



Letter to the Editor

More Evidence of Microscopic Ball Lightning (Plasmoids) in CF Devices

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Abstract

The traces and marks of micrometer-sized plasmoids have been found in many transmutation and cold fusion experiments. This author has counted about 12 groups that have published photographs that show such microscopic markings on their electrodes, experimental apparatus, X-ray films, or particle track-detecting nuclear emulsions. Twenty years ago, this author proposed a theory that these objects will be commonly produced in these kinds of devices. A survey article of such markings and traces exhibited in various experiments from the year 2000 to 2007 was published in this journal in 2009. In it, the author compared the markings to those previously detected by T. Matsumoto and K. Shoulders. In this letter, markings and features that were published more recently by Mosier-Boss et al. and Adamenko et al. are described. The author believes that this kind of highly anomalous microscopic plasmoid is similar to macroscopic natural ball lightning and so calls these objects "microscopic ball lightning." The author proposes that more focus on investigating these objects will greatly enhance the researchers' understanding of the processes involved in atomic transmutations.

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I thought Issue No. 4 for 2011 was good. There was a paper by the Mosier-Boss [1] showing structures and craters. I would like to comment about them. I think the concept of plasmoids is vitally important for CF researchers to understand since these are produced in CF devices and are a part of the energy output and effects. As I wrote in articles almost 20 years ago, since plasmoids produced in various devices behave like ball lightning, the natural phenomena and the experimentally produced phenomena are identifiable. Even if micro-meter sized ball lightning-type objects are not produced in a particular device or experiment, understanding the concept helps people to understand atomic effects when atoms transform to a ball lightning state. Here is an update about plasmoid effects in CF devices since my article was published in this journal in 2009 [2]; and to show evidence of the relationship of transmutation and plasmoids, K. Shoulder's evidence from the 1990s is described.

In the past issues of *Infinite Energy* starting from the earliest issues in 1997, there are articles I have written about plasmoid theory, ball lightning in CF-LENR devices, ball lightning and tornadoes. My most recent articles on this

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subject were published in *Infinite Energy* (Issue 83) and in the *Journal of Condensed Matter Nuclear Physics* in 2009 [2]. These two latest articles explain the BL markings and previously unknown phenomena such as post-experiment filament growth and plasmoid activity found by the several groups in the decade of the 2000s.

Now about 11 different groups have reported finding similar-looking unusual craters and markings that I believe are similar to those shown more than 14 years ago by Matsumoto and Ken Shoulders. The most recent new reports that I am aware of are those of Adamenko et al. who describe a “Lochak Monopole” hypothesis to explain the markings and those of the SPAWAR group and Mosier-Boss. Since I wrote the 2009 article in 2008, both Adamenko and Mosier-Boss have published microscopic pictures of their apparatus that show pits or craters. For example, Fig. 5b in the paper by Mosier-Boss et al. [1] shows a crater that could be due to the impact or the emergence of a ball lightning-type object. Compare it to the pit markings pictured in my 2009 article [2].

The pit in Figs. 4c and d of Adamenko’s article [3] is about $1.6\ \mu\text{m}$ wide, and its “sloshing” around it (as Ken Shoulders calls it) is probably due to the boring of a ball lightning object since a typical BL track leads to it. These kinds of “tire-track” traces (as several groups of Russian researchers termed them) also appeared in the experiments of Savvatimova and Urutskoev. The lip of material around the side of the half moon-shaped hole looks much like the lips of materials sloshed around the pits and tunnels photographed by Ken Shoulders. For example, similar sloshings are seen around the pits in Figs. 4–7, 9, 13, and 19 of Shoulder’s 1999 article titled “Charged Clusters in Action.[4]” His article is about the effects of EV (plasmoid) impact. Can it be simple coincidence that the pits are similarly shaped and of similar sizes? Or do the similarities imply that micro-BL is the cause of the markings in both Shoulders’ experiments and Adamenko’s experiments? In my article [2], I tried to explain that a spiral motion of BL objects may be the cause for several kinds of the tire-track markings of the researchers. Shoulders later wrote the same thing in an article.

Early evidence of the link between ball lightning and transmutation is in Shoulder’s 1999 article [4]. For the pit in Fig. 19 that was described above, Shoulders did an elemental analysis, and his results are shown in Fig. 20. That is clear evidence of elemental change at the point of the pit.

Recently, super-fast video cameras are revealing the pervasiveness of the ball lightning phenomena in nature. Ken Shoulders sent me links to recent videos of lightning bolts that were made by Tom Warner. By using a new kind of super-fast video camera, people can see that balls of light lead many of the lightning bolts before the bolts become visible. People can see the lightning bolts with their eyes. What they can not see are the big ball lightning moving around that lead the bolts and the bolts lighting up behind them. These bright leading objects are caught on the videos. The big balls of light that lead the lightnings are fast-moving macroscopic natural ball lightnings.

I would like to encourage researchers to study ball lightning and plasmoids. Plasmoid research goes back to W. Bostick, and the phenomena was pursued by Ken Shoulders. Winston Bostick called these objects that make these kinds of markings “plasmoids” decades ago. This information is important for researchers because a microscopic electrical object that most researchers do not know about plays a large part in transmutation and CF reactions. The more of them, the more energetic and transmutation effects according to reports by Matsumoto, Shoulders, and Savvatimova. Do people understand the connection to ball lightning? Natural ball lightnings are a kind of a general class of material objects I call “plasmoids”.

PS

I would also like to point out that there was a typographical error in the abstract of my 2009 article in the journal. Instead of “angstroms”, the unit of measurement should be micrometers. I think that there are micro-BL that are angstroms wide. However, I think the unusual microscopic pits and traces in their pictures are due to BL-type phenomena that are about 0.1–400 micrometers wide. I am sorry there was a typographical error. Maybe software put in the symbol automatically.

References

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