

## GENERAL ANNOUNCEMENT AND CALL FOR PAPERS

The Indian Roads Congress (IRC) brings out the following periodicals/publications:

- a) Indian Highways (Monthly)
  - b) Journal of the IRC (Quarterly) - 3 Volumes (with two Sections: Discussion & Information) + Volume 4 (for proceedings)
  - c) Highway Research Journal (Biannual)
2. IRC is a premier body of highway engineers. The technical papers published in the "INDIAN HIGHWAYS", "JOURNAL OF THE IRC" and "HIGHWAY RESEARCH JOURNAL" of the IRC are highly valued and are read by a large cross section of highway professionals throughout the country and even abroad. The technical papers submitted for publication should, therefore, be of reasonable standard so that highway fraternity gets benefitted from them in terms of the additional knowledge, information and new ideas. The papers should be properly structured and should address the theme/idea being presented and should avoid dwellings at length on facts broadly known to highway engineers. The papers should deal with important case studies, new design concepts/principles, new construction techniques, modern quality control, modern maintenance techniques applied in highway projects, besides traffic engineering, transport planning, etc. The authors are requested to properly draft and edit their paper before sending the same to IRC for publication, so that the paper is free from errors. The layout of the typescript of the paper should conform to Annex C (Clause 9.15) to IS 12 : 2005 (*Fourth Revision*) Guide for Drafting and Presentation of Indian Standards, *December 2005*.
  3. The technical papers are sent to a panel of experts and are considered for publication only after obtaining their views regarding acceptance of the paper. Technical papers printed in JOURNAL OF THE IRC should involve matter of discussion because such papers are discussed during Annual Session of IRC. The papers to be published under HIGHWAY RESEARCH JOURNAL should have research based details. The authors are encouraged to continue sending more papers so that IRC is able to publish good quality papers, to the benefit of fraternity of highway engineers.
  4. The authors are also requested to send four hard copies of manuscript of the paper drafted in English in third person (with CD) complete in all respects. The length of the paper should be generally between 5000 to 8000 words including Tables, Figures, Photographs, etc, on A 4 size paper with 12 pt font size of Times New Roman typed in 1.5 line space drafted as per guidelines in IS 12 : 2005.
  5. Only SI units and their multiples should be used in the papers and other units, if used, should be given only in the parentheses preceded by SI units. All numbers, quantities and amounts in the paper should be written as per the *Standards of Weights and Measures (Numeration) Rules, 1987*. It has been observed that many a times, Figures (drawings) submitted along with the paper are not properly drawn. Authors are requested to take due care in preparation of the drawings through computer software, so that the get-up of the paper is presentable. It has been generally observed that authors send coloured photographs in support of their papers, and graphs are drawn with coloured legends. Since the IRC publications are printed in black and white, the

coloured photographs and graphs do not give the desired results after printing. It would be appreciated if the photographs and graphs are in black and white. Further, Tables, Figures (diagrams) and Photographs are to be adjusted immediately after their references in the text and these should be legible. Complete data (including Tables, Figures, Photos, etc) on computer CD in Windows MS software would be required for printing.

6. Rules for Contribution of Technical Papers and the Award of Medals are enclosed at Annex A. The same are also available on our website: [www.irc.org.in](http://www.irc.org.in)

## **ANNEX A**

*(Clause 6)*

### **RULES FOR CONTRIBUTION OF TECHNICAL PAPERS AND AWARD OF MEDALS**

(Updated in January 2010)

#### **I RULES FOR CONTRIBUTION OF TECHNICAL PAPERS**

##### **1 GENERAL**

- 1.1 The Standing Rules for guidance, when contributing papers, are reprinted below. It is requested that members may read these rules and observe them while submitting papers to the Indian Roads Congress (IRC).
- 1.2 Members intending to contribute papers to the IRC on any subject connected with highway engineering are requested to send their contributions to the Secretary General, IRC, **Sector 6, R.K. Puram, Kama Koti Marg, New Delhi-110 022** as and when these are ready without waiting for a special invitation. In case of joint authors, it must be made clear to whom communications are to be addressed.
- 1.3 Final acceptance of the papers rests with the IRC. However, to avoid disappointment owing to an excessive number being written on any one subject or for any other reason, it is requested that any member intending to write a paper should intimate to the Secretary General, IRC the subject on which he or she wishes to write and enclose a short synopsis of the proposed paper and the paper should also contain Synopsis. He or she will then be informed whether his/her offer can be accepted. Papers are accepted on the understanding that they may be edited for style and use of language.
- 1.4 IRC reserves the right to publish any paper in the form of an abstract. When a paper is published in an abstract form, the manuscript of the paper as sent by the author will be added to the IRC library and made available for inspection by interested members.
- 1.5 Even non-members, who are Experts in any relevant field or who have specialized knowledge on any subject related to highway engineering are also welcome to contribute Technical Papers.
- 1.6 The members, while choosing subjects for contributing papers should bear in mind the fact

that there is often a good deal more to be learnt from failures than from successes.

- 1.7 All authors whose papers have been accepted for publication in the JOURNAL OF THE IRC/ HIGHWAY RESEARCH JOURNAL/INDIAN HIGHWAYS will be supplied twenty five complimentary reprints of their paper.

## 2 LENGTH OF PAPER

- 2.1 Paper should not exceed 5000 to 8000 words including around 8 illustrations.
- 2.2 Written discussions/comments on papers already published should not exceed 500 to 1000 words and 2 to 3 illustrations.

## 3 PREPARATION OF MANUSCRIPT

- 3.1 The language of the IRC publications is English. The mode of presentation should be in third person. **The Oxford Dictionary should be referred as the authority for spellings.** The layout of typescript of the paper should conform to Annex C (Clause 9.15) to IS 12 : 2005 (Fourth Revision), December 2005. The text of the paper should conform to other relevant clauses of IS 12.
- 3.2 SI units and their multiples as per IS 10 005 : 1994/ISO 1000 : 1992 *Reaffirmed 2000*) should be used wherever possible. Other units, if used, should be given only in parentheses preceded by SI units.
- 3.3 All numbers, quantities and amounts in the paper should be written as per the *Standards of Weights and Measures (Numeration) Rules, 1987..*
  - 3.3.1 *Numerals of More than Three Digits*

Such numerals shall be given in groups of three with a space between every two consecutive groups; the grouping shall start from the unit towards left when there is no decimal point. In case of a decimal point, the grouping shall be made in both directions from the decimal point.
  - 3.3.2 *Phone, Fax and Mobile Number*

At present, no standard even by BIS is available for writing the above numbers. Considering the good industrial practice, following style shall be followed:

    - a) Phone No. (11) 2618 5315 or +91 (11) 2618 5315
    - b) Fax No. +91 (11) 2618 3669
    - c) Mob. No. +91 98101 12345
- 3.4 Mathematical symbols should be typed or neatly hand written, care should be taken to differentiate between similar characters (for example 1 and l), capital and lower case letters and superior and inferior types as per clause 10.2 of IS 12 : 2005.
- 3.5 Manuscripts should be typed with 1.5 spacing throughout (including references) on one side of A 4 size paper, leaving ample margins. Lengthy mathematical proofs and derivation, and extensive test data are discouraged.
- 3.6 3.6 The preferred order of contents is:
  - 3.6.1 Title of Paper;
  - 3.6.2 Author(s) name(s) and IRC membership No.  
It is customary for the author/co-author to be a member of IRC before publishing of his paper.
  - 3.6.3 Synopsis of not more than 200 words, covering the aims of work, method used, results obtained and conclusions reached;
  - 3.6.4 Keywords and List of Notations, where applicable;
  - 3.6.5 Authors business address as a footnote to the front page;
  - 3.6.6 *Body of the paper* Organized into logical sections, with preferably not more than two grades

of sub-headings;

### **3.6.7 Acknowledgements**

Sources of quotations appearing in the papers should be stated and acknowledgement should be made for all information called from books, periodicals and proceedings of sister societies, etc.

### **3.6.8 References**

References cited in the paper should be numbered sequentially in order of citation and given in the text by a superscript numeral, with a reference list, in numerical order, at the end of the paper. The list should give name(s) with initial(s) and the exact title of the paper or the book. For Journals this should be followed by the title, volume number, month and year of issue and page numbers of the article. For books this should be followed by the name(s) of the editor(s) (if appropriate), the name of the publisher and the place and the year of publication. In case of conference proceedings this should be followed by the exact title of the conferences, year and date. All references in this list should be indicated at some point in the text and vice versa. Unpublished data or private communications should not appear in the reference list.

### **3.6.9 Tables**

Tables shall be used wherever tabular presentation would eliminate repetition or show a relationship more clearly. Tables may be of the formal and informal types. The formal type should be used where a large amount of data is presented and/or referred to elsewhere in the text. The informal type should be used where small amount of material is presented as an integral part of preceding text.

Every formal table shall be referred to in the text of the paper, preferably in numerical sequence, with appropriate wording to establish relevance and status.

The tables should be numbered consecutively throughout the text.

### **3.6.10 Illustrations**

Diagrams, maps, graphs, photographs and drawings shall be used wherever it is possible to illustrate an idea more clearly, concisely and accurately.

All illustrations in a given paper shall be designated as figures and abbreviated as 'Fig.' They shall be consecutively numbered in Hindu-Arabic numerals as per clause **9.13.1** of IS 12 : 2005.

## **3.7 Paragraphing**

The following procedure shall be followed in the display of Titles/Headings of Items, Clauses, Subclauses and Sub-subclauses in the paper.

### **3.7.1 Item**

All words in the heading of an item shall be in capitals and shall be printed in bold face.

### **3.7.2 Clause**

Initial letters of all principal words in the headings of a clause shall be given in capitals. All words in the headings shall be printed in bold face.

### 3.7.3 *Subclause*

Initial letters of all principal words in the heading of a subclause shall be in capitals. The headings shall be printed in italics.

### 3.7.4 *Sub-subclause*

Only the initial letter of the first word in the heading of a sub-subclause shall be in capital. The heading of sub-subclause shall also be printed in italics.

### 3.7.5 *Indentation of Subdivisions*

The numbers of an item, clause, subclause and sub-subclause shall be aligned on the left-hand margin of the column. However, as an aid to composition of the printed text, lists and notes integrated in the text shall be inset from the margin. The layout of the typescript of the paper should be as per Annex C to IS 12 : 2005.

## 3.8 **Abbreviations**

3.8.1 Whenever an uncommon abbreviation is used, at its first appearance it should be accompanied by a full expression of what it represents.

3.8.2 **Abbreviations**, in general, should be used without a full stop after them except in cases where the abbreviation results in a common English word or in an ambiguity for example  
a) No. for number or numbers and

b) Fig. for figure..

3.8.3 The same abbreviation shall be used both for singular and plural words.

3.8.4 The letters of abbreviations shall neither be spaced nor punctuated.

3.8.5 In general, abbreviations should be avoided in the title of IRC publications.

## **RULES FOR CONTRIBUTION OF TECHNICAL PAPERS AND AWARD OF MEDALS**

### **4. ILLUSTRATIONS**

#### **4.1 Drawings/Figures**

4.1.1 Original line drawings must neatly be drawn in black Indian ink on good quality tracing paper of A-4 size (180 mm x 240 mm). For letters, only mechanical lettering sets (stencils) should be used.

4.1.2 Alternatively, drawings should be prepared through computer software, so that the get up of the paper is presentable.

#### 4.1.3 *Figures*

Figures in the IRC publication should be reduced to fit either into a single or double column width that is 85 mm or 180 mm. Letterings in the figure should be large enough such that even the smallest of them would be at least 1.5 mm high when the figure sizes are scanned for printing.

#### **4.2 Photographs**

Photographs should be clear, sharp, black and white prints, with good contrast on glossy paper. Again the most suitable size is twice the final size. Cuttings from printed matter or photocopies are unsuitable for reproduction.

#### **4.3 Plates**

4.3.1 Plates should preferably be prepared in widths that are multiples of 180 mm but the height should remain constant at 240 mm. The size of letters used in the Plate should be so

chosen that after reduction no letter would be less than 2 mm size. Thus, if the width is 320 mm, the minimum size of the letter should be 4 mm. The thickness of the letter should also stand corresponding reduction. The title should be in the right hand bottom corner in letters of such size that when reduced, the size will be at least 4 mm. Scale should be drawn in the Plate below the title to admit reduction of drawings without altering the correct relation of the scale to the drawing. Mere mention of the scale as "Scale of 1/100 (10 mm = 1 m)" should be avoided, as this would be incorrect when the size of the Plate is reduced photographically.

**4.3.2** In drawing diagrams or graphs, the following points deserve the consideration of authors:

**4.3.3.1** From the standpoint of pleasing appearance, a rectangular graph or drawing with proportions between 3 by 5 and 3 by 4 is to be preferred to a square one.

**4.3.3.2** The appearance and effectiveness of a graph depend in a large measure on the relative thickness of lines used in its component parts. The thicker line should be used for the principal curve. If several curves are presented on the same graph, the line width used for curves should be less than that used when a single curve is presented. Co-ordinate rulings should be the narrowest in thickness. Principal reference lines, such as, the axes should be wider than other rulings but narrower than curves. For the size of reduction that is usually adopted for the IRC Journals, it is considered that the thickest line when finally reduced should not be more than 2.5 points, that is, 1 mm in width.

**4.3.3.3** Coloured distinctions should not be done. When it is desired to distinguish lines, dotted or chain dotted lines should be used instead of colours since the IRC publications are printed in black and white.

## **5. BRIDGE DETAILS**

Members contributing papers on any bridge work actually carried out are requested to give inter-alia the following details:

- a) A site plan showing the road and river for three kilometres on either side of the bridge site;
- b) A dimensioned cross-section of the roadway;
- c) The loading on which the design is based;
- d) The cost per square metre of elevation area comprising the formation level and the bottom of the foundations; and
- e) The ratio of the total cost of the sub-structure to the cost of those parts of the superstructure as is subject to variation with variation of span.

## **II AWARD OF MEDALS**

**The following Medals are available for award:**

### **1. Mitchel Medal**

This is a Bronze Medal to be awarded annually for an exceptionally good paper published in Journal of the Indian Roads Congress (IRC) and discussed at the Annual Session. This medal has been instituted to perpetuate Sir Kenneth Mitchell's connection with the Indian Roads Congress. This is the highest award given by IRC.

**2. Indian Roads Congress Medal**

This is also a Bronze Medal. It is awarded to the best paper published in Journal of the IRC and discussed at the Annual Session..

**3. Indian Roads Congress Medal for “Construction”**

This Medal is awarded to the best paper on `Construction' published in Journal of the IRC sponsored by the Maharashtra PWD.

**4. Indian Roads Congress Medal for “Road Research”**

This Medal is awarded to the best paper on `Road Research' published in Highway Research Journal (HRJ) sponsored by the Bihar PWD. To encourage road research, the Papers Committee may award even two medals in this category in a year considering their merit.

**5. Indian Roads Congress Medal for “Maintenance”**

This Medal is awarded to the best paper on `Maintenance' published in Journal of the IRC sponsored by the Central Public Works Department

**6. IRC - Pandit Jawaharlal Nehru Birth Centenary Award**

This Medal is awarded to a Scientist/Highway Engineer for conspicuously important and outstanding contribution to the development of roads in India.

**7. Commendation Certificate**

This Certificate is awarded to a paper/papers published in Journal of the IRC/HRJ of a high merit which could not get any of the above said Medals.