[[1]](#footnote-1)

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This will contain names of the members FY CP1 group starting with name of the guide **without** any prefix like Prof. / Dr. / Sir / Madam / Mr. / Mrs. / Ms. / Sou. etc. followed by the Group Leader, AGL and next members in this format ---- for e.g. Sunil M. Patil, Radhika K. Sharma, K.V. Ramkumar ….. (14 font, Times New Roman, single spacing.)

Department of Engineering, Sciences and Humanities (DESH)

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# INTRODUCTION

T

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Here briefly mention in your own language, the latest work done till date related to your the **CP1** project topic; already published in different research papers (Minimum 6/7 papers).Search on internet, discuss with your guide for the same and cite the work done earlier; appropriately in the given format provided in reference. (You can cite a research journal paper, conference paper, patent, an article, a book, website etc)

# Methodology/Experimental

Choose any one from *A,B,C given below as applicable to your Project*

## Materials/Components/Flowchart/Block Diagram/Theory

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## Synthesis/Algorithm/Design/Method

Gljkdgji dfgjidfp pgjpjk ghpojkfhp pfghp piojgh lijghopoj lifjghij lijfghoij lkgjhoidjfgh ldigjolijdgh lkjndghojd lkjghlkjh lkjhjkhg

## Characterization/Pseudo Code/ Testing

Gljkdgji dfgjidfp pgjpjk ghpojkfhp pfghp piojgh lijghopoj lifjghij lijfghoij lkgjhoidjfgh ldigjolijdgh lkjndghojd lkjghlkjh lkjhjkhg

# Results and Discussions

Gljkdgji dfgjidfp pgjpjk ghpojkfhp pfghp piojgh lijghopoj lifjghij lijfghoij lkgjhoidjfgh ldigjolijdgh lkjndghojd lkjghlkjh lkjhjkhg

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Fig. 1. Magnetization as a function of applied field. Note that “Fig.” is abbreviated. There is a period after the figure number, followed by two spaces. It is good practice to explain the significance of the figure in the caption.

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Use either SI (MKS) or CGS as primary units. (SI units are strongly encouraged.) English units may be used as secondary units (in parentheses). **This applies to papers in data storage.** For example, write “15 Gb/cm2 (100 Gb/in2).” An exception is when English units are used as identifiers in trade, such as “3½ in disk drive.” Avoid combining SI and CGS units, such as current in amperes and magnetic field in oersteds. This often leads to confusion because equations do not balance dimensionally. If you must use mixed units, clearly state the units for each quantity in an equation.

The SI unit for magnetic field strength *H* is A/m. However, if you wish to use units of T, either refer to magnetic flux density *B* or magnetic field strength symbolized as µ0*H*. Use the center dot to separate compound units, e.g., “A·m2.”

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## Figures and Tables

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Color printing of figures is available, but is billed to the authors (approximately $1300, depending on the number of figures and number of pages containing color). Include a note with your final paper indicating that you request color printing. **Do not use color unless it is necessary for the proper interpretation of your figures.** If you want reprints of your color article, the reprint order should be submitted promptly. There is an additional charge of $81 per 100 for color reprints.

Figure axis labels are often a source of confusion. Use words rather than symbols. As an example, write the quantity “Magnetization,” or “Magnetization *M*,” not just “*M*.” Put units in parentheses. Do not label axes only with units. As in Fig. 1, for example, write “Magnetization (A/m)” or “Magnetization (Am−1),” not just “A/m.” Do not label axes with a ratio of quantities and units. For example, write “Temperature (K),” not “Temperature/K.”

Multipliers can be especially confusing. Write “Magnetization (kA/m)” or “Magnetization (103 A/m).” Do not write “Magnetization (A/m) × 1000” because the reader would not know whether the top axis label in Fig. 1 meant 16000 A/m or 0.016 A/m. Figure labels should be legible, approximately 8 to 12 point type.

## References

Number citations consecutively in square brackets [1]. The sentence punctuation follows the brackets [2]. Multiple references [2], [3] are each numbered with separate brackets [1]–[3]. When citing a section in a book, please give the relevant page numbers [2]. In sentences, refer simply to the reference number, as in [3]. Do not use “Ref. [3]” or “reference [3]” except at the beginning of a sentence: “Reference [3] shows ... .” Unfortunately the IEEE document translator cannot handle automatic endnotes in *Word*; therefore, type the reference list at the end of the paper using the “References” style.

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Define abbreviations and acronyms the first time they are used in the text, even after they have already been defined in the abstract. Abbreviations such as IEEE, SI, ac, and dc do not have to be defined. Abbreviations that incorporate periods should not have spaces: write “C.N.R.S.,” not “C. N. R. S.” Do not use abbreviations in the title unless they are unavoidable (for example, “IEEE” in the title of this article).

## Equations

Number equations consecutively with equation numbers in parentheses flush with the right margin, as in (1). First use the equation editor to create the equation. Then select the “Equation” markup style. Press the tab key and write the equation number in parentheses. To make your equations more compact, you may use the solidus ( / ), the exp function, or appropriate exponents. Use parentheses to avoid ambiguities in denominators. Punctuate equations when they are part of a sentence, as in

(1)

Be sure that the symbols in your equation have been defined before the equation appears or immediately following. Italicize symbols (*T* might refer to temperature, but T is the unit tesla). Refer to “(1),” not “Eq. (1)” or “equation (1),” except at the beginning of a sentence: “Equation (1) is ... .”

## Other Recommendations

Use one space after periods and colons. Hyphenate complex modifiers: “zero-field-cooled magnetization.” Avoid dangling participles, such as, “Using (1), the potential was calculated.” [It is not clear who or what used (1).] Write instead, “The potential was calculated by using (1),” or “Using (1), we calculated the potential.”

Use a zero before decimal points: “0.25,” not “.25.” Use “cm3,” not “cc.” Indicate sample dimensions as “0.1 cm × 0.2 cm,” not “0.1 × 0.2 cm2.” The abbreviation for “seconds” is “s,” not “sec.” Do not mix complete spellings and abbreviations of units: use “Wb/m2” or “webers per square meter,” not “webers/m2.” When expressing a range of values, write “7 to 9” or “7-9,” not “7~9.”

A parenthetical statement at the end of a sentence is punctuated outside of the closing parenthesis (like this). (A parenthetical sentence is punctuated within the parentheses.) In American English, periods and commas are within quotation marks, like “this period.” Other punctuation is “outside”! Avoid contractions; for example, write “do not” instead of “don’t.” The serial comma is preferred: “A, B, and C” instead of “A, B and C.”

If you wish, you may write in the first person singular or plural and use the active voice (“I observed that ...” or “We observed that ...” instead of “It was observed that ...”). Remember to check spelling. If your native language is not English, please get a native English-speaking colleague to proofread your paper.

# Some Common Mistakes

The word “data” is plural, not singular. The subscript for the permeability of vacuum µ0 is zero, not a lowercase letter “o.” The term for residual magnetization is “remanence”; the adjective is “remanent”; do not write “remnance” or “remnant.” Use the word “micrometer” instead of “micron.” A graph within a graph is an “inset,” not an “insert.” The word “alternatively” is preferred to the word “alternately” (unless you really mean something that alternates). Use the word “whereas” instead of “while” (unless you are referring to simultaneous events). Do not use the word “essentially” to mean “approximately” or “effectively.” Do not use the word “issue” as a euphemism for “problem.” When compositions are not specified, separate chemical symbols by en-dashes; for example, “NiMn” indicates the intermetallic compound Ni0.5Mn0.5 whereas “Ni–Mn” indicates an alloy of some composition NixMn1-x.

Be aware of the different meanings of the homophones “affect” (usually a verb) and “effect” (usually a noun), “complement” and “compliment,” “discreet” and “discrete,” “principal” (e.g., “principal investigator”) and “principle” (e.g., “principle of measurement”). Do not confuse “imply” and “infer.”

Prefixes such as “non,” “sub,” “micro,” “multi,” and “"ultra” are not independent words; they should be joined to the words they modify, usually without a hyphen. There is no period after the “et” in the Latin abbreviation “*et al.*” (it is also italicized). The abbreviation “i.e.,” means “that is,” and the abbreviation “e.g.,” means “for example” (these abbreviations are not italicized).

An excellent style manual and source of information for science writers is [9]. A general IEEE style guide, *Information for Authors,* is available at <http://www.ieee.org/organizations/pubs/transactions/information.htm>

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# Limitations

‘skfl’m, jk ;tjkd ;ljkth ;lk;okh ;lkghlk ‘lsdfnm ;’lm, ‘;lgth ‘skfl’m, ljkth ;lk;okh ;lkghlk ‘lsdfnm ;’lm, ‘;lgth ‘skfl’m,

ljkth ;lk;okh ;lkghlk ‘lsdfnm ;’lm, ‘;lgth ‘skfl’m, ljkth ;lk;okh ;lkghlk ‘lsdfnm ;’lm, ‘;lgth ‘skfl’m, ljkth ;lk;okh ;lkghlk ‘lsdfnm ;’lm, ‘;lgth ‘skfl’m, ljkth ;lk;okh ;lkghlk ‘lsdfnm ;’lm, ‘;lgth ‘skfl’m,

# Future Scope

Dsflhljk ;tjkd ;ljkth ;lk;okh ;lkghlk ‘lsdfnm ;’lm, ‘;lgth ‘skfl’m, jk ;tjkd ;ljkth ;lk;okh ;lkghlk ‘lsdfnm ;’lm, ‘;lgth ‘skfl’m, jk ;tjkd ;ljkth ;lk;okh ;lkghlk ‘lsdfnm ;’lm, ‘;lgth ‘skfl’m, ljkth ;lk;okh ;lkghlk ‘lsdfnm ;’lm, ‘;lgth ‘skfl’m,

ljkth ;lk;okh ;lkghlk ‘lsdfnm ;’lm, ‘;lgth ‘skfl’m, ljkth ;lk;okh ;lkghlk ‘lsdfnm ;’lm, ‘;lgth ‘skfl’m, ljkth ;lk;okh ;lkghlk ‘lsdfnm ;’lm, ‘;lgth ‘skfl’m, ljkth ;lk;okh ;lkghlk ‘lsdfnm ;’lm, ‘;lgth ‘skfl’m,

# Conclusion

Although a conclusion may review the main points of the paper, do not replicate the abstract as the conclusion. A conclusion might elaborate on the importance of the work or suggest applications and extensions.

Appendix

Appendixes, if needed, appear before the acknowledg-ment. For e.g. reference charts, graphs, tables, data sheets, manuals, brochures etc.

Acknowledgment

The preferred spelling of the word “acknowledgment” in American English is without an “e” after the “g.” Use the singular heading even if you have many acknowledgments. Avoid expressions such as “One of us (S.B.A.) would like to thank .” Instead, write “F. A. Author thanks ..” **Sponsor and financial support acknowledgments are placed in the unnumbered footnote on the first page**.

References

1. G. O. Young, “Synthetic structure of industrial plastics (Book style with paper title and editor),” in *Plastics*, 2nd ed. vol. 3, J. Peters, Ed. New York: McGraw-Hill, 1964, pp. 15–64.
2. W.-K. Chen, *Linear Networks and Systems* (Book style)*.* Belmont, CA: Wadsworth, 1993, pp. 123–135.
3. H. Poor, *An Introduction to Signal Detection and Estimation*. New York: Springer-Verlag, 1985, ch. 4.
4. B. Smith, “An approach to graphs of linear forms (Unpublished work style),” unpublished.
5. E. H. Miller, “A note on reflector arrays (Periodical style—Accepted for publication),” *IEEE Trans. Antennas Propagat.*, to be published.
6. J. Wang, “Fundamentals of erbium-doped fiber amplifiers arrays (Periodical style—Submitted for publication),” *IEEE J. Quantum Electron.*, submitted for publication.
7. C. J. Kaufman, Rocky Mountain Research Lab., Boulder, CO, private communication, May 1995.
8. Y. Yorozu, M. Hirano, K. Oka, and Y. Tagawa, “Electron spectroscopy studies on magneto-optical media and plastic substrate interfaces (Translation Journals style),” *IEEE Transl. J. Magn.Jpn.*, vol. 2, Aug. 1987, pp. 740–741 [*Dig. 9th Annu. Conf. Magnetics* Japan, 1982, p. 301].
9. M. Young, *The Techincal Writers Handbook.* Mill Valley, CA: University Science, 1989.
10. J. U. Duncombe, “Infrared navigation—Part I: An assessment of feasibility (Periodical style),” *IEEE Trans. Electron Devices*, vol. ED-11, pp. 34–39, Jan. 1959.

1. [↑](#footnote-ref-1)
2. . [↑](#footnote-ref-2)