



SDI Review Form 1.6

PART 1:

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2013_BJAST_3653
Title of the Manuscript:	Defective Barrier on Voltage Optimization for Small Airgap

General guideline for Peer Review process is available in this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 7 parts. Kindly note that you should use all the parts of this review form.



SDI Review Form 1.6

PART 2: Review Comments

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<u>Compulsory</u> REVISION comments	Please be consistent with the barrier distance tested. It said 3 cm in Methodology, but 2.5 cm in the text. When referring to the previous work (for example, the work by Roser), please cite the source of original work directly, not another reference. Please provide Reference(s) for the results shown in Figs. 2 and 3. Please provide the test condition for the results shown in Figure 8 Please substantiate the conclusion that was actually drawn from the present study from those published from the previous studies. For example, the first conclusion about the effect of the gap distance of the barrier on the breakdown voltage could not be drawn from the present study as the present study only considered a fixed gap length. Similarly, the last conclusion (which may seem reasonable) about the effect of hole size and location on the breakdown could not possibly be drawn from and supported by the present study from the same reason as above.	3cm has been changed to 2.5cm in the Methodology as it is in the text. The original work has been referenced. References have been provided for figs. 2 and 3 Test condition for results in figure 7 (previously figure 8) is given in the "Experimental Procedures". All tests carried out were not initially specified either in the materials and methods, and experimental procedures. Now it is clearly presented and so that the conclusion is now in agreement with the tests carried out.



SDI Review Form 1.6

<u>Minor</u> REVISION comments	There are many typos found in the manuscript. The author needs to carefully proofread the manuscript. To name a few, - KV (or kv) should be kV - Position Point (in Table 1) should be Positive Point.	Typographical errors in the manuscript have been corrected in the manuscript.
<u>Optional/General</u> comments	The author has presented an experimental study on the effect of defected barrier on the breakdown voltage in air gap between needle point and plate electrodes. The experiment was conducted for a fixed gap distance of 10 cm and a barrier distance of 2.5 cm from the point electrode with both polarities. While the results may be of great interest, many of them are just confirmation of the results previously published (particularly for the positive discharge). The main contribution of the present work is only on the effect of negative discharge, but the results were quite limited to warrant its publication. In addition, the paper is mostly focused on the review of the past works. The conclusions drawn are also mostly from the previous studies, not the present work. Therefore, the manuscript is not recommended for publication in its present form.	The corrections have been made.