

Guidelines for Authors

Resonance - journal of science education is primarily targeted to undergraduate students and teachers. The journal invites contributions in various branches of science and emphasizes a lucid style that will attract readers from diverse backgrounds. A helpful general rule is that at least the first one third of the article should be readily understood by a general audience.

Articles on topics in the undergraduate curriculum, especially those which students often consider difficult to understand, new classroom experiments, emerging techniques and ideas and innovative procedures for teaching specific concepts are particularly welcome. The submitted

contributions should not have appeared elsewhere.

Book Reviews: The following types of books will be reviewed: (1) textbooks in subjects of interest to the journal; (2) general books in science which should be brought to the attention of students/teachers; (3) well-known classics; (4) books on educational methods. (5) Websites or CDs related to science education. Books reviewed should generally be affordable to students/teachers (price range Rs. 50 to 300). New books will get preference in review. A list of books received by the academy office will be circulated among the editors who will then decide which are to be listed and which to be reviewed.

Please follow the instructions given below before preparing the manuscript. Articles which do not conform to the guidelines will not be considered.

1. Manuscript should be submitted in ***triplicate*** to ***Resonance Office***.
2. Along with hardcopies authors having access to a PC are encouraged to submit an ASCII/MS Word/Latex/Word Perfect version on a floppy diskette or send by email to ***resonanc@ias.ernet.in***.

Title: Authors are encouraged to provide a) 4–7 word first title (*should be a precise technical description of the contents of the article*) and b) a 4-10 word second title (*which will attract the general readers attention*).

Author(s): A photograph and a brief biographical sketch may be added (in less than 100 words). The author's name and mailing address should be provided. Inclusion of phone and fax numbers and email address would help in expediting the processing of manuscripts.

Summary: Please provide 2 to 4 sentences summary of the article which will highlight the important points of the article.

Keywords: Between 3 to 6 keywords must be provided for indexing and information retrieval services.

Text: Use simple English. Keep the sentences short. Break up the text into logical units, with readily understandable headings and sub-headings. Do not use multiple sub-sections. **Articles should generally be 1000–2000 words long.**



Illustrations: Use figures, charts and schemes liberally. A few colour illustrations may be useful. Try to use good quality computer generated images, with neatly labelled axes, clear labels, fonts and shades. All figures, including photographs (which must be glossy prints) should be numbered consecutively in arabic numerals in the order of occurrence in the text. Please try to keep the size of the figures between 4 and 13 cm based on the importance of the figure. Figure captions must be written with care and in some detail. Key features of the illustration may be pointed out in the caption. Illustrations and other material if reproduced, must be properly credited: ***It is the author's responsibility to obtain permission of reproduction*** (copies of letters of permission should be sent).

Tables: All tables must be numbered consecutively in arabic numerals (e.g. *Table 1*) in the order of appearance in the text. The tables must be self-contained with a descriptive title. Column headings of tables should be brief. Footnotes to the tables, if any, should be identified by superscript symbols and placed at the bottom of the table.

Boxes: Summaries, biographical and historical notes presented at a level different from the main body of the text and which nevertheless enhance the interest of the main theme can be placed as boxed items. Such a boxed item should fit in a printed page and not exceed 250 words.

Highlights: Underline the text in blue pen which can be used as possible highlights in page.

Margin Notes/Footnotes: When necessary they should be numbered (numbers in superscript) sequentially in the main text. The matter of each margin note/footnote should appear at the end of the each page.

Suggested Reading: Avoid technical references. If some citations are necessary, mention these as part of the text (number them in square brackets e.g. [1]). A list of suggested readings may be included at the end. It should be listed as the following example:

for journal

[1] S A Shirali, Title of the article, *Resonance*, Vol.6, No.5, pp.29–38, 2001.

for book

[2] S K Saxena, *Faunal Diversity in Thar Desert ...* (Eds. A K Ghosh, Q H Baqri and Ishwar Prakash), Scientific Publishers, Jodhpur, pp.203–214, 1996.

Layout: It is preferable to place all the boxes, illustrations and their captions after the main text of the article. The suggested location of the boxes and figures should be marked in the text.

Please Note: If necessary the editors may edit the manuscript substantially in order to maintain uniformity of presentation and to enhance readability.



Author Guidelines for Figures

Figures (line diagrams and photographs) should be clear, sharp and of good quality with good contrast. We will normally use figures as submitted and it is therefore the authors' responsibility to ensure that the scientific details covered in them are correct.

Please note the following important points:

- ❖ Shading and fill patterns should be avoided wherever possible because diagrams containing them have to be printed as half-tones which may not reproduce well. In graphs if it is necessary to distinguish between various curves, different types of lines, for example, solid, long dashes, large dots, alternate dashes and dots are recommended rather than lines of different thicknesses.
- ❖ When producing colour line illustrations, light colours such as yellow, light green, light blue, light grey, etc., should be avoided because they generally reproduce poorly during the black and white printing process.
- ❖ Quality of reproduction will depend on resolution and size of figures. Low-resolution files do not reproduce well, especially when enlarged. Tone illustrations (in color or in black & white), for e.g., photographs, paintings, etc., should be scanned at a high resolution (800 dpi, if possible). Illustrations that have both line and tone should also be produced at a high resolution. The size of figures provided should be more or less in the final intended size that will appear in the journal, so that resizing can be avoided.
- ❖ Wherever possible figures submitted as electronic files should be tightly cropped to minimize superfluous white space surrounding them. This reduces file sizes and helps the alignment of figures on the printed page.
- ❖ Fonts used should be restricted to standard font families (Times, Helvetica, courier or symbol), all letterings should be easy to read (7 or 8 point font size) and the thinnest line should be half a point.

File formats

In order to get the best results we prefer TIFF files or encapsulated postscript (EPS) for figures. Files in other bitmap formats like BMP, GIF and JPEG are also acceptable. But please note that if the GIF and JPEG files have been downloaded from websites they may not be suitable for printing purposes.

