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Method and Details for Creation of a Spectacular Brilliant Light Flash Potentially Resulting from Hydrino Formation

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ABSTRACT

This paper describes a method for creating a spectacular brilliant light flash with a high current, low voltage pulse discharge through a hydrated salt and metal mix. Photography of flashes generated are presented and analysed for consistency with the hydrino theory of R. Mills (2011). Photography shows generation of a high density of photons away from the electrodes consistent with a secondary photon generating reaction mechanism.

Indexing terms/Keywords

Hydrino, XUV, photon, high current, brilliant, light, flash

Academic Discipline And Sub-Disciplines

Physics, molecular and optics

SUBJECT CLASSIFICATION

Physics

TYPE (METHOD/APPROACH)

Experimental

INTRODUCTION

Emerging new energy sourcesmay have significant beneficial implications for global efforts to transition to a safe, low carbon economy, and as such the discovery and development of these technologies should be pursued with vigor.

As identified by Dr. R. Mills (2011 and elsewhere), energy can be released from the catalysedtransition of the base state electron orbital to a smaller orbital state/s under certain conditions. Water (H_2O) has been identified as onesuitable catalyst for this transition.

This experiment was undertaken for the purpose of replicating a method of generating high density photon release from acatalysedtransition of the electron orbital in hydrogen to a smaller orbital (hydrino formation) based on previous experimentation and theory by Dr. R. Mills.

DESCRIPTION OF THE EXPERIMENT

A high current, low voltage pulse was released though a 55/45 mix of copper (in nano powder form) and a hydrated common salt powder (magnesium chloride), with a small amount of distilled water added.

The pulse discharge was created by charging 4,700uF 16V high speed capacitors in parallel and releasing the pulse through an approx. 2mm x 2mm x 2mm cube of the powder.

Charging was done with 20V from a transformer connected to mains power, then disconnected. Capacitors were charged to around 14V.

High current Schottky transistors were used to trigger the pulse release, but some small amount of mechanical stimulation was also generally required, (i.e. a light tap with an insulated pole). Electrical brass screw connectors were used as the principle conductors. Theoretical pulse time was calculated as approximately 1/2000 of a second.

Phase 1

An experimental apparatus was constructed with 50 no. capacitors and copper electrodes as shown in Figure 1. This setup allowed a maximum theoretical output current from all the capacitor/transistor pairs of 10,000 amps and provided an electrical energy release of 3.3 joules. Allowing for system losses and resistance, the actual current and energy across the electrodes was expected to be less than this.

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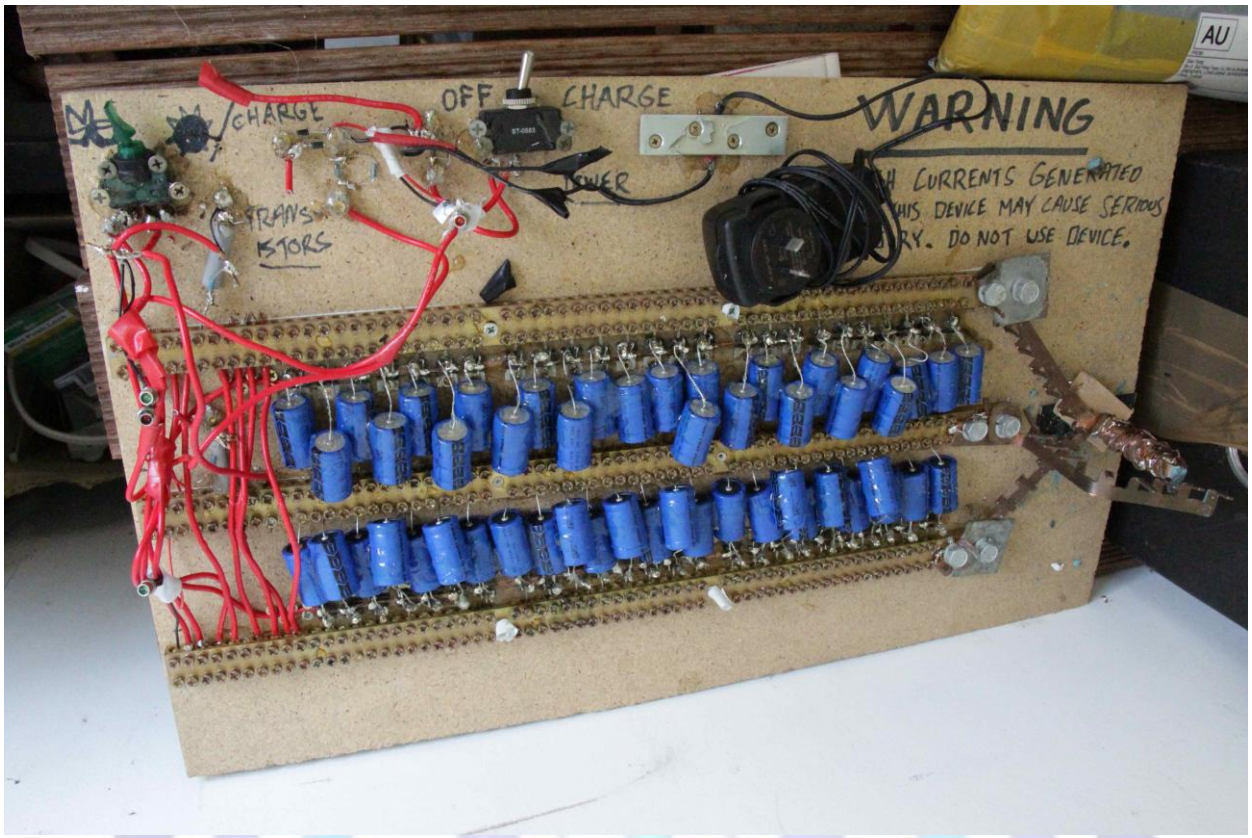
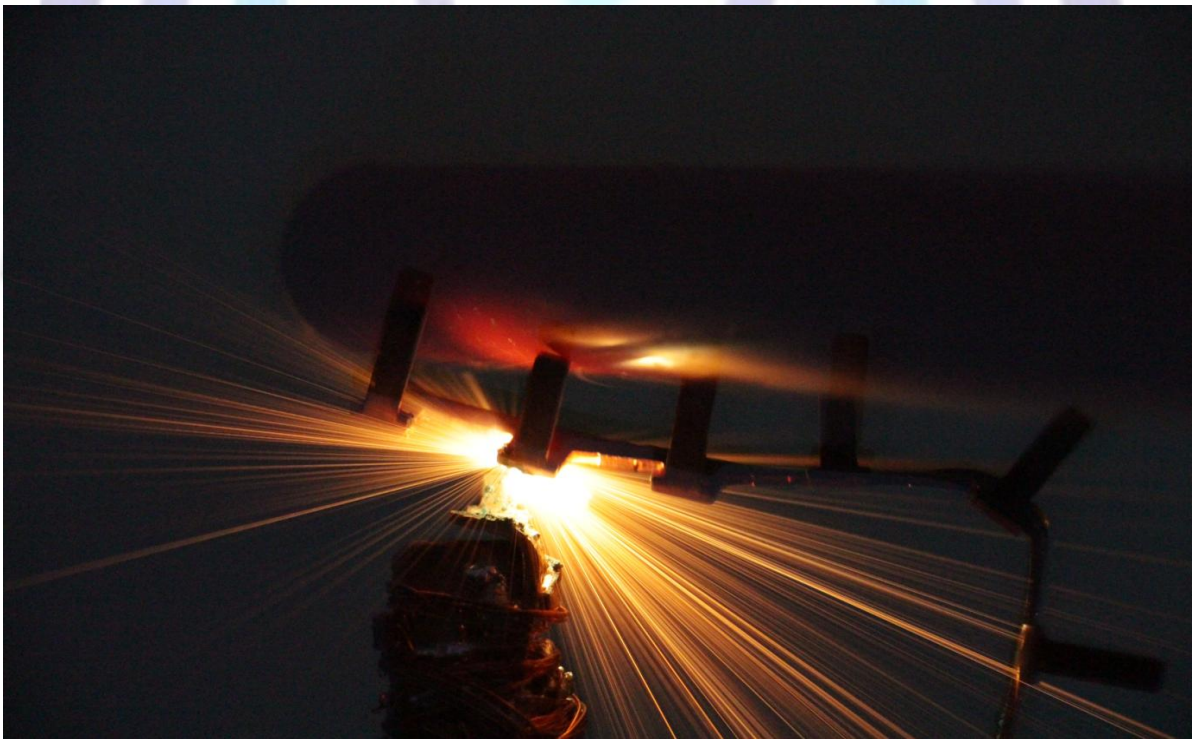
FIGURE 1



The fuel mix was loaded between the electrodes. Capacitors were then charged. Electrical discharge wastriggered and recorded with a standard digital SLR camera. A typical flash observed is shown in Figure 2.

FIGURE 2



For scale, image width is approximately 150mm

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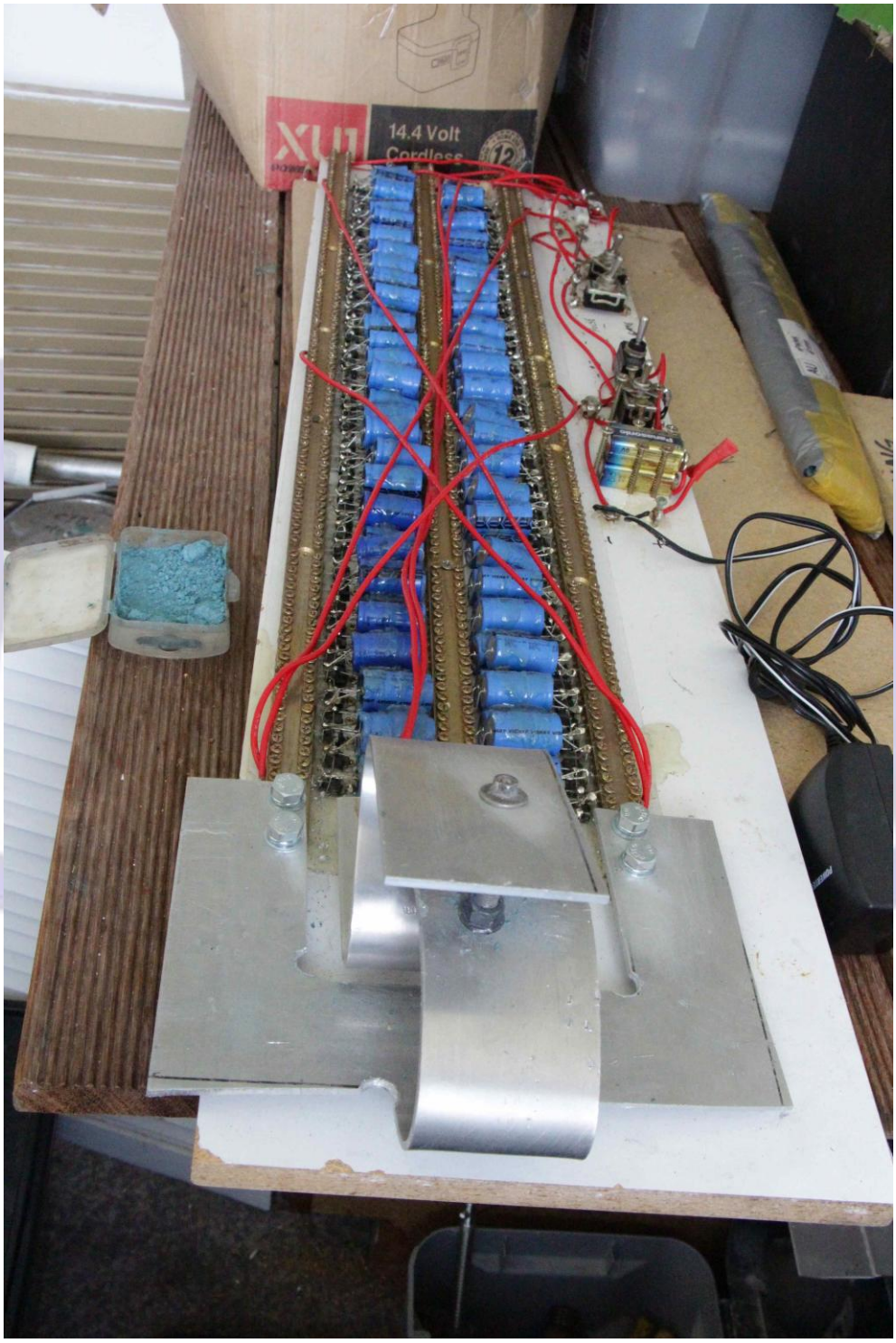
Light flashes formed a radial pattern out from the electrode gap. Light was typically bright orange/yellow in colour, sometimes with a dull green tinge.

Phase 2

An new experimental apparatus was built increasing the number of capacitors to 100 no. and using larger aluminium electrodes to reduce overall system resistance. The updated experimental setup is shown in Figure 3. Maximum theoretical output current from all the capacitor/transistor pairs was 20,000 amps and electrical energy released was 6.6 joules.

FIGURE 3



Light flashes were again photographed. Typical light flashes observatedare shown in Figure 4 and 5.

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FIGURE 4

For scale, bolt size is M6.

FIGURE 5

For scale, bolt size is M6.

Light emissions were significantly brighter for Phase 2 flashes compared to flashes recorded in Phase 1. A loudaudible 'crack' was also heard during each pulse release during Phase 2.

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DISCUSSION

This experiment demonstrated production of a significant density of photon emissions from a high current, low voltage pulse, as observed within the visible light range.

Photon energy release from excited H_2O following energy absorbsion from the transition of base state hydrogen (also from H_2O) to a smaller form of hydrogen (hydrino), as proposed by Mills (2011), could be a possible explanation.

Other possible mechanisms for the visible light photon emission observations could include:

- excitement of electron orbitals in copper (or other elements) to higher energy states by electric current, then the subsequent release of photons during a return to ground state.
- a reduction in the orbital size of excited free electrons moving through the system (as current) as they pass into the high resistance zone between electrodes resulting in a release of photons.

An important distinction between possible mechanisms is that the mechanism proposed by Mills proposes that excess energy is possible from this reaction which may lead to a viable new energy source. Consequently understanding the mechanism has particular importance.

The analysis of light flash morphology below provides an indication of the likely reaction mechanism:

(1) There was a clear non-linearity between the magnitude of photon emissions generated from the Phase 1 and Phase 2 experiments. Phase 2 light emissions were much, much brighter and whiter in colour. This was indicative of a potentially different dominant mechanism of light generation between the Phase 1 and Phase 2 experiments.

(2) There was a clear difference in the location of the light source between the Phase 1 and Phase 2 experiments. In the Phase 1 experiment, light radiated out from a central source located directly between the electrodes. In the Phase 2 experiment, light emission was decentralised with the principal location of the light source generally being located away from the electrode gap. This indicates that the source of the visible light in the Phase 2experiment is likely to be from secondary reaction mechanisms rather than directly from current flow between the electrodes.

(3) The morphology of the Phase 2 light emissions appears to be indicative of a detonation type reaction. “Hot spot” zones were typically observed away from the electrode gap where there was a very high density of photon emissions. Flash morphology in Phase 2 was more indicative of a self catalytic type reaction mechanism rather than the general release of energy from current discharge across the electrode gap.

CONCLUSIONS

It is considered that photon release from an excited catalyst (H_2O) following energy absorbsion from hydrino formation is a very plausible explanation for the high intensity photon emission phenomenon observed in the Phase 2 experiment.

SAFETY NOTES

There is potential for both fatal and chronic health and safety issues associated with this experiment. High current can be fatal even at low voltages. Emissions are expected to include extreme UV light which is a known carcinogen. As such replication of this experiment without modifications to ensure safety is not recommended. As a minimum a full safety review and plan should be developed by a suitably experienced person/s before proceeding. Replication should only be done by suitably trained and experienced persons.

REFERENCES

[1] Mills, R. 2011, The Grand Unified Theory of Classical Physics

Author’ biography with Photo

Simon Brink is a professional engineer and has been researching, prototyping and testing a wide range of emerging energy technologies for over ten years.