IEEE Region 8 Student Paper Contest

GENERAL

1. Once each year, each Branch may hold a Paper Contest under its own responsibility.

2. The winner(s) of each Branch Contest may compete for the Region 8 Contest, held within the Region limits. A Branch may submit one paper for every 100 branch members or part thereof, with a maximum of three papers.

3. An international jury will grade the written papers without knowledge of the identity of the author and of his school, and will decide which papers will be accepted for presentation at the oral finals.

4. If accepted for the oral finals, the paper must be presented by one person only, although it may be authored by more than one.

5. Each author must be a member of an IEEE Student Branch at the time of the original submission of the paper to the Branch Contest, and a member (student or not) of the IEEE at the time of the oral presentation. The work presented has to be completed before the student receives the engineering degree that entitles him/her to start preparing a doctoral thesis; and the submission of the paper to the Region 8 Contest must be completed within 12 months after graduation. A doctoral thesis is not considered.

6. Although the original paper - i.e., the paper that was submitted to the local Branch Contest - may be written in any language, the paper that is submitted to the Region 8 Contest should be in English. The oral presentation shall be in English, as well.

7. When entering a paper in the Region 8 Contest, each counselor will provide a document certifying that condition 5 is fulfilled, giving the IEEE membership number(s) of the author(s), and stating during which year(s) after high school the work has been performed. Any other useful information concerning the work and background is welcome. This document should be attached to the *Student Paper Cover Sheet* (see "Author guidelines on paper layout").

8. Travel expenses (train 2nd class, or plane economy class for very long distances) will be provided by the Region 8 Student Activities Fund to one author of each paper accepted by the jury for oral presentation. Living expenses which may occur while attending the oral presentation may also be reimbursed; the guidelines for this reimbursement will be mailed to attendees before the presentation.

9. The Life Member Fund is offering three prizes (the year 2006 amounts were respectively 800, 500 and 200 US Dollars). Furthermore, the Region 8 Student Activities Fund offers 250 US Dollars as the "Dick Poortvliet Award" to the branch where the winner comes from.

10. If acceptable to the organizers of the conference at which the oral finals take place, the papers that have been accepted for oral presentation will be published in the proceedings of that conference; the final format of the papers should be in accordance with the conference proceedings' rules. An electronic version of the finalists' papers will also be published in the IEEE Region 8 SAC web pages.

11. Published work is excluded from the Contest. Any paper subsequently published should mention an acknowledgement of the received award.

GRADING

12. There shall be five judges. The jury is international, appointed by the IEEE Region 8 SAC Chair.

- 13. The contributions are graded as follows:
- written paper
- content: 45 points
- presentation: 25 points
- oral presentation: 30 points

14. A preliminary selection based on the written document may be made by the members of the jury, either if too many papers are submitted or if some papers do not reach the expected level.

CHARACTER OF THE PAPER

15. Papers should cover technical and engineering aspects of a subject reasonably within or related to the areas with which the IEEE is concerned with.

16. The work need not be original in engineering content, but should be original in treatment and concise in coverage of the author's contribution to the subject.

DOCUMENT LAYOUT

17. The paper must be typewritten on A4 size paper (210 mm \times 297 mm), with the text width equal to 183 mm and the text height equal to 243.5 mm; a font size of 10 pt or larger should be used. The two-column IEEE Transactions style (with the space between columns equal to 4.1 mm) is preferred; the corresponding LaTeX style sheet 'IEEEtran.cls' can be obtained from http://ewh.ieee.org/reg/8/sac/index.php?

option=com_content&task=view&id=19

(Note that the present document is in the two-column IEEE Transactions style with a font size of 10 pt.)

18. The paper should not exceed six (6) pages. Overlength papers will not be considered for the contest!

PAPER SUBMISSION

19. Either an electronic version (pdf or ps) or six hard copies of the paper, accompanied by the *Student Paper Cover Sheet*, must be sent to the Region 8 Contest co-ordinator:

Prof. Dr. George Paunovic University of Belgrade, Faculty of Electrical Engineering Bulevar Kralja Aleksandra 73, PF 3554, Belgrade, Serbia email: g.paunovic@ieee.org

20. The submission deadline is 15 December.

ORAL PRESENTATION

21. Those authors selected to give an oral presentation should develop a pleasant and logical presentation of the subject matter

fitted to 20 minutes. The jury will question each contestant for an additional period of 10 minutes typical.

22. An electronic presentation – based on Power Point, for instance – using a beamer (LCD data projector) is preferred. Additional presentation tools may be provided if a request is made and granted in advance.

23. The presentation should not attempt to cover the entire paper, but rather to give a general idea and enlarge on one or two specific points.

AUTHOR GUIDELINES ON PAPER LAYOUT

The following guidelines are suggested to assist grading by providing a uniform layout. In general the paper should be organized as follows:

Student Paper Cover Sheet. Since the judges must handle the papers without knowledge of the identity of the author and his educational establishment, it is required that the paper itself show no such identification other than the title. The title, author(s)' name(s) and IEEE membership number(s), corresponding author's address, school, and Branch Counselor's name must be shown on a removable cover sheet. The Counselor's document should be removable too.

Title page. The title should consist of the minimum number of key words necessary to portray accurately the content of the paper. Readers interest is stimulated by a well-chosen title. The author's name should not appear on the title page, nor should any other name of persons or schools.

Abstract. The abstract should not describe the paper, but should give in brief the essential facts of its content, for example, a brief statement of the problem or objective and a concise summary of results or conclusions, touching upon methods or other details only if they are unique or if they are of some particular significance. The abstract should be no longer than 100 words.

Introduction. The introduction should lead to the development of the subject so that the reader may obtain a clear understanding of the significance of the paper. This often can be done by giving briefly the state of the art as background. Then bring out the added advantages of the method of approach and emphasize the importance of the results or conclusions.

Body. The main argument of the development of the subject is carried out in the body of the paper, complete with supporting data. The argument should proceed in a logical sequence according to a prepared outline. The writing should be in the third person. Supporting data and results can often be presented most effectively as curves, charts or tables. Well-known abbreviations may be used in the text but should be defined where used the first time, followed by the abbreviation in parentheses. Generally the use of abbreviations should be confined to not duplicate text matter.

Conclusion. The conclusions are often considered the most important part of a paper. They should be stated concisely in a separate section at the end of the paper. If there are three or more conclusions, greater emphasis can be obtained by numbering each conclusion and setting it off in a separate paragraph.

Tables. Tables should be numbered consecutively using Roman numerals. Small tabulations or listings may be made in the text

where necessary for continuity. Each table should be titled by giving a brief description as a heading following the table number at the top. Ditto marks should not be used in tables, but brackets may be used to group information common to several lines.

Diagrams. Three types of diagrams may be used: photographs, oscillograms, line drawings. Keep reading matter on illustrations to a minimum; include it in the captions. Portions of illustrations may be identified by letters and explained in the captions. Whenever feasible, combine several curves on the same co-ordinates. Their identifying letters or numbers should be in clear spaces between cross-section lines. If it is necessary to place data over cross-section lines, erase these lines.

Appendices. Detailed mathematical proofs, development of equations, and examples which are subordinate to the main argument in the body of a paper, but not essential to following the argument, should be treated in appendices. References are made in the text to details in the appendices. Main equations as they are developed should be numbered consecutively, with the number in parentheses opposite the equation in the right hand margin.

References. Any information or development taken from books, periodicals or courses, i.e. from any external source, should be clearly referenced in the text and a suitable reference list should be appended to enable the reader to consult those sources. References should be numbered consecutively and should follow the form shown below:

• For a periodical: R. N. Hall, "Power rectifiers and transistors," *Proc. IRE*, vol. **40**, pp. 1512–1519, November 1952.

• For a book: W. A. Edison, *Vacuum Tube Oscillators*, Wiley, New York, pp. 170–171, 1948.

JURY GUIDELINES ON GRADING THE PAPER

The following criteria are suggested to provide a uniform grading standard:

a. Do the authors present their independent work?

b. Is the significant amount of presented work new? Do the authors present a novel interpretation of some existing work?

c. Is the subject matter of substantial technical content and is it presented at an acceptably advanced level?

d. Is the 100-word abstract concise, informative and accurate? e. Does the written presentation include a satisfactory introduction which properly orients the reader with respect to the general area with which the paper deals ? Does the concluding portion of the paper summarize the reader's impression of what the work has accomplished ? Are the conclusions supported by evidence? f. Does the exposition (and analysis which may be involved) proceed in an orderly and logical manner? Is the paper selfcontained?

g. Does the author exhibit ingenuity and resourcefulness in methods of presentation, choice of illustrations, use of analogies and the like?

h. Is the paper technically accurate?

i. Is an unmistakable meaning conveyed with acceptable brevity?

j. Is the format and typesetting quality of the paper appropriate?

Student Paper Cover Sheet

Answer the form below concisely and completely, and attach it to the paper; it will help the jury in grading the paper.

- School:
- Author(s), with their IEEE membership number(s):
- Name, address and e-mail of author to whom correspondence should be addressed:
- Name, address and e-mail of Student Branch Counselor:

• Paper title:

• What is the problem and why is it important?

• What is the original contribution of this work? Be explicit.

• Does this work check and / or extend previously reported work? What work? Give references. **Be explicit.** How does this contribution compare to previously published work?

• If the paper is to be submitted to one of the IEEE Transactions, which Transactions would be the most appropriate?