

# *ASNT Manual for Authors of Technical Papers*

Guidance to Authors  
In Preparing Technical Papers  
For *Materials Evaluation*

*Materials Evaluation*  
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## Guidance to Authors in Preparing Technical Papers for *Materials Evaluation*

ASNT solicits and encourages the preparation of original papers on NDT research, engineering investigations and applications, and arranges for publication in *Materials Evaluation*.

### About *Materials Evaluation*

The journal's technical papers are refereed by experts in their fields, and the papers are abstracted by major technical abstracting services, including *Abstract Bulletin of the Institute of Paper Science and Technology*; *Acoustic Abstracts*; *Applied Mechanics Review*; *Applied Science and Technology Index*; *Art and Archaeology Technical Abstracts*; *Cadscan*; *Ceramics Abstracts*; *Chemical Abstracts*; *Current Contents*; *Engineered Materials Abstracts*; *Engineering Index*; *Highway Research Info Service*; *INSPEC*; *ISMEC*, *Mechanical Engineering Abstracts*; *Index to Scientific Reviews*; *International Aerospace Abstracts*; *Leadscan*; *Metals Abstracts*; *Metals Information*; *Nondestructive Testing Information Analysis Center*; *Petroleum Abstracts*; *Science Abstracts (Physics Abstracts, Electrical and Electronics Abstracts, and Computer and Control Abstracts)*; *Science Citation Index*; *Solid State and Superconductivity Abstracts*; *World Aluminum Abstracts*; and *Zincscan*.

This manual is intended to assist prospective authors in the organization and writing of technical papers that the Society can accept. The cost of publication permits the acceptance of only those papers having timely and significant information that is presented directly and understandably.

### The Parts of a Paper

*Title* — The title of the paper should give an accurate description of the work in a minimum number of words, and to permit proper cataloging and indexing.

*Abstract* — A brief abstract (100 to 200 words) eases reading of the entire paper, gives an understanding of its contents, and indicates the intention and scope of the paper.

*Keywords*: The keywords are a short list of the most important terms and topics of the paper, which permit proper cataloging, indexing, and abstracting.

*Introduction* — Every paper should contain at least one or two introductory paragraphs stating the paper's subject, purpose, scope of coverage, and structure. Background or historical information may be included if essential to the reader's understanding of the subject.

*Body* — The use of trade names should be avoided. If, however, it is necessary to use a trade name, please supply us with the name and address of the manufacturer.

*Conclusion* — Papers should have at least one or two paragraphs of summary or concluding information, analyzing the results of the work and indicating any need for further work on the subject.

## Special Paper Elements

*Appendices* — Appendices are used to present supplementary material that (a) is necessary for completeness but that, inserted in the main body of the paper, would detract from orderly and logical presentation; or (b) may be valuable only for the specialist in the field.

*Equations* — Make sure that all equations appear in the right spot on the review copies and that all superscripts, subscripts, etc., appear correctly. Clearly label all vectors and tensors. All equations will be reset by editorial staff, so strive for accuracy and clarity rather than style.

*Spelling* — Authors should spell out all acronyms or initialisms upon first use in the paper. Examples include CVD, MFL, NASA, NIST, OCTG, and OD. Two-letter abbreviations are used for all NDT methods: AE, ET, IR, LT, MT, PT, RT, UT, VA, VT. American spelling is used (center not centre, color not colour, pressurize not pressurise). Recommended spellings of some frequently used words include disk, gage, and X-ray (X-Ray in titles and headings only).

*Symbols* — Check carefully that all symbols in your paper are adequately defined and consistently used.

*Tables* — Each table should include a table number, title, appropriate headings, and body copy. Data may be organized in an electronic table format (such as Word) or by tabbing between columns. Keep the formatting very simple (no rules or shading).

*Units* — The SI system, a modern metric system, is used in all ASNT publications, including *Materials Evaluation*. The SI unit is followed by English units, as shown here: 1 m (3.2 ft).

## Illustrations

*Materials Evaluation* accepts papers up to 5000 words and containing up to 10 illustrations. Permission must be obtained if more than 10 illustrations are used. All illustrations should be numbered in consecutive order as they relate to the text. Include in the text a discussion of the significance of each table or illustration. Captions must include the figure number. Please refer to figures in the text by “Figure 1,” “Figure 2b,” etc.

When sending electronic files after publication has been approved, use tiff, jpeg, or eps file formats (minimum dpi 300; maximum 2450) and send illustrations on a separate disk from the text. Do not embed or anchor illustrations within the text. Photographs to be submitted should be black and white prints on glossy paper. Slides are not accepted. Color illustrations will be considered for publication only if the use of color is necessary for an understanding of the paper.

## Publication Procedure

The points of most technical papers can fit within a limit of 5000 words and 10 illustrations or parts thereof. This is particularly true if adequate references are used to supplement the material in the paper. Papers within these limits may be submitted, and shorter papers are encouraged. If it be impossible to comply with these limits, authors should consider preparing the material as two or more separate papers.

Papers should be submitted to the Editor of *Materials Evaluation* using the ASNT Headquarters address. Four copies of each paper are required; each copy should be complete with illustrations. One set of illustrations must be camera ready, but the others may be photocopies. Receipt of the paper by ASNT will be acknowledged.

Manuscripts must be in English, typed or printed on one side of the paper only, and double spaced with a 25.4 mm (1 in.) margin on both sides. Pages should be numbered. The complete address of the corresponding author should be noted clearly on the manuscript. The author should keep the Editor informed as to changes of address.

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Proofs of the paper will be sent to the author for review before publication. Proofs of illustrations are not usually provided.

## Awards to Authors

Beginning in 1993, two **Outstanding Paper Awards**, one for *Materials Evaluation* and one for *Research in Nondestructive Evaluation*, replaced the **Achievement Award**. The purpose of these two awards is to encourage a high degree of effort toward technical, educational, or managerial achievement in NDT through publication in these ASNT journals. Recipients of the award are selected on the merit of written contributions published by the Society during the previous calendar year. Selection is based equally on the material's originality, usefulness, and clarity, and on the appropriateness and accuracy of its supporting material.

## Prior Outstanding Paper Awards

1993	Peter B. Nagy and Laszlo Adler
1994	Richard Dewhurst, Ruhua He, and Qing Shan
1995	Nachappa Gopalsami, Sasan Bakhtiari, Stephen L. Dieckman, Apostolos C. Raptis, and Matthew J. Lepper
1996	D.A. Oursler and J.W. Wagner
1997	Raymond E. Schramm, Jacek Szelazek, and A. Van Clark, Jr.
1998	A.D. Degtyar, Anton I. Lavrentyev, and S.I. Rokhlin