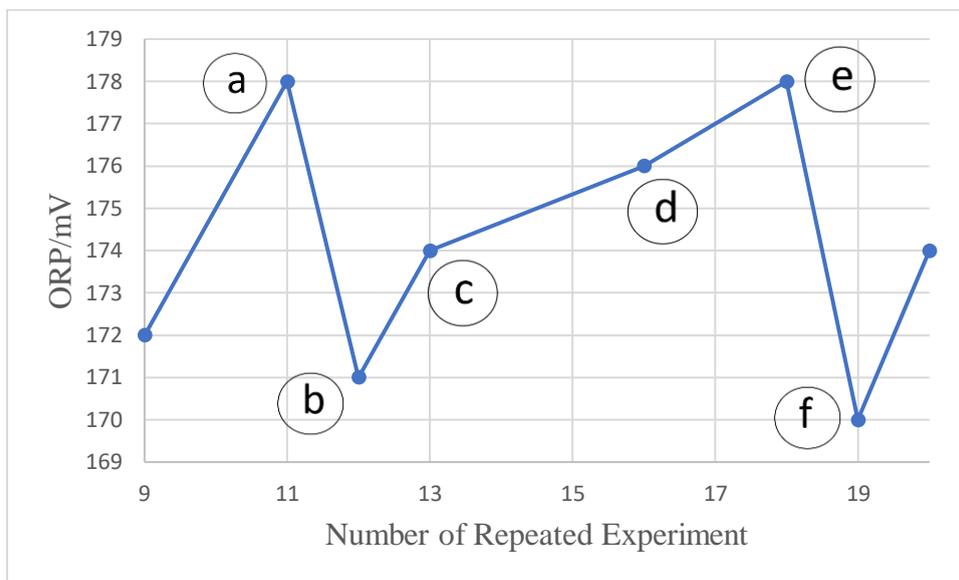


In this partial equation, 4 electronic energy shall be released by one oxygen molecule as according to Eq. 5 and it is used to oxidize substances in the aqueous water and it is measured by the ORP meter as the ORP values. The positive sign of the ORP values denotes oxidation occurred. The continuous increment in ORP up to the first steep-drop which occurred at 11th to 12th cycles indicated that more production of oxygen contributed to higher values of ORP at each cycle. The steep-drop characteristic of this experiment indicated a drastic drop in ORP while the number of oxygen molecules continues to increase. This is anticipated that a sufficient amount of oxygen atoms that carry low oxidative energy than normally produced oxygen atoms from the oxygenation mechanism has appeared. Such appearance is extraordinary!

The steep-drop characteristic is thought to occur when massive desorption of oxygen atoms (produced from the oxygenation mechanism) happened due to the inability of the water matrix to hold the sufficiently large amount of dissolved oxygen. This inability occurs when the dissolution equilibrium between oxygen molecules in the air and the water matrix has reached the equilibrium constant. This shall occur when the system reaches a saturation state. At this state, when massive desorption of oxygen outflow to the air, there shall be a net inflow of oxygen molecules from the air to occupy some of the vacancies in the water matrix. This conclusion is made based on the Newton Third Law that the outgoing thrust must be the same as the in-flowing thrust. Therefore the net inflow of oxygen molecules from the atmosphere (oxygen not from the oxygenation mechanism) is thought to carry low oxidative power that contributes to the sharp drop of the ORP values. It was thought that immediately after the single steep-drop occurred, the dissolution equilibrium has been shifted lower due to the in-flow of oxygen molecules of the type of lower oxidative power. Such assumption shall not be logical in the case both types of oxygen carried the same mass. Such assumption can be made logically in the case the in-flow oxygen carried a lighter mass compare to those of out-flow oxygen. When the in-flow atoms of oxygen carried a lighter mass, there shall appear more or extra spaces to accommodate new oxygen atoms that could be produced from further magnetosynthesis processes in the future experiment. Hence, further cycles showed a continuous increase of ORP until the next single steep-drop characteristic occurred. This is because when the oxygenation experiment continues to the next cycle, those newly produced oxygen can be absorbed but not desorption and it was observed similarly in the subsequence few cycles. The same phenomenon continues to the second single steep-drop point and continues to more steep-drop points until the grand saturation of oxygen dissolution in water can be achieved. In this experiment, the grand saturation of dissolved oxygen was recorded to be 97% (8.01 ppm) as in Figure 5(a).

To explain the above observation in detail, the authors sketch the single steep-drop

concentration in Figure 6 and to illustrate for an explanation as below:



Source: Data collected from the experiment

Figure 6: The graph of ORP against the Number of the repeated experiment from 9 to 20.

At point a: Aqueous water system attained equilibrium saturation level.

At point b: Excessive oxygen produced from magnetosynthesis process released to the atmospheric due to aqueous water system has exceeded saturation. At the same time, oxygen from the atmospheric air entered the aqueous water system due to Newton’s Third Law.

When points b, c, d, and e are on rising trend: The rising trend indicated oxygen produced from the magnetosynthesis process could accommodate or absorb in the aqueous water system. This is evidence that more “place” available in the aqueous water system appeared so that newly produced oxygen from the magnetosynthesis process can be absorbed. The appearance of “new place” is extraordinary and this is the evidence those oxygen entered from the atmospheric air as explained in Point b possessed a smaller size or lighter mass. When examined the periodic table, evidence of higher mass oxygen does exist. Hence lighter mass oxygen was present in the air and they present in majority quantity so that those entered aqueous water systems are lighter mass.

At point e and f: Second equilibrium saturation level attained and second single steep-drop cycle commenced.

5.2 Discussion

The Einstein’s Special Relativity Theory on Energy and Mass Inter-permutable

The authors have pointed out the evidence that oxygen produced from the magnetosynthesis process possessed higher oxidative power and heavier mass when compared to common oxygen from the atmospheric air, perhaps the majority are produced from the photosynthesis process. From Eq. 5, it is obvious that when the oxygen possessed a heavier mass, the oxidative power that could be contributed by the oxygen would be higher. Hence, conclusion 5.1 was made. When the mass of an atom is concerned, the only reason the atom could gain heavier mass should point to Einstein’s Special Relativity Theory. However, Einstein did not mention the method of how the nucleus of an atom can transmute to heavier mass when energy is absorbed. The authors studied the prior art, as in the literature review, it was revealed that when a nucleus is decayed, gamma

rays could be produced. Since the mass and the energy obeyed the principle of conservation, on the other hand, it can be proposed that when a nucleus received gamma rays, the nucleus could gain mass. The existence of gamma rays in aqueous water must have appeared so that the oxygen when produced by aqueous water using the magnetosynthesis process could gain heavier mass when compared to photosynthesis. Such a proposal by the authors is important to science and shall be a breakthrough in the present materials science for advanced material processing. The problem now is; why there are gamma rays!

5.3 Discussion

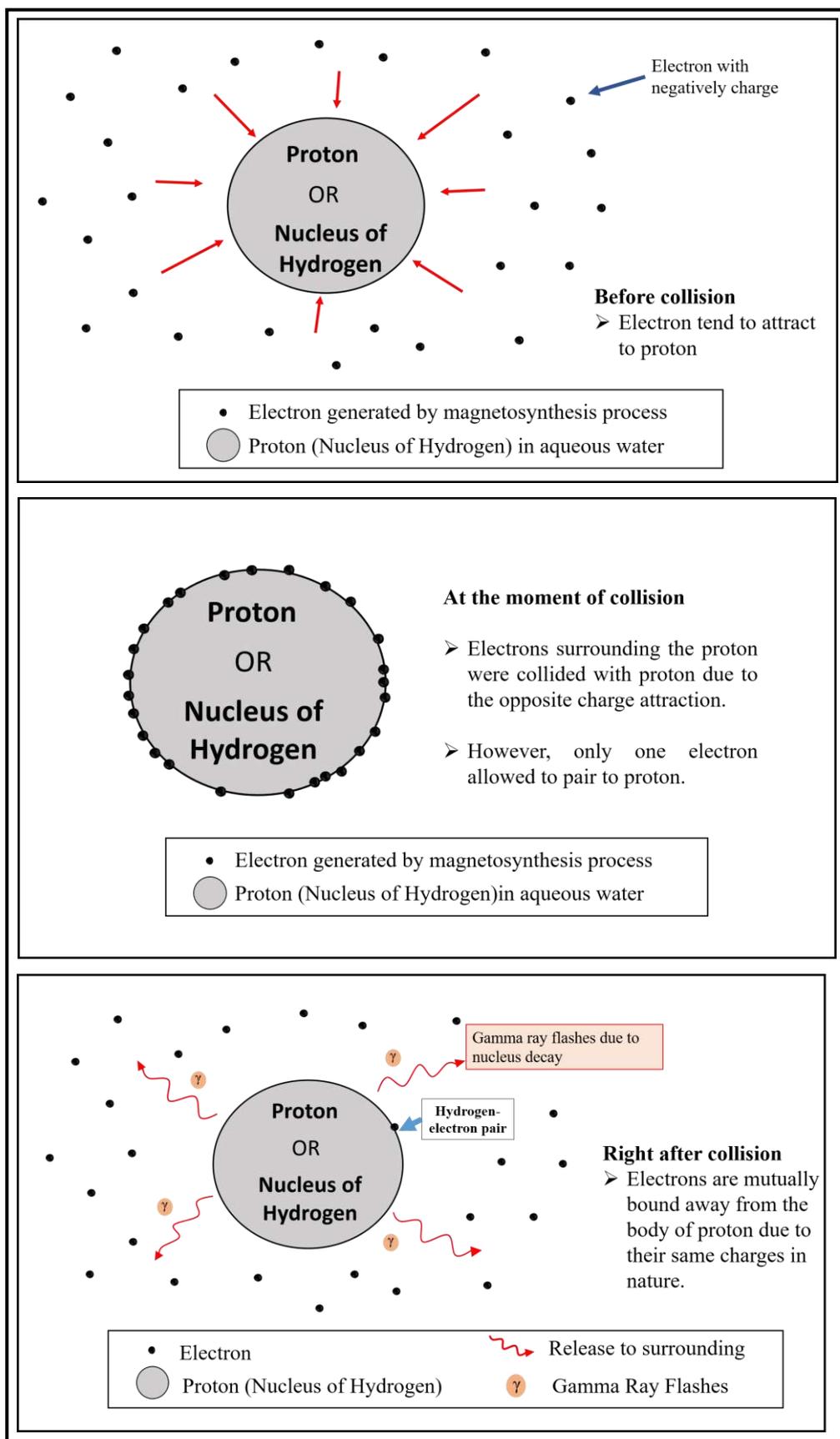
The Proposal on Gamma Rays Production to Cause Heavier Mass and Higher Oxidative Power of Oxygen Production

It is well known that gamma rays can be produced when a nucleus is decayed. It is no doubt that in this case, the authors could point out nucleus decay happens, gamma rays must have been produced. The secret hides in the hydrogen-electron pairs that the authors have proved their formation and such formation led to the production of oxygen as reported in Section 4.0. The authors were pointed out all the facts reported in this paper were started with the principle of induced current. In this principle, a massive amount of electrons could be generated; including the one paired to the proton; however, still much more than the single one that paired to the proton.

The clue to the production of gamma rays as a result of nucleus decay lies in the size or the mass of the proton. The mass of a proton is indeed 1836 times the mass of an electron. As a result of the mass being tremendously bigger than an electron, at the moment those electrons when adhering to the proton must not only be a single electron, rather they are a lot! Perhaps 100 electrons adhere to one proton at a moment, in the next moment, when hydrogen (proton) - electron pair formed, the excessed 99 electrons shall be expelled away from the body of proton as a result of those electrons are carried the same negative

charge. The said proton is a hydrogen ion and it is the nucleus of the hydrogen. Before those electrons are expelled away from the body of the proton, those electrons and the proton are in fact the constituent of the nucleus of hydrogen; hence when those electrons are leaving the proton, the nucleus decay phenomenon appeared. Those electrons when leaving the nucleus produced gamma rays; either those electrons permuted to be gamma rays energy or fresh gamma rays could be produced. Hence, many scientists discovered terrestrial gamma-ray flashes in the air [Doğru et al., 2005; Dwyer & Smith, 2012] when electrons are also present. The authors have graphically illustrated the above proposed gamma-ray flashes production mechanism in Figure 7.

The authors felt likely that when the hydrogen-electron pairs are formed, and in the case the induced current continues, more electrons are possible to adhere to the proton due to its size being huge compared to the electron. Collision of the electron could continue to occur to adhere to the hydrogen-electron pair due to the huge size difference. Such adherence to proton followed by rebound could happen several times until an equilibrium is achieved. In this method, the production of gamma-ray flashes is continuous so long as the electron can be obtained from the principle of induced current.



Source: Self sketching

Figure 7: Graphical illustration for proposed production of gamma-ray flashes by magnetosynthesis process

III. CONCLUSIONS

When aqueous water is flown through magnetic fields, the aqueous water shall be dissociated to produce oxygen molecules and hydrogen-electron pairs. The authors observed the equilibrium of the oxygen dissolved in the aqueous water when closed to saturation, it is concluded that the properties of the oxygen produced by the magnetosynthesis process possessed properties different than those available in the atmospheric air. The authors concluded the properties of the oxygen produced from magnetosynthesis are different than those from photosynthesis. It is anticipated the majority of the oxygen in the atmospheric air is contributed by the photosynthesis process. In this context, the oxidative power and the mass of the oxygen produced from the magnetosynthesis process are higher and heavier than those from photosynthesis. In this relationship, the authors discovered that not only oxygen and hydrogen-electron pairs are produced by the magnetosynthesis process, but gamma-ray flashes are also produced.

Gamma rays are widely known to be produced when a nucleus is decayed. It is also well-known that protons are the nucleus of hydrogen. As a result of the principle of induced current could produce a massive amount of electrons, the authors thought that when the hydrogen-electron pairs are formed, the hydrogen ions or the protons shall expel those extra electrons that were previously adhered to their bodies. Such expulsion is the same as the decay of a nucleus because electrons are leaving from the nucleus of hydrogen (proton). Hence, gamma-ray flashes are produced.

The authors also thought that for Einstein's Special Relativity Theory to take place, gamma rays are the clue in the inter-permutable role for mass and energy. When the mass permutates to energy, gamma rays will be produced, and vice versa. Hence, when gamma-ray flashes are produced by the hydrogen-electron pairs, the oxygen when received the gamma-ray flashes, the oxygen gain mass. This is the reason for the difference in properties when oxygen is produced

from magnetosynthesis compared to those produced from photosynthesis.

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