

Comparing Indoor Air Quality Between Student Dwellings and Low-Income Communities

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SUMMARY (Times New Roman Bold 12 pt, UPPERCASE, style: Heading 1)

Prepare an informative summary of up to 150 words based on the completed paper. The summary should provide information on the purpose of the study, methods or procedures, results, discussion and concluding remarks or interpretation of the results. If feasible, it should also indicate the meaning or importance of the work. It should be a self-contained statement giving the reader a clear indication of the purpose and content of the paper. *(Leave one blank line before all new headings throughout)*

KEYWORDS

(Select up to five terms or brief phrases, which describe the content of your paper. Phrases should not contain more than three words. These words should not be identical to words used in the title of the paper.)

1 INTRODUCTION

The introduction should present the practical and scientific background for the research topic, its fit into the broad field of Indoor Air science, the hypothesis(es) tested and a clear statement of the objective(s) of the work. *(Leave one blank line between paragraphs throughout)*

The **maximum length of extended abstracts is TWO pages** including all text, figures and tables and their captions, and references. The length of the written paper will have no impact on the allocation of papers to oral or poster presentations. Please use the format described on these pages. The accepted file format is MS Word .doc or .docx and the file should not exceed 5 megabytes.

All text should be justified Times New Roman 12 pt (style: Normal). Use 12 pt **UPPERCASE** bold font for main headings (style: **HEADING 1**) and 12 pt normal lowercase bold font for 2nd level headings (style: **Heading 2**). Do not use page numbers.

Paper size should be set at ISO A4 [210x297 mm]. In MS Word you can set paper size from File menu and the drop down to Page Set-up. Set margins on all sides [top, bottom, left and right] at 25 mm.

All contributions shall be submitted using the manuscript submission system, accessible through the 'Submissions' heading on www.indoorair2022.org page. Details about the submission and review process as well as deadlines for submission, review, resubmission and final decision can be found on the conference website.

All accepted papers will be published in the digital conference proceedings, if at least one of the authors has registered for the conference before June 1st 2022. The proceedings will first be available only for ISIAQ members and will be open for all after two years. The authors of the

papers are free to distribute their paper from the time of publication. Each registered participant can have a maximum of two platform presentations.

2 MATERIALS/METHODS

This section should describe the study design, materials, measuring methods, procedures and statistical methods. Measurement and statistical methods should be mentioned, but for routine methods a reference rather than a description of the method is recommended. Certain kinds of research (e.g. policy analysis) should instead include substantial references to support methods of analysis. Case studies and practical applications of routine methods should include a reference for the methods, and the full paper must indicate the new, or unique, application of the routine method.

The extended abstracts must provide **new** information on scientific validation, comparative testing, research, development or policy. Please note that **commercialism is absolutely not allowed**. **ISIAQ also does not accept papers with show clear connections to the oil and smoking industry. ISIAQ is not a political organization and tries to remain independent at every case.** Papers that are deemed too commercial will not be accepted for publication or presentation.

3 RESULTS *(Leave blank line before subheadings)*

The Results section should describe the study outcomes. If desired, the Results section may be combined with the Discussion section, for a synergistic Results and Discussion section.

Presentation of data (Times New Roman Bold 12 pt, lowercase, style: Heading 2)

Wherever possible, experimental data should be presented with uncertainty/error bounds and a statement of how these bounds were determined should be presented.

Tables and illustrations

In general, figures and other illustrations should be used when they are shorter, clearer, or more effective than explanations in words. If you use shading or color, please check the reproduction by making a photocopy. Avoid tables and figures which duplicate each other or present superfluous data. If you use a figure, do not include a table for the same information. Substitute a few typical results for lengthy tables when practical. All tables must have suitable captions above the table. Use single line border style tables as presented in Table 1. Tables and figures should be inserted in the text near to the place they are mentioned the first time. Do not extend the tables or figures beyond the margins. You may use 11 pt. font size for tables.

Table 1. Climate in Brisbane. (You may use 11 pt font size for table contents)

Parameter	June	July	August
Mean max. temp. (°C)	21	21	23
Max. temp. (°C)	27	28	28
Sunshine hours	200	245	270
Precipitation (mm)	60	51	45

Insert figures as ‘picture’ (e.g. wmf or jpg), not as ‘objects’ or spreadsheets. Reduce the resolution of photos etc. to 72 pixels/inch. All figures must have suitable captions below the figure. *(Leave one blank line before and after tables, figures and equations)*



a)

b)

Figure 1. An example of a figure. a) ISIAQ logo, b) INDOOR AIR 2022 logo.

Equations

Equations should be formatted using an equation editor, indented (1 cm) and numbered at the right margin, with symbols (and their units) introduced immediately after the equation the first time that they appear in the text, as in the example below (*Leave one blank line before and after equations*):

$$E[n] = \frac{\sigma_{\tau}}{\pi\sigma_T} \exp\left(-\frac{1}{2} \frac{(T - \mu_T + L)^2}{\sigma_T^2}\right) t \quad (1)$$

where μ_T is the mean value of the temperature and σ_T is the standard deviation of the temperature, σ_i is the standard deviation of the rate of change of the temperature, and n is the number of level crossings. Use *italic symbols* for quantities and variables. Punctuate equations with commas or periods when they are part of a sentence.

Names and units

Only the metric system (SI units) should be used. Names of micro-organisms should be italic (e.g. *E. coli*). Frequently used technical terms may be abbreviated after the first time they are mentioned: "Semi-volatile organic compounds (SVOCs) can..."

4 DISCUSSION

The most important findings of the paper should be put into perspective with prior knowledge in the literature. Possible sources of error that may affect the interpretation of the results should also be discussed.

The discussion should also present the authors' interpretation of the meaning of the results. The Discussion section may be combined with the Results section for a synergistic Results and Discussion section if desired.

5 CONCLUSIONS

Do not simply repeat results or discussion, but provide some overall observations regarding the findings, such as their applicability in other settings or applications. This section should tell the reader what the importance of the work is for others including researchers, building designers, owners and operators, or occupants.

ACKNOWLEDGEMENT

A short section may acknowledge assistance. Sources of financial aid should **always** be noted.

6 REFERENCES

Due to space constraints authors are encouraged to use reference judiciously in the main body of the paper. When references are used, cite the source by enclosing the author's name and the date of the paper in parentheses and inserting this in the text within parentheses. (*NOTE:* there is a comma between the name and date). Two authors' names may be included; for three or more, use "et al".

For example:

.... a feeling of thermal comfort is related to air speed (Kimura and Tanabe, 1993; Hanzawa et al. 1982). ... of such effect were clearly defined (Fanger, 1970); however, ...

If the author's name has just been mentioned, only the date needs to be inserted within parentheses.

For example:

.... were clearly defined by Fanger (1970); however, ...

If the "author" is an organization, use initials.

For example:

ASHRAE (1992) has used the work from other people (Fanger, 1970, 1982; Hanzawa et al. 1982) in its standard....

Include the full reference to the cited work in the reference list at the end of the paper. Do not use blank lines between references. Instead, use a hanging indent of 0.6 cm, as in the examples below. The references should be in alphabetical order.

ASHRAE. 1992. *ANSI/ASHRAE Standard 55-1992*, Thermal Environmental Conditions for Human Occupancy. Atlanta: American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

Chen Q. 1988. Indoor airflow, air quality and energy consumption of buildings. *Ph.D. Thesis*, Delft University of Technology (The Netherlands), 156 pages.

Chen Q. and Wang L. 2004. Coupling of multizone program CONTAM with simplified CFD program CFD0-C. Final Report for NIST RFQ-03-Q-9537, School of Mechanical Engineering, Purdue University (USA), 120 pages.

Fanger P.O. 1970. *Thermal Comfort*. Copenhagen: Danish Technical Press.

Hanzawa H, Melikov A.K, and Fanger P.O. 1987. Air flow characteristics in the occupied zone of ventilated spaces. *ASHRAE Transactions*, 93(1), 10-20.

Kimura K. and Tanabe S. 1993. Recommended air velocity against combinations of temperature and humidity for sedentary occupants in summer clothing. In: *Proceedings of the 6th International Conference on Indoor Air Quality and Climate – Indoor Air '93*, Helsinki, Vol. 6, pp. 61-66.

Olesen B.W. 2004. International standards for the indoor environment. *Indoor Air*, 14(Suppl 7), 18-126.