

1. R&D ORGANISATIONS

Organisation:

Vilnius Gediminas Technical University, Lithuania

www.vtu.lt

Director in charge of CREC actions:

Prof. Habil. Dr. R. Kacianauskas, Vice-Rector for Research

Communication details:

Vilnius Gediminas Technical University

Sauletekio al. 11, LT-2040 Vilnius

Lithuania

E-mail: mopror@adm.vtu.lt

Tel +370 2 70 04 82

Fax +370 2 70 01 14

Description:

During the last decade VGTU has become one of the largest and most important Lithuanian universities. VGTU has a number of high-level researchers. The University has industrial links, multi-disciplinary technological base and international connections. Economical tendencies and requirements in Lithuania forcing the researchers of the university activate the networking with European research institutions to maintain the position among the leaders of scientific and technological development in the country. VGTU successful FP5 Projects: Technically optimised pile concept (2000–2003); Thematic network on rail freight services (2000–2003); Promotion of results in transport research and learning (2000–2003); European geotechnical thematic network (2001–2003); The recycling of waste clay brick and tile materials for the partial replacement of cement in concrete (1996–2001); Promoting Innovation in Construction Industry SMES (2001–2003).

At present the University has 8 faculties ([Environmental Engineering](#), [Architecture](#), [Electronics](#), [Fundamental Sciences](#), [Mechanics](#), [Civil Engineering](#), [Transport Engineering](#), [Business Management](#)), [Institute of Aviation](#), [International Study Centre](#), Centre for Continuous Education, 49 departments (including, [7 research institutes](#), [2 research centres](#) and [14 research laboratories](#)). The university has 1682 staff members (1263 of them working full-time). Teaching staff numbers 748, while 61 are research fellows. The number of professors reaches 105 (of whom 86 work full-time). There are also 386 associated professors. Lecturers and senior lecturers make 257 staff-members.

Research fields:

- Research, development and application of building materials, structures and technologies;
- Development and application of information technologies, statistical analysis and methods of modelling physical processes;
- Investigation of social, economical and technological problems in the process of integration in to EC, harmonization and restructuring engineering systems;
- Experimental and theoretical investigation of environmental systems and development of environment protection technologies;
- Investigation of objects and design methods of architecture and urban planning, systems of building and territory planning in the context of social-economical transition.

Faculty of Civil Engineering

Director in charge of CREC actions:

Assoc. Prof. Dr. Povilas Vainiunas, Dean

Communication details:

Vilnius Gediminas Technical University
Sauletekio al. 11, LT-2040 Vilnius
Lithuania
Tel + 370 2 70 04 94
Fax + 370 2 70 04 94
E-mail: Povilas.Vainiunas@st.vtu.lt

Description:

The Faculty was founded in 1940. Academic staff: 82, including Prof. Dr. Habil. 11, Assoc. Prof. Dr. 71; Doctoral students 29.

The Faculty includes: 10 academic departments (Reinforced Concrete Structures; Steel and Timber Structures ; Geotechnical Engineering ; Construction Technology and Management ; Structural Mechanics; Building Materials ; Labour Safety and Fire Protection ; Architectural Engineering; Department of Construction Economics and Property Management; Department of Bridges and Special Structures); research institute "Kompozitas" (for special constructions and buildings); 3 research laboratories (of Geotechnical Engineering, of Construction Technology and Management).

Research fields:

- Creation of a system of standards for Lithuanian building needs, application of EN to Lithuanian purposes;
- Mechanics of reinforced concrete and automated design of constructions;
- Reliability, restoration and strengthening of building constructions;
- Investigations into metal, composite and glulam constructions, their design and improving their computational methods;
- Automated variant design and total quality control;
- Building systems and their forecast;
- New composite material development of local raw materials and industrial waste;
- Industrial ecology and environment protection;
- Computation theory of constructions and optimisation methods;
- Footings and foundations of newly built houses and those under reconstruction (Lithuanian building codes and standards);
- Ergonomic investigations in human safety;
- Analysis of builders traumatism and its prevention;
- Real estate valuation;
- Multiple criteria decision-making systems;
- Total quality management;
- Modelling of construction industry;
- Expert systems in construction;
- E – business in construction and property.

Faculty of Environmental Engineering

Director in charge of CREC actions:

Assoc. Prof. Dr. D. Cygas, Dean

Communication details:

Vilnius Gediminas Technical University

Sauletekio al. 11, LT-2040 Vilnius

Lithuania

Tel + 370 2 76 64 78

Fax + 370 2 70 04 97

E-mail: apf.dek@ap.vtu.lt

Description:

Most specialists in Lithuania for municipalities, their engineering systems as well as environmental protection needs are trained only at this Faculty. The Faculty comprises seven academic departments (Environment Protection; Geodesy; Roads; Urban Engineering; Heating and Ventilation; Water Supply and Management; Hydraulics).

Research fields:

- Systematization of building codes and regulations for Lithuania (heating and ventilation, materials of roads, road construction, geodetical work);
- Energetic evaluation and optimization of buildings and their microclimatic systems;
- Technological investigation of treatment of natural water, waste water and sludge;
- The perfection of methods used for hydraulic computation, hydraulic structures and water supply systems;
- Creating territory planning and urban traffic systems data bank, development of transport systems and their evaluation;
- Rehabilitation of Lithuanian railways, creation of railway infrastructure data bank, evaluation of Lithuanian local roads;
- Geodynamic processes in Lithuania, establishment of geodetic network, selection of coordinate system, creation of the information system with a geodetic base.

Faculty of Architecture

Director in charge of CREC actions:

Assoc. Prof. Dr. Eugenijus Staniunas, Dean

Communication details:

Vilnius Gediminas Technical University

Traku st. 1/26, LT-2001 Vilnius

Lithuania

Tel + 370 2 70 04 98

Fax + 370 2 61 91 44

E-mail: archdek@ar.vtu.lt

Description:

Academic staff: 43, including Prof. Dr. Habil. 8, Assoc. Prof. Dr. 15; Doctoral students 11. There are about 280 students studying meanwhile at the Faculty, first-year enrollment is approximately 60. The Faculty is the biggest educational institution in Lithuania for architecture specialists. Its history started in 1946 when the Faculty of Architecture in Kaunas Vytautas Magnus University was founded. In 1971 the Faculty was „revived” in Vilnius. Now it comprises four academic departments (Architecture, Architectural Graphics, Building Structures, Urban Design and Planning) and the laboratory of Defectology of Buildings. The Faculty comprises four academic departments ([Architecture](#); [Urban Design and Planning](#); [Architectural Graphics](#); [Building Structures](#)).

Research fields:

- Analysis of architectural and urban structures
- Analysis of architectural design methods
- Research into building and territory planning systems of the states in socio-economical transition
- Research and development of building construction

Organisation:

Kaunas University of Technology
Faculty of Civil Engineering and Architecture

Director in charge of CREC actions:

Assoc. Prof. Dr. H. Elzbutas, Dean

Communication details:

Studentu st. 48
3031 Kaunas
Lithuania
Tel + 370 7 451483
Fax + 370 7 300450, + 370 7 300454
E-mail: deksaf@adm.ktu.lt

Description:

The Faculty of Civil Engineering and Architecture was founded in 1940. Since 1922 it had existed as the Office of Civil Engineering in the Faculty of Technology. The Faculty contains 1,102 students; 65 academic and research staff. **The Laboratory of Building Materials and Constructions** ([Laboratory of Building Materials and Constructions](#)) is also part of the faculty.

Departments: [Civil Engineering and Architecture](#); [Building Materials](#); [Building Structures](#); [Civil Engineering Technologies](#); [Geotechnical Engineering](#) [Graphics Drawing](#); [Laboratory of Building Materials and Constructions](#).

Research fields:

- Investigation and formation of cultural landscape, research and management of cultural heritage, prognosis of cultural values protection, development of recreation and tourism;
- Production technologies of concrete and its components; optimization of their structure and properties;
- Research of strength, stability and durability of reinforced concrete structures;
- Monitoring of energy efficiency measures in dwelling houses, public and industrial buildings;
- Mathematical modelling and optimization of building processes, research and modernization of building technology, internationalization of the building process and its effects on the transformation of national construction;
- Interaction between hydraulic systems and environment.

Organisation:

Institute of Architecture and Construction

Director in charge of CREC actions:

Dr. Egidijus Blazelevicius, Director

Communication details:

Tunelio st. 60

3035 Kaunas

Lithuania

Tel + 370 7 451351; + 370 7 451355

Fax + 370 7 451355

E-mail: asi@asi.lt

Description:

Divisions: [Sector of History of Architecture](#); [Sector of Architectural Theory and Perspective Problems](#); [Sector of Urbanistics](#); [Department of Pre-Design Analysis](#); [Sector of Land Use Management](#); [Sector of Automation of Energy Systems](#); [Laboratory of Heating Technique](#); [Laboratory of Building Thermal Physics](#); [Department of Building Structures](#); [Department of Modified Building Materials](#); [Laboratory of Composite and Finish Materials](#).

Personnel:

Total employees - 150. 6 of them - doctors habilitates, professors; 40 of them - doctors, associated professors; 22 of them - researchers without a scientific degree; 10 of them - doctoral students; 39 of them - engineers and technicians; 33 of them - other service employees.

Main Trends of Activities:

- Investigation of history and heritage of Lithuanian architecture and urbanistics;
- Development of scientific principles in land management and territorial planning;
- Analysis of energy saving problems in buildings; investigation in the field of climate durability, strength and reliability of building structures;
- Research and development of new technologies of processing local raw and waste materials into building materials and products.

Organisation:

Institute of Thermoinsulation

Director in charge of CREC actions:

Prof. Dr. Habil. Antanas Laukaitis, Director

Communication details:

Linkmenu g. 28,

2600 Vilnius

Lithuania

Tel. +370 2 750001

Fax. +370 2 752629

E-mail: termo@aiva.lt

Description:

Divisions: Building Materials Employment Laboratory (accredited); Building Materials Laboratory (accredited); Refractory Concrete Laboratory (accredited); Laboratory of Local Binding Materials; Center of Physical-Chemical Investigations; Laboratory of Acoustics (accredited); Environment Laboratory; Laboratory of Technogenic Raw Materials.

Staff:

Total employees – 91. 2 of them – professors, doctors habilitates; 18 doctors, 10 researchers without scientific degree, 4 – doctoral students, 23 – engineers and technicians, 38 – service staff.

Main trends of activities:

- Research on physical properties, technologies and application on building materials.
- Estimation of conformity of building materials, articles, products, constructions and testing methods to European standards.