



# XIV<sup>th</sup> INTERNATIONAL HVAC+R SYMPOSIUM

1 – 3 April 2020

## Instructions for preparing the full paper to XIV<sup>th</sup> INTERNATIONAL HVAC+R SYMPOSIUM 2020

### “Resilient HVAC Solutions to Achieve More Sustainable Future”

(Times New Roman Bold 14 pt, style: Title)

First name Last name<sup>1</sup>, Andy Author<sup>2</sup> and William Writer<sup>2</sup> (12 pt normal, style: Author)

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### **SUMMARY (heading style: Times New Roman Bold 12 pt, UPPERCASE)**

Prepare an informative summary of up to 250 words based on the complete 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 two empty lines after)

### **INTRODUCTION**

The introduction should present the practical and scientific background for the study or presentation, the hypothesis(es) and a clear statement of the objective(s) of the study/presentation.

The **maximum length of full papers is eight pages** including references, figures and tables. The length of the written paper will have no impact on the allocation of papers to oral or poster presentation. Please use the format described on these pages. The accepted file format is word document and the file should not exceed 2 Mbytes. The recommended type face is Times New Roman. All text should be left-justified 12 pt bold face (style: Normal). Use 12 pt UPPERCASE bold font for main headings (style: Heading) and 12 pt normal lowercase font for 2<sup>nd</sup> level headings (style: Heading). Do not use page numbers.

The deadline is: **February 15th 2020.**

Final notification of paper acceptance is: **March 2nd 2020.**

## METHODS

This section should describe the study design, materials, measuring methods and procedures and statistical methods. Measuring and statistical methods should be mentioned, but for routine methods a reference rather than a description of the method is recommended.

The full papers must provide new information on scientific validation, comparative testing, research or development.

**Please note that commercialism (use of company or product names or logos in the text or illustrations) is not allowed.**

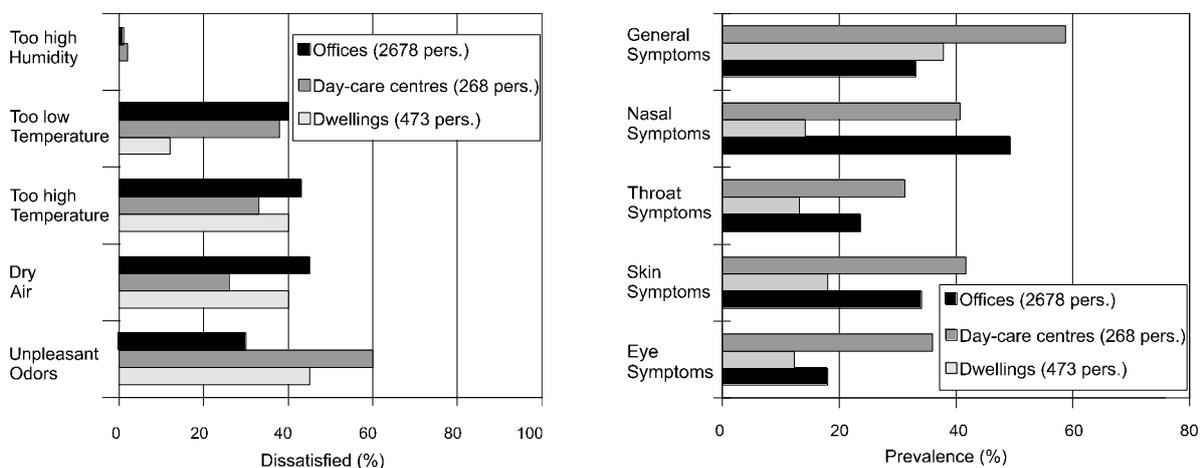
## RESULTS

**Tables and illustrations (2<sup>nd</sup> level heading style: Times New Roman Bold 12 pt, Lowercase)**

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 taking 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. If the reader needs the table, omit the figure. Substitute a few typical results for lengthy tables when practical. All tables must have suitable captions above the table. Use single line border as presented in Table 2. Tables and figures should be inserted in the text near to the place they are mentioned the first time. Insert figures as 'picture' (e.g. wmf or jpg), not as 'objects' or spreadsheets. Reduce the resolution of photos etc. to 72 pixels/inch.

Table 2. Prevalence of respiratory symptoms. (You may use 11 pt font size for table contents)

Symptom or Condition	Exposed	Reference	Total
Total	50	100	150
Persistent cough	70	65	135
Persistent phlegm	80	89	169
Ext	62	100	162



a) b)  
Figure 1. An example of a figure. a) Complaints, b) Symptoms.

## Equations

Equations should be centered and numbered as in the example below:

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

where  $\mu_T$  is the mean value of the temperature and  $\sigma_T$  is the standard deviation of the temperature,  $\sigma_\tau$  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 microorganisms 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 (SVOC) can..."

## DISCUSSION

The most central findings should be put into perspective with the prior knowledge. Possible sources of error, which may have distorted the results, should also be discussed

Discussion should also present authors' interpretation of the meaning of the results. The authors are encouraged to make recommendations on the basis of the earlier knowledge and the present results with special reference to practical achievement for sustainable energy use in buildings.

## ACKNOWLEDGEMENT

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

## REFERENCES

References should be numbered consecutively in the order in which they are first mentioned in the text and identified in the text, tables or figures and legends by Arabic numbers in square brackets [1]. If a publication has four or fewer authors, all the authors are listed. If there are more than four, list the first three authors and add "et al".

1. ASHRAE. 1992. ANSI/ASHRAE Standard 55-1992, Thermal Environmental Conditions for Human Occupancy, Atlanta: American Society of Heating, Refrigerating, and Airconditioning Engineers, Inc.
2. Fanger, P O. 1970. Thermal Comfort. Danish Technical Press.
3. Brundrett, G W. 1990. Criteria for Moisture Control. Butterworths.
4. Hanzawa, H, Melikov, A K, and Fanger P O. 1987. Air flow characteristics in the occupied zone of ventilated spaces. ASHRAE Transactions. Vol. 93 (1), pp 10-20.

5. Kimura, K and Tanabe, S. 1993. Recommended air velocity against combinations of temperature and humidity for sedentary occupants in summer clothing, Proceedings of the 6th International Conference on Indoor Air Quality and Climate - Indoor Air '93, Vol 6, pp 61—66.
6. Raw, G J, Aizlewood, C E, Llewellyn, J, et al. 1999. Indoor air quality and health in 10 office buildings in the UK - a multi-disciplinary study. BRE Report 9911332.
7. Sexton, K and Ryan, P B. 1988. Assessment of human exposure to air pollution: methods, measurements and models. In Air Pollution, the Automobile and Public Health, A Y Watson, R R Bates and D Kennedy, eds. Washington DC: National Academy Press.

(Reference style: Times New Roman 11 pt)