### STUDEENT SCIENTIFIC CONFERENCE



#### **KAUNAS UNIVERSITY OF TECHNOLOGY**

#### FACULTY OF CIVIL ENGINEERING AND ARCHITECTURE

KTU Library amphitheater, Studentų str. 48, Kaunas

### Agenda

Friday, November 24

#### 09:30 Opening of the conference

Greetings from Prof. dr. Andrius Jurelionis, Dean of the Faculty of Civil Engineering and Architecture

#### The Plenary Session of the Conference

#### The chairman Assoc. prof. dr. Aušra Mlinkauskienė

# 09:35 Modelling of Intelligibility of Buildings and Spaces of Kaunas Downtown area: GIS and Space Syntax Based Approach

Speaker: Prof. dr. Kęstutis Zaleckis, Kaunas University of Technology, Kaunas, Lithuania

#### 10:05 The need of Buildings Operational Rating for a Smart Built Environment

Speaker: dr. Paris Fokaides, Frederick University, Cyprus. Chief Researcher of Faculty of Civil Engineering and Architecture, Kaunas University of Technology, Kaunas, Lithuania

#### 10:35 Remote Sensing for Urban Planning

Speaker: Prof. dr. Sébastien Gadal, Aix-Marseille University, France



#### **Presentations of the Conference**

#### The chairman PhD student Manhanga Fallon Clare

11:05 Study the Sense of Time as a Means of Shaping the Urban Environment: the case of Kaunas, Lithuania

Speaker: Abdelhak Ayouaz, Kaunas University of Technology. Co-author: Marius Ivaškevičius, Kaunas University of Technology

11:15 Analysis of the Prediction of Energy Performance of Buildings in the Renovation Process

Speaker: Martynas Pranauskas, Kaunas University of Technology

11:25 Research on Biocomposites Based on Mineral Binders

Speaker: Gabrielė Jurgutytė, Kaunas University of Technology

11:35 Comparative Analysis of Global Warming Emission of High-rise Residential Buildings of Different Materials

Speaker: Akvilė Ulevičė, Kaunas University of Technology. Co-author: Rėda Bistrickaitė

#### 11:45 Biomass Bottom Ash in Eco-efficient Cementitious Systems

Speaker: Deividas Norkus, Kaunas University of Technology. Co-authors: Danutė Vaičiukynienė, Jūratė Mockienė

## 11:55 Recycling of Plasterboard Waste and the Effect of Chemical Additives on the Properties of Recycled Gypsum Binder

Speaker: Gina Gustaitė, Kaunas University of Technology. Co-authors: Danutė Vaičiukynienė, Jūratė Mockienė

#### 12:05 Research of Heat Exchange in Soil Thermo-accumulators

Speaker: Aistė Mickūnaitė, Kaunas University of Technology

#### 12:15 Production and Use of Lightweight Artificial Aggregates in 3D Building Technology

Speaker: Fausta Adomaitytė, Kaunas University of Technology

#### 12:25 Research on Plastic Reinforced with Fiberglass

Speaker: Simonas Štreimikis, Kaunas University of Technology. Co-author: Ernestas Ivanauskas

12:35-13:20

#### Lunch break

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#### **Presentations of the Conference**

#### The chairman PhD student Thomas Andre Jeremy Gloaguen

## 13:20 Specific Features of the Application of the National Classification in Construction Projects

Speaker: Vitalija Armalytė, Kaunas University of Technology. Co-author: Arūnas Aleksandras Navickas

#### 13:30 Research of CO<sub>2</sub> Curing Impact on Thin-layer Product Properties

Speaker: Monika Druskevičiūtė, Kaunas University of Technology

### 13:40 Research of Geothermal Heating Usage Possibilities in Lithuanian District Heating Networks

Speaker: Egidijus Kasperavičius, Kaunas University of Technology. Co-author: Rokas Valančius

#### 13:50 Research and Conceptual Model for Biodiversity Conservation in Kaunas Neighborhoods During and After Renovation

Speaker: Anastasiia Kiuppier, Kaunas University of Technology. Co-author: Indrė Gražulevičiūtė-Vileniškė

## 14:00 Urban Design Influence on Environment-friendly Behavior in Kaunas Suburbs

Speaker: Birutė Gedrimienė, Kaunas University of Technology. Co-author: Ingrida Povilaitienė

## 14:10 The Investigation of Roller Compacted Concrete with Fly Ash Using Gyratory Compactor

Speaker: Jishnu Vijayan, Kaunas University of Technology. Co-author: Audrius Grinys

#### 14:20 Investigation of Artificial Lime – Biomass Bottom Ash Composite

Speaker: Ernestas Papšel, Kaunas University of Technology. Co-authors: Danutė Vaičiukynienė, Viktoras Doroševas



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#### 14:30 Effectiveness of Passive Cooling Strategies in Reducing Overheating Risk in Residential Buildings Under Future Climate Scenarios in Lithuania

Speaker: Svajūnas Jucis, Kaunas University of Technology. Co-author: Laura Stasiulienė

#### 14:40 A Study of the Interlinkages between List of Regulated Construction Products and the Types of Classified Materials

Speaker: Bronislovas Keseriauskis, Kaunas University of Technology. Coauthor: Arūnas Aleksandras Navickas

14:50 Reduction of CO<sub>2</sub> Emission through Utilisation of Municipal Glass Waste in the form Artificial Aggregates and Study of the Properties of the Aggregate

Speaker: Aivaras Rimgaila, Kaunas University of Technology

#### 15:00-15:10

#### Coffee break

#### Presentations of the Conference

#### The chairman PhD student Thomas Andre Jeremy Gloaguen

## 15:10 Feasibility Study of the Use of Architectural Theory in the Development of the Territory of the Former Military Base in Karmelava

Speaker: Arnas Džiaugys, Kaunas University of Technology

#### 15:20 Collective Intelligence in the Planning of Urban Public Spaces

Speaker: Aurelija Šideikytė, Kaunas University of Technology. Co-author: Jūratė Kamičaitytė

#### 15:30 Development of Public Spaces' System in Samylai County

Speaker: Younes Islem Zellagui, Kaunas University of Technology. Co-author: Vidmantas Minkevičius

### 15:40 Normal Section Strengthening Methods of Bendable Wooden Beams and their Analysis

Speaker: Edmondas Vaškys, Kaunas University of Technology. Co-author: Nerijus Adamukaitis



#### 15:50 The Research of Fresh Concrete Pressure into the Formwork

Speaker: Laimonas Andrikis, Kaunas University of Technology

## 16:00 Analysis and Effective use of Hybrid Photovoltaic Modules in the Swimming pool

Speaker: Modestas Stasytis, Kaunas University of Technology

16:10 Evaluation of Modular Buildings Load-bearing Structures from a Technological Aspect

Speaker: Lukas Tocionis, Kaunas University of Technology

16:20 Eco-Smart Construction: Harnessing Wood Sawdust, Cement Biocomposites for Sustainable Built Environments

Speaker: Hossein Rahmani, Kaunas University of Technology. Co-author: Algirdas Augonis

#### 16:30 Recycled Plastic Usage in Creating Building Materials

Speaker: Agnė Barkauskaitė, Kaunas University of Technology

#### 16:40-16:50 Discussion

#### 16:50 Conference Closing

**Scientific committee:** Assoc. prof. dr. Aušra Mlinkauskienė, KTU; Prof. dr. Danutė Vaičiukynienė, KTU; Prof. dr. Jūratė Kamičaitytė, KTU; Assoc. prof. dr. Eglė Klumbytė, KTU; Assoc. prof. dr. Rokas Valančius, KTU; Assoc. prof. dr. Laura Stasiulienė, KTU; Lect. dr. Ignacio Villalon Fornes, KTU

**Organizing committee:** Assoc. prof. dr. Indrė Gražulevičiūtė-Vileniškė, KTU; Lect. 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; Eglė Januškienė, KTU

#### Conference website

https://sbe.ktu.edu/