



**LVIV POLYTECHNIC
NATIONAL UNIVERSITY**



**INSTITUTE OF CIVIL
ENGINEERING AND BUILDING
SYSTEMS**

CONFERENCE PROGRAMME

II International Scientific Conference

**ECOCOMFORT AND CURRENT ISSUES OF CIVIL ENGINEERING
LVIV, UKRAINE**



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SEPTEMBER 16-18, 2020

CONFERENCE PROGRAMME

II International Scientific Conference

ECOCOMFORT AND CURRENT ISSUES OF CIVIL ENGINEERING LVIV, UKRAINE

Important:

In order to take part in the EcoComfort 2020 online conference, you need to follow the links provided below - first for the opening ceremony, and then for the section meeting. To log in, you need to register an account on Google.com. Therefore, please try to join in advance.

All participants will be able to try to join the same links one day before the conference, 15.09.2020 from 12-00 to 14-00. Administrators will be waiting for you.

First day - September 16, 2020

10⁰⁰ - 11⁰⁰ Registration

<https://meet.google.com/ohx-hcco-dpf>

11⁰⁰ – 11³⁰ Opening Ceremony.

Prof. Zinoviy Blikharsky, Sc.D., Director of the Institute of Civil Engineering and Building Systems of the Lviv Polytechnic National University (Ukraine)

Prof. Vasyl Zhelykh, Sc.D., head of Department of Heat and Gas Supply and Ventilation, Institute of Civil Engineering and Building Systems of the Lviv Polytechnic National University (Ukraine)

11³⁰ – 13⁰⁰ Section meetings*

13⁰⁰ - 14⁰⁰ Break for Lunch

14⁰⁰ – 17⁰⁰ Section meetings*

*Section 1 - Construction and Structural Mechanics

<https://meet.google.com/ohx-hcco-dpf>

	Moderator –Roman Khmil Administrator – Taras Shnal
11 ³⁰ – 11 ⁴⁰	1. Andriichuk, Oleksandr (et al.) Experimental Research of Strength Characteristics of Steel Fiber Reinforced Concrete Gutters and Modeling of Their Work Using the Finite Element Method
11 ⁴⁰ – 11 ⁵⁰	2. Babych, Evgen (et al.) Experimental Research of Strength Characteristics of Continuous Reinforced Concrete Beams with Combined Reinforcement, and Modelling Their Work by the Finite Element Method
11 ⁵⁰ – 12 ⁰⁰	3. Barabash, Maria (et al.) Simulation of the Seismic Resistance of Buildings with Account of Unlimited Soil Space
12 ⁰⁰ – 12 ¹⁰	4. Bevz, Mykola Between Tradition and Innovation: The Search for Modern Architectural Forms and Structures in the Design of Wooden Churches
12 ¹⁰ – 12 ²⁰	5. Blikharsky, Zinoviy (et al.) Bearing Capacity of Stone Beam Reinforced by GFRP
12 ²⁰ – 12 ³⁰	6. Bobalo, Taras (et al.) Influence of the Percentage of Reinforcement on the Compressive Forces Loss in Pre-stressed RC Beams Strengthened with a Package of Steel Bars
12 ³⁰ – 12 ⁴⁰	7. Borysiuk, Oleksandr (et al.) Experimental Research Results of the Bearing Capacity of the Reinforced Concrete Beams Strengthened in the Compressed and Tensile Zones
12 ⁴⁰ – 12 ⁵⁰	8. Bula, Serhiy (et al.) Experimental Study of Compressed Ceramic Hollow Brick Masonry Structures Strengthened with GFRP Meshes
12 ⁵⁰ – 13 ⁰⁰	9. Chernieva, Olena (et al.) Methods of Reinforcing for Engineering Restoration of Architectural Monuments

13 ⁰⁰ – 14 ⁰⁰	Break for Lunch
	Moderator –Roman Khmil Administrator – Taras Shnal
14 ⁰⁰ – 14 ¹⁰	10. Vitaliy, Dorofeyev (et al.) The Influence of Concrete Structure on the Destruction of Reinforced Concrete Bended Elements
14 ¹⁰ – 14 ²⁰	11. Khmil, Roman (et al.) The Probabilistic Calculation Model of RC Beams, Strengthened by RC Jacket
14 ²⁰ – 14 ³⁰	12. Klymenko, Yevhenii (et al.) Operation of Damaged H-Shaped Columns
14 ³⁰ – 14 ⁴⁰	13. Kochkarev, Dmitro (et al.) Designing of Standard Cross Sections of Composite Bending Reinforced Concrete Elements by the Method of Design Resistance of Reinforced Concrete
14 ³⁰ – 14 ⁴⁰	14. Koval, Petro (et al.) Influence of Basalt Fiber Dispersed Reinforcement on the Work of Concrete Beams with Non-metallic Composite Reinforcement
14 ⁴⁰ – 14 ⁵⁰	15. Kovalchuk, Bogdan (et al.) Strength of Reinforced Concrete Beams Strengthened Under Loading with Additional Reinforcement with Different Levels of its Pre-tensio
14 ⁵⁰ – 15 ⁰⁰	16. Kushchenko, Volodymir (et al.) Monitoring of Dynamic Loads on Steel Headframes
15 ⁰⁰ – 15 ¹⁰	17. Lobodanov, Maxim (et al.) Influence of Damages in the Compressed Zone on Bearing Capacity of Reinforced Concrete Beams
15 ¹⁰ – 15 ²⁰	18. Maksymovych, Solomiya (et al.) Experimental Study of Crack Resistance and Shear Strength of Single-Span Reinforced Concrete Beams Under a Concentrated Load at a/d= 1
15 ²⁰ – 15 ³⁰	19. Romaniuk, Volodymyr (et al.) Influence of Flexibility of Bolted Joints on Rigidity of the Hingeless Frame
15 ³⁰ – 15 ⁴⁰	20. Shnal, Taras (et al.) Determination of the Charring Rate of Timber to Estimate the Fire Resistance of Structures at Real Temperature Modes of Fires
15 ⁴⁰ – 15 ⁵⁰	21. Shnal, Taras (et al.) Development of a Mathematical Model of Fire Spreading in a Three-Storey Building Under Full-Scale Fire-Response Tests

*Section 2 - Building Materials

<https://meet.google.com/ozr-zstt-xdc>

	Moderator – Khrystyna Sobol Administrator – Taras Markiv
11 ³⁰ – 11 ⁴⁰	1. Hohol, Marko (et al.) Effect of Nano-TiO ₂ and ETS Antifungal Agent Addition on the Mechanical and Biocidal Properties of Cement Mortars
11 ⁴⁰ – 11 ⁵⁰	2. Kropyvnytska, Tetiana (et al.) Effects of Nano-liquids on the Durability of Brick Constructions for External Walls
11 ⁵⁰ – 12 ⁰⁰	1. Markiv, Taras (et al.) Effect of Plasticizing and Retarding Admixtures on the Properties of High Strength Concrete
12 ⁰⁰ – 12 ¹⁰	2. Plugin, Andrii A. (et al.) Hydration Products that Provide Water-Repellency for Portland Cement-Based Waterproofing Compositions and Their Identification by Physical and Chemical Methods
12 ¹⁰ – 12 ²⁰	3. Pozniak, Oksana (et al.) Production of Fly Ash Aerated Concrete and Efficiency of Its Application
12 ²⁰ – 12 ³⁰	4. Sanytsky, Myroslav (et al.) The Effect of Mechanical Activation on the Properties of Hardened Portland Cement
12 ³⁰ – 12 ⁴⁰	5. Sydor, Nazar (et al.) Development of Component Composition of Engineered Cementitious Composites
12 ⁴⁰ – 12 ⁵⁰	6. Tolmachov, Serhij (et al.) Physico-Chemical Investigations of Water Suspensions Microfillers
12 ⁵⁰ – 13 ⁰⁰	7. Zhitkovsky, Vadim (et al.) Methodology for Calculating the Composition of Fine-Grained Concrete with High Resolution
13 ⁰⁰ – 14 ⁰⁰	Break for Lunch
	Moderator – Khrystyna Sobol Administrator – Taras Markiv
14 ⁰⁰ – 14 ¹⁰	8. Demchuk, Yuriy (et al.) Comparison of Bitumen Modified by Phenol Formaldehyde Resins Synthesized from Different Raw Materials
14 ¹⁰ – 14 ²⁰	9. Sidun, Iurii (et al.) Cohesion of Slurry Surfacing Mix on Bitumens of Different Acid Numbers at Different Curing Temperatures

14 ²⁰ – 14 ³⁰	10. Sobko, Yuriy The Methodology of Experimental Bending Moments Determination in Bridge Span Structures
14 ³⁰ – 14 ⁴⁰	11. Turba, Yurii (et al.) Crack Resistance of Concretes Reinforced with Polypropylene Fiber

*Section 3 - Environmental Engineering and Sustainability

<https://meet.google.com/wrh-oxge-naq>

	<p>Moderator – Orest Voznyak Administrator – Stepan Shapoval</p>
11 ³⁰ – 11 ⁴⁰	1. Antypov, Ievgen (et al.) Influence of Nanoparticles on the Processes of Heat Accumulation During Material Phase Transformations
11 ⁴⁰ – 11 ⁵⁰	2. Buravchenko, Vsevolod (et al.) Simplified Method for Determining the Energy Efficiency of Window Blinds in the Field
11 ⁵⁰ – 12 ⁰⁰	3. Fialko, Nataliia (et al.) Ukraine Energy Transition in Light of the EU Experience
12 ⁰⁰ – 12 ¹⁰	4. Gorobets, Valery (et al.) Investigation of Preparation Processes of Liquid Feed Mixtures in Rotary Pulsating Apparatus
12 ¹⁰ – 12 ²⁰	5. Gulay, Bohdan (et al.) Investigations of Compact Recuperators Acoustic Properties
12 ²⁰ – 12 ³⁰	6. Ivaniv, Vasyl (et al.) Non-uniformity of Water Inflow into Pressure Collector-Pipeline Depending on the Values of Reynolds Criterion and of Inflow Jets Angles
12 ³⁰ – 12 ⁴⁰	7. Kapalo, Peter (et al.) Examining the Interdependence of the Various Parameters of Indoor Air
12 ⁴⁰ – 12 ⁵⁰	8. Kapalo, Peter (et al.) The Analysis of Heat Consumption in the Selected City
12 ⁵⁰ – 13 ⁰⁰	9. Katunsky, Dusan (et al.) Assessment of Thermal Insulation Properties of Envelope Structures of a Burgher House in Kosice
13 ⁰⁰ – 14 ⁰⁰	Break for Lunch
	<p>Moderators – Orest Voznyak Administrator – Stepan Shapoval</p>
14 ⁰⁰ – 14 ¹⁰	10. Khmelniuk, Mykhailo (et al.) Performance Analysis of the Small-Scale Refrigeration System Using Natural Refrigerants and Their Mixtures
14 ¹⁰ – 14 ²⁰	11. Koval, Lidiia (et al.) Promising Trends in Design of LED Lighting Combined with Systems of Natural Lighting
14 ²⁰ – 14 ³⁰	12. Labay, Volodymyr (et al.) Dependence of Evaporation Temperature and Exergetic Efficiency of Air Split-Conditioners Heat Pumps from the External Air Temperature
14 ³⁰ – 14 ⁴⁰	13. Lys, Stepan (et al.) Influence of Humidity of Wood Fuel on the Gasification Process in a Continuous Layer
14 ⁴⁰ – 14 ⁵⁰	14. Matsiyevska, Oksana (et al.) Analysis of the Water Consumption in the Apartment House – Case Study
14 ⁵⁰ – 15 ⁰⁰	15. Mileikovskiy, Viktor (et al.) Precise Explicit Approximations of the Colebrook-White Equation for Engineering Systems
15 ⁰⁰ – 15 ¹⁰	16. Myroniuk, Khrystyna (et al.) Technical and Economic Efficiency After the Boiler Room Renewal
15 ¹⁰ – 15 ²⁰	17. Petrenko, Viktor (et al.) The Calculation of Indoor Air Forecast Temperature of a Space with the Replaceable Thermotechnical Characteristics of the Enclosure Structures While in Operation
15 ²⁰ – 15 ³⁰	18. Poorova, Zuzana (et al.) Humidity, Air Temperature, CO ₂ and Well-Being of People with and Without Green Wall
15 ³⁰ – 15 ⁴⁰	19. Protsenko, Serhii (et al.) Analysis of the Current Methodology Disadvantage of the Consumed Thermal Energy Allocation Between Consumers for Heating of Multi-apartment Buildings and Ways of its Improvement
15 ⁴⁰ – 15 ⁵⁰	20. Riabenko, Oleksandr (et al.) Impact of Undular Jump Characteristics on Erosion of Tailrace Channel
15 ⁵⁰ – 16 ⁰⁰	21. Savchenko, Olena (et al.) Thermal Renewal of Industrial Buildings Gas Supply System
16 ⁰⁰ – 16 ¹⁰	22. Savytskiy, Mykola (et al.) The Sustainable Design of the Greenhouse by Criteria of Heat Losses and Solar Heat Gains
16 ¹⁰ – 16 ²⁰	23. Shapoval, Stepan (et al.) Clarification of Thermal Characteristics of the Solar Collector Integrated into Transparent Façade

16 ²⁰ – 16 ³⁰	24. Snitynskyi, Volodymyr (et al.) Influence of Climatic Factors on Runoff Formation and Surface Water Quality of the Stryi River Basin
16 ³⁰ – 16 ⁴⁰	25. Spodyniuk, Nadiia (et al.) Research of Temperature Regime in the Module for Poultry Growing
16 ⁴⁰ – 16 ⁵⁰	26. Ulewicz, Malgorzata (et al.) Assessment of the Economic Feasibility of Using Alternative Energy Sources in Ukraine
16 ⁵⁰ – 17 ⁰⁰	27. Velychko, Svitlana (et al.) Estimation of the Ecological Flow of Mountain River in Ukrainian Carpathians for Small Hydropower Projects
17 ⁰⁰ – 17 ¹⁰	28. Zhelykh, Vasyl (et al.) Influence of Orientation of Buildings Facades on the Level of Solar Energy Supply to Them
17 ¹⁰ – 17 ²⁰	29. Zhuk, Volodymyr (et al.) Maximum Daily Stormwater Runoff Flow Rates at the Inlet of the Lviv WWTP Based on the Results of Systematic Hydrologic Observations of the Catchment

Second day - September 17, 2020

10⁰⁰ - 13⁰⁰ Section meetings*

13⁰⁰ - 14⁰⁰ Break for Lunch

14⁰⁰ - 17⁰⁰ Section meetings*

Third day - September 18, 2020

10⁰⁰ - 13⁰⁰ Section meetings*

Важливо:

для того, щоб взяти участь в онлайн конференції ЕкоКомфорт 2020, необхідно пройти за посиланнями, наданими вище - спершу для церемонії відкриття, а потім для секційного засідання. Для входу необхідна реєстрація акаунту на Google.com. Тому просимо спробувати приєднання заздалегідь.

Всі учасники зможуть спробувати приєднатись за тими самими посиланнями один день перед конференцією, 15.09.2020 з 12-00 до 14-00. Вас чекатимуть адміністратори.