**Preparation of Papers for Publication
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**ABSTRACT**

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 Index Terms — **corona, partial discharge (PD), energy dissipation, treeing, time-to-failure, Weibull distribution**

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# **INTRODUCTION**

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**Table 1.** Units and corresponding symbols.

|  |  |
| --- | --- |
| Unit | Unit Symbol |
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**Figure 1.** Rate-Distortion curves comparing reference and proposed algorithms. There is a period after the figure number, followed by two spaces. It is good practice to explain the significance of the figure (center if short otherwise use justified text).

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**Appendix**

Appendices, if needed, appear before the acknowledgment

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***Articles in Books:***

[2] G. O. Young, “Synthetic structure of industrial plastics,” in *Plastics*, 2nd ed., vol. 3, J. Peters, Ed. New York: McGraw-Hill, 1964, pp. 15–64.

***Periodicals****:*

[3] G. Mazzanti, G. C. Montanari, and L. Dissado, “A space charge life model for AC electrical aging of polymers,” IEEE Trans. Dielectr. Electr. Insul., vol. 6, no. 3, pp. 864–875, Dec. 1999.

[4] A. George, S. Fabini and K.D. Stravini, “Power electronics and electrical insulation systems,” J. Appl. Phys., vol. 26, no. 3, pp. 7-15, 2010.

***Conference Proceedings and Reports (published):***

[5] S. Al Kuran, “The prospects for GaAs MESFET technology in DC-AC voltage conversion,” A*nnu. Rep. Conf. Electr. Insul. Dielect. Phenom. (CEIDP),* 1997*,* vol. 1, pp. 187-191*.*

[6] E. M. Klein, “The importance of using moisture free Kraft paper in power transformers,” *IEEE Int. Conf. Electr. Insul, (ICEI),* 2013, pp. 62-66.

***Papers Presented at Conferences (unpublished):***

[7] A. Jones, “Electrical insulation just for beginners,” presented at the Conference on Insulation Materials, New York, N.Y., 1999.

***Online Sources:***

[8] Electrical Materials for Industry in today’s competitive world, Available: <http://www.deis.nrc.ca/eim/search.htm>.

***Patents:***

[9] A. Inventor, “Patent title,” US Patent number, Nov. 4, 2010.

***Standards:***

[10] Title of Standard, IEEE Standard 0000-2003, 2003-03-14.

***Theses (MS) and Dissertations (PhD):***

[11] A. N. Beggar, “Study on the way things work,” PhD dissertation, Dept. of Electr. and Compr. Eng., Waford University, WA., 1999.

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[12] B. Smith, private communication, Nov. 2010.

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