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ABSTRACT

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Keywords: Refrigeration, Carbon Dioxide, Compressors, COP, Evaporators, Energy Efficiency

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The main body of the paper will consist of one or more main sections describing experimental designs, test procedures, theoretical consideration, and results. Label each section with an appropriate heading. Each section should describe the test equipment, measurements, observations, and mathematics needed to perform the experiments. Case histories, systems descriptions, or applications should contain original aspects, out-of-standard performances or noteworthy details that should be clearly identified and described. Discussion of the results, qualifications, limits to the accuracy of tests, and calculations should also be included in this part.

General Format and Page Limit

Please adhere to the following order: Title, Author(s) Information, Abstract, Introduction, Main Text (one or more sections and subsections, as appropriate), Conclusions (as appropriate), Acknowledgements, Nomenclature, References, Appendix(es). Papers should be prepared on a word processor. The text is to be single-spaced. Leave a line between paragraphs. Do not insert any blank lines between headings and the main text. The pre-defined paragraph styles include all necessary blank spaces around the headings. The template is prepared in Calibri. Use full justification for all text. The entire manuscript (i.e., including abstract, text, figures, and tables but **excluding references**) must contain a maximum number of 4,000 words for conference papers and a maximum number of 5,500 words for a keynote paper. Any manuscript having excess pages will not be published. The footer will contain the conference information. Please use the footer as it appears on this template.

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The text area is to be 17.0 cm wide by 25.2 cm high. Table 1 presents the margin settings for A4 size paper (21 x 29.7 cm). It is important to adhere to these margins to ensure that your manuscript prints properly on the paper format from the Conference Proceedings.

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Each table should be numbered (Table 1, Table 2, etc.), with the caption being placed above the table. Each figure should be numbered (Figure 1, Figure 2, etc.), with the caption being placed below the figure. In the text, figures and tables should be referred to as follows: “Figure 1 shows the relationship …” or “the measured values are given in Table 1.” Figures and tables should be inserted into the text soon after they are first referenced (as illustrated by Table 1).

Chart, bar chart, histogram

Description automatically generated

Figure 1: Monthly electricity consumption

Equations and Symbols

Use the “Equation Editor” whenever possible. Equations should be centered, with the equation number flush with the right margin. If you are using the “IIR equation” style, this is accomplished by inserting tab characters before the equation number. An equation should be cited in the text with its number, for example, “…as shown in Eq. (1)”. Equations should be separated from the text above and below by a blank space, already predefined in the style.

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Eq. (1)

where p is pressure in kPa, T is temperature in K, V is molar volume in m3.mol–1, and R is the gas constant. If few equations are used, the definition of symbols may follow each equation. Otherwise, the manuscript shall include a Nomenclature section where all symbols and abbreviations are explained. Use the international system of units (SI). Avoid use of the solidus (/), but present quantities in the denominator always with negative exponents. The units used should be given, if appropriate. For the Nomenclature section only, a two-column format may be used, if desired, to save space.

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CONCLUSIONS

The Conclusions section should list the major conclusions of the work and summarize the significance of the paper as clearly and concisely as possible.

ACKNOWLEDGEMENTS

A short section may acknowledge special assistance, such as financial aid, help of guiding technical committees, individuals, or other groups.

NOMENCLATURE

|  |  |  |
| --- | --- | --- |
| *p* | pressure (kPa) [Text Normal] | *R* molar gas constant (8.314472 J×mol–1×K–1) |
| *T* | temperature (K) | *V* molar volume (m3×mol-1) |

REFERENCES

Bibliographical sources should be cited within the paper by giving the last name(s) of the author(s) and the year of publication. The year should always be listed within parentheses. Author names may be listed within the narrative text or within parentheses, preceding the year of publication. The citations for Herbe and Lundqvist (1997) and Pearson (1996) provide examples for the format for a journal article and conference proceeding, or the citations could be (Herbe and Lundqvist, 1997) and (Pearson, 1996). In the case of a source with three or more authors, the citation could be Hirschfelder et al. (1967) or (Hirschfelder et al., 1967); only the name of the first author is cited in the text, but all authors are listed in the entry in the References section. The References section should be alphabetized by the last name of the first author.

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Herbe, L., Lundqvist, P., 1997. CFC and HCFC refrigerants retrofits. Int. J. Refrigeration 20(1), 49-54. [Article from a periodical]

Janna, S.W., 1986. Engineering Heat Transfer. PWS Publishers, Boston, 769 p. [Book]

Pearson, S.F., 1996. Uses of Hydrocarbon Refrigerants. Proceedings of the IIR Conference on Applications for Natural Refrigerants, Aarhus, Denmark, IIF/IIR, 439-446. [Paper published in conference proceedings]