

भारत सरकार
अंतरिक्ष विभाग

विक्रम साराभाई अंतरिक्ष केन्द्र

तिरुवनंतपुरम 695 022

तार : स्पेस

टेलीफोन : 56 2444 & 56 2555

टेलक्स : 0435 201 & 202

फैक्स : 0471-79795



GOVERNMENT OF INDIA
DEPARTMENT OF SPACE

VIKRAM SARABHAI SPACE CENTRE

THIRUVANANTHAPURAM-695 022

TELEGRAM: SPACE

TELEPHONE : 56 2444 & 56 2555

TELEX : 0435 201 & 202

FAX : 0471-79795

SPACE PHYSICS LABORATORY

Dr. B.V. Krishna Murthy
Director, SPL

SPL/NSSS-94

December 28, 1994

Dear Prof Srikantan,

Let me once again thank you for participating in the 8th National Space Science Symposium and delivering an invited talk in the symposium. As announced in the symposium, the National Organizing Committee of the symposium decided that the papers relating to the plenary/invited Talks presented in the symposium be published in a special volume of Indian Journal of Radio & Space Physics (IJRSP). To facilitate early publication of these papers, may I request you to kindly send me the paper on your Talk in the special session "Progress in Space Science Research in India" (in commemoration of the 75th Birth Anniversary of Dr. Vikram Sarabhai), to reach before February 28, 1995. The paper should conform to the IJRSP format which I am herewith enclosing for your reference.

With best regards,

Yours sincerely

(BV KRISHNA MURTHY)

To
Prof B.V. Srikantan
National Institute of Advanced Studies
Indian Institute of Science Campus
BANGALORE - 560012

INSTRUCTIONS TO CONTRIBUTORS

General

Contributions should reflect original work done. They should neither have been published already nor be under consideration for publication elsewhere. The manuscripts should be typewritten only on one side of good quality thesis paper, in double space and with adequate margin on all four sides of the text matter. The original and two copies thereof, all the copies complete in all respects including abstract, figures, etc., are to be submitted.

Contributions should clearly bring out the justification for undertaking the investigation and outline the exact scope of the study. Elaborate and long introductions should be avoided. Minimum essential experimental details which would enable anyone to repeat the work, should be included. Accuracy of measurements, and limitations of the results and conclusion should be clearly stated. Discussion should be limited to the strictly essential and should not repeat lengthy statements of facts/observations, which are obvious from the tabular and graphical data presented. A separate section on 'Conclusions' can be included only when they are of outstanding significance. Mere observation of trends of results should be distinguished from firm conclusions. References given at the end should be strictly limited to the essential minimum. Large-scale reproduction of all references given in another single source should be avoided unless highly relevant.

Papers must be written in clear and concise English. Good attention to spelling and grammar should be given. Standard international nomenclature should be followed in giving names of chemical compounds. Standard abbreviations for units of measurement should be used in the text, tables and illustrations. The abbreviations should be used without fullstops.

Title—The title should be neither too brief/general nor unnecessarily long. It should reflect the content of the paper so as to derive the maximum advantage in indexing and information retrieval. A short title for use as running title should also be supplied. If a paper forms part of a series, a subtitle indicating the aspects of the work covered in the paper should be provided.

Abstract—The abstract should indicate the scope of the work and the principal findings of the paper. It should not exceed 3% of the length of the paper and, barring exceptional cases, it should not exceed 200 words. The abstract should be prepared in such a form that abstracting periodicals can use it without modification.

The abstract including the title of the paper, authors' names and affiliations, a short running title and relevant footnotes, if any, should be typed on separate sheet.

Data—Only such primary data as are essential for understanding the discussion and the main conclusions emerging from the study should be included. All such secondary data as are of interest to a specific category of readership may, if necessary, be deposited in the editorial office (or retained by the authors) for supply on demand. A footnote to this effect may be inserted at a suitable place in the paper.

Mathematical Portions—Special attention should be given to the mathematical portions of the paper. Equations must be well separated from the text and written clearly with good separation between the successive lines. The usual norms of breaking long mathematical expressions may be adhered to. Equations should be numbered consecutively in Arabic numerals with the number in parentheses near the right hand margin. Superscripts and subscripts should be clearly indicated in pencil by V and Λ signs, respectively. Capital and small letters, particularly of the same letter when both occur, as well as letters or symbols likely to be confused one for the other, should be clearly distinguished. Special characters (e.g. Greek, Script, vector, tensor, matrix, etc.) required must be indicated by marginal notes. Letters and symbols which should appear in bold face must be clearly indicated. To simplify typesetting: (i) long and complicated mathematical expressions which are frequently repeated should be replaced with single letter/symbol, without clashing with the others used in the paper; (ii) the "exp" form of complex exponential functions should be used; and (iii) to simplify fractions, the solidus (/) is to be used and fractional exponents are to be used instead of root signs, e.g.

$$\text{write } \left[4\omega_{pl} K_{3\lambda}^2 / (\bar{\omega} K_D^2) \right]^{1/2} \quad \text{and not } \sqrt{\frac{4\omega_{pl} K_{3\lambda}^2}{\bar{\omega} K_D^2}}$$

$$\text{write } \exp \{ -i\omega_0 (t_1 - t_2)/2 \} \quad \text{and not } e^{-i\omega_0(t_1 - t_2)/2}$$

Tables—Tables should be typed on separate sheets of paper without any text matter on the page. They should be numbered consecutively in Arabic numerals and should bear brief titles. *Column headings should be brief.* Units of measurement should be abbreviated and placed below the headings. Nil results should be indicated and distinguished clearly from absence of data. Presentation of the same data both in the form of tables and graphs should be avoided. Inclusion of structural formulae inside the tables should be avoided as far as possible. Tables should be referred to in the text by numbers and not by terms like 'above', 'below', 'preceding' or 'following'.

Illustrations—All illustrations must be numbered consecutively in Arabic numerals. Captions and legends to the figures should be self-explanatory and should be typed on a separate sheet of paper and attached at the end of the manuscript. Line drawings should be made with Indian ink on white drawing paper (preferably Bristol board), cellophane sheet or tracing cloth. Histograms, probability variation curves, etc. may be prepared with hatched lines instead of thick black ink. In addition to the originals, a set of blue-prints or photostat copies should be sent. For satisfactory reproduction, the graphs and line drawings should be drawn to approximately twice the printed size.

The lettering should be uniform, preferably in stencil, so as to be not less than 2 mm after reduction widthwise to 3" or 6" as required. The size of geometrical shapes (used to distinguish different graphs), dots, lines, etc. should be sufficiently large to permit the necessary reduction without

loss of detail. In the case of *photographs*, prints must be on *glossy paper and contrasty*. If an illustration is taken from another publication, reference to the source should be given and prior permission secured. Illustrations should be protected by thick cardboard packing against creases, folds and broken corners during transit. Illustrations should be referred to in the text by numbers and not by terms like 'above', 'below', 'preceding' or 'following'.

Spectra, ionograms, echograms, etc. should be included only if they are essential to the discussion; otherwise only significant numerical data should be included in the text.

References—The list of references should be prepared strictly in accordance with the style followed in the journal. In the text, references to literature should be numbered consecutively, in the order of their first occurrence, and should be indicated by superscripts at the relevant places; as far as possible the placement of references on numerals or other symbols should be avoided; in such cases the reference may be given in parenthesis in running text, e.g. "this yielded for n a value of 2.3 (Ref. 5)". Full bibliographic details for all the references mentioned in the text should be listed in serial order at the end of the paper.

In citing references to research papers, names and initials of authors should be followed, in order by the title of the periodical in the abbreviated form (underlined), the volume number (two lines underneath), the year within parenthesis and the page reference [e.g. Rastogi R G, *Indian J Radio & Space Phys*, 9 (1980), 173.]. For names of periodicals, the abbreviations followed by the *Physics Abstracts* should be used. For periodicals not covered by *Physics Abstracts*, the title abbreviations should be according to the *Bibliographic Guide for Editors and Authors*, 1974, published by the American Chemical Society, Washington DC, USA; additionally the country from which the journal is published should be given in parenthesis immediately after the title abbreviation. If a paper has been accepted for publication, the names of the authors and the journal should be given followed by the words "in press" [e.g. Mitra A P, *J Atmos & Terr Phys (GB)*, 37 (1975), in press.].

In the list of references, unpublished work, accepted papers in press and personal communications should be clearly distinguished.

Even if a reference contains more than two authors, the names of all the authors with their respective initials should be given. The abbreviations *et al.*, *idem* and *ibid* should be avoided.

Reference to a book should include, in the following order: names and initials of authors, the title of the book (underlined), name of publisher and place of publication within

parenthesis and year [e.g. Smylie D E, Clarke G K C & Ulrich J J, *Methods in computational physics* (Academic Press Inc., New York), 1973, 391.]. If the reference is to the work of an author published in a book by a different author or edited by a different person, the fact that it is cited from the source book should be clearly indicated [e.g. Culhane J L, cited in *Supernovae*, edited by D N Schramm (D Reidel), 1977.].

Proceedings of conferences and symposia should be treated in the same manner as books. Reference to a paper presented at a conference, the proceedings of which are not published, should include, in the following order, names and initials of authors, title of the paper (underlined), name of the conference, place where the conference was held and date (Sen A K & Trehan S K, *Field changes of the sky wave component due to a local broadcast signal during different geophysical phenomena*, Paper presented to the Symposium on Earth's Near Space Environment, National Physical Laboratory, New Delhi, 18-21 Feb. 1975).

Reference to a thesis should include the name of the author, title of the thesis (underlined), university or institution to which it was submitted and year of submission (e.g. Burg J P, *Maximum entropy spectral analysis*, Ph D thesis, Stanford University, California, 1975.).

Reference to a patent should include names of patentees, country of origin (underlined) and patent number, the organization to which the patent has been assigned within parenthesis, data of acceptance of the patent and reference to an abstracting periodical where available [Labe M M, *US Pat.* 4,066,567 (to Temple University), 3 January 1978; *Chem Abstr.* 88 (No.20X1978), 138350 n.].

Abbreviations, symbols and units—These should conform to the style of the journal.

Frequently repeated combinations of words, e.g. sudden ionospheric disturbance (SID), point discharge current (PDC), gradual rise and fall (GRF), etc. should be abbreviated subsequently, indicating the abbreviated form in parenthesis, as shown, at the place of their first occurrence.

Nomenclature—Where too many symbols are used in the text, a section entitled 'Nomenclature', explaining the significance of the various symbols, may be given and placed just above the Acknowledgement section.

Acknowledgement—Acknowledgements should not be exuberant and must be made only to real assistance rendered in connection with the scientific work reported in the paper.

Appendixes—Appendixes, typed on separate sheets, should be numbered consecutively, in Arabic numerals, in the order of their occurrence in the text, and should be placed at the very end of the paper.