









Slovak Society of

Environmental Technology (SSTP)

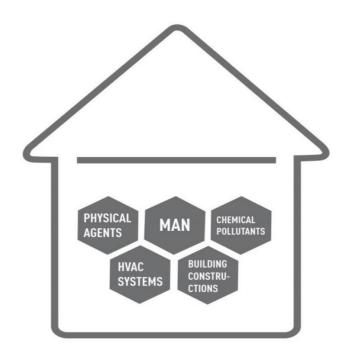
Association of Slovak Scientific and Technological Societies (ZSVTS)

Association of Energy Engineers: AEE Student Chapter - STU Bratislava, Slovakia **Slovak Chamber of Civil Engineers**

Slovak University of Technology in Bratislava, Faculty of Civil Engineering

Invite you to 33th annual and 11th International conference

INDOOR CLIMATE OF BUILDINGS 2022



HEALTHY BUILT ENVIRONMENT AND ENERGY SECURITY

4. - 6. December 2022

Nový Smokovec - Hotel ATRIUM ***, Slovakia

Dear Madam, Dear Sir,

It is my pleasure to invite you to the Indoor Climate of Buildings (ICB) 2022 conference. ICB 2022 is the 33th annual and 11th International conference organized by the Slovak Society of Environmental Technology (SSTP), held in Slovakia.

The conference will examine thermal comfort, indoor air quality, ventilation, exposure and related environmental health concerns associated with building design, construction, retrofit and operation, energy efficiency of buildings. It is a forum mainly for PhD. students and young researchers, to give them chance to gain new knowledge, exchange ideas and contacts for future collaboration with their other international fellows.

The Conference program will be based on keynote presentations given by international speaker and peer reviewed paper and extended abstract presentations of young researchers. The topics of the Conference will cover the following areas:

- Indoor air quality and health
- Indoor climate and comfort of buildings
- Indoor built environment and evaluation
- · Energy efficiency and management of Buildings
- · Energy Performance of HVAC-R systems
- Outdoor Environment and Renewable Energy

International Scientific Committee:

Budiaková Mária, *Slovakia* Kabele Karel *Czechia* Krajčík Michal, *Slovakia* Petráš Dušan, *Slovakia* Piecková Elena, *Slovakia* Stutterecker Werner, *Austria* Jiří Hirš, *Czechia*

Professional guarantor of the conference:

Dušan Petráš - prezident ICB Slovak University of Technology in Bratislava Faculty of Civil Engineering Radlinského 11, 811 07 Bratislava dusan.petras@stuba.sk Barbora Junasová – Slovakian coordinator Slovak University of Technology in Bratislava Faculty of Civil Engineering Radlinského 11, 811 07 Bratislava icb.conference@gmail.com

Organizing committee:

Jana Lehotová Nôtová SSTP, Koceľova 15 815 94 Bratislava konferencie@sstp.sk

Proceeding editor:

Zuzana Švecová SSTP, Koceľova 15 815 94 Bratislava sstp@sstp.sk

4. 12. 2022 Sunday

15:00 - 19:00	Registration
17:00 - 17:30	Opening
17:30 - 19:00	Plenary session I.
19:00 - 23:00	Welcome Reception

5. 12. 2022 Monday

08:30 – 18:00	Registration
09:00 - 10:00	Plenary session II.
10:00 - 10:30	Coffee Break
10:30 - 12:00	I. Session: Indoor air quality and health
12:00 - 13:30	Lunch break
13:30 – 15:00	II. Session: Indoor climate and comfort of buildings
15:00 – 15:30	Tea Break
15:30 – 17:00	III. Session: Indoor built environment and evaluation

6. 12. 2022 Tuesday

08:30 - 18:00	Registration
09:00 - 10:30	IV. Session: Energy efficiency of Buildings
10:30 - 11:00	Coffee break
11:00 – 12:30	V. Session: Outdoor environment and renewable energy
12:30 - 13:30	Lunch Break

4. 12. 2022 Sunday

15:00 - 19:00 Registration

17:00 - 17:30 Opening

17:30 – 19:00 PLENARY SESSION I.

Chairman: Petráš D., Junasová B.

1. Energy performance and comfort of intelligent buildings - where is the limit of automation of building management processes

Kabele K.: Czech Technical University in Prague, Faculty of Civil Engineering

2. Production of Pollutants from Organic Litter for Dairy Cow

Wargocki P., Wei W., Mandin C.: DTU Denmark

3. Renoactive - Velux project

Predajnianska A., Petráš D., Szánka I.: Slovak University of Technology in Bratislava, Faculty of Civil Engineering

19:00 - 22:00 Welcome Reception

5. 12. 2022 Monday

8:30 - 18:00 Registration

9:00 – 10:00 PLENARY SESSION II.

Chairman: Kabele K., Mudrá M.

1. Smart regions

Hirš J.: Brno University of Technology

2. Breathable composition of fungal bioaerosol in historic places - calcuolations and ill health potential

Piecková E., Lehotská R.: Slovak Medical University, Bratislava

10:00 - 10:30 Coffee break

10:30 – 12:00 I. Session: INDOOR AIR QUALITY AND HEALTH

Chairman: Piecková E., Budajová J.

1. Monitoring of indoor environmental quality in three certified buildings

Budajová J., Harčárová K., Vilčeková S., Krídlová Burdová E.: Technical University of Košice

2. Analysis of Indoor Air Quality in a pre-school education facility in the summer and winter period

Stiborová P., Baďurová A.: VSB-Technical University of Ostrava

3. Analysis of indoor climate in in flat in new residential building

Budiaková M.: Slovak University of Technology in Bratislava

4. Calculation of air change rate by tracer gas

Štefanič P.: Slovak University of Technology in Bratislava

12:00 – 13:30 Lunch break

13:30 – 15:00 II. Session: INDOOR CLIMATE AND COMFORT OF BUILDINGS

Chairman: Budiaková.M., Fadrný O.

1. Analysis of thermal comfort in modern big university lecture hall

Budiaková M.: Slovak University of Technology in Bratislava

2. Evaluation of new construction and technological solutions for farms in relation to the quality of the environment

Lendelová J., Karandušová I., Balková M., Žitňák M., Gálik R.: Faculty of Engineering, Slovak University of Agriculture in Nitra

3. Requierements for the indoor air quality of residential buildings and buildings used for animal husbandry and vegetable cultivation

Állóová V.: Slovak University of Technology in Bratislava

4. Assessment of the quality of the indoor environment in flats after complex renovation of the building

Strenk T.: Slovak University of Technology in Bratislava

5. Analysis of daylight in a multi-storey office building in different geographical conditions of the Czech Republic and

Fadrný O., Skotnicová I., Kolarčík V.: VSB - Technical University of Ostrava

15:00 - 15:30 Coffee break

15:30 – 17:00 III. Session: INDOOR BUILT ENVIRONMENT AND EVALUATION

Chairman: Šimko M., Knut P.

1. Field laboratory for simultaneous of radiant floor, ceiling, and wall system

Šimko M, Petráš D., Szabó D., Krajčík M.: Slovak University of Technology in Bratislava

2. Parametric study of fragments using ATO in buildings

Mučková V., Kalús D.: Slovak University of Technology in Bratislava

3. Adapting the construction of radiant systems for building reconstructions

Junasová B., Krajčík M.: Slovak University of Technology in Bratislava

4. Analysis of the current state of green facades

Knut P., Kocúrková M., Kapalo P., Vranayová Z.: Technical University of Košice

5. Phase change material in radiant systems

Švarcová E.: Slovak University of Technology in Bratislava

17:00 – 18:00 CORPORATE LECTURES

19:00 - 22:00 Dinner

8:30 - 9:00 Registration

9:00 – 10:30 IV. Session: ENERGY EFFICIENCY OF BUILDINGS

Chairman: Stutterecker W., Horák O.

1. Identification of performance gaps from heat pump systems in real operation environment based on model-based data analysis

Stelzer R.: Forschung Burgenland GmbH, Research Centre Pinkafeld

2. Effects of feed-in power limitations on the annual energy yield of residential photovoltaic systems

Kirchknopf N., Krammer M., Wenig F..: Forschung Burgenland GmbH, Research Centre Pinkafeld

3. Analysis of Frosting in Heat Recovery Exchanger

Svodobová A., Adamovsky D.: Czech technical university in Prague

4. Operational building energy performance

Horák O., Kabele K.: Czech technical university in Prague

5. Energy efficient fuel cells - A possibility for the future building

Seidl Ch.: Forschung Burgenland GmbH, Research Centre Pinkafeld

6. Energy ventilation concept for an apartment building with the application of heat recovery elements using two ventilation system alternatives, Case Study

Straková Z.: Slovak University of Technology in Bratislava

10:30 - 11:00 Coffee break

11:00 – 12:30 V. Session: OUTDOOR ENVIRONMENT AND RENEWABLE ENERGY

Chairman: Predajnianska A.

1. Simulation of pressure resistance of odor traps

Sokol M., Peráčková J.: Slovak University of Technology in Bratislava

2. Overview of wastewater cooling options

Predajnianska A., Takács J.: Slovak University of Technology in Bratislava

3. The impact of heat source renovation on apartment buildings

Mudrá M.: Slovak University of Technology in Bratislava

4. Heat recovery from sewage systems in buildings

Hrnčárová L., Peráčková J.: Slovak University of Technology in Bratislava

5. The New Test Cells for Experimental Research of Advanced

Facades

Dankova A., Bielek B., Szabo D., Kaníková K.: Slovak University of Technology in Bratislava

6. Effect of Indoor Climate parameters on Thermal comfort and energy need for heating: a brief review

Kudriashov V., Krajčík M.: Slovak University of Technology in Bratislava

12:30 - 13:30 Lunch break

13:30 - 14:00 Closing

REGISTRATION FEE PAYMENT

REGISTRATION FEES:

•	ICB Regular participant	85,00	+ 20% VAT =	102,00€	
•	ICB Reduced fee participant (Member of SSTP, SKSI)	75,00	+ 20% VAT =	90,00€	
•	Student - Presenter	75,00	+ 20% VAT =	90,00€	
•	Proceedings book	25,00	+ 20% VAT =	30,00€	
•	Proceedings on USB	15,00	+ 20% VAT =	18,00€	
•	Presenting company – Diamond partner	1000,00	+ 20% VAT =	1200,00€	
•	Presenting company – Main Partner	600,00	+ 20% VAT =	720,00€	
•	Presenting company	400,00	+ 20% VAT =	480,00€	
•	Special requirements	individual offer at: konferencie@sstp.sk			

REGISTRATION INCLUDES:

- Access to Sessions
- Breaks
- Welcome Reception
- Conference Slovak Dinner

WIRE TRANSFER INFORMATION

Registration fees must be paid in EUR by wire transfer to: SSTP. Kocelova 15

815 94 Bratislava, Slovakia Company ID: 00896918 Tax ID: SK2021491241

Account NO.: 1307192857/ 0200 Variable symbol: 21 + your company ID

Details of payment: Name of company / Forename and Surname of participant*

IBAN: SK67 0200 0000 0013 0719 2857

SWIFT/BIC: SUBASKBX

All payments made by bank transfer have to be net of all bank charges. The payer pays the bank charges of their bank, and the beneficiary pays the charges of their bank, if any.

The invoice will be sent after the conference.

The refundation of the registration fee is not possible.

If you should be prevented from attending, you will be given the opportunity to send a colleague in your place

^{*}The participant's name should be clearly legible otherwise the payment cannot be identified.

VENUE:



4. - 6. December 2022, Hotel ATRIUM, Nový Smokovec - High Tatras.

Conference dates: Sunday - Tuesday, 4. - 6. December 2022

Accommodation: Hotel ATRIUM***, Nový Smokovec – High Tatras.

Conference prices for accomodation:

Double room per night 84,00 €
Single room per night 73,00 €

The price of accommodation includes:

- · Continental breakfast
- Parking
- WiFi access in the hotel area
- Free entry to hotels Vital World

Local tax must be paid at the check-in – 1,5 €/person/day.

Accommodation is paid by participant of conference and it is not included in registration fees. Accommodation must be paid in EUR by credit card or cash in the hotel.

The programme and registration form can be found on the webpage www.sstp.sk.

More information is provided by the organisation guarantor

Ing. Barbora Junasová (ENG/ES/SK/CZ)

Jana Lehotová Nôtová (SK/CZ)

Please send the registration form to the following e-mail address: konferencie@sstp.sk

The deadline for applications is 30.11. 2022

Contact address: SSTP, Kocel'ova 15 815 94 Bratislava, Slovakia icb.conference@gmail.com

or

konferencie@sstp.sk

Diamond partner:



Main partners:







Exhibition partners:







Medial partners:







