## KAUNAS UNIVERSITY OF TECHNOLOGY FACULTY OF CIVIL ENGINEERING AND ARCHITECTURE

## DEPARTMENT OF ARCHITECTURE AND URBANISM

# **Ecological Architecture 2017**

4<sup>th</sup> international scientific conference dedicated to sustainability in architecture and planning

Preliminary program

23<sup>rd</sup> November, 2017 Kaunas, Lithuania

# INTERNATIONAL SCIENTIFIC CONFERENCE FCOLOGICAL ARCHITECTURE 2017

The aim of the scientific conference **Ecological Architecture 2017** is to discuss the application of ecological ideas and principles of sustainability to the fields of architectural design, construction and planning. We intend to share the Lithuanian experience in this field with foreign colleagues, to identify the aesthetic and technological peculiarities of ecological or sustainable architecture and construction, considering climatic conditions, sociocultural peculiarities and other features of the region, to discuss the concepts of sustainable, ecological and organic urban and landscape development.

### **Topics of the conference:**

Application of the principles of sustainability in architecture, planning, and construction;

Theoretical approach to ideas and principles of sustainable design and planning;

Concepts and models of sustainable, ecological and organic urban and landscape development;

Aesthetic aspects of ecological architecture;

Social and psychological aspects of ecological architecture; Technological aspects of ecological architecture and construction:

Digital design for sustainability;

Ecology and sustainability in landscape architecture;

Heritage preservation dimension in sustainable design and planning;

Sustainable building maintenance and management.

#### **Organizers of the Conference:**

Kaunas University of Technology Faculty of Civil Engineering and Architecture Department of Architecture and Urbanism

### Site of the conference:

Department of Architecture and Urbanism, Faculty of Civil Engineering and Architecture, Kaunas University of Technology, Studentu st. 48 Kaunas, Lithuania

Slenio 9



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#### CONFERENCE PROGRAM

**Registration** 9.00 – 9.30 (Foyer, 3rd floor)

Opening of the conference 9.30 (310 aud.)

Plenary Session 9.40 - 12.30 (310 aud.)

Chairman - Prof. dr. Kęstutis Zaleckis

(20 min for presentation)

Invited speakers

- **1. Gintaras Balčytis** (Kaunas University of Technology) *GENIUS LOCI*: A CREATIVE APPROACH TO ARCHITECTURE DESIGN
- 2. Martynas Marozas (MMAP, Kaunas University of Technology) TOOLS FOR URBAN PLANNING AND REGENERATION
- **3. Vaidas Petrulis** (Kaunas University of Technology) EUROPEAN HERITAGE LABEL AS AN IMPULSE FOR THE CITY IDENTITY CONSTRUCTION: CASE OF KAUNAS
- **4. Vytautas Petrušonis** (Vilnius Gediminas Technical University) ECOLOGICAL DETERMINATION OF PLACE: PARTICIPATION AND / OR *GENIUS LOCI*?
- **5. Kęstutis Zaleckis** (Kaunas University of Technology) URBAN SPACE AS A CATALYST OF SOCIAL AND CULTURAL PROCESSES

Coffee Break (311 aud.) 12.30 – 13.00

# Session: Sustainable architecture, planning and heritage preservation 12.30 – 14.00 (310 aud.)

#### Chairman – Dr. Evaldas Ramanauskas

(15 min for presentation)

- **1. Enkarni Gomez Genua, Alex Mitxelena** (University of the Basque Country) FROM ECOLOGICAL TO BIOMIMETIC ARCHITECTURE
- 2. Jūratė Jurevičienė, Vytautas Petrušonis, Edita Riaubienė, Dalius Vrubliauskas (Vilnius Gediminas Technical University) SUSTAINABILITY OF THE HERITAGE PRESERVATION IN THE ACADEMIC EDUCATION OF THE ARCHITECTS IN LITHUANIA
- 3. Inga Gurauskienė, Jolanta Dvarionienė, Daina Kliaugaitė, Francesco Scorza (Kaunas University of Technology, University of Basilicata) STAKEHOLDERS INVOLVEMENT FOR INCREASE OF ENERGY EFFICIENCY IN BUILDINGS
- **4. Inga Urbonaitė, Gerda Antanaitytė** (LCC International University) ADAPTING PARTICIPATORY DESIGN TOOLS IN DESIGN THROUGH RESEARCH (DTR) MODELS TO DEVELOP SUSTAINABLE PROJECTS IN SENSITIVE TERRITORIES. CASE ANALYSIS

#### Coffee Break (311 aud.) 14.00 – 14.30

- **5. Özlem Atalan, Elif Süyük Makaklı** (Celal Bayar University) UNDERSTANDING OF KULA TRADITIONAL HOUSING DESIGN APPROACH IN SUSTAINABLE ARCHITECTURE
- **6. Elif Süyük Makaklı, Özlem Atalan** (Celal Bayar University) TRADITIONAL TURKISH HOUSES IN THE SUSTAINABLE DESIGN CONTEXT
- **7. Antanas Stančius** (Klaipėda University) SUSTAINABLE WATER TREATMENT AND DESIGN IN PUBLIC SPACES
- 8. Evaldas Ramanauskas, Gintė Jonkutė (Kaunas University of Technology) SUSTAINABLE DEVELOPMENT PECULIARITIES OF UKMERGE MUNICIPALITY CONSIDERING THE URBANISTIC, SOCIAL AND ENVIRONMENTAL ASPECTS

### Poster presentations 15.30 – 16.00 (Foyer, 3rd floor)

Chairman – Assoc. Prof. dr. Indrė Gražulevičiūtė-Vileniškė

- 1. Kęstutis Zaleckis, Aušra Mlinkauskienė, Nijole Steponaitytė (Kaunas University of Technology) MODELLING OF VALUABLE FEATURES OF IMMOVABLE CULTURAL HERITAGE FOR SUSTAINABLE URBAN DEVELOPMENT
- 2. Hariharasubbu Balamoorthy, Rasa Apanavičienė (Kaunas University of Technology) CONSTRUCTION OF INNOVATIVE ENERGY HARVESTING EXPOSITION PARK IN KAUNAS SCIENCE ISLAND
- 3. Lina Šeduikytė, Indrė Gražulevičiūtė-Vileniškė, Orinta Liutikaitė (Kaunas University of Technology)
  REFUNCTIONING OF INTER-WAR MODERNISM
  BUILDINGS IN KAUNAS (LITHUANIA): THE ASPECT
  OF USERS' COMFORT
- 4. Raffaela De Martino, Rossella Franchino, Nicola Pisacane (Università degli Studi della Campania Luigi Vanvitelli) HISTORIC WATERMILLS DIGITAL SURVEY AND SUSTAINABLE RE-DESIGN IN CILENTO AND VALLO DI DIANO NATIONAL PARK (ITALY)
- **5. Nikolay Dyomin, Yulia Ivashko, Li Shuan** (Kiev National University of Construction and Architecture) THE INFLUENCE OF NATURAL LANDSCAPE AND CHINESE TRADITIONS TO TRANSFORMATION OF ART-NOUVEAU AND NATIONAL ROMANTICISM ARCHITECTURE IN CHINA
- **6. Vaiva Vaitkevičiūtė, Kęstutis Zaleckis** (Kaunas University of Technology) LEGIBILITY OF URBAN SPACES IN KAUNAS NEW TOWN
- **7. Kamilė Jakubauskaitė, Irina Matijošaitienė** (Kaunas UNIVERSITY OF TECHNOLOGY) CRIME ANALYSIS IN PUBLIC SPACES OF VILIJAMPOLĖ