



**KAUNAS UNIVERSITY OF TECHNOLOGY**

**FACULTY OF CIVIL ENGINEERING AND ARCHITECTURE**

KTU Library, Studentų Str. 48, Kaunas

## Agenda

Friday, December 6

- 08:30**      **Registration**
- 09:00**      **Opening of the conference**

### **The Plenary Session of the Conference, Amphitheater**

**The chairman Assist. dr. Ignacio Villalon Fornes**

- 09:05**      **Architecture as Part of Rebuilding Ukraine Effort: Lithuanian Case**  
Speaker: Rūta Leitanaitė, Architects Association of Lithuania, Vilnius, Lithuania
- 09:25**      **Panel Renovation – What can it Bring on the Table?**  
Speaker: Doc. Dr. Jurgita Černeckienė, Kaunas University of Technology, Kaunas, Lithuania
- 09:45**      **Displaced Lithuanian Architects in the United States: The Case of Jonas Mulokas**  
Speaker: Lect. Dr. Paulius Tautvydas Laurinaitis, Kaunas University of Technology, Kaunas, Lithuania

**10:05-10:20**

**Break**



### Presentations of the Conference

#### Interdisciplinary Research, Amphitheater

The chairman PhD student Manhanga Fallon Clare

- 10:20**     **Integrating Digitalisation in Assessing and Ensuring the Sustainability of Heritage Buildings**
- Speaker: Erika Svytytė, Kaunas University of Technology. Co-author: Prof. dr. Lina Šeduikytė, Kaunas University of Technology
- 10:30**     **Development of an Automated 4D/5D BIM Model for Real-Time Project Evaluation and Management in High-Speed Railway Bridge Construction**
- Speaker: Farhad Sharifli, Kaunas University of Technology
- 10:40**     **Optimizing Geospatial Accuracy and Data Integration in Multidisciplinary Construction Projects via Shared Coordinate Systems**
- Speaker: Mohamed W. Meneaem, Kaunas University of Technology
- 10:50**     **Building Life Cycle Assessment Through Building Information Modelling**
- Speaker: Amirkhuja Rakhmatkhujaev, Kaunas University of Technology. Co-author: Assoc. prof. dr. Eglė Klumbytė, Kaunas University of Technology
- 11:00**     **Logistics Optimization of the Road Construction Using Linear Programming**
- Speaker: Shahram Shaygani, Kaunas University of Technology. Co-author: Assoc. prof. dr. Rasa Apanavičienė, Kaunas University of Technology
- 11:10**     **Simulation-Based Optimisation of Parametric Building Designs for Solar Insolation Efficiency: Case Study Analysis**
- Speaker: Elham Mokhalled, Kaunas University of Technology. Co-author: Assist. dr. Marius Ivaškevičius, Kaunas University of Technology
- 11:20**     **A study on the Assessment of Sustainable Materials in Buildings**
- Speaker: Aleksas Masevič, Kaunas University of Technology. Co-author: Assoc. prof. dr. Arūnas Aleksandras Navickas
- 11:30**     **Study of Blends of Lime and Calcined Diatomite**



Speaker: Oleksii Lozytskyi, Kaunas University of Technology. Co-authors: Vainius Serafimas, Pranta Dev Nath, Prof. dr. Danutė Vaičiukynienė, Kaunas University of Technology

**11:40 The Technology of Installation and EPD calculation of Sustainable Pavements for Heavy-Duty Applications**

Speaker: Leonardas Miliūnas, Kaunas University of Technology. Co-author: Assoc. prof. dr. Audrius Grinys, Kaunas University of Technology

**11:50-13:00 Lunch break**

**Presentations of the Conference**

**Parallel session**

**Civil Engineering, Library, M9**

**The chairman PhD student Gintautas Tamošaitis**

**13:00 Research on Structural Units and Technologies of Modular Construction Buildings**

Speaker: Arminas Sadauskas, Kaunas University of Technology

**13:10 Enrichment of Building Information Model with Machine Learning**

Speaker: Donatas Počešiūnas, Kaunas University of Technology

**13:30 Research of the Influence of Ground Thermal Properties on the Energy Efficiency of a Building with a Deepened Part**

Speaker: Dominykas Vencius, Kaunas University of Technology

**13:40 Research on Underwater Concreting Technologies**

Speaker: Lukas Jakubavičius, Kaunas University of Technology

**13:50 Research on the Use of Dolomite Rock Processing Waste in the Development of Construction Products**

Speaker: Matas Burinskas, Kaunas University of Technology

**14:00 Strengthening of Notched Wooden Beams at the Support using Plywood and Wood Screws**



Speaker: Mindaugas Uščiauskas, Kaunas University of Technology. Co-author: Assist. dr. Nerijus Adamukaitis, Kaunas University of Technology

**14:10 Relative Humidity inside a Straw Bale House**

Speaker: Oskaras Liniauskas, Kaunas University of Technology. Co-authors: Prof. dr. Lina Šeduikytė, Kaunas University of Technology, Laurynas Marcinkus, UAB "Ilanga", Lithuania

**14:20 Economical Cost Analysis of Sustainable Pavements for Heavy-Duty Applications**

Speaker: Vilius Zbarauskas, Kaunas University of Technology. Co-author: Assoc. prof. dr. Audrius Grinys, Kaunas University of Technology

**14:30-14:40**

**Break**

**14:40 Lightweight Concrete Incorporating Silica Aerogel: Investigations and Applications**

Speaker: Kornelija Valuckaitė, Kaunas University of Technology

**14:50 Research on Biocomposites with Mineral Binders**

Speaker: Nojus Naruševičius, Kaunas University of Technology

**15:00 Gypsum Composites for Sound Insulation**

Speaker: Ernestas Papšelis, Kaunas University of Technology. Co-authors: Prof. dr. Danutė Vaičiukynienė, Assoc. prof. dr. Dalia Nizevičienė, Kaunas University of Technology

**15:10 Research on the Use of Wood Processing Waste in Concrete**

Speaker: Domantas Ramanauskas, Kaunas University of Technology

**15:20 Research Into Installation Technologies of Steel-Concrete Composite Beams Combined with Timber-Concrete Composite Slabs**

Speaker: Mantas Širvinskas, Kaunas University of Technology

**15:30 Concrete Composites Reinforced with Sawdust Treated with Sodium Sulphate: An Analytical and Experimental Study of Mechanical Properties**

Speakers: Domantas Ramanauskas, Kornelija Valuckaitė, Kaunas University of Technology. Co-author: Jonas Ragelis, Kaunas University of Technology



15:40-16:00 Discussion

16:00 Conference Closing, Amphitheater

### Presentations of the Conference

#### Parallel session

#### Architecture, Library, M3

The chairman PhD student Thomas Andre Jeremy Gloaguen

**13:00 The Death and Life of Small Lithuanian Towns**

Speaker: Agnė Dudonytė, Kaunas University of Technology. Co-author: Assoc. prof. Gintarė Kapočiūtė, Kaunas University of Technology

**13:10 Reviving Identity-Lacking Territories through the Principles of Sensory Urbanism: A Review of Theoretical Research**

Speaker: Aida Raižytė, Kaunas University of Technology. Co-author: Assoc. prof. Rūta M. Slavinskaitė

**13:20 Rethinking Prison Architecture: Creating Spaces for Resocialization and Reintegration: Literature Review**

Speaker: Auksė Taurasevičiūtė, Kaunas University of Technology

**13:30 Experimental proposals for transformation of historic industrial quarter in the context of urban regeneration and green infrastructure development**

Speaker: Diana Žmėjauskaitė, Kaunas University of Technology. Co-author: Assoc. prof. dr. Indrė Gražulevičiūtė-Vileniškė, Kaunas University of Technology

**13:40 Biophilic Office Spaces with Integrated Plants: Analysis of Literature and Examples of Co-working Spaces**

Speaker: Gopu Pandaran Jayan, Kaunas University of Technology. Co-author: Assoc. prof. dr. Indrė Gražulevičiūtė-Vileniškė, Kaunas University of Technology

**13:50 Co-living Hotel for Students and Lecturers in the 15th Quarter of Kaunas Old Town**

Speaker: Laura Jurkštienė, Kaunas University of Technology. Co-author: Assoc. prof. dr. Gintaras Prikockis, Kaunas University of Technology



**14:00 Urban Regeneration of Brownfields Through the Concept of Sustainability Islands: A Review of Theoretical Research**

Speaker: Lukrecija Ramanauskaitė, Kaunas University of Technology. Co-author: Prof. dr. Jūratė Kamičaitytė, Kaunas University of Technology

**14:10-14:20**

**Break**

**14:20 Using Walkscape Concept for the Design of Urban**

Speaker: Majd Aboud, Kaunas University of Technology. Co-author: Prof. dr. Jūratė Kamičaitytė, Kaunas University of Technology

**14:30 Distinct Regional Tactics to Architectural Placemaking in Protected Landscapes: A Theoretical Research Review**

Speaker: Martynas Stakvilevičius, Kaunas University of Technology

**14:40 The Impact of Social Factors on The Protection of Cultural Heritage (Kaunas Modernism)**

Speaker: Poorun Kumar Bhatoo, Kaunas University of Technology. Co-author: Assoc. prof. dr. Aušra Mlinkauskienė, Kaunas University of Technology

**14:50 Regeneration of Urban Structures Applying the Principles of Integral Urbanism and Ecotone Functioning**

Speaker: María Alejandra Gutierrez Luna, Kaunas University of Technology

**15:00 Cellular Automata and Where to Find Them: Using Biological Process Inspired Generative Architecture for the Reconstruction of Kaunas Taxi Park. A Review of Theoretical Research**

Speaker: Džiugas Urbonas, Kaunas University of Technology

**15:10 Introduction of Reused/Already Recycled Materials into Architectural Design**

Speaker: Diyora Yarasheva, Kaunas University of Technology. Co-author: Assist. dr. Ingrida Povilaitienė, Kaunas University of Technology

**15:20 Natural Building Materials and Aesthetic Innovation: Investigating the Use of Natural, Locally Sourced, and Renewable Materials in Creating Visually Appealing and Environmentally Friendly Architecture**

# SMART BUILT ENVIRONMENT



## STUDENT SCIENTIFIC CONFERENCE

Speaker: Mylana Titovska, Kaunas University of Technology. Co-author: Assoc. prof. dr. Indrė Gražulevičiūtė-Vileniškė, Kaunas University of Technology

**15:30-16:00 Discussion**

**16:00 Conference Closing, Amphitheater**

**Scientific committee:** Prof. dr. Andrius Jurelionis; Assoc. prof. dr. Aušra Mlinkauskienė, KTU; Prof. dr. Jūratė Kamičaitytė, KTU; Prof. dr. Mindaugas Daukšys; Assoc. prof. dr. Eglė Klumbytė, KTU; Assoc. Prof. dr. Indrė Gražulevičiūtė-Vileniškė, KTU; Assist. dr. Ingrida Povilaitienė, KTU; Assist. dr. Ignacio Villalon Fornes, KTU

**Organizing committee:** Assist. dr. Vilma Kriaučiūnaitė-Neklejonovienė, KTU; Gintarė Stankevičiūtė, KTU; Viktoras Jasaitis, KTU; Martynas Statkauskas, KTU; Gloaguen Thomas Andre Jeremy, KTU; Manhanga Fallon Clare, KTU; Gintautas Tamošaitis, KTU; Kasparas Vazinskas, KTU; Viltė Ažukaitė, KTU; Gabija Kuzmickaitė, KTU

**Conference website**

<https://sbe.ktu.edu/>