



# **RESEARCH ACTIVITY REPORT 2025**

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44	Faculty of Civil Engineering and Architecture
49	Institute of Environmental Engineering
52	Institute of Architecture and Construction
54	Biomedical Engineering Institute
56	Food Institute
58	Institute of Mechatronics
60	Institute of Materials Science
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66	Health Telematics Science Institute



**Researchers, Artists**

935



**Publications**

925 \*



**Projects**

24,2 mln. €



**R&D&I Works and Services**

4,2 mln. €



**Patents / Patent Applications**

25 / 21



**PhD Students**

338



**Doctoral Dissertations Defended**

55



**Awards**

27

## Priority Research Thematics Technologies for Sustainable Future

-  Artificial Intelligence and Robotics
-  Biomedical Engineering and Medical Technologies
-  Chemical and Environmental Technologies
-  Diagnostic Technologies
-  Applied Mathematics
-  Electronics and Electrical Engineering
-  Functional Materials and Technologies
-  Information and Communication Technologies
-  Food Systems and Biotechnologies
-  Mechanical and Transportation Engineering
-  Construction Technologies
-  Applied and Medicinal Chemistry
-  Sustainable Energy

## Priority Research Thematics Sustainable Sociocultural Development

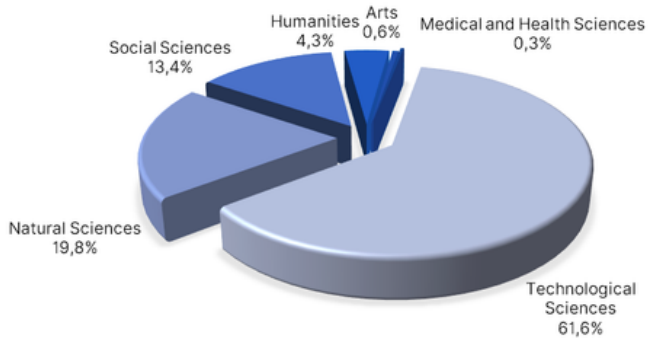
-  Architecture, Urban Activities and Cultural Heritage
-  Audiovisual Arts
-  Educational Environments and Technologies
-  Financial Technologies
-  Economic Analytics and Competitiveness
-  Business Models
-  Innovation Management and Entrepreneurship
-  Organisational Development
-  Industrial Design
-  Digital Media and Culture
-  Public Administration

# KTU Divisions Activities in Priority Research Thematics

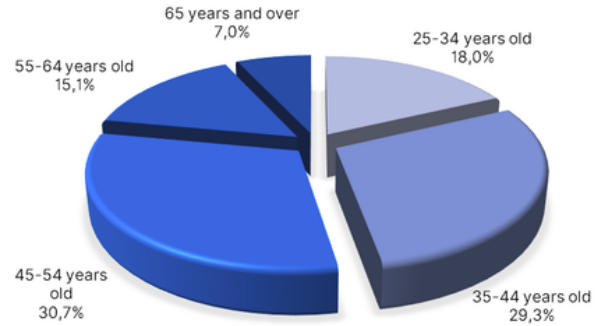
Divisions	Technologies for Sustainable Future												Sustainable Sociocultural Development												
	Artificial Intelligence and Robotics	Biomedical Engineering and Medical Technologies	Chemical and Environmental Technologies	Diagnostic Technologies	Applied Mathematics	Electronics and Electrical Engineering	Functional Materials and Technologies	Information and Communication Technologies	Food Systems and Biotechnologies	Mechanical and Transportation Engineering	Construction Technologies	Applied and Medicinal Chemistry	Sustainable Energy	Architecture, Urban Activities and Cultural Heritage	Audiovisual Arts	Educational Environments and Technologies	Financial Technologies	Economic Analytics and Competitiveness	Business Models	Innovation Management and Entrepreneurship	Organisational Development	Organisational Development	Digital Media and Culture	Public Administration	
Faculty of Chemical Technology			●			●		●				●	●												
School of Economics and Business								●					●				●	●	●	●	●			●	
Faculty of Electrical and Electronics Engineering	●			●		●							●												
Faculty of Informatics	●	●			●			●								●	●							●	
Faculty of Mathematics and Natural Sciences	●	●	●	●	●		●	●					●			●	●	●	●						
Faculty of Mechanical Engineering and Design	●			●		●	●		●				●	●	●								●		
Panevėžys Faculty of Technologies and Business	●					●	●													●	●				
Faculty of Social Sciences, Arts and Humanities	●												●	●	●					●	●		●	●	
Faculty of Civil Engineering and Architecture						●				●			●	●									●		
Institute of Environmental Engineering			●										●							●					
Institute of Architecture and Construction						●				●			●	●											
Biomedical Engineering Institute		●																							
Food Institute								●																	
Institute of Mechatronics	●	●		●		●	●	●	●	●															
Institute of Materials Science				●		●						●													
Prof. K. Baršauskas Ultrasound Research Institute	●	●		●		●	●																		
Health Telematics Science Institute		●		●		●																			

## Academic Staff (researchers, artists)

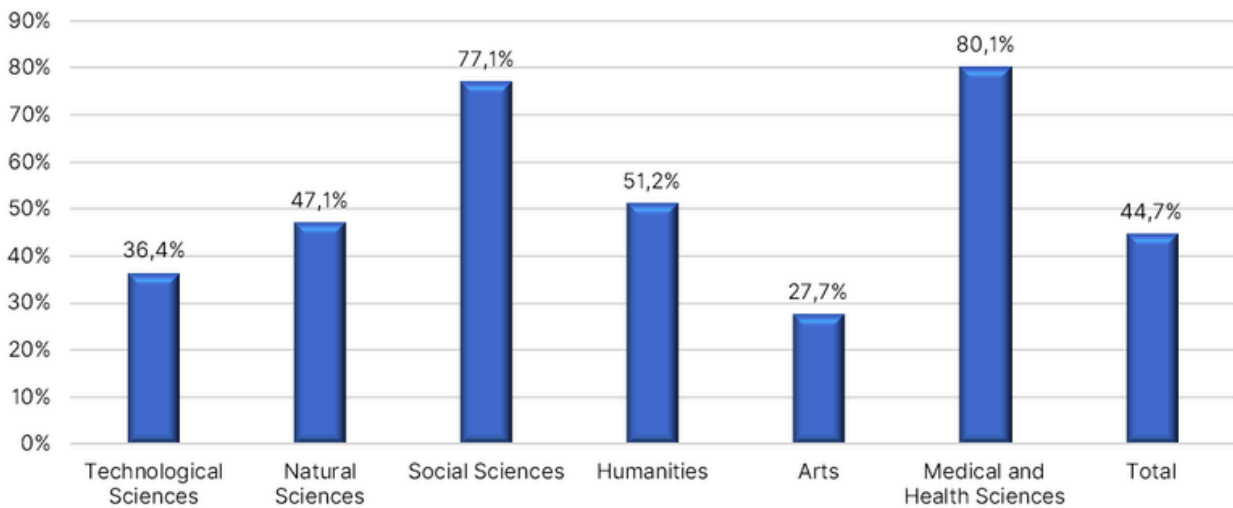
Academic staff time devoted to scientific (art) activities



Academic staff (researchers, artists) by age

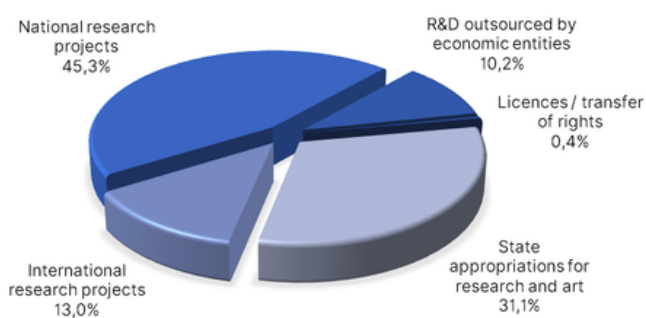


Female part in academic staff time devoted to scientific (art) activities

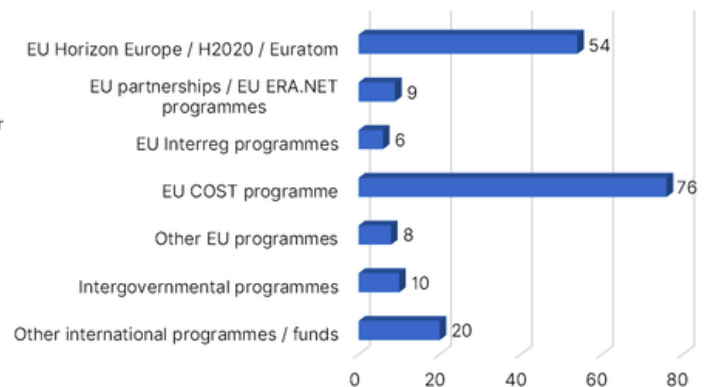


## Research funding and international projects

Research funding

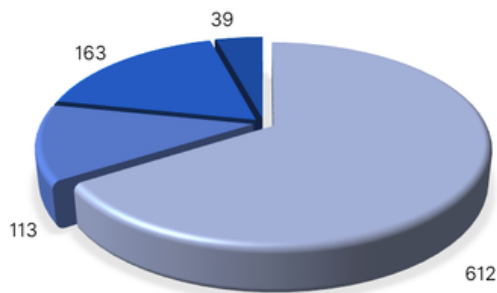


Projects of international research and innovation programmes



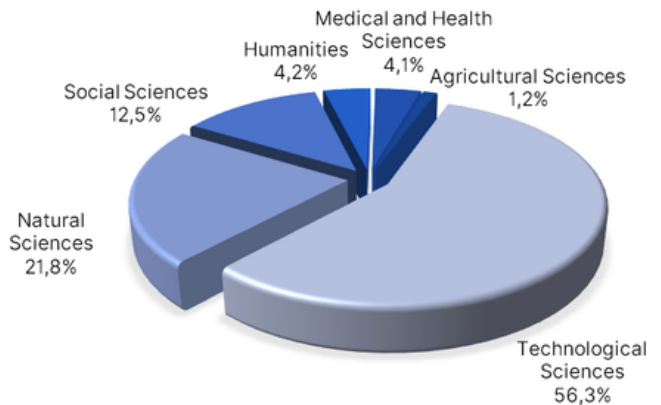
## Publications

Peer-reviewed scientific publications



- Articles in journals indexed in Web of Science or Scopus with impact factor
- Articles in other publications indexed in Web of Science or Scopus
- Articles in other peer-reviewed scientific publications
- Scientific monographs, studies and parts thereof

Peer-reviewed scientific publications by science areas



## Awards

- Dr. V. Getautis. The Cross of the Knight of the Order of the Lithuanian Grand Duke Gediminas
- Dr. V. Petruelis. The Cross of the Knight of the Order of the Lithuanian Grand Duke Gediminas
- Dr. Habil. S. Tamulevičius. The Cross of the Knight of the Order of the Lithuanian Grand Duke Gediminas
- Dr. D. Adlienė. The Medal of the Order of the Lithuanian Grand Duke Gediminas
- Dr. S. Keturakis. The Medal of the Order of the Lithuanian Grand Duke Gediminas
- Dr. P. R. Venskutonis. The Honorary Doctor title (Doctor Honoris Causa) awarded by the Estonian University of Life Sciences
- Dr. R. Raišutis. The Kazimieras Baršauskas Prize of the Lithuanian Academy of Sciences in the field of electronics and electrical engineering
- Dr. K. Baltakys. Kaunas City Science Prize
- Dr. K. Lekeckas. Gold Award "Fashion Design of the Year" of the competition "International Design Awards (IDA)"
- Dr. K. Lekeckas. Bronze A' Design Award in Fashion, Apparel and Garment Design
- Dr. V. Petruelis, Dr. B. Tranavičiūtė, Dr. P. T. Laurinaitis. National Architecture Award in the category "For Architectural Theory and Dissemination"
- G. Janulytė Bernotienė. National Architecture Award in the category "Conversion"
- G. Balčytis. Architectural Title-Belt "Kaunas Architect of the Year"
- G. Janulytė Bernotienė, et al. First place in the professional category of the National Urbanism and Architecture Awards "Smart City 11"
- Dr. R. Lekavičienė. Kaunas City Municipality 2nd Degree Santaka Badge of Honour
- Dr. A. Balžekienė, Dr. A. Telešienė. Prof. Juozas Leonavičius Award
- Dr. Š. Daškevičiūtė. Winner's award of the competition "Best Dissertations of 2024" in the fields of natural, technological, medical and health, and agricultural sciences
- Dr. S. Maqsood. Prize of the Young Scientists and Doctoral Students' Research Works Competition of the Lithuanian Academy of Sciences
- Dr. R. Beresnevičiūtė. Letter of Commendation of the Young Scientists and Doctoral Students' Research Works Competition of the Lithuanian Academy of Sciences
- A. Pupiūtė. Scholarship of the Theodor von Grotthuss Fund of the Lithuanian Academy of Sciences
- R. Kleinauskas. Prize of the Higher Education Students' Research Works Competition of the Lithuanian Academy of Sciences
- D. Lekavičius. Prize of the Higher Education Students' Research Works Competition of the Lithuanian Academy of Sciences
- G. Riaubaitė. Prize of the Higher Education Students' Research Works Competition of the Lithuanian Academy of Sciences
- E. Januškienė, et al. Award in the nomination "Best Architectural Education Project" at the exhibition "Architecture: Kaunas 2025"
- M. Stakvilevičius. First place in the student category of the National Urbanism and Architecture Awards "Smart City 11"
- Dr. E. Butkevičiūtė. Grand Finalist and Overall Winner of the Global Pitching Research Competition (IGPRC2024)
- Biomedical Engineering Institute. Kaunas Chamber of Commerce, Industry and Crafts award in the category "Business and Science"

## Doctoral Studies in Science (Art) Fields

### Technological Sciences

- T 001 Electrical and Electronic Engineering
- T 002 Civil Engineering
- T 003 Transport Engineering
- T 004 Environmental Engineering
- T 005 Chemical Engineering
- T 006 Energetics and Thermoengineering
- T 007 Informatics Engineering
- T 008 Materials Engineering
- T 009 Mechanical Engineering
- T 010 Measurement Engineering

### Natural Sciences

- N 001 Mathematics
- N 002 Physics
- N 003 Chemistry
- N 009 Informatics

### Social Sciences

- S 002 Political Sciences
- S 003 Management
- S 004 Economics
- S 005 Sociology
- S 007 Education

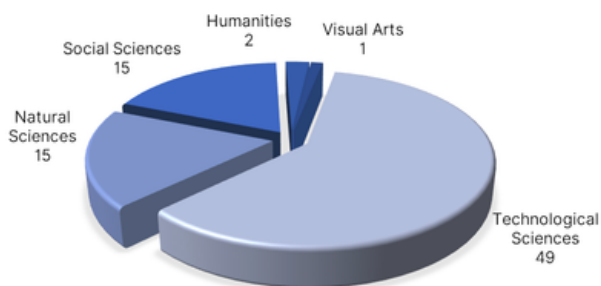
### Humanities

- H 003 History and Theory of Arts

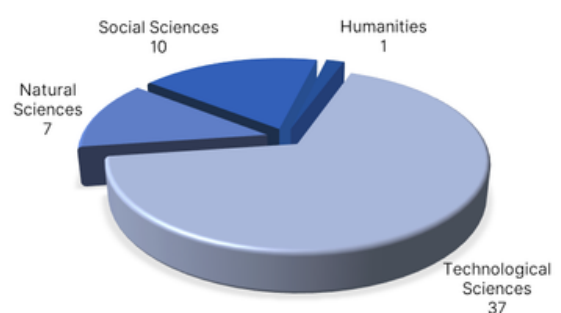
### Visual Arts

- V 001 Architecture

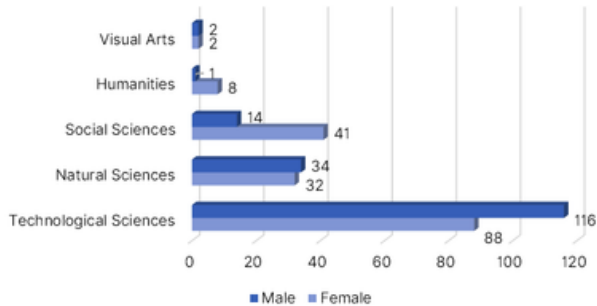
Doctoral students admitted



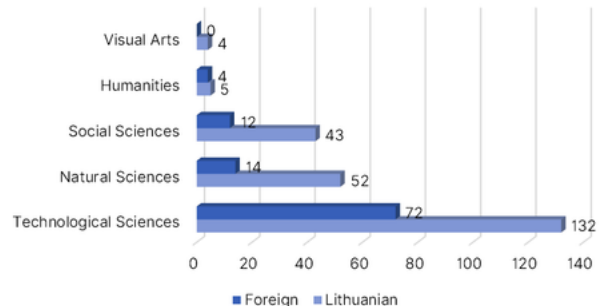
Doctoral dissertations defended



Doctoral students by gender



Doctoral students by nationality



**FACULTIES**



**Researchers / PhD Students**

164 / 80



**Projects**

75



**Publications**

196



**Patents / Patent Applications**

9 / 8



**Doctoral Dissertations Defended**

12

## Science Fields



N 003 Chemistry



T 004 Environmental Engineering



T 005 Chemical Engineering



T 008 Materials Engineering

## Priority Research Thematics



Chemical and Environmental Technologies



Functional Materials and Technologies



Food Systems and Biotechnologies



Applied and Medicinal Chemistry



Sustainable Energy

## R&D Services and Infrastructure

- [Thin-layer chromatography plate analysis system with mass spectrometry](#)
- [Ionization potential measurement spectrometer Riken Keiki AC-2S](#)
- [1-1FH2R9 Fluxim PHELOS goniospektrometer](#)
- [Differential scanning calorimeter TA DSC250 with cooling equipment](#)
- [Faculty's open access research facilities and services](#)



## Representation, Memberships

- Dr. L. Bašinskienė – Lithuanian Standards Board Technical Committee LST TK 15 “Cereals, Cereal Products, Bread and Animal Feeding Stuffs”, Chair; Lithuanian Standards Board Technical Committee LST TK 51 “Food Analysis – Horizontal Methods”, Chair; Expert Commission for the Certification of National Heritage Products, Non-formal Training Programmes for Traditional Crafts and Attestation of Traditional Crafts Masters under Ministry of Agriculture of the Republic of Lithuania, member
- Dr. L. Jūrienė – Phytochemical Society of Europe, member; European Federation of Chemical Engineering, Working Party on High Pressure Technology, guest member; International Society for the Advancement of Supercritical Fluids, member
- Dr. V. Kitrytė-Syrpa – Accreditation Agency for Study Programmes in Engineering, Informatics, Natural Sciences and Mathematics (ASIIIN), expert; ISEKI-Food Association: European Association for Integrating Food Science and Engineering Knowledge into the Food Chain, national representative; European Chemical Society (EuChemS), Food Chemistry Division, national representative
- Dr. R. Vinauskienė – Lithuanian Standards Board Technical Committee LST TK 3 “Meat and Meat Products”, member; International Organization for Standardization, ISO Technical Committee 34 “Food Products”, Subcommittee 6 “Meat, Poultry, Fish, Eggs and Their Products”, member
- Dr. P. R. Venskutonis – ISEKI Food Association: European Association for Integrating Food Science and Engineering Knowledge into the Food Chain, national representative, member of ISEKI-Food Association Academy; International Society for Nutraceuticals and Functional Foods (ISNFF), member of the International Advisory Board; Institute of Food Technologists (IFT), International Chapter and Nutraceutical and Functional Foods Division, member; European Chemical Society (EuChemS), Food Chemistry Division, national representative; NAPA Society (Nutrition and Physical Activity on Aging, Obesity, and Cancer), member of the Board; Global Harmonisation Initiative, Ambassador of Lithuania; Expert Committee of Natural and Technical Sciences of the Research Council of Lithuania, member; Lithuanian Academy of Sciences, full member; FutureFoodS partnership, member of the Steering Committee; Research Ethics Committee of the Research Council of Lithuania, member
- Dr. R. Rutkaitė – Lithuanian Standards Board Technical Committee LST TK 68 “Plastics”, member; International Association of Engineers (IAENG), member
- Dr. L. Pečiulytė – Lithuanian Standards Board Technical Committee LST TK 68 “Plastics”, member
- Dr. O. Baniukaitienė – Tissue Engineering and Regenerative Medicine International Society (TERMIS), member
- Dr. Habil. J. V. Gražulevičius – Lithuanian Academy of Sciences, full member
- Dr. O. Bezvikonnyi – American Chemical Society, member
- Dr. S. Grigalevičius – Lithuanian Academy of Sciences, full member
- Dr. J. Ostrauskaitė – American Chemical Society, member; Network of Service Providers for Eco-innovations in Manufacturing SMEs (Ecolabnet), member; European Chemistry Thematic Network (ECTN), member
- Dr. G. Kručaitė – Young Academy of the Lithuanian Academy of Sciences, member
- Dr. S. Grauželienė – Network of Service Providers for Eco-innovations in Manufacturing SMEs (Ecolabnet), member
- Dr. A. Navaruckienė – Network of Service Providers for Eco-innovations in Manufacturing SMEs (Ecolabnet), member
- Dr. R. Šiaučiušas – Lithuanian Academy of Sciences, full member and member of the Presidium; Research and International Cooperation Charity and Support Foundation of the Lithuanian Academy of Sciences, member of the Board
- Dr. K. Baltakys – Lithuanian Chemical Industry Companies Association, President; Education Policy Committee of the Lithuanian Confederation of Industrialists, member; Lithuanian Chemical Society, member of the Board; Science Committee of the Lithuanian University Rectors' Conference, member
- Dr. A. Eisinas – Young Academy of the Lithuanian Academy of Sciences, alumnus
- Dr. T. Dambrauskas – International Confederation for Thermal Analysis and Calorimetry (ICTAC), affiliate councillor
- Dr. D. Martuzevičius – EU-LCI (EC DG Internal Market, Industry, Entrepreneurship and SMEs) Expert Group, member
- Dr. L. Kliučininkas – EU Horizon Europe Programme Committee “Climate Neutral and Smart Cities”, national representative
- Dr. V. Kaunelienė – National Committee on Climate Change, member
- Dr. E. Krugly – American Chemical Society, member; Society for Biomaterials, member
- Dr. I. Barauskienė – International Society of Electrochemistry, member
- Dr. E. Griškoniš – International Society of Electrochemistry, member
- Dr. K. Kantminienė – International Society of Electrochemistry, member
- Dr. R. Paleckienė – Lithuanian Standards Board Technical Committee LST TK 57 “Fertilizers”, member
- Dr. D. Sinkevičiūtė – International Society of Electrochemistry, member

## Representation, Memberships

- Dr. R. Šlinkšienė – Lithuanian Standards Board Technical Committee LST TK 57 “Fertilizers”, Chair; CEN/TC 223 “Soil improvers and growing media”, member
- Dr. A. Šulčiūtė – European Chemical Society (EuChemS), member; International Society of Electrochemistry, member
- Dr. E. Valatka – Lithuanian Chemical Society, Deputy Chairman; International Society of Electrochemistry, member
- Dr. N. Žmuidzinaučienė – International Society of Electrochemistry, member
- Dr. N. Malys – Higher Education Academy (Advance HE), member; Biochemical Society, member; Carbon Recycling Network, member
- Dr. V. Getautis – Lithuanian Academy of Science, full member
- Dr. E. Arbačiauskienė – American Chemical Society, member
- Dr. J. Solovjova – American Chemical Society, member
- Dr. K. Rakštys – American Chemical Society, member
- Dr. T. Malinauskas – American Chemical Society, member; European Materials Research Society, member
- Dr. A. Magomedov – Lithuanian Society of Young Researchers, member
- Dr. I. Jonuškienė – International Society of Electrochemistry, member
- Dr. L. Miknius – Lithuanian Standards Board Technical Committee LST TK 40 “Petroleum, petroleum products, lubricants and alternative fuels”, member

## Key Achievements in Science and Innovation

- Dr. V. Getautis. The Cross of the Knight of the Order of the Lithuanian Grand Duke Gediminas
- Dr. P. R. Venskutonis. The Honorary Doctor title (Doctor Honoris Causa) awarded by the Estonian University of Life Sciences
- Dr. K. Baltakys. Kaunas City Science Prize
- Dr. Š. Daškevičiūtė. Winner’s Award of the competition “Best Dissertations of 2024” in the fields of natural, technological, medical and health, and agricultural sciences
- A. Pupiūtė. Scholarship of the Theodor von Grotthuss Fund of the Lithuanian Academy of Sciences
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- R. Kleinauskas. Prize of the Higher Education Students' Research Works Competition of the Lithuanian Academy of Sciences
- D. Lekavičius. Prize of the Higher Education Students' Research Works Competition of the Lithuanian Academy of Sciences
- Dr. D. Blaževičius. Winner of the KTU Competition for the Most Active Young Researchers
- Dr. L. Jūrienė. Winner of the KTU Competition for the Most Active Young Researchers
- Dr. M. Stanitska. Winner of the KTU Competition for the Most Active Young Researchers
- A. Melnikas. President Aleksandras Stulginskis Scholarship
- E. Lazickaitė. Winner’s Award of the competition “Best Master Thesis of 2025” in the field of agricultural sciences
- V. Šreikaitė. Winner’s Award of the competition “Best Master Thesis of 2025” in the field of technological sciences

## Main Publications

- Nature Energy, DOI: [10.1038/s41560-025-01817-6](https://doi.org/10.1038/s41560-025-01817-6)
- Advanced Energy Materials, DOI: [10.1002/aenm.202500841](https://doi.org/10.1002/aenm.202500841)
- Advanced Energy Materials, DOI: [10.1002/aenm.202404617](https://doi.org/10.1002/aenm.202404617)
- Chemical Engineering Journal, DOI: [10.1016/j.cej.2025.159362](https://doi.org/10.1016/j.cej.2025.159362)
- Biotechnology Advances, DOI: [10.1016/j.biotechadv.2025.108571](https://doi.org/10.1016/j.biotechadv.2025.108571)
- International Journal of Biological Macromolecules, DOI: [10.1016/j.ijbiomac.2025.144354](https://doi.org/10.1016/j.ijbiomac.2025.144354)
- Process Safety and Environmental Protection, DOI: [10.1016/j.psep.2025.106959](https://doi.org/10.1016/j.psep.2025.106959)
- ACS Applied Materials and Interfaces, DOI: [10.1021/acsami.5c17456](https://doi.org/10.1021/acsami.5c17456)
- Journal of Environmental Chemical Engineering, DOI: [10.1016/j.jece.2025.116515](https://doi.org/10.1016/j.jece.2025.116515)
- Ceramics International, DOI: [10.1016/j.ceramint.2025.10.406](https://doi.org/10.1016/j.ceramint.2025.10.406)
- Food Bioscience, DOI: [10.1016/j.fbio.2025.106747](https://doi.org/10.1016/j.fbio.2025.106747)
- Journal of Materials Chemistry C, DOI: [10.1039/d5tc01485a](https://doi.org/10.1039/d5tc01485a)
- LWT, DOI: [10.1016/j.lwt.2025.117749](https://doi.org/10.1016/j.lwt.2025.117749)
- Optical Materials, DOI: [10.1016/j.optmat.2025.117467](https://doi.org/10.1016/j.optmat.2025.117467)
- RSC Advances, DOI: [10.1039/d5ra02996a](https://doi.org/10.1039/d5ra02996a)

## Projects

- [Pilot Line for European Production of Perovskite-Silicon Tandem Modules on Industrial Scale \(PEPPERONI\)](#), 2022-2026
- [Perovskite Solar Cells with Enhanced Stability and Applicability \(VALHALLA\)](#), 2023-2025
- [High-Efficiency Perovskites on Flexible Substrates for Sustainable Applications \(HEPAFLEX\)](#), 2023-2027
- [Strong-Coupling-Enhanced Nanoparticle Array Organic Light Emitting Diode \(SCOLED\)](#), 2024-2026
- [High-Speed Organic Photonics and Optoelectronics \(HiSOPE\)](#), 2024-2028
- [Research and Innovation Strategy for Lviv Polytechnic National University Dedicated to White-Emitting Organic Lighting Systems \(HELIOS\)](#), 2024-2027
- [Rationally Designed Thin Contact Layers Enabling Large-Scale Perovskite-on-Silicon Tandem Photovoltaics \(RADICALS\)](#), 2023-2027
- [Revealing of Se-based Semiconductors for Electro-optical Gas Sensors \(SeSeoS\)](#), 2025-2028
- [Fermented Algal Extracts for Nutraceutical and Oral Health Care Applications \(FEAL4HEALTH\)](#), 2023-2026
- [Implementation of Mission-Based Science and Innovation Programs: SmartEcoTech](#), 2024-2026
- [New Generation In Vitro Model of Osteochondral Tissue: Synergistic Engineering of Multilayered 3D Polymer Scaffolds and Smart Hydrogels](#), 2024-2026
- [Production of Innovative Solid CO<sub>2</sub> Binder Based on Calcium Rich Industrial Wastes \(PICOBIND\)](#), 2025-2028
- [Investigation of Branched C5-dicarboxylic Acid Metabolism and Development of Chemolithoautotrophic Cell Factory for Itaconic Acid Production from Carbon Dioxide \(ITABIO\)](#), 2024-2027
- [Novel Structure Design Approach for High Protein Enteral Feeding Formulations to Modulate Digestibility and Bioavailability of Proteins \(ENRICH\)](#), 2025-2028
- [Materials Recovering from Multi-Layer Composite Waste by Simultaneous Delamination and Leaching: Theory, Technology and Circularity \(SIMILARITY\)](#), 2023-2026

## Patents / Patent Applications

- Patent [EP 4450588 B1](#)
- Patent [EP 4194596 B1](#)
- Patents [US 12317741 B2](#), [JP 7768643 B2](#)
- Patents [US 12207546 B2](#), [JP 7663191 B2](#)
- Patent / application [US 12503437 B2](#) / [US 2025066301 A1](#)
- Patent applications [CN 120329352 A](#), [EP 4590099 A1](#), [US 2025241109 A1](#), [JP 2025112277 A](#)
- Patent application [US 2025049875 A1](#)
- Patent / application [LT 7167 B](#) / [LT 2024009 A](#)
- Patent / application [LT 7153 B](#) / [LT 2023554 A](#)

## Scientific Events

- [18th Baltic Conference on Food Science and Technology "Baltics R&D For Future Food" \(FOODBALT2025\)](#)
- [Academician Jonas Janickis Chemistry Contest](#)

## Collaboration

### Foreign Research and Study Institutions

- [Aalto University](#), Finland
- [Aarhus University](#), Denmark
- [Abai Kazakh National Pedagogical University](#), Kazakhstan
- [Agricultural University of Athens](#), Greece
- [Artois University](#), France
- [Atomic and Alternative Energy Commission](#), France
- [Autonomous University of Barcelona](#), Spain
- [Autonomous University of Madrid](#), Spain
- [Avignon University](#), France
- [Babeş-Bolyai University](#), Romania
- [Bar-Ilan University](#), Israel
- [Ben-Gurion University of the Negev](#), Israel
- [Brno University of Technology](#), Czechia
- [Budapest University of Technology and Economics](#), Hungary
- [Bureau of Geological and Mining Research \(BRGM\)](#), France
- [Bursa Uludağ University](#), Turkey
- [Centria University of Applied Sciences](#), Finland
- [Cornell University](#), USA
- [Cranfield University](#), United Kingdom

## Collaboration

### Foreign Research and Study Institutions

- [Danish Technological Institute](#), Denmark
- [Eindhoven University of Technology](#), Netherlands
- [EPFL](#), Switzerland
- [Estonian University of Life Sciences](#), Estonia
- [Freiberg University of Mining and Technology](#), Germany
- [Gdańsk University of Technology](#), Poland
- [Hamburg University of Technology](#), Germany
- [Hanze University of Applied Sciences](#), Netherlands
- [Helmholtz Centre Berlin for Materials and Energy GmbH \(HZB\)](#), Germany
- [Heriot-Watt University](#), United Kingdom
- [Indian Institute of Technology](#), India
- [INSA Rouen](#), France
- [Institute of Physics, University of Belgrade](#), Serbia
- [Italian Institute of Technology \(IIT\)](#), Italy
- [Ivan Franko National University of Lviv](#), Ukraine
- [Jaroslav Heyrovsky Institute of Physical Chemistry](#), Czechia
- [Jaume I University](#), Spain
- [Kyiv National University of Technologies and Design](#), Ukraine
- [Lancaster University](#), United Kingdom
- [Latvian Institute of Organic Synthesis](#), Latvia
- [Leather and Footwear Research Institute](#), Romania
- [Lehigh University](#), USA
- [Lodz University of Technology](#), Poland
- [Lund University](#), Sweden
- [Lviv Polytechnic National University](#), Ukraine
- [National Chung Cheng University](#), Taiwan
- [National Chung Hsing University](#), Taiwan
- [National Institute for Industrial Environment and Risks \(INERIS\)](#), France
- [National Research Council \(CNR\)](#), Italy
- [National Taiwan University of Science and Technology](#), Taiwan
- [National Tsing Hua University](#), Taiwan
- [Natural Resources Institute Finland](#), Finland
- [Nord University](#), Norway
- [Palacký University Olomouc](#), Czechia
- [Polymer Competence Center Leoben](#), Austria
- [Pontifical Catholic University of Valparaíso](#), Chile
- [Riga Technical University](#), Latvia
- [Rovira i Virgili University](#), Spain
- [Silesian University of Technology](#), Poland
- [Sivas Cumhuriyet University](#), Turkey
- [Slovak Academy of Sciences](#), Slovakia
- [Swiss Center for Electronics and Microtechnology \(CSEM\)](#), Switzerland
- [Swiss Federal Laboratories for Materials Science and Technology \(EMPA\)](#), Switzerland
- [Tallinn University of Technology](#), Estonia
- [Taras Shevchenko National University of Kyiv](#), Ukraine
- [Technical University of Munich](#), Germany
- [Ternopil Ivan Puluj National Technical University](#), Ukraine
- [Université Grenoble Alpes](#), France
- [University of Angers](#), France
- [University of Applied Sciences Vienna](#), Austria
- [University of Aveiro](#), Portugal
- [University of Banja Luka](#), Bosnia and Herzegovina
- [University of Bologna](#), Italy
- [University of Burgundy](#), France
- [University of Copenhagen](#), Denmark
- [University of Eastern Finland](#), Finland
- [University of Exeter](#), United Kingdom
- [University of Galway](#), Ireland
- [University of Gaziantep](#), Turkey
- [University of Groningen](#), Netherlands
- [University of Haute-Alsace](#), France
- [University of Hohenheim](#), Germany
- [University of Kaiserslautern-Landau](#), Germany
- [University of Las Palmas de Gran Canaria](#), Spain
- [University of Latvia](#), Latvia
- [University of Liege](#), Belgium
- [University of Ljubljana](#), Slovenia
- [University of Lodz](#), Poland
- [University of Malaya](#), Malaysia
- [University of Maryland](#), USA
- [University of Milano-Bicocca](#), Italy
- [University of Mostar](#), Bosnia and Herzegovina
- [University of Novi Sad](#), Serbia
- [University of Orléans](#), France
- [University of Oxford](#), United Kingdom
- [University of Padua](#), Italy
- [University of Parma](#), Italy
- [University of Porto](#), Portugal
- [University of Sheffield](#), United Kingdom
- [University of Split](#), Croatia
- [University of Tours](#), France
- [University of Trento](#), Italy
- [University of Turin](#), Italy
- [University of Turku](#), Finland
- [University of Valencia](#), Spain
- [University of Vienna](#), Austria
- [University of Würzburg](#), Germany
- [University of Zagreb](#), Croatia
- [University Paris](#), France
- [Uppsala University](#), Sweden
- [V. Lashkaryov Institute of Semiconductor Physics](#), Ukraine
- [VTT Technical Research Centre of Finland](#), Finland
- [Wageningen University](#), Netherlands
- [Walloon Agricultural Research Centre](#), Belgium
- [Yuan Ze University](#), Taiwan
- [Zurich University of Applied Sciences](#), Switzerland

## Collaboration

### Industry and Business

- [3D Creative, UAB](#)
- [3SUN, SRL, Italy](#)
- [Achema, AB](#)
- [Addere Care, UAB](#)
- [Akmenės cementas, AB](#)
- [All in container, UAB](#)
- [Allive Europe, UAB](#)
- [Ark Metrica, LTD, United Kingdom](#)
- [ATUTU, UAB](#)
- [Axioma Metering, UAB](#)
- [Baltic traders group LT, UAB](#)
- [Bauroc, UAB](#)
- [BC solutions, UAB](#)
- [Becquerel Institute France, France](#)
- [Biossyd, UAB](#)
- [Biotecha, UAB](#)
- [Bious labs, MB](#)
- [Biržų duona, UAB](#)
- [Boros grupė, UAB](#)
- [Cosmoway, UAB](#)
- [Dargesta, UAB](#)
- [Divaks, UAB](#)
- [Dolomitas, AB](#)
- [Doma, SIA, Latvia](#)
- [DP acetate, UAB](#)
- [Dyename, AB, Sweden](#)
- [Ecostone solutions, UAB](#)
- [Energenas, UAB](#)
- [Esco Medical Technologies, UAB](#)
- [Filter, UAB](#)
- [Finegrī, UAB](#)
- [Fivrec, UAB](#)
- [FOM Technologies, A/S, Denmark](#)
- [Genba Taste, UAB](#)
- [HANWHA Q.CELLS, GmbH, Germany](#)
- [Heidelberg Materials Lietuva Cementas, UAB](#)
- [HI-LABS, UAB](#)
- [Hollister Lietuva, UAB](#)
- [Involutus, UAB](#)
- [Jotron, UAB](#)
- [Kauen craft, UAB](#)
- [Kauno energija, AB](#)
- [Kauno grūdai, AB](#)
- [Kauno kogeneracinė jėgainė, UAB](#)
- [Kauno stiklas, UAB](#)
- [Kėdainių konservų fabrikas, UAB](#)
- [KN Energies, AB](#)
- [Linea libera, UAB](#)
- [Litesko, UAB](#)
- [Litmus LT, UAB](#)
- [Lomartov, SL, Spain](#)
- [Lomista, UAB](#)
- [LZT, UAB](#)
- [Mantinga, UAB](#)
- [Medicata Filia, UAB](#)
- [Modest, AB](#)
- [Mondragon Assembly, Spain](#)
- [Montuotojas, UAB](#)
- [MV GROUP Production, AB](#)
- [Nanoversa, UAB](#)
- [Natural Market Holding, UAB](#)
- [Natūralus pluoštas, UAB](#)
- [Novaled, GmbH, Germany](#)
- [OMG Bubble Tea, UAB](#)
- [OQEMA, UAB](#)
- [Ortho Baltic, UAB](#)
- [Pieno žvaigždės, AB](#)
- [Prolabs, UAB](#)
- [Red Sea Farms, LTD, United Arab Emirates](#)
- [Reola, UAB](#)
- [Silikatas, AB](#)
- [SSF, UAB](#)
- [Statybos produkcijos sertifikavimo centras, UAB](#)
- [Stikloporas, UAB](#)
- [Švyturys-Utenos alus, UAB](#)
- [Teknisolar, SRL, Italy](#)
- [Tokyo Chemical Industry, Japan](#)
- [Tranvia, UAB](#)
- [TRATE, UAB](#)
- [UHB AGRO, UAB](#)
- [Valentis, UAB](#)
- [Vandenvala, UAB](#)
- [Veika, UAB](#)
- [Viperger, ApS, Denmark](#)
- [Virmalda, MB](#)
- [VMG grupė, UAB](#)
- [Volfas Engelman, AB](#)
- [VON ARDENNE, GmbH, Germany](#)
- [Yparex, BV, Netherlands](#)
- [Žemaitijos pienas, AB](#)

## Dissemination of Research Results to Society

- Lithuanian molecules used worldwide – a breakthrough in perovskite technologies (in Lithuanian), Dr. V. Getautis
- A new invisible threat highlighted: this harmful substance is now detectable even in the umbilical cord (in Lithuanian), Dr. V. Kaunelienė
- Thin, highly bright, and even flexible: OLED-based displays are rapidly advancing (in Lithuanian), Dr. Habil. J. V. Gražulevičius
- Nigerian scientist in Lithuania converts potato peels into bioplastic (in Lithuanian), Dr. A. E. T. Amobonye
- Hemp residues transformed into an innovation (in Lithuanian), Dr. A. Šipailienė
- Lithuanian scientists develop ultra-strong cement using textile ashes (in Lithuanian), Dr. R. Kubiliūtė
- Plant and soil vitamins: biofertilizers (in Lithuanian), Dr. R. Šlinkšienė
- Artificial joint replacement may no longer be necessary – Lithuanian researchers have developed a technology to restore damaged cartilage (in Lithuanian), Dr. E. Krugly, Dr. D. Martuzevičius
- KTU associate professor: digitalisation in biotechnology – from bacteria to a real-world product (in Lithuanian), Dr. I. Jonuškienė
- KTU, Latvian, and Taiwanese scientists are developing NIR-OLED technology: a step towards more advanced 3D sensors, Dr. G. Kručaitė
- Incredible Lithuanian discovery opens new possibilities in explosives manufacturing (in Lithuanian), Dr. M. Čekavičiūtė, Dr. Habil. J. V. Gražulevičius, E. U. Rashid
- Breakthrough by KTU scientists: next-generation solar cells operating for hundreds of hours approach commercial application (in Lithuanian), Dr. K. Rakštys
- Probiotics in a new form – KTU doctoral student offers an alternative for intestinal health, L. Varnaitė-Kapočė
- KTU associate professor: 3D scaffolds made from advanced materials – an innovation that will replace donor tissue transplants, Dr. O. Baniukaitienė
- Raspberry, blackberry, and rosehip tea – Lithuanian researchers teach students to generate energy from berries (in Lithuanian), Dr. Š. Daškevičiūtė



**Researchers / PhD Students**

100 / 37



**Projects**

32



**Publications**

89



**Doctoral Dissertations Defended**

8

## Science Fields



S 003 Management



S 004 Economics

## Priority Research Thematics



Information and Communication Technologies



Business Models



Sustainable Energy



Innovation Management and Entrepreneurship



Financial Technologies



Organisational Development



Economic Analytics and Competitiveness



Digital Media and Culture

## R&D Services and Infrastructure

- [Faculty's open access research facilities and services](#)



## Representation, Memberships

- Dr. A. Daunorienė – European Consortium of Innovative Universities (ECIU), member of the Learning and teaching expert group
- Dr. A. Pundzienė – Research Council of Lithuania, member of the Board
- Dr. A. Rūtelionė – Innovation Fund Denmark, expert; North American University, member of the Board of Advisors
- Dr. A. Stundžienė – Advisory Working Group of the Research Council of Lithuania on the WIDERA Action Area of the Horizon Europe Programme, member; European Economic Association, member
- Dr. B. Šeinauskienė – Association for Consumer Research, member
- Dr. D. Dumčiuviene – Romanian Executive Agency for Higher Education, Research, Development and Innovation, expert; Advisory Working Groups of the Research Council of Lithuania on the WIDERA and ERC Action Areas of the Horizon Europe Programme, member; National Centre for Research and Development of Poland, expert; Baltic Economic Association, member of the Board
- Dr. E. Gimžauskienė – Baltic Management Development Association (BMDA), member of the Board
- Dr. E. Staniškienė – Inter-University Sustainable Development Research Programme (IUSDRP), member; UNEP Global Universities Partnership on Environment and Sustainability Network (GUPES), member; Lithuanian Association for Socially Responsible Business (LAVA), member of the Sustainability expert group
- Dr. I. Zykiene – European Economic Association, member
- Dr. J. Banytė – Neuromarketing Science & Business Association (NMSBA), member
- Dr. J. Čeičytė-Pranskūnė – Center for Global R&D and Innovation (GLORAD), member
- Dr. J. Sekliuckienė – Academy of International Business, Central and Eastern Europe Chapter (AIB-CEE), member of the Board
- Dr. K. Duoba – European Institute for Advanced Studies in Management (EIASM), member of the Academic Council
- Dr. L. Užienė – Knowledge society “The New Club of Paris”, Vice-President, member of the Board
- Dr. M. Andrijauskienė – Young Academy of the Lithuanian Academy of Sciences, member
- Dr. M. Vilkas – European Commission Industry 5.0 Community of Practice (CoP 5.0), member
- Dr. M. Petraite – Knowledge Economy Forum, member; Sheffield Hallam University Business School, member of the Advisory Board
- Dr. N. Gerulaitienė – Lithuanian Society of Young Researchers, member; Global Inspir2es Research Network, Ambassador in Lithuania
- Dr. R. Hopenienė – Lithuanian Marketing Association (LiMA), member of the Council at Kaunas Chapter
- Dr. R. Krušinskas – Population Genocide and Resistance Research Centre of Lithuania, member of the Council
- Dr. Š. Leitoniene – Chamber of Property and Business Appraisers of the Republic of Lithuania, member; European Accounting Association (EAA), member
- Dr. V. Kumpikaitė-Valiūnienė – International Economics Development and Research Center (IEDRC), member; European Academy of Management (EURAM), member
- Dr. V. Pilinkienė – European Economic Association, member
- Dr. Ž. Stankevičiūtė – Lithuanian Association for Socially Responsible Business (LAVA), member of the Sustainability expert group

## Key Achievements in Science and Innovation

- Dr. A. Pundzienė with coauthors. Berkeley Haas Case Series Best Case Award
- Dr. V. Kumpikaitė-Valiūnienė, Dr. J. Duobienė, I. Banevičienė with coauthor. European Academy of Management EURAM Conference 2025 Journal of Global Mobility Best Paper Award
- Dr. L. Dagilienė, Dr. V. Varaniūtė, Dr. J. Bruneckienė. European Academy of Management EURAM Conference 2025 Most Inspiring Paper Award from the Strategic Management Interest Group

## Scientific Events

- Research and Business Conference “Navigating Challenges and Opportunities of Family Businesses in Lithuania, Latvia, and Taiwan”
- InSPIR2eS Global Pitching Research Competition (IGPRC2025)
- Developmental Workshop 2025: Open Innovation Paper Studio
- From Ideas to Impact: Workshop for Sharing Research and Partnership Building
- Health2Innovation seminar cycle

## Main Publications

- Research Policy, DOI: [10.1016/j.respol.2024.105150](https://doi.org/10.1016/j.respol.2024.105150)
- Journal of Monetary Economics, DOI: [10.1016/j.jmoneco.2025.103748](https://doi.org/10.1016/j.jmoneco.2025.103748)
- MIT Sloan Management Review, [Article 2025-05-20](#)
- Journal of Cross-Cultural Psychology, DOI: [10.1177/00220221251326957](https://doi.org/10.1177/00220221251326957)
- Business Strategy and the Environment, DOI: [10.1002/bse.4044](https://doi.org/10.1002/bse.4044)
- EuroMed Journal of Business, DOI: [10.1108/EMJB-07-2023-0192](https://doi.org/10.1108/EMJB-07-2023-0192)
- International Journal of Consumer Studies, DOI: [10.1111/ijcs.70008](https://doi.org/10.1111/ijcs.70008)
- Economics of Transition and Institutional Change, DOI: [10.1111/ecot.12427](https://doi.org/10.1111/ecot.12427)
- European Journal of Innovation Management, DOI: [10.1108/EJIM-03-2025-0282](https://doi.org/10.1108/EJIM-03-2025-0282)
- International Journal of Intercultural Relations, DOI: [10.1016/j.ijintrel.2025.102296](https://doi.org/10.1016/j.ijintrel.2025.102296)
- International Review on Public and Nonprofit Marketing, DOI: [10.1007/s12208-025-00438-9](https://doi.org/10.1007/s12208-025-00438-9)
- Journal of Fashion Marketing and Management, DOI: [10.1108/JFMM-04-2024-0146](https://doi.org/10.1108/JFMM-04-2024-0146)
- Economics and Sociology, DOI: [10.14254/2071-789X.2025/18-2/7](https://doi.org/10.14254/2071-789X.2025/18-2/7)
- Journal of Innovation & Knowledge, DOI: [10.1016/j.jik.2025.100654](https://doi.org/10.1016/j.jik.2025.100654)
- Journal of Manufacturing Technology Management, DOI: [10.1108/JMTM-04-2024-0176](https://doi.org/10.1108/JMTM-04-2024-0176)

## Projects

- [Building Employee Resilience through Sustainable HRM for Organizational Transformation towards Sustainability in Context of Environmental Disruptions](#), 2023-2026
- [Artificial Intelligence-Based Assessment of the Companies' Innovativeness in the Context of Digital Transformation](#), 2023-2026
- [An AI-Augmented Framework for Evaluating Circular Economy Implementation in Organizations: Integrating Human Insight with AI-Powered Analysis](#), 2025-2028
- [Exit from Distance Learning Based on Artificial Intelligence Technology, Model Digitization](#), 2025-2028
- [Enhancing Research and Innovation Synergies for Schools of Economics and Business \(RIS4SEB\)](#), 2024-2027
- [A Study of Global Employees' Subjective Well-Being and Adjustment Factors in Lithuania \(GLOBEES\)](#), 2024-2027
- [Bridging Risks to an Inclusive Digital and Green Future by Enhancing Workforce Skills for Industry 5.0 \(BRIDGES 5.0\)](#), 2023-2026
- [Driving Climate Positive Futures Programme \(DREAM+PLAN\)](#), 2025-2030
- [Ensuring Sustainable Careers for Refugee Women in the Host Country \(ESCAR\)](#), 2023-2026
- [Managing Paradoxical Tensions and Developing Organizational Capabilities in a Circular Economy \(CEPOC\)](#), 2023-2026
- [Improving Mental Health, Wellbeing, and Resilience of Healthcare Workers in Changing Environments \(APOLLO2028\)](#), 2024-2027
- [Expression of Consumers' Ecoliteracy, Attention, and Information Perception in Cognitive and Behavioural Response to Sustainable Products \(EKORA\)](#), 2024-2027
- [Understanding and Addressing LATE-effects of Treatment of AYA Cancer Survivors with AI-based Digital Phenotyping and Non-invasive Holistic Approach \(LATE-AYA\)](#), 2025-2030
- [Value Co-creation, Delivery and Co-capture in Digital Platforms Imbedded in Social-Purpose Driven Ecosystem. Network Externalities Approach](#), 2023-2026
- [Enabling Circular Economy Action Plans for Small and Medium-Sized Cities \(ECLECTIC\)](#), 2024-2026

## Collaboration

### Foreign Research and Study Institutions

- [Technical University of Dortmund](#), Germany
- [KU Leuven](#), Belgium
- [University of Latvia](#), Latvia
- [Chalmers University of Technology](#), Sweden
- [Polytechnic Institute of Coimbra](#), Portugal
- [ABO Akademi University](#), Finland
- [Karolinska Institute](#), Sweden
- [Luigi Bocconi Commercial University](#), Italy
- [University of Tampere](#), Finland
- [Riga Technical University](#), Latvia
- [University of Tartu](#), Estonia
- [University of Montpellier](#), France
- [Copenhagen Business School](#), Denmark
- [Cranfield University](#), United Kingdom
- [Dalhousie University](#), Canada
- [Polytechnic School](#), France

## Collaboration

### Foreign Research and Study Institutions

- [Edith Cowan University](#), Australia
- [Estonian Business School](#), Estonia
- [Dortmund University of Applied Sciences and Arts](#), Germany
- [Hamburg University of Technology](#), Germany
- [I-Shou University](#), Taiwan
- [La Trobe University](#), Australia
- [Maynooth University](#), Ireland
- [RMIT University](#), Australia
- [SGH Warsaw School of Economics](#), Poland
- [Sichuan University](#), China
- [Southwest Jiaotong University](#), China
- [University of Brighton](#), United Kingdom
- [University of California](#), Berkely, USA
- [University of Groningen](#), Netherlands
- [University of Łódź](#), Poland
- [University of Oulu](#), Finland
- [University of Pisa](#), Italy
- [University of Reading](#), United Kingdom
- [University of Rome Tor Vergata](#), Italy
- [University of Split](#), Croatia
- [University of Vaasa](#), Finland
- [Autonomous University of Barcelona](#), Spain
- [Uppsala University](#), Sweden
- [Lappeenranta-Lahti University of Technology](#), Finland
- [King's College London](#), United Kingdom
- [University of St. Gallen](#), Switzerland
- [Trinity College Dublin](#), Ireland
- [Utrecht University](#), Netherlands
- [Milan Polytechnic](#), Italy
- [National Institute of Applied Sciences of Toulouse](#), France
- [University of Aveiro](#), Portugal

### Industry and Business

- [British - Portuguese Chamber of Commerce](#), Portugal
- [Infineon Technologies AG](#), Austria
- [Lithuanian Confederation of Industrialists](#)
- [Workplace Innovation Europe CLG](#), Ireland
- [Luminor bank](#)
- [Swedbank bank](#)
- [SEB bank](#)
- [Innovation Agency](#)
- [Bank of Lithuania](#)
- [State Tax Inspectorate under the Ministry of Finance of the Republic of Lithuania](#)
- [Artea Bank](#)
- [Lithuanian Free Market Institute](#)
- [Evolaris Next Level GmbH](#), Austria
- [Samsung Electronics UK Limited](#), United Kingdom
- [ILTE, UAB](#)
- [Association for AI Lithuania](#)

## Dissemination of Research Results to Society

- [KTU helps create national cancer data hubs in Europe](#) (in Lithuanian), Dr. A. Pundzienė
- [Emotions sell: how do marketers reach our subconscious?](#) (in Lithuanian), E. Vaičiukynaitė
- [Working but poor: where is Lithuania on this map?](#) (in Lithuanian), Dr. D. Laskienė
- [Economist: Pension funds themselves are also to blame for the lack of trust in the second pillar](#) (in Lithuanian), Dr. E. Stankevičius
- [Will those who don't own property also scramble for money due to property taxes? Wonders what awaits residents](#) (in Lithuanian), Dr. E. Stankevičius
- [KTU economist: does Lithuania need a state pension fund?](#) (in Lithuanian), Dr. E. Stankevičius
- [KTU economist on the deepening housing crisis: how many tourists are too many for the city?](#) (in Lithuanian), Dr. E. Stankevičius
- [KTU economist: it's expensive in Lithuania not because of prices, but because of low incomes](#) (in Lithuanian), Dr. E. Stankevičius
- [Expert on the middle class in Lithuania: too rich for support, too modest for a loan](#) (in Lithuanian), Dr. E. Stankevičius
- [The Kaunas government has thrown a lifeline, but even this will not help: there has never been such an increase in the value of real estate in history](#) (in Lithuanian), Dr. R. Krušinskas
- [Study shows young people are not as free and bold as thought](#) (in Lithuanian), Dr. V. Kumpikaitė-Valiūnienė, Dr. A. Mockaitis
- [Emigration begins in the mind: KTU study reveals how Lithuanian values change even before leaving](#) (in Lithuanian), Dr. V. Kumpikaitė-Valiūnienė
- [Rytis Krušinskas. The most important thing is financial discipline and considered risk](#) (in Lithuanian), Dr. R. Krušinskas
- [Economist: This decision is a shot in the foot](#) (in Lithuanian), Dr. R. Krušinskas, Dr. V. Gaidelys
- [KTU professor: the most difficult part of the defence funding debate is still in the future](#) (in Lithuanian), Dr. R. Krušinskas
- KTU journal [Inžinerinė ekonomika = Engineering Economics](#)



**Researchers / PhD Students**

81 / 22



**Projects**

17



**Publications**

86



**Patents**





6







**Doctoral  
Dissertations  
Defended**

5

## Science Fields

-  T 001 Electrical and Electronics Engineering
-  T 006 Energy and Thermoengineering
-  T 007 Informatics Engineering
-  T 010 Measurement Engineering

## Priority Research Thematics

-  Artificial Intelligence and Robotics
-  Diagnostic Technologies
-  Electronics and Electrical Engineering
-  Sustainable Energy

## R&D Services and Infrastructure

- [Equipment for electrical grid digital twin development, power waveform and event recording](#)
- [Transformer testing equipment](#)
- KTU [ProtoLab](#) is a member of the [Europractice](#) network.
- [Faculty's open access research facilities and services](#)



## Representation, Memberships

- Dr. A. Andriukaitis – Institute of Electrical and Electronics Engineers (IEEE), senior member; European Association for Education in Electrical and Information Engineering (EAEEIE), member
- Dr. V. Baranauskas – euRobotics aisbl Association, KTU representative
- Dr. G. Dervinis – Lithuanian Standards Board Technical Committee LST TK 5 “Electrical Engineering”, member; National Industrial Competitiveness Commission “Industry 4.0” under the Ministry of Economy and Innovation of the Republic of Lithuania, member of the coordination group
- Dr. V. Galvanauskas – Alexander von Humboldt Foundation, member; European Society of Biochemical Engineering Sciences (ESBES), member of the M3C section
- Dr. S. Gudžius – Lithuanian Electricity Association, KTU representative; Lithuanian Solar Energy Association, KTU representative; European Research Community on Flow, Turbulence and Combustion (ERCOFTAC), KTU representative; European Safety, Reliability & Data Association (ESReDA), member
- Dr. E. Jasiūnienė – European Aeronautics Science Network (EASN), member of the Board of Directors and Scientific advisory officer; Expert Committee of Natural and Technical Sciences of the Research Council of Lithuania, member; Lithuanian Society for Non-Destructive Testing and Technical Diagnostics (LNBD), Chair of the Board; Lithuanian Standards Board Technical Committee LST TK 66 “Non-Destructive Testing”, member; NDT.net, member of the Advisory Board; Academia NDT International, member
- Dr. A. Jonaitis – International Council on Large Electric Systems (CIGRE), national representative
- Dr. P. Kaškonas – Lithuanian Standards Board Technical Committee LST TK 34 “Metrology”, member; Lithuanian Standards Board Technical Committee LST TK 1 “Electronics”, member
- Dr. D. Kybartas – Institute of Electrical and Electronics Engineers (IEEE), member
- Dr. I. Konstantinavičiūtė – National Committee on Climate Change, member; International Association for Energy Economics (IAEE), member
- Dr. A. Meškuotienė – Lithuanian Standards Board Technical Committee LST TK 34 “Metrology”, member; National Metrology Institute, member of the Metrology Expert Council; Lithuanian National Accreditation Bureau, technical expert
- Dr. Ž. Nakutis – Institute of Electrical and Electronics Engineers (IEEE), member
- Dr. R. Raišutis – Sustainable Nuclear Energy Technology Platform (SNETP), member; Institute of Electrical and Electronics Engineers (IEEE), member; European Structural Integrity Society (ESIS), member; European Federation of Societies for Ultrasound in Medicine and Biology (EFSUMB), member; International Committee for Non-Destructive Testing (ICNDT), member; Lithuanian Society for Non-Destructive Testing and Technical Diagnostics (LNBD), President
- Dr. L. Svilainis – NATO Science and Technology Organization (STO), member of working group SET-242; Lithuanian Standards Board Technical Committee LST TK 8 “Electromagnetic Compatibility”, Chairman; Institute of Electrical and Electronics Engineers (IEEE), senior member
- Dr. A. Valinevičius – European Society for Engineering Education (SEFI), member; European Association for Education in Electrical and Information Engineering (EAEEIE), member; NATO Science and Technology Organization (STO), member of working group SET-229; Lukasiewicz Research Network – Tele and Radio Research Institute, member of the Council
- Dr. B. G. Urbonavičius – Lithuanian Standards Board Technical Committee LST TK 76 “Explosive Atmospheres”, member
- Dr. R. Urniežius – Institute of Electrical and Electronics Engineers (IEEE), senior member
- Dr. V. Marozas – Swiss National Science Foundation (SNSF), expert; Singapore National Research Council, expert; Neuroscience Institute of Lithuanian University of Health Sciences, member of the Council; Institute of Endocrinology of Lithuanian University of Health Sciences, member of the Council

## Scientific Events

- International conference “MICROELECTRONICS 2025: From Technology to Application”
- TiFEC student scientific conference TiFEC – 2025
- Conference “The Energy Profession 2025: What Innovations Await You”
- Conference “The Transformation of Centralized Heat Supply as an Integral Part of Sustainable Energy”
- Conference “Scientific Challenges in Energy”

## Patents

- Patent [EP 4343319 B1](#)
- Patent [EP 4269999 B1](#)
- Patent [US 12272057 B2](#)
- Patents [EP 4157716 B1](#), [US 12304616 B2](#), [CN 115667071 B](#)

## Key Achievements in Science and Innovation

- Dr. L. Svilainis. [IEEE Transactions on Instrumentation and Measurement \(TIM\) Outstanding Associated Editor Award](#)

## Main Publications

- Engineering Science and Technology, an International Journal, DOI: [10.1016/j.jestch.2025.102178](#)
- IEEE Sensors Journal, DOI: [10.1109/JSEN.2025.3622932](#)
- Applied Sciences, DOI: [10.3390/app15148093](#)
- IEEE Robotics and Automation Letters, DOI: [10.1109/LRA.2025.3608655](#)
- Sensors and Actuators A: Physical, DOI: [10.1016/j.sna.2025.117178](#)
- NDT & E International, DOI: [10.1016/j.ndteint.2025.103386](#)
- IEEE Access, DOI: [10.1109/ACCESS.2025.3622028](#)
- Applied Sciences, DOI: [10.3390/app15158299](#)
- Ultrasonics Sonochemistry, DOI: [10.1016/j.ultsonch.2025.107381](#)
- Sustainability, DOI: [10.3390/su17052134](#)
- Frontiers in Bioengineering and Biotechnology, DOI: [10.3389/fbioe.2025.1609369](#)
- Entropy, DOI: [10.3390/e27080806](#)
- IEEE Transactions on Instrumentation and Measurement, DOI: [10.1109/TIM.2025.3579845](#)
- Measurement, DOI: [10.1016/j.measurement.2025.118206](#)
- ACS Applied Electronic Materials, DOI: [10.1021/acsaelm.4c01725](#)

## Projects

- [New Non-Contact Ultrasound Transduction Methods for Wideband Spread Spectrum Signals](#), 2023-2025
- [Modelling of 3D Arrhythmias Using Data of Cardiac Optical Mapping, Multilayer Microelectrode Recording and Gap Junction Gating](#), 2024-2026
- [Implementation of Mission-Based Science and Innovation Programs: SmartEco Tech](#), 2024-2026
- [Development of Smart Conveyor Roller](#), 2023-2025
- [Development of an Optical Electrical Miniature Oscilloscope for Measurements and Analysis of Impulsive and Communication Signals in the Bandwidth of 30 GHz and Above \(FemtoTest\)](#), 2024-2026
- [Development of the Platform of Renewable Energy Communities for the Management of Its' Members Electric Power](#), 2024-2026
- [Assessment and Improvement of the System of Metrological Requirements and Verification Methodologies of Measuring Instruments of Legal Metrology \(MPPMS\)](#), 2024-2025
- [Intelligent Vehicles Parking System \(5G PARK\)](#), 2024-2026
- [Autonomous Mine Detection Drone \(AMAD\)](#), 2024-2025
- [Research of Anomaly Detection Methods for Electrical Energy Smart Metering Data \(ANODETEL\)](#), 2024-2027
- [Revolutionizing Renewable Energy Conversion: GaN-Based ANPC Converter and Advanced Predictive Control for Enhanced Efficiency \(REnCon\)](#), 2025-2027
- [Seminar of Knowledge and Experience Exchange in the Field of Advanced Robotics, Automation and AI integration \(KnowHowExchange\)](#), 2025-2025
- [Lithuanian Chips Competence Centre \(ChipsC2-LT\)](#), 2025-2029
- [Development of a Smart Conveyor Belt Monitoring Device](#), 2025-2027
- [Development and Validation of a Hybrid Model of Patient Data for Health Assessment \(CARE\)](#), 2025-2027
- [Cell Free Low Emission Network for 6G \(CLEAN-6G\)](#), 2025-2026

## Collaboration

### Foreign Research and Study Institutions

- [University of Bologna, Italy](#)
- [Institute for Physical and Information Technologies \(ITEFI\) of Spanish National Research Council, Spain](#)
- [Miguel Hernández University, Spain](#)
- [University of Warwick, United Kingdom](#)
- [Institute of Solid State Physics of University of Latvia, Latvia](#)
- [Central Laboratory of Applied Physics of Bulgarian Academy of Sciences, Bulgaria](#)
- [Hiroshima University, Japan](#)
- [Białystok University of Technology, Poland](#)
- [Brno University of Technology, Czechia](#)
- [Dublin City University, Ireland](#)
- [Lodz University of Technology, Poland](#)
- [National Institute of Applied Sciences of Lyon, France](#)
- [Ondokuz Mayıs University, Turkey](#)
- [VSB Technical University of Ostrava, Czechia](#)
- [University of Aveiro, Portugal](#)
- [University of Defence, Czechia](#)
- [University of Ghent, Belgium](#)
- [University of York, United Kingdom](#)
- [University of Priština in Kosovska Mitrovica, Kosovo](#)
- [University of Maribor, Slovenia](#)
- [University of Zilina, Slovakia](#)
- [University of Salento, Italy](#)
- [University of Vigo, Spain](#)

### Industry and Business

- [Baketas, UAB](#)
- [Eltesta, UAB](#)
- [Enerheads solutions, UAB](#)
- [DTS solutions, UAB](#)
- [Cumulatis, UAB](#)
- [Inofin sprendimai, MB](#)
- [Litgrid, AB](#)
- [Energijos skirstymo operatorius, AB](#)
- [Ignitis, UAB](#)
- [Modernios e-technologijos, UAB](#)
- [Ekobazė, UAB](#)
- [Nanoversa, UAB](#)
- [Soli Tek R&D, UAB](#)
- [NRD CS, UAB](#)
- [Arginta, UAB](#)
- [Biomapas, UAB](#)
- [Droplet Genomics, UAB](#)
- [Provectus redivivus, UAB](#)
- [Kelių priežiūra, AB](#)
- [3D creative, UAB](#)
- [Femtika, UAB](#)
- [Getweb, UAB](#)
- [Baltic Trader Group LT, UAB](#)
- [Atlas IT, UAB](#)
- [NT Service, UAB](#)
- [Rohde & Schwarz Danmark A/S Lithuanian Branch](#)

## Dissemination of Research Results to Society

- [An important step for the Lithuanian technology sector – KTU opens the Chip Academy](#) (in Lithuanian), Dr. M. Žilyš
- [The astonishing future of phones: flexible, transparent, and with built-in alcohol meters](#) (in Lithuanian), Dr. L. Svilainis
- [KTU EEF Prof. V. Raudonis – on the future of humanoids](#) (in Lithuanian), Dr. V. Raudonis
- [KTU professor: AI can already help diagnose diseases or prevent their development](#) (in Lithuanian), Dr. V. Raudonis
- [The smart parking system 5G PARK – a Lithuanian innovation that will change urban mobility](#) (in Lithuanian), Dr. D. Andriukaitis
- [How not to lose your head in the heat of energy transformation?](#) (in Lithuanian), Dr. S. Gudžius, D. Virbickas
- [Early diagnosis of insidious diseases: Artificial intelligence system developed in Lithuania recognized in the US](#) (in Lithuanian), Dr. R. Raišutis
- [Acute pancreatitis – insidious and severe](#) (in Lithuanian), Dr. R. Raišutis
- [Lithuanian scientists' invention will improve the lives of stroke survivors](#) (in Lithuanian), Dr. D. Jegelevičius
- [KTU professor on detecting anomalies in smart metering data](#) (in Lithuanian), dr. Ž. Nakutis
- KTU journal [Elektronika ir Elektrotechnika](#)



**Researchers / PhD Students**

107 / 31



**Projects**

28



**Publications**

137



**Doctoral Dissertations Defended**

2

## Science Fields



T 007 Informatics Engineering



N 009 Informatics

## Priority Research Thematics



Artificial Intelligence and Robotics



Educational Environments and Technologies



Biomedical Engineering and Medical Technologies



Financial Technologies



Applied Mathematics



Digital Media and Culture



Information and Communication Technologies

## R&D Services and Infrastructure

- [Faculty's open access research facilities and services](#)



## Representation, Memberships

- Dr. J. Čeponis – [INFOBALT Lithuania](#), member of the Board; [Association “Informatics Europe”](#), member
- Dr. Š. Grigaliūnas – [LITNET network](#), member of the CERT team; [Lithuanian Standards Board Technical Committee LST TK 79 “IT Security Techniques”](#), member
- Dr. D. Gudonienė – [Association “Informatics Europe”](#), member; [European Digital Education Hub](#), member
- Dr. R. Butleris – [European Research Center for Information Systems \(ERCIS\)](#), member
- Dr. K. Kapočius – [European Research Center for Information Systems \(ERCIS\)](#), member
- Dr. R. Butkienė – [CLARIN consortium](#), member
- Dr. Habil. R. Barauskas – [Lithuanian Academy of Sciences](#), full member
- Dr. T. Skersys – [Lithuanian Standards Board Technical Committee LST TK 98 “Digital Product Passport \(DPP\)”](#), member
- Dr. A. Lopata – [Scientific Cyber Security Association of Georgia](#), member
- Dr. I. Patašienė – [International Simulation and Gaming Association \(ISAGA\)](#), member
- Dr. G. Krikščiūnienė – [Standards Development Organization OMG](#), member of the UAF work group

## Key Achievements in Science and Innovation

- Dr. S. Maqsood. [Prize of the Young Scientists and Doctoral Students' Research Works Competition of the Lithuanian Academy of Sciences](#)
- Dr. E. Butkevičiūtė. [Grand Finalist and Overall Winner of the Global Pitching Research Competition \(IGPRC2024\)](#)
- Dr. L. Ablonskis, Dr. R. Butleris, Dr. A. Lopata. [International Conference Information Society and University Studies IVUS 2025 Best Paper Award](#)
- Dr. A. Lopata. [International Conference Data Analysis Methods for Software Systems DAMSS 2025 Best Poster Award](#)
- Dr. L. Kižauskienė with coauthors. [First place in the KTU Best Monographs Competition for the monograph “Noninvasive Therapeutic Technologies: Stimulation of Physiological Processes”](#)

## Main Publications

- IEEE Transactions on Automation Science and Engineering, DOI: [10.1109/TASE.2025.3598695](#)
- Nurse Education Today, DOI: [10.1016/j.nedt.2025.106838](#)
- Journal of Industrial Information Integration, DOI: [10.1016/j.jii.2025.100934](#)
- Computer Modeling in Engineering & Sciences, DOI: [10.32604/cmescs.2025.072790](#)
- Cluster Computing, DOI: [10.1007/s10586-025-05126-1](#)
- Engineering Applications of Artificial Intelligence, DOI: [10.1016/j.engappai.2025.111751](#)
- Scientific Reports, DOI: [10.1038/s41598-025-05918-w](#)
- Applied Soft Computing, DOI: [10.1016/j.asoc.2025.113371](#)
- Cognitive Computation, DOI: [10.1007/s12559-025-10472-8](#)
- Journal of Sustainable Forestry, DOI: [10.1080/10549811.2025.2513220](#)
- IEEE Access, DOI: [10.1109/ACCESS.2025.3574265](#)
- Chaos, Solitons & Fractals, DOI: [10.1016/j.chaos.2025.116419](#)
- IEEE Access, DOI: [10.1109/ACCESS.2025.3535796](#)
- IEEE Sensors Journal, DOI: [10.1109/JSEN.2025.3529841](#)
- Applied Mathematics and Computation, DOI: [10.1016/j.amc.2024.129040](#)

## Scientific Events

- [International Conference Information and Software Technologies ICIST 2025](#)
- [International Conference Information Society and University Studies IVUS 2025](#)

## Projects

- [Deep Learning Based Architecture for Humanoid Pose \(Skeletal\) Estimation from Partial Depth Data](#), 2024-2026
- [Development of Combined Physical Behaviour and Artificial Intelligence Models to Determine Hydromorphology of Rivers by Indirect Measurements](#), 2023-2026
- [Creating Economic Ecosystems through NGI Deployment \(Local for Local\)](#), 2023-2026
- [Intelligent 5G Satellite-Based Global Tracking System \(i5GloSis\)](#), 2024-2025
- [Implementation of Mission-Based Science and Innovation Programs \(DigiDefense AICP-FIMI\)](#), 2024-2026
- [Implementation of Mission-Based Science and Innovation Programs \(DigiDefense CTI-balanced\)](#), 2024-2026
- [Implementation of Mission-Based Science and Innovation Programs \(DigiDefense HIPSTER\)](#), 2024-2026
- [Artificial Intelligence Detection of Classroom-Level Factors for Educational Effectiveness: A Benchmarking Study on Generative AIs](#), 2024-2026
- [European Doctoral Network for Neural Prostheses and Brain Research \(DONUT\)](#), 2024-2027
- [Implementation of Mission-Based Science and Innovation Programs \(DigiDefense AFFECTS\)](#), 2024-2026
- [Implementation of Mission-Based Science and Innovation Programs \(DigiDefense CyberFIRD\)](#), 2024-2026
- [Creation of the Centre of Excellence in Smart Forestry \(Forest 4.0\)](#), 2023-2029
- [Development of Artificial Intelligence-Based Automated Voice and Speech Enhancement Algorithms for Patients after Laryngeal Cancer Surgery](#), 2023-2026
- [Automated Vulnerability Detection in Software Development Using AI Techniques \(AISSAM\)](#), 2025-2027
- [Security Education Center for Unified Resilience and Effective Communications \(SECURE\)](#), 2024-2027

## Collaboration

### Foreign Research and Study Institutions

- [Hamburg University of Technology](#), Germany
- [Tampere University](#), Finland
- [KU Leuven](#), Belgium
- [Miguel Hernandez University](#), Spain
- [Slovak Academy of Sciences](#), Slovakia
- [Aarhus University](#), Denmark
- [Radboud University](#), Netherlands
- [Delft University of Technology](#), Netherlands

### Industry and Business

- [Teltonika Networks](#), UAB
- [Satalia Lithuania](#), UAB
- [Festo Lietuva](#), UAB
- [Centric IT Solutions Lithuania](#), UAB
- [Hyand Lithuania](#), UAB
- [Singletonas](#), UAB
- [Coherent Solutions](#), UAB
- [Devoteam Lietuva](#), UAB
- [Cognizant Technology Solutions Lithuania](#), UAB
- [Hostinger](#), UAB
- [Indeform](#), UAB
- [Present Connection](#), UAB
- [SneakyBox](#), UAB
- [LITIT](#), UAB
- [Reiz Tech](#), UAB
- [Rocket Software Lithuania](#), UAB
- [Adform Lithuania](#), UAB
- [Juvare Lithuania](#), UAB
- [KAYAK Lithuania](#), UAB
- [Xplicity](#), UAB
- [Visma Tech](#), UAB
- [Accenture Lithuania](#), UAB
- [Helmes](#), UAB
- [Edukacinės sistemos](#), UAB (TutoTOONS)
- [EPAM Systems](#), UAB
- [Bentley Systems Europe B.V. branch](#)
- [Unity Technologies LT](#), UAB
- [CreditOnline](#), UAB
- [Lithuanian National Radio and Television](#)

## Dissemination of Research Results to Society

- [KTU professor urges Baltic States to take action on quantum-secure identity](#) (in Lithuanian), Dr. Š. Grigaliūnas
- [KTU professor on new scams: what to watch out for during the holidays](#) (in Lithuanian), Dr. Š. Grigaliūnas
- [KTU scientists develop advanced forest monitoring systems: will forests monitor themselves in the future?](#) (in Lithuanian), Dr. R. Maskeliūnas, Dr. R. Damaševičius, Dr. E. Kazanavičius
- [Smart traffic management: KTU student develops an environmental perception model for autonomous systems](#) (in Lithuanian), Dr. R. Maskeliūnas
- [KTU journal Informacinės technologijos ir valdymas / Information Technology and Control](#)



**Researchers / PhD Students**

83 / 23



**Projects**

29



**Publications**

101



**Patent Applications**

2



**Doctoral  
Dissertations  
Defended**

5

## Science Fields



N 001 Mathematics



T 008 Materials Engineering



N 002 Physics



M 001 Medicine



N 009 Informatics



S 007 Education

## Priority Research Thematics



Artificial Intelligence and Robotics



Information and Communication  
Technologies



Biomedical Engineering and Medical  
Technologies



Sustainable Energy



Chemical and Environmental Technologies



Educational Environments and  
Technologies



Diagnostic Technologies



Financial Technologies



Applied Mathematics



Economic Analytics and Competitiveness



Functional Materials and Technologies



Business Models

## R&D Services and Infrastructure

- [Faculty's open access research facilities and services](#)



## Representation, Memberships

- Faculty of Mathematics and Natural Sciences – European Consortium for Mathematics in Industry (ECMI), member; European Chemicals Agency (ECHA), member
- Dr. B. Abakevičienė – CERN Baltic Group, Head
- Dr. D. Adlienė – International Atomic Energy Agency (IAEA), expert; Medical Physicists' Expert Certification Commission at the Radiation Protection Centre, member; European Federation of Organisations for Medical Physics (EFOMP), member of the Science and Education Committees; Lithuanian Association of Medical Physics and Biomedical Engineering, member of the Board; Advanced Particle Therapy Centre for Baltics (APT/CB) Feasibility Study Strategy Group (FSSG) of the CERN Baltic Group, member
- Dr. R. Alzbutas – International Atomic Energy Agency (IAEA), expert; Foundation for Polish Science (FNP), expert; Lithuanian Society of Young Researchers, honorary member
- Dr. Habil. A. Galdikas – Lithuanian Academy of Sciences, full member; European doctoral network “Physics and Chemistry of Advanced Materials (PCAM)”, member of the Executive Committee
- Dr. A. Kabašinskas – Association of European Operational Research Societies (EURO), member of the Working Groups “Commodities and Financial Modelling”, “Stochastic Modelling”, “Stochastic Optimization”, “Vehicle Routing and Logistics”; Bank of Lithuania, KTU representative at the Working Group on Pension System Reform; European Consortium for Mathematics in Industry (ECMI), member of the Educational Committee and Council
- Dr. G. Laukaitis – Latvian Council of Science, expert; “Inter-Academia” collaboration community between Shizuoka University and Central-Eastern European Universities, member of the Executive Committee
- Dr. J. Laurikaitienė – European Federation of Organisations for Medical Physics (EFOMP), member of the Communication Committee
- Dr. K. Lukšys – Lithuanian Mathematical Society, member of the Board
- Dr. D. Petkevičiūtė-Gerlach – Lithuanian Mathematical Society, member of the Board
- Dr. L. Marcinauskas – BalticNet-PlasmaTec (BNPT), member
- Dr. B. Narkevičienė – Lithuanian Educational Research Association (LETA), which is the Lithuanian unit of the European Educational Research Association (EERA), member; Lithuanian Mathematical Society, member of the Board
- Dr. Habil. M. K. Ragulskis – Research Foundation Flanders (FWO), member of the Panel Committee; HeartMath Institute, member of the Scientific Advisory Board; Lithuanian Academy of Sciences, full member; Lithuanian Mathematical Society, member of the Board
- Dr. Ž. Rutkūnienė – “Basnet forumas” association, Chair of the Board
- Dr. V. Stankus – BalticNet-PlasmaTec (BNPT), member
- Dr. Habil. S. Tamulevičius – Lithuanian Academy of Sciences, full member; University of Southern Denmark, honorary professor; European doctoral network “Physics and Chemistry of Advanced Materials (PCAM)”, member of the Executive Committee; European distributed infrastructure network “EuroNanoLab”, member of the Steering Committee
- Dr. T. Tamulevičius – Young Academy of the Lithuanian Academy of Sciences, alumnus; International Council on Materials Education (ICME), member of the Council; North European Initiative Nanotechnology (NiNa), member of the Board of Curators
- Dr. B. G. Urbonavičius – Lithuanian Standards Board Technical Committee LST TK 76 “Explosive Atmospheres”, member
- Dr. E. Valakevičius – CQF Institute, member

## Key Achievements in Science and Innovation

- Dr. D. Adlienė. The Medal of the Order of the Lithuanian Grand Duke Gediminas
- Dr. Habil. S. Tamulevičius. The Cross of the Knight of the Order of the Lithuanian Grand Duke Gediminas
- Dr. T. Sidekerskienė with coauthor. Third place in the KTU Best Monographs Competition for the monograph “Digital escape room designs in education”
- G. Riaubaitė. Prize of the Higher Education Students' Research Works Competition of the Lithuanian Academy of Sciences
- S. Arslonova. Third Place Award for the best presentation at the Lithuanian Academy of Sciences Young Scientists Conference “Biofuture: Perspectives of Natural and Life Sciences”
- U. Orinaitė. President Aleksandras Stulginskis Scholarship

## Main Publications

- Journal of Physiology, DOI: [10.1113/JP288088](https://doi.org/10.1113/JP288088)
- Mathematics, DOI: [10.3390/math13071169](https://doi.org/10.3390/math13071169)
- Alexandria Engineering Journal, DOI: [10.1016/j.aej.2024.11.108](https://doi.org/10.1016/j.aej.2024.11.108)
- AIMS Mathematics, DOI: [10.3934/math.20251139](https://doi.org/10.3934/math.20251139)
- Diagnostics, DOI: [10.3390/diagnostics15233070](https://doi.org/10.3390/diagnostics15233070)
- Chaos, DOI: [10.1016/j.chaos.2025.116419](https://doi.org/10.1016/j.chaos.2025.116419)
- Mathematics, DOI: [10.3390/math13020274](https://doi.org/10.3390/math13020274)
- Neural Networks, DOI: [10.1016/j.neunet.2024.107018](https://doi.org/10.1016/j.neunet.2024.107018)
- Computer-Aided Civil and Infrastructure Engineering, DOI: [10.1111/mice.13349](https://doi.org/10.1111/mice.13349)
- Journal of Clinical Medicine, DOI: [10.3390/jcm14248852](https://doi.org/10.3390/jcm14248852)
- Journal of Materials Processing Technology, DOI: [10.1016/j.jmatprotec.2025.118994](https://doi.org/10.1016/j.jmatprotec.2025.118994)
- Applied Surface Science, DOI: [10.1016/j.apsusc.2025.162576](https://doi.org/10.1016/j.apsusc.2025.162576)
- Matter, DOI: [10.1016/j.matt.2025.101990](https://doi.org/10.1016/j.matt.2025.101990)
- Carbon, DOI: [10.1016/j.carbon.2024.119704](https://doi.org/10.1016/j.carbon.2024.119704)
- Gels, DOI: [10.3390/gels11050336](https://doi.org/10.3390/gels11050336)

## Patent Applications

- Patent applications [US 2025000468 A1](#), [EP 4485364 A1](#)

## Scientific Events

- [Student scientific conference "Mathematics and Natural Sciences: Theory and Application 2025"](#)
- [27th International Conference - School "Advanced Materials and Technologies"](#)
- [46th Lithuanian National Physics Conference](#)
- [5th CERN Baltic Conference \(CBC 2025\)](#)
- [17th International Conference & Workshop "Medical Physics in the Baltic States"](#)
- [Workshop of Mathematical Solutions in Business and Industry](#)
- [ECMI Modelling Week](#)
- [Green Digital Finance - Training Week](#)

## Projects

- [Ultrasensitive Sensors for the Detection of Lithium Ion Batteries Fails \(NanoTRAACES\)](#), 2022-2025
- [Digital Finance - Reaching New Frontiers \(DIGITAL\)](#), 2024-2027
- [Prospects for Green Ammonia in Sustainable Energy Development \(AMPROSE\)](#), 2024-2026
- [Evaluation of Devonian & Cambrian Hydrothermal Complexes in West Lithuania Addressing Uncertainties Related to Geothermal Energy Production](#), 2023-2026
- [Self-Assembled Noble Metal Metasurface-based Platform for Photoelectrochemical Catalysis \(MetaCatalysis\)](#), 2023-2026
- [Development of Lead-free Adaptive Modular Radiation Protection Constructions against Mixed High-energy Radiation in Nuclear Medicine \(ADAM\)](#), 2024-2027
- [Intelligent Liquidity Strategies](#), 2024-2026
- [Innovative Transition Metal Oxide \(TMO\) Based Electrocatalyst Structures for Sustainable Hydrogen Production \(SUSTAIN-H2O\)](#), 2024-2027
- [Continuously Renewing Omnichannel Pricing System for Catering, Based on Machine Learning Dynamic Pricing Models](#), 2024-2026
- [Precision Medicine: Stereotactic Ablative Magnetic Resonance Image-Guided Radiotherapy for Early-Stage Laryngeal Cancer \(SMART\)](#), 2024-2027
- [Remote patient-targeted health monitoring to reduce clinical workload](#), 2025-2028
- [Finite-time divergence in differential equations of nilpotent matrices - theory and applications](#), 2025-2028
- [Multipillar pension system, stability indicators, uncertain environment, modeling, decision making \(PensionStability\)](#), 2025-2028
- [De-risking Geothermal Heat Extraction from Tight Hot Sedimentary Aquifer \(GEOGUARD\)](#), 2025-2028
- [Deciphering Hereditary Hearing Impairment: Integrating Computational Genomics, Deep Learning, and Inner Ear Imaging \(CGI-DeepEar\)](#), 2025-2027

## Collaboration

### Foreign Research and Study Institutions

- [University of Southern Denmark](#), Denmark
- [Lund University Skåne University Hospital](#), Sweden
- [Shizuoka University](#), Japan
- [Al-Farabi Kazakh National University](#), Kazakhstan
- [Paisii Hilendarski University of Plovdiv](#), Bulgaria
- [CERN Accelerator School](#), Switzerland
- [Sun Yat-sen National University](#), Taiwan
- [University of Caen Normandy](#), France
- [Tecnologico de Monterrey](#), Mexico
- [University of Porto](#), Portugal
- [Stanford University](#), USA
- [National Institute of Materials Science \(NIMS\)](#), Japan
- [Gdansk University of Technology](#), Poland
- [University of Latvia](#), Latvia
- [Gwangju Institute of Science and Technology](#), Korea
- [Korea Institute for the Advancement of Science and Technology](#), Korea
- [Institute of Mechanics of Bulgarian Academy of Sciences](#), Bulgaria
- [Hohai University](#), China
- [SINTEF](#), Norway
- [University of the Republic](#), Uruguay
- [Stern College for Women at Yeshiva University](#), USA
- [Courant Institute of Mathematical Sciences at New York University](#), USA
- [Columbia University](#), USA
- [Tashkent City Branch of Republican Specialized Scientific-Practical Medical Centre of Oncology and Radiology](#), Uzbekistan
- [Charles University in Prague](#), Czechia
- [Georg-August University of Göttingen](#), Germany
- [University of Almeria](#), Spain
- [Technical University of Denmark](#), Denmark
- [Vienna University of Technology](#), Austria

### Industry and Business

- [LTG Cargo, AB](#)
- [Brachydose, UAB](#)
- [Light Conversion, UAB](#)
- [Maisto mylėtojai, UAB](#)
- [Daistara, UAB](#)
- [Girteka Europe West, UAB](#)
- [Optitecha, UAB](#)
- [Judesio medicina, MB](#)
- [Telia, AB](#)
- [Ortho Baltic, UAB](#)
- [Prodivi, UAB](#)
- [SBA Grupė, UAB](#)
- [Elektrita, UAB](#)
- [Minijos nafta, UAB](#)
- [Altechna, UAB](#)
- [State Tax Inspectorate under the Ministry of Finance of the Republic of Lithuania](#)
- [Sunfox Technologies, LTD](#), India
- [GeoQuest Systems, BV](#), Netherlands
- [HeartMath Institute, USA](#)

### Dissemination of Research Results to Society

- [KTU alumnus on photoacoustics: it is the future of cancer diagnostics](#)
- [KTU physicist on the grandeur of the Universe: fortunately, the supermassive black hole of our galaxy has long since "eaten" almost everything that was nearby](#) (in Lithuanian), Dr. V. Stankus
- [KTU scientist who studied astronauts' electroencephalograms: in the future it would be possible to model brain activity](#) (in Lithuanian), Dr. K. Armonaitė
- [Lithuanian scientist: theoretically, there are no limits to star travel](#) (in Lithuanian), Dr. V. Stankus
- [The future of Lithuanian energy may lie underground](#) (in Lithuanian), Dr. M. Pal
- [Would an apple have still fallen on Newton's head in the "anti-universe"? \(what do we know about antimatter\)](#) (in Lithuanian), Dr. B. G. Urbonavičius
- [KTU expert: images generated by artificial intelligence - where does creation begin, and where is it just a copy?](#) (in Lithuanian), Dr. M. Lukauskas
- [KTU professor Tomas Ruzgas: mathematical modeling in business is the same as a compass at sea](#) (in Lithuanian), Dr. T. Ruzgas
- [The new king? GPT-5 arrives in the heated arena of artificial intelligence](#) (in Lithuanian), Dr. M. Lukauskas
- [The future generation of innovators: who will raise it - ChatGPT or the university?](#) (in Lithuanian), Dr. B. G. Urbonavičius
- [How parents can help their child prepare for exams without causing additional stress](#) (in Lithuanian), Dr. V. Kravčenkienė
- [Neuroscientist: why do we remember some events for a lifetime and forget others after just a moment?](#) (in Lithuanian), Dr. K. Armonaitė
- [Green hydrogen: KTU scientists are creating a cheaper path to a clean energy future](#) (in Lithuanian), Dr. K. Bočkutė, Dr. G. Laukaitis, Dr. I. Barauskienė
- [Mantas Lukauskas. Next-generation Gemini 3 - Google's biggest AI leap yet](#) (in Lithuanian), Dr. M. Lukauskas
- [Contraband balloons continue to cause headaches: what can we do?](#) (in Lithuanian), Dr. B. G. Urbonavičius



**Researchers, Artists / PhD Students**

115 / 52



**Projects**

38



**Publications**

162



**Patents / Patent Applications**

6 / 2



**Doctoral  
Dissertations  
Defended**

6

## Science (Art) Fields



T 003 Transport Engineering



T 009 Mechanical Engineering



T 006 Energetics and Thermoengineering



V 003 Design



T 008 Materials Engineering

## Priority Research Thematics



Artificial Intelligence and Robotics



Sustainable Energy



Diagnostic Technologies



Architecture, Urban Activities and Cultural Heritage



Functional Materials and Technologies



Audiovisual Arts



Information and Communication Technologies



Industrial Design



Mechanical and Transportation Engineering

## R&D Services and Infrastructure

- [Faculty's open access research facilities and services](#)



## Representation, Memberships

- Dr. A. Balčius – National Association of Refrigeration Professionals, member of the Board; Lithuanian Thermal Engineering Association (LTERA), member of the Council
- Dr. R. Bendikienė – Lithuanian Standards Board Technical Committee LST TK 49 “Metallic Materials”, Chair
- Dr. K. Buinevičius – Lithuanian Biomass Energy Association (LITBIOMA), member of the Scientific Council; Lithuanian Thermal Engineering Association (LTERA), member of the Council
- Dr. R. Česnavičius – European Structural Integrity Society (ESIS), member
- Dr. V. Daukantienė – Lithuanian Standards Board Technical Committee LST TK 21 “Textiles and Personal Protective Equipment”, member
- Dr. G. Dundulis – Nuclear Generation II&III Association (NUGENIA) Technical area 4 “Integrity Assessment of Systems, Structure and Components”, member; European Structural Integrity Society (ESIS), member
- Dr. E. Fataraitė-Urbonienė – National Accreditation Bureau under the Ministry of Economy and Innovation of the Republic of Lithuania, technical expert
- Dr. G. Janušas – International Society for Optics and Photonics (SPIE), member; Lithuanian Standards Board Technical Committee LST TK 98 “Digital Product Passport”, member
- Dr. V. Jonaitienė – Northern European Network for Wood Science and Engineering, national representative
- Dr. R. Jonynas – Lithuanian Thermal Engineering Association (LTERA), Director
- Dr. R. Keršys – European Rail Research Network of Excellence (EURNEX), member
- Dr. V. Leišis – European Structural Integrity Society (ESIS), member
- Dr. K. Lekeckas – Lithuanian Design Council under the Ministry of Culture of the Republic of Lithuania, member
- Dr. V. Lukoševičius – Lithuanian District Heating Association, President
- Dr. R. Makaras – Lithuanian Standards Board Technical Committee LST TK 82 “Safety of Trackless Overground Vehicles”, member
- Dr. D. Mikučionienė – Institute of Architecture and Design of Riga Technical University, member of the Advisory Board
- Dr. R. Milašius – European Materials Researchers Association (E-MRS), member of the Board of Delegates; Association of Universities for Textiles (AUTEX), KTU representative
- Dr. A. Palevičius – International Association of Engineers (IAENG), member
- Dr. L. Paukštaitis – Lithuanian Standards Board Technical Committee LST TK 56 “Metal Liquid Tanks and Industrial Pipelines”, Chair
- Dr. E. Puida – Lithuanian Standards Board Technical Committee LST TK 71 “Sustainably Produced Biomass for Energy Application, Solid Biofuel and Solid Recovered Fuel”, member, Lithuanian Thermal Engineering Association (LTERA), Vice-President of the Council
- Dr. L. Raslavičius – Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI) of Romania, expert
- Dr. R. Rimašauskienė – IFToMM Technical Committee for Linkages and Mechanical Controls, member; IFToMM organisation in Lithuania, Chair; Lithuanian Standards Board Technical Committee LST TK 98 “Digital Product Passport (DPP)”, member
- Dr. R. Skvireckas – Lithuanian Standards Board Technical Committee LST TK 43 “Railway Traffic”, member
- Dr. K. Ukvalbergienė – Association “Lithuanian Forest”, member of the Board
- Dr. K. Vaitasius – Lithuanian Standards Board Technical Committee LST TK 70 “Pulp, Paper, Board, Adhesives”, Chair
- Dr. D. Zeleniakienė – European Society for Composite Materials (ESCM), member

## Key Achievements in Science and Art

- Dr. V. Jankauskaitė. KTU Most Innovative Scientist Award (female category).
- Dr. K. Lekeckas. Gold Award “Fashion Design of the Year” of the competition “International Design Awards (IDA)”
- Dr. K. Lekeckas. Bronze A' Design Award in Fashion, Apparel and Garment Design
- M. Muningytė. President Jonas Žemaitis Scholarship
- U. Zasčiurinskaitė. President Jonas Žemaitis Scholarship

## Main Publications

- Sustainable Materials and Technologies, DOI: [10.1016/j.susmat.2025.e01782](https://doi.org/10.1016/j.susmat.2025.e01782)
- Mathematics, DOI: [10.3390/math13223626](https://doi.org/10.3390/math13223626)
- Ceramics International, DOI: [10.1016/j.ceramint.2025.10.406](https://doi.org/10.1016/j.ceramint.2025.10.406)
- Journal of Environmental Management, DOI: [10.1016/j.jenvman.2025.127690](https://doi.org/10.1016/j.jenvman.2025.127690)
- Applied Thermal Engineering, DOI: [10.1016/j.applthermaleng.2025.128078](https://doi.org/10.1016/j.applthermaleng.2025.128078)
- Journal of Materials Chemistry A, DOI: [10.1039/d5ta03212a](https://doi.org/10.1039/d5ta03212a)
- Archives of Civil and Mechanical Engineering, DOI: [10.1007/s43452-025-01255-x](https://doi.org/10.1007/s43452-025-01255-x)
- Cellulose, DOI: [10.1007/s10570-025-06618-4](https://doi.org/10.1007/s10570-025-06618-4)
- Composites Communications, DOI: [10.1016/j.coco.2025.102497](https://doi.org/10.1016/j.coco.2025.102497)
- Engineering Fracture Mechanics, DOI: [10.1016/j.engfracmech.2025.111227](https://doi.org/10.1016/j.engfracmech.2025.111227)
- Mathematics, DOI: [10.3390/math13060966](https://doi.org/10.3390/math13060966)
- BMC Oral Health, DOI: [10.1186/s12903-025-05515-3](https://doi.org/10.1186/s12903-025-05515-3)
- Composites Part B: Engineering, DOI: [10.1016/j.compositesb.2025.112182](https://doi.org/10.1016/j.compositesb.2025.112182)
- Cellulose, DOI: [10.1007/s10570-024-06270-4](https://doi.org/10.1007/s10570-024-06270-4)
- Engineering Structures, DOI: [10.1016/j.engstruct.2024.119540](https://doi.org/10.1016/j.engstruct.2024.119540)

## Patents / Patent Applications

- Patent [EP 4368565 B1](#)
- Patent [EP 4369912 B1](#)
- Patents [EP 4108308 B1](#), [PL 4108308 T3](#)
- Patent / application [LT 7147 B](#) / [LT 2023547 A](#)
- Patent / application [LT 7146 B](#) / [LT 2023548 A](#)

## Internships

- [Munich University of Applied Sciences](#), Germany, 2024-10-01 – 2025-02-28, smart electric rollators, Dr. S. Japertas

## Scientific Events

- [29th International Conference "Mechanika-2025"](#)
- [29th International Scientific Conference "Transport Means – 2025"](#)
- [12th International Young Researchers' Conference "Industrial Engineering 2025"](#)

## Projects

- [Increasing Safety in NPPs by Covering Gaps in Environmental Fatigue Assessment - Focusing on Gaps between Laboratory Data and Component Scale \(INCEFA-SCALE\)](#), 2020-2025
- [Eco-friendly Corrosion Protective Coatings Based on Smart Nanotechnology Platforms for a Circular Economy \(COAT4LIFE\)](#), 2021-2025
- [Functional Textile Materials and Products for the Needs of the Military, Doctors, Hospitalists and Civilians \(ORTOKNIT\)](#), 2024-2025
- [Regional Cooperation in Oil Spill Cleanup of Baltic Sea Using Electrospunmaterials \(RESCUE\)](#), 2024-2026
- [Baltic Hemp to Biochar \(B2B\): Harnessing Industrial Hemp Waste for Sustainable Textile](#), 2024-2026
- [Mitigating Microplastics Pollution through Advanced Baltic Cooperation \(MICROPLASTGUARD\)](#), 2024-2026
- [Development of Eco-friendly Multifunctional Structural Composites \(Eco-Multi-Comp\)](#), 2023-2026
- [Development and Implementation of a New Concept Soil Ripper in Sustainable Agricultural Sector](#), 2024-2026
- [Flammable Oil and Fibers Recovery from Pyrolysis of Wind Turbine Blade Waste and Their Applications in Cementitious Matrix Reinforcement and LCA](#), 2023-2026
- [Development and Experimental Validation of a Fast Computational Model of Aircraft Aeroelasticity and Flight Control Algorithms \(AIRRH-CRAFT\)](#), 2024-2027
- [Development of Sustainable Nanocomposites from Banana Fiber Reinforced Biopolymers Enriched with Bio-Nanoparticles Derived from Natural Wastes](#), 2024-2027
- [Intelligent Micro Sensor Array for Physical Environmental Monitoring Based on the Mechanisms of Behaviour of Insect Mechanoreceptors \(BioSens-Ins\)](#), 2024-2027
- [Developing of Structures of Flexible Solar Module and Analysis of Dynamic Processes Arising in the Operating Environment](#), 2024-2026
- [Integration of Advanced Non-Destructive Testing in the Composite Materials Ecosystem: Innovation, Reliability, and Safety](#), 2024-2026
- [Development of Composite Self-Cleaning Nanofiltration Membranes for Water Treatment](#), 2024-2026

## Collaboration

### Foreign Research and Study Institutions

- [Aalto University, Finland](#)
- [University of Aveiro, Portugal](#)
- [Bialystok University of Technology, Poland](#)
- [University of Bialystok, Poland](#)
- [University of Borås, Sweden](#)
- [Chalmers University of Technology, Sweden](#)
- [Technical University Dortmund, Germany](#)
- [Dresden University of Technology, Germany](#)
- [University of Edinburgh, United Kingdom](#)
- [Institute of Experimental Morphology, Pathology and Anthropology with Museum, Bulgaria](#)
- [Centre for Energy, Environment and Technology Research \(CIEMAT\), Spain](#)
- [Gdańsk University of Technology, Poland](#)
- [Helmholtz Zentrum Hereon, Germany](#)
- [Institute of Engineering Ecology, Ukraine](#)
- [Astrophysics Institute of the Canary Islands, Spain](#)
- [University of Cantabria, Spain](#)
- [Kielce University of Technology, Poland](#)
- [Karlsruhe Institute of Technology, Germany](#)
- [Foundation for the Open University of Catalonia, Spain](#)
- [University of Catania, Italy](#)
- [Kyiv National University of Technologies and Design, Ukraine](#)
- [Craiova University, Romania](#)
- [AGH University of Krakow, Poland](#)
- [University of Latvia, Latvia](#)
- [Linköping University, Sweden](#)
- [NOVA University Lisbon, Portugal](#)
- [Lodz University of Technology, Poland](#)
- [Brunel University London, United Kingdom](#)
- [University of the Arts London, United Kingdom](#)
- [University of Lorraine, France](#)
- [Lurederra Technology Centre, Spain](#)
- [Lviv Polytechnic National University, Ukraine](#)
- [University of Manchester, United Kingdom](#)
- [University of Milan, Italy](#)
- [Munich University of Applied Sciences, Germany](#)
- [National Research and Development Institute for Textiles and Leather, Romania](#)
- [National University of Science and Technology Politehnica Bucharest, Romania](#)
- [University of Oslo, Norway](#)
- [Oklahoma State University, USA](#)
- [University of Oradea, Romania](#)
- [Aarhus University, Denmark](#)
- [Palermo University, Italy](#)
- [Paul Scherrer Institute, Switzerland](#)
- [Institute for Radiation Protection and Nuclear Safety \(IRSN\), France](#)
- [Riga Technical University, Latvia](#)
- [Selcuk University, Turkey](#)
- [Silesian University of Technology, Poland](#)
- [SINTEF, AS, Norway](#)
- [VTT Technical Research Centre of Finland, Finland](#)
- [Tampere University, Finland](#)
- [University of Tartu, Finland](#)
- [University of Tartu, Estonia](#)
- [National University of Life and Environmental Sciences of Ukraine, Ukraine](#)
- [Ethnology Institute of National Academy of Sciences of Ukraine, Ukraine](#)
- [I. M. Frantsevich Institute for Problems of Materials Science of National Academy of Sciences of Ukraine, Ukraine](#)
- [Institute of Pulse Processes and Technologies of National Academy of Sciences of Ukraine, Ukraine](#)
- [State University of Infrastructure and Technologies, Ukraine](#)
- [Ukrainian State University of Science and Technologies, Ukraine](#)
- [University of West Attica, Greece](#)
- [Polytechnic University of Valencia, Spain](#)
- [Wrocław University of Science and Technology \(Politechnika\), Poland](#)

### Industry and Business

- [Meteka, UAB](#)
- [IN RE, UAB](#)
- [Stido, UAB](#)
- [Astra LT, UAB](#)
- [Plungės kooperatinė prekyba, UAB](#)
- [Mereabi OU Klaipėdos filialas](#)
- [SSF, UAB](#)
- [Kauno energija, AB](#)
- [Lithuanian District Heating Association](#)
- [Genys, UAB](#)
- [Idex Baltic, UAB](#)
- [Kalvis, UAB](#)
- [Carlsen Baltic, UAB](#)
- [Baltic Refrigeration Group, UAB](#)
- [Elektrėnų energetikos remontas, UAB](#)
- [Ignitis grupė, AB](#)
- [Panevėžio energija, AB](#)
- [Utenos šilumos tinklai, UAB](#)
- [Tauragės šilumos tinklai, UAB](#)
- [Raseinių šilumos tinklai, UAB](#)
- [Jonavos šilumos tinklai, UAB](#)
- [Urdora, UAB](#)
- [Axioma Metering, UAB](#)
- [Elinta, UAB](#)
- [Kitron, UAB](#)
- [Alumingo, UAB](#)

## Collaboration

### Industry and Business

- [Modernios e-technologijos, UAB](#)
- [Mechana, UAB](#)
- [Cosmoway, UAB](#)
- [Hautica, UAB](#)
- [Granberg LT, UAB](#)
- [Lincasa, UAB](#)
- [Klasikinė tekstilė, UAB](#)
- [LTP, UAB](#)
- [Safariland Lithuania, UAB](#)
- [MLI, UAB](#)
- [Novameta, UAB](#)
- [Antalis, UAB](#)
- [HELLA Lithuania, UAB](#)
- [Autofortas motors, UAB](#)
- [LTG Infra, AB](#)
- [LTG Cargo, AB](#)
- [COBALT](#)
- [Techservisas, UAB](#)
- [FL Technics, AB](#)
- [Skyco AE, UAB](#)
- [Sportinė aviacija ir Ko, UAB](#)
- [Altas komercinis transportas, UAB](#)
- [Via Lietuva, AB](#)
- [SMALLMATEK, LDA, Portugal](#)
- [Tehnolabor, OÜ, Estonia](#)
- [Řež, UJV, Czechia](#)
- [SYNPO, AS, Czechia](#)

### Dissemination of Research (Art) Results to Society

- [From synthetic to natural fibers: where materials engineering is heading?](#) (in Lithuanian), Dr. G. Monastyreckis
- [Aviation expert: how effective can a “Drone Wall” be in Lithuania?](#) (in Lithuanian), Dr. S. Japertas
- [Bees at the university: from modern hives to unique beekeeping suits](#) (in Lithuanian), Dr. G. Čižauskas
- [Lower risk of accidents: KTU researchers develop new composites for aviation and automobiles](#) (in Lithuanian), Dr. D. Zeleniakienė
- [KTU scientist: how much air is needed to drive to the sea?](#) (in Lithuanian), Dr. K. Buinevičius
- [What's next for us? - Is it still possible to save the Baltic Sea?](#) (in Lithuanian), Dr. R. Milašius
- [Modern manufacturing and business today: how AI is changing the rules of the game?](#) (in Lithuanian), Dr. A. Kleiva
- [KTU scientist: oil spills in the Baltics – new technologies against an old pollution problem](#) (in Lithuanian), Dr. R. Milašius
- [Alternative to synthetics: Lithuanians and partners create textiles from hemp waste](#) (in Lithuanian), Dr. D. Mikučionienė
- [Advanced bandages have been introduced](#) (in Lithuanian), Dr. D. Mikučionienė
- [KTU aviation engineering experts: what are the real causes of plane crashes?](#) (in Lithuanian), Dr. S. Japertas, A. Rimkevičius
- [Once and for all: they explained what so-called “chemtrails” are and whether white smoke from chimneys is dangerous](#) (in Lithuanian), Dr. K. Buinevičius
- [Not just black and white: professor warns that switching to electric cars alone will not save the planet](#) (in Lithuanian), Dr. L. Raslavičius
- [KTU researcher on the role of metals in the global economy: these are resources that cause conflicts](#) (in Lithuanian), Dr. L. Kavaliauskienė
- [Lithuanian designer triumphs in Norway: gold medal for impressively beautiful works](#) (in Lithuanian), Dr. K. Lekeckas
- KTU journal [Mechanika](#)

**Researchers**

16




**Publications**

4

**Patents / Patent  
Applications**

1 / 1

## Science Fields

-  T 001 Electrical and Electronics Engineering
-  T 002 Civil Engineering
-  S 003 Management

## Priority Research Thematics

-  Artificial Intelligence and Robotics
-  Electronics and Electrical Engineering
-  Functional Materials and Technologies
-  Innovation Management and Entrepreneurship
-  Organisational Development

## Representation, Memberships

- Dr. N. Kvedaraitė – European Educational Research Association (EERA), member
- Dr. R. Bubnys – European Educational Research Association (EERA), member; World Education Research Association (WERA), member; International Professional Development Association (IPDA), member
- Dr. D. Viržonis – Institute of Electrical and Electronics Engineers (IEEE), member
- Dr. D. Žostautienė – Panevėžys City Industry 4.0 Advisory Board, member; Panevėžys City Municipality Education Council, member



## Main Publications

- Coatings,  
DOI: [10.3390/coatings15080963](https://doi.org/10.3390/coatings15080963)
- Naukovyi Visnyk Natsionalnoho Hirnychoho Universytetu,  
DOI: [10.33271/nvngu/2025-5/218](https://doi.org/10.33271/nvngu/2025-5/218)
- Review of Education,  
DOI: [10.1002/rev3.v13.2](https://doi.org/10.1002/rev3.v13.2)

## Scientific Events

- [25th Students Scientific Conference "Current Issues of Technologies and Business"](#)

## Patents / Patent Applications

- Patent / application [EP 4436910 B1](#) / [US 2025019223 A1](#)

## Projects

- [Enhancement of Incubators' International Entrepreneurship and Trade Abilities in Digital Platform \(ENTRANT\), 2024-2026](#)

## Collaboration

### Foreign Research and Study Institutions

- [Wismar University](#), Germany
- [Budapest University of Technology and Economics](#), Hungary
- [Széchenyi István University](#), Hungary
- [Bursa Technical University](#), Turkey
- [Bursa Technical University Technology Development Park](#), Turkey
- [Magurele Science Park Association](#), Romania
- [Technology Park Varaždin](#), Croatia
- [NOVI Science Park](#), Denmark
- [Association to Advance Collegiate Schools of Business \(AACSB\)](#), USA

### Industry and Business

- [Supergarden, UAB](#)
- [Sunrise Valley Science and Technology Park](#)
- [Broliy medus, UAB](#)
- [Ruukki Express, AS \(Panevėžys\)](#)
- [Omron Industrial Automation Europe \(Omron Electronics Oy\)](#)
- [Lucid Agreements, UAB \(isLucid\)](#)
- [Arm Gate, UAB](#)

### State Institutions and Public Organizations

- [Kupiškis District Municipality](#)
- [Panevėžys Region Industrialists Association](#)
- [Panevėžys City Municipality](#)
- [Panevezys Development Agency "PanevėžysNow"](#)
- [Panevėžys District Municipality](#)
- [Panevėžys Chamber of Commerce, Industry and Crafts](#)
- [Panevėžys County Branch of the Lithuanian Association of Civil Engineers](#)

## Dissemination of Research Results to Society

- [Innovations of the KTU Panevezys Faculty of Technology and Business: how science becomes business through smart technologies](#) (in Lithuanian), Dr. D. Viržonis, Dr. D. Pelenis
- [KTU professor about reflection: it is not only an intellectual tool, but also a path to personal development](#) (in Lithuanian), Dr. R. Bubnys
- [Reflection in the study and research process: a researcher's insights into the importance, challenges, and practical benefits](#) (in Lithuanian), Dr. R. Bubnys



**Researchers, Artists / PhD Students**

114 / 21



**Projects**

51



**Publications**

59



**Doctoral Dissertations Defended**

3

## Science (Art) Fields



S 001 Law



S 008 Communication and Information



S 002 Political Sciences



H 001 Philosophy



S 003 Management



H 003 History and Theory of Arts



S 004 Economics



H 004 Philology



S 005 Sociology



M 004 Public Health



S 006 Psychology



C 001 Music



S 007 Education

## Priority Research Thematics



Artificial Intelligence and Robotics



Innovation Management and Entrepreneurship



Sustainable Energy



Organisational Development



Audiovisual Arts



Digital Media and Culture



Educational Environments and Technologies



Public Administration



## R&D Services and Infrastructure

- [Lithuanian Data Archive for Social Sciences and Humanities \(LiDA\)](#)
- [Consortium of European Social Science Data Archives \(CESSDA\)](#)
- [Survey of Health, Ageing and Retirement in Europe \(SHARE-ERIC\)](#)
- [International Social Survey Programme \(ISSP\)](#)
- [Faculty's open access research facilities and services](#)

## Representation, Memberships

- Dr. A. Augustinienė – [European Association of Developmental Psychologists \(EADP\)](#), member; [Lithuanian Agency for Non-Formal Education of Students](#), expert; [Lithuanian Educational Research Association \(LERA\) General Education Network Committee](#), member
- Dr. R. Ambrazevičius – [European Society for Cognitive Music Science \(ESCOM\)](#), member; [European Seminar of Ethnomusicologists \(ESEM\)](#), member of the Council; [Estonian Science Foundation](#), expert; [Acoustical Society of Lithuania](#), member of the Council; [National Jonas Basanavičius Prize Commission](#), member
- I. Antanaitė – [Government Strategic Analysis Centre \(STRATA\)](#), member of the Board
- Dr. A. Balžekienė – [United Nations Environment Programme \(UNEP\) report „Global Environmental Outlook – 7”](#), coauthor; [International Sociological Association \(ISA\)](#), member; [European Sociological Association \(ESA\) research network “RN22 Sociology of Risk and Uncertainty”](#), member of the Advisory Board
- Dr. N. E. Bedyga – [European Sociological Association \(ESA\)](#), member; [Society for Risk Analysis Europe \(SRA-Europe\)](#), member; [Polish Sociological Association](#), member of the Board
- Dr. A. Bielskis – [International Society for MacIntyrean Enquiry \(ISME\)](#), member of the Steering Committee
- Dr. E. Butkevičienė – [European University Association \(EUA\) Expert Group on Open Science \(EGOS\)](#), member, representative of the Lithuanian University Rectors' Conference (LURK); [Coalition for the Assessment of Research Progress \(CoARA\)](#), member, representative of the LURK; [World Association for Public Opinion Research \(WAPOR\)](#), national representative; [International Social Survey Programme \(ISSP\)](#), member, KTU representative; [European Citizen Science Association \(ECSA\)](#), member of the Board of Directors; [European Sociological Association \(ESA\)](#), member; [EMES International Research Network](#), member; [American Sociological Association \(ASA\)](#), member; [American Association for Public Opinion Research \(AAPOR\)](#), member; [International Political Science Association \(IPSA\)](#), member; [European Consortium for Policy Research \(ECPR\)](#), member; [International Public Policy Association \(IPPA\)](#), member; [Citizen Science Association](#), founder and member
- Dr. R. Chakraborty-Paunksnis – [Writing, Analysing, Translating Dalit Literature Network](#), member; [European Association for South Asian Studies \(EASAS\)](#), member; [Gothic in Asia Association](#), member
- Dr. R. Daugėlienė – [Quality Agency for Higher Education of Latvia \(AIKA\)](#), expert; [Foundation for International Business Administration Accreditation \(FIBAA\)](#), expert
- M. De Potestad Tellechea – [Lithuanian Language Teachers' Association \(LKPA\)](#), member of the Council
- Dr. M. S. De Vries – [International Commission on the Accreditation of Public Administration Education and Training Programs \(ICAPA\)](#), Vice Chair
- Dr. R. Erentaitė – [European Association for Research on Adolescence \(EARA\)](#), national representative; [Developmental Evolutionary Ecological Psychology \(DEEP lab\) network](#), member
- Dr. E. Gaulė – [Network of Institutes and Schools of Public Administration in Central and Eastern Europe \(NISPACEE\)](#), member
- Dr. V. Giedraitytė – [Quality Agency for Higher Education of Latvia \(AIKA\)](#), expert
- Dr. J. S. Gordon – [German Society for Analytical Philosophy \(GAP\)](#), member; [German Society for Philosophy \(DGPhil\)](#), member
- Dr. A. Grišinas – [National Science Centre of Poland \(NCN\)](#), expert; [Association for the Advancement of Baltic Studies \(AABS\)](#), member
- Dr. J. Horbačasienė – [European Educational Research Association \(EERA\)](#), member; [World Educational Research Association \(WERA\)](#), member; [Quality Agency for Higher Education of Latvia \(AIKA\)](#), expert; [Rezekne Academy of Technologies](#), member of the Council of Professors
- Dr. E. Jaleniausienė – [European Educational Research Association \(EERA\)](#), member; [World Educational Research Association \(WERA\)](#), member; [European Social Sciences and Humanities Alliance \(EASSH\)](#), member; [European Civil Society Platform for Multilingualism \(ECSPM\)](#), member; [API Education Forum](#), member
- I. Janavičienė – [European Society for Translation Studies \(EST\)](#), member; [International Association of Languages and Intercultural Communication \(IALIC\)](#), member
- Dr. D. Jovarausienė – [European Association for Research on Services \(RESER\)](#), member; [European Group for Public Administration \(EGPA\)](#), member

## Representation, Memberships

- Dr. S. Juzelėnienė – Association for Researching and Applying Metaphor (RaAM), member; International Association for Applied Linguistics, member
- Dr. R. Kasperė – State Commission of the Lithuanian Language, member and Head of the Language Technology Subcommittee; Lithuanian University Rectors' Conference (LURK) working group "Possibilities of Applying Artificial Intelligence in University Activities", member; European Society for Translation Studies (EST), member; European Association for Machine Translation (EAMT), member; European Association for Studies in Screen Translation (ESIST), member; International Cognitive Linguistics Association (ICLA), member
- Dr. S. Keturakis – Expert Committee of Humanities and Social Sciences of the Research Council of Lithuania, member
- P. Kliūkūnas – European Security and Defence College (ESDC), representative of Lithuania; European Public Prosecutor's Office (EPPO), team coordinator of the Digital Operations Group
- Dr. D. Kučinskas – Music Quality Enhancement (MusiQuE), expert; International Association of Sound and Audiovisual Archives (IASA), member; International Association of Music Libraries, Archives and Documentation Centres, member; International Musicological Society, member; Automatic Music Instrument Collectors' Association, member
- Dr. A. Lašas – Association for the Advancement of Baltic Studies (AABS), member
- Dr. V. Linkevičiūtė – International Cognitive Linguistics Association (ICLA), member
- Dr. D. Martinelli – European Association for Critical Animal Studies (EACAS), member of the Scientific Committee; International Association for Semiotic Studies (IASS-AIS), member; REPRISE of the Ministry of University and Research (MUR) of Italy, expert; Baltic and East European Studies Foundation, member; International Society of Zooanthropology, Baltic region research coordinator; Estonian Research Council, expert
- Dr. A. Martinisi – International Panel of the Information Environment (IPIE), member
- Dr. D. Maumevičienė – European Master's in Translation (EMT) network supported by the Directorate-General for Translation of the European Commission, KTU representative and member of the working group "Translation Tools and Technologies"; Globalization and Localization Association (GALA Global), member; Lithuanian Museum of Education, member of the Council; European Association for Studies in Screen Translation (ESIST), member
- Dr. R. Miežanskienė – Law and Society Association, member
- Dr. J. Mikėlionienė – European Master's in Translation (EMT) network supported by the Directorate-General for Translation of the European Commission, member of the working group "Translation Tools and Technologies"; Forum on Terminology of Institutions and Bodies of the European Union and of the Republic of Lithuania, member; European Association of Terminology, member
- Dr. V. Morkevičius – Consortium for European Social Science Data Archives (CESSDA), national representative; Platform "re3data.org" (Registry of Research Data Repositories), member of the Editorial Board; American Political Science Association, member; International Political Science Association, member; International Communication Association, member
- J. Motiejūnienė – European Society for Studies in Screen Translation (ESIST), member; European Society for Translation Studies (EST), member
- Dr. Š. Paunksnis – Gothic in Asia Association, member; European Association of South Asian Studies, member
- R. Pelikšienė – International Sociological Association (ISA), member; European Sociological Association, member
- Dr. R. Petrauskienė – Foundation for International Business Administration Accreditation (FIBAA), expert
- Dr. S. Petronienė – European Society for Translation Studies (EST), member; Athens Institute (ATINER), member; Global Engineers Language Skills Network (GELS), KTU representative
- Dr. I. Popovaitė – Social Studies of Outer Space Network (SSOS Network), member
- Dr. R. Pučėtaitė – Research Center for Corruption Studies of University of Geneva, member
- Dr. F. C. Rabitz – Convention on Biological Diversity (CBD), member of the Lithuanian delegation; Steering Committee of the Multilateral Mechanism for the Fair and Equitable Sharing of Benefits from the Use of Digital Sequence Information on Genetic Resources, including the Cali Fund, member; Earth System Governance Network, member; Sustainability Transitions Research Network, member
- Dr. E. Štuopytė – European Educational Research Association (EERA), member; World Educational Research Association (WERA), member; European Social Sciences and Humanities Alliance (EASSH), member
- Dr. L. Tauginienė – Committee on Publication Ethics (COPE), member of the Council; European Group for Organizational Studies (EGOS), member; The Organization and Management Editors' Network (OMEN), member; European Academy of Management (EURAM), member; European Citizen Science Association (ECSA), member of the working group "Citizen Science and Open Science"; Council of Europe Platform on Ethics, Transparency and Integrity in Education (ETINED), expert; European Network of Research Integrity Offices (ENRIO), member of the Board, Vice-President, co-leader of the Working group "Research Integrity Definitions"; French Office for Research Integrity, member of the Advisory Board; Research Ethics Committee of the Research Council of Lithuania, Chair
- Dr. G. Tautkevičienė – OpenAIRE National Open Access Desk, member; RDA (Research Data Alliance), national coordinator; Working Group of the Research Council of Lithuania on accession to the European Open Science Cloud (EOSC), member

## Representation, Memberships

- Dr. A. Telešienė – Irish Research Council, expert; Review and Impact Assessment of the State Lithuanian Studies and Dissemination Programme (LIST) 2016–2024, member of the Expert Group; Research Council of Lithuania LIST 2025-2030 Programme, member of the Developing Group; United Nations Environment Programme (UNEP) report „Global Environmental Outlook – 7”, lead author, coordinator of the Behavioural, Social and Cultural Sciences Group; European Sociological Association (ESA), member; ESA research network “RN12 Environment and Society”, member of the Advisory Board; International Sociological Association (ISA), member; Lithuanian Sociological Society, member of the Board; Expert Commission of the Research Council of Lithuania for the Preparation of “Social innovation feasibility study in the field of mobility”, Chair
- Dr. E. Vaidelytė – International Association of Schools and Institutes of Administration (IASIA), member of the Board and Vice-President for Europe; Network of Directors of Institutes and Schools of Public Administration (DISPA), national member; Research Ethics Committee of the Research Council of Lithuania, member
- Dr. V. Valentinavičius – National Working Group to Promote an Effective Response to Hate Crimes and Hate Speech in Lithuania, member; International Public Policy Association (IPPA), member; International Political Science Association (IPSA), member
- Dr. U. Varankaitė – International Pluridisciplinary Research Group Semiotics of the Arts, member
- Dr. J. Vitkauskaitė-Ramanauskienė – European Sociological Association (ESA) research network “RN12 Environment and Society”, member of the Board
- Dr. R. Vosylis – Society for the Study of Emerging Adulthood (SSEA), member

## Main Publications

- Current Sociology, DOI: [10.1177/00113921241250047](https://doi.org/10.1177/00113921241250047)
- Learning and Individual Differences, DOI: [10.1016/j.lindif.2024.102594](https://doi.org/10.1016/j.lindif.2024.102594)
- Science and Public Policy, DOI: [10.1093/scipol/scae078](https://doi.org/10.1093/scipol/scae078)
- International Journal of Sociology, DOI: [10.1080/00207659.2025.2552090](https://doi.org/10.1080/00207659.2025.2552090)
- Interdisciplinary Journal of Problem-Based Learning, DOI: [10.14434/ijpbl.v19i1.35846](https://doi.org/10.14434/ijpbl.v19i1.35846)
- Logos, DOI: [10.24101/logos.2025.43](https://doi.org/10.24101/logos.2025.43)
- The Routledge Handbook of the Translation Industry, DOI: [10.4324/9781003381303-18](https://doi.org/10.4324/9781003381303-18)
- A Companion to Applied Philosophy of AI, DOI: [10.1002/9781394238651.ch24](https://doi.org/10.1002/9781394238651.ch24)
- Enabling Indigenous Knowledge Systems in Action Research and Action Learning, DOI: [10.4018/979-8-3693-3542-0.ch001](https://doi.org/10.4018/979-8-3693-3542-0.ch001)
- Human Flourishing in the Age of Digital Capitalism: AI, Automation and Alienation, ISBN: [9781350510715](https://www.isbn-international.org/product/9781350510715)
- Governance and Public Management = 35 Years of Public Sector Reform in Central Europe, DOI: [10.1007/978-3-031-80668-1](https://doi.org/10.1007/978-3-031-80668-1)
- Humanity and Ukraine: Resistance through Language, Culture, and the Taking up of Arms, ISBN: [9781666960525](https://www.isbn-international.org/product/9781666960525)
- International Perspectives on Migration, Bullying, and School: Implications for Schools, Refugees, and Migrants, DOI: [10.4324/9781003439202-5](https://doi.org/10.4324/9781003439202-5)
- The Western Crisis of Truth in the Early 21st Century: as the Enlightenment Dims, DOI: [10.4324/9781003380627](https://doi.org/10.4324/9781003380627)
- Librarians' Competencies Enabling Engagement in Citizen Science Activities (in Lithuanian), DOI: [10.5755/e01.9786090219096](https://doi.org/10.5755/e01.9786090219096)

## Key Achievements in Science and Art

- Dr. S. Keturakis. The Medal of the Order of the Lithuanian Grand Duke Gediminas
- Dr. A. Balžekienė, Dr. A. Telešienė. Prof. Juozas Leonavičius Award
- Dr. R. Lekavičienė. Kaunas City Municipality 2nd Degree Santaka Badge of Honour
- Dr. A. Grišinas. Second place in the KTU Best Monographs Competition for the monograph “The Western Crisis of Truth in the Early 21st Century: as the Enlightenment Dims”
- T. Backūnas. Winner's Award of the competition “Best Master Thesis of 2025” in the field of social sciences

## Scientific Events

- Scientific conference “Language in the Age of Artificial Intelligence LTech 2025”
- ESA RN12 “Environment and Society” mid-term and Energy and Society Network 7th international joint conference “Societal Responses to Environmental Crises and Energy Transitions”
- Student scientific conference “SMILES 2025 Social Sciences, Arts and Humanities in Contemporary Society”
- Workshop “The Application Possibilities of Eye-Tracking Technologies in Education, Cartography, and the Analysis of Interactive Maps”

## Internships

- [The City University of New York \(CUNY\)](#), USA, 02-18-2025 – 06-01-2025, philosophical research aimed at conceptualizing the relationship between human flourishing and artificial intelligence (AI) and its rapid development, as well as ethnographic research on workers in the artificial intelligence industry (especially in Silicon Valley) to prepare a manuscript of the monograph “Human Flourishing and the Secrets of Artificial Intelligence”; Dr. A. Bielskis

## Projects

- [Futures-Oriented Governance of Outer Space: Towards Peace, Equity, and Environmental Integrity \(FOGOS\)](#), 2024-2028
- [Catalysation of Institutional Transformations of Higher Education Institutions through the Adoption of Acceleration Services \(CATALIS\)](#), 2023-2025
- [Promoting Ocean and Water Literacy in School Communities \(ProBleu\)](#), 2023-2026
- [Augmented Intelligence for Pedagogically Sustained Training and Education \(augMENTOR\)](#), 2023-2025
- [TRUSTMAKING: Young Creators and Responsibilities for the New Green Transition](#), 2022-2025
- [Implementation of the International Research Infrastructure Membership Plan \(CESSDA ERIC\)](#), 2024-2029
- [Large Language Models for Social Sciences \(LLAMOSS\)](#), 2024-2027
- [Social Solutions to the Climate Crisis: Behavioral Profiles and Targeted Communication \(KLIM-KOM\)](#), 2022-2025
- [Socio-spatial Determinants of Societal Vulnerability and Resilience to Crises and Strengthening the Crisis Response Potential of Communities \(SERENITY\)](#), 2023-2026
- [The Transnationalisation of Outer Space \(TRACE\)](#), 2023-2026
- [Innovative System for Students' Data Analysis, Progress Evaluation and Achievement Forecasting](#), 2024-2026
- [Strengthening Resilience in Communities and Society through Citizen Science and Citizenship \(RECONNECT\)](#), 2023-2026
- [Petty Corruption Unveiling in Lithuanian Healthcare Sector: Individual Choices, Institutional Patterns, and Anticorruption Policy Perspectives \(PULSE\)](#), 2024-2027
- [Eye Tracking for Analysing Reception of Machine Translation and Sign Language \(EyeSign\)](#), 2024-2027

## Collaboration

### State Institutions and Public Organizations

- [AIIESEC KTU](#)
- [AIIESEC Lithuania](#)
- [AIIESEC.ORG](#)
- [Artifactory](#), Greece
- [Balzekas Museum of Lithuanian Culture](#), USA
- [CLEAR Global](#), Ireland
- [GESIS – Leibniz Institute for Social Sciences](#), Germany
- [European Sociological Association](#)
- [United Nations Environment Programme \(UNEP\)](#)
- [International Association of Schools and Institutes of Administration \(IASIA\)](#)
- [International Social Survey Programme \(ISSP\)](#)
- [Citizen Science Association](#)
- [Ministry of Environment of the Republic of Lithuania](#)
- [Chancellery of the Government of the Republic of Lithuania](#)
- [Seimas Ombudspersons' Office of the Republic of Lithuania](#)
- [Migration Department under the Ministry of the Interior of the Republic of Lithuania](#)
- [Lithuanian Public Employment Service under the Ministry of Social Security and Labour of the Republic of Lithuania](#)
- [State Data Agency \(Statistics Lithuania\)](#)
- [Public Procurement Office](#)
- [Board of the State Social Insurance Fund under the Ministry of Social Security and Labour of the Republic of Lithuania](#)
- [Transparency International Lithuania](#)
- [National Kaunas Drama Theatre](#)
- [Centre for the Cultural Development of Society](#)
- [Innovative Creative Projects](#)
- [Lietuvos Junior Achievement](#)

### Industry and Business

- [XTRF Management Systems, SA](#), Poland
- [Baltijos vertimai, UAB](#)
- [Šviesa, UAB](#)
- [Tarptautinių vertimų biuras, UAB](#)
- [Pasaulio spalvos, UAB](#)
- [Vilmorus, UAB](#)

## Collaboration

### Foreign Research and Study Institutions

- [University of Antwerp](#), Belgium
- [University of Aveiro](#), Portugal
- [Autonomous University of Barcelona](#), Spain
- [University of Bologna](#), Italy
- [University of Central Florida](#), USA
- [University of Zurich](#), Switzerland
- [Dortmund University of Technology](#), Germany
- [University of Aix-Marseille](#), France
- [Estonian University of Life Sciences](#), Estonia
- [University of Graz](#), Austria
- [University of Granada](#), Spain
- [University of Haifa](#), Israel
- [University of Iceland](#), Iceland
- [Ivano-Frankivsk National Technical University of Oil and Gas](#), Ukraine
- [Jawaharlal Nehru University](#), India
- [University of Jyväskylä](#), Finland
- [Cardiff University](#), United Kingdom
- [University of Cambridge](#), United Kingdom
- [Kosovo Institute for Public Administration](#), Kosovo
- [Kozminski University](#), Poland
- [University of Crete](#), Greece
- [Latvia University of Life Sciences and Technologies](#), Latvia
- [Leiden University](#), Netherlands
- [Masaryk University](#), Czechia
- [Tecnológico de Monterrey](#), Mexico
- [National University of Political Studies and Public Administration \(SNSPA\)](#), Romania
- [National Sun Yat-sen University](#), Taiwan
- [University of Navarra](#), Spain
- [University of Nicosia](#), Cyprus
- [Constantine the Philosopher University in Nitra](#), Slovakia
- [Örebro University](#), Sweden
- [University of Oulu](#), Finland
- [Palacký University Olomouc](#), Czechia
- [University of Orleans](#), France
- [University of Padova](#), Italy
- [Pablo de Olavide University](#), Spain
- [Poznan Adam Mickiewicz University](#), Poland
- [University of Pristina](#), Kosovo
- [Rezekne Academy of Technologies](#), Latvia
- [RWTH Aachen University](#), Germany
- [University of Salento](#), Italy
- [University of National and World Economy](#), Bulgaria
- [University of Stavanger](#), Norway
- [Stellenbosch University Business School](#), South Africa
- [Suleyman Demirel University](#), Kazakhstan
- [University of Tartu](#), Estonia
- [University of Trento](#), Italy
- [University of Twente](#), Netherlands
- [Ukrainian Catholic University](#), Ukraine
- [Uppsala University](#), Sweden
- [Utrecht University](#), Netherlands
- [V. N. Karazin Kharkiv National University](#), Ukraine
- [Warsaw School of Social Psychology \(SWPS\)](#), Poland
- [Hungarian Academy of Sciences](#), Hungary
- [Mid Sweden University](#), Sweden
- [Academy of Public Administration under the President of the Republic of Kazakhstan](#), Kazakhstan

### Dissemination of Research (Art) Results to Society

- [Are we ready for crises? Researcher reveals what preparedness is still lacking among Lithuanian residents](#) (in Lithuanian), Dr. A. Balžekienė
- [Artificial intelligence tools and inclusive education](#) (in Lithuanian), Dr. L. Daniusevičiūtė-Brazaitė
- [How universities can overcome roadblocks to citizen science in academia](#), Dr. E. Butkevičienė
- [Humans have blown past 6 of 9 'planetary boundaries': Governments alone won't fix this](#), Dr. A. Telešienė
- [Lithuanian cities over a century: from interwar growth to contemporary challenges](#) (in Lithuanian), Dr. P. Budrytė
- [A KTU dissertation focuses on the whole child: a holistic education paradigm proposed for Lithuania](#) (in Lithuanian), Dr. B. Miseliūnaitė
- [KTU scientists: military-themed toys incorporating artificial intelligence may affect the way children think](#) (in Lithuanian), Dr. R. Kasperė
- [\(Non-\)accidental speech errors – why do we sometimes get tongue-tied and words slip away?](#) (in Lithuanian), Dr. D. Maumevičienė
- [KTU research: Lithuanian schools monitor student progress, but are limited by resources](#) (in Lithuanian), Dr. R. Erentaitė
- [For aspiring future teachers: short and practice-oriented studies at KTU](#) (in Lithuanian), Dr. B. Simonaitienė
- [Painting memory: Lithuanian researchers explore how street art shapes urban identity](#), Dr. S. Juzelėnienė, Dr. S. Petronienė
- [The five stages of grief, or the stages through which we accept AI integration into education](#) (in Lithuanian), Dr. E. Jaleniauskiene
- [Complex topics in schools: how should we talk about them with children?](#) (in Lithuanian), G. Matusevičiūtė
- [Pollution affects not only physical but also emotional health: what do studies in Klaipėda show?](#) (in Lithuanian), Dr. A. Balundė
- [Eye-tracking research in mathematics classes: a KTU PhD student investigates what determines learning success](#) (in Lithuanian), A. Paškovskė
- KTU journal [Kalbų studijos / Studies about Languages](#)
- KTU journal (published jointly with MRU) [Viešojo politika ir administravimas / Public Policy and Administration](#)



**Researchers, Artists / PhD Students**

48 / 25



**Projects**

16



**Publications**

69



**Patents / Patent Applications**




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**Doctoral  
Dissertations  
Defended**

2

### Science (Art) Fields

-  H 003 History and Theory of Arts
-  T 002 Civil Engineering
-  V 001 Architecture

### Priority Research Thematics

-  Functional Materials and Technologies
-  Construction Technologies
-  Sustainable Energy
-  Architecture, Urban Activities and Cultural Heritage
-  Digital Media and Culture

### R&D Services and Infrastructure

- [Faculty's open access research facilities and services](#)



## Representation, Memberships

- Dr. R. Apanavičienė – EURO Working Group on Sustainable Development and Civil Engineering (EWG ORSDCE), member
- Dr. A. Augonis – Association of Construction Products Testing Laboratories, member of the Board
- G. Balčytis – Lithuanian Association of Architects, Chairman; Kaunas Council of Experts on Architecture and Urban Planning (KAUET), member
- V. Baltus – Panevėžys Regional Council of Architects of the Lithuanian Chamber of Architects, member
- Dr. J. Černeckienė – Lithuanian Standards Board Technical Committee LST TK 96 “Energy Performance of Buildings”, member; Nordic branch IBPSA-Nordic of the International Building Performance Simulation Association (IBPSA), member
- Dr. M. Daukšys – International Federation for Structural Concrete (FIB) working group TG7.8 “Recycled Materials and Industrial By-Products to Produce High-Performance Concrete Structures”, member; Lithuanian Standards Board Technical Committee LST TK 19 “Concrete and Reinforced Concrete”, member
- Dr. P. Fokaides – Energy Committee of Cyprus Scientific and Technical Chamber (ETEK), member
- Dr. I. Gražulevičiūtė-Vileniške – Šiauliai Regional Council of Architects of the Lithuanian Chamber of Architects, member
- Dr. E. Ivanauskas – Lithuanian Standards Board Technical Committee LST TK 19 “Concrete and Reinforced Concrete”, Chairman; Lithuanian Standards Board Technical Committee LST TK 25 “Matrix, Gypsum and Gypsum Based Products”, member
- Dr. M. Ivaškevičius – Vilnius Regional Council of Architects of the Lithuanian Chamber of Architects, member
- G. Janulytė Bernotienė – Kaunas Council of Experts on Architecture and Urban Planning (KAUET), member
- Dr. A. Jurelionis – European Council on Computing in Construction (EC3), member of the Education Committee; Lithuanian Construction Association, member of the Council; Lithuanian Standards Board Technical Committee LST TK 96 “Energy Performance of Buildings”, Chairman
- Dr. J. Kamičaitytė – Kaunas Regional Council of Architects of the Lithuanian Chamber of Architects, member; Nordic Baltic Academy of Architecture, Vice Rector
- Dr. E. Klumbytė – BUILD UP ambassador for Lithuania
- R. Leitanaitė – Vilnius Regional Council of Architects of the Lithuanian Chamber of Architects, member
- Dr. A. Mlinkauskienė – Third Immovable Cultural Heritage Assessment Council of the Department of Cultural Heritage under the Ministry of Culture, member; National Architecture Awards Jury, member
- Dr. V. Petruelis – National Commission for Cultural Heritage, member; ICOMOS ISC20C Bureau, member; Baltic Region Heritage Committee, Working group on 20th Century Built Cultural Heritage, member; Lithuanian Chapter Group of the International Working Group on Documentation and Protection of Modern Architecture “DoCoMoMo LT”, member
- G. Prikockis – Kaunas Regional Council of Architects of the Lithuanian Chamber of Architects, member; Kaunas Council of Experts on Architecture and Urban Planning (KAUET), member
- Dr. D. Pupekis – Kaunas County Branch of the Lithuanian Union of Civil Engineers, member of the Council; Lithuanian Standards Board Technical Committee LST TK 88 “Building Information Modelling (BIM)”, member
- Dr. Ž. Rudžionis – Lithuanian Association of Civil Engineers, member of the Presidium; Kaunas County Branch of the Lithuanian Union of Civil Engineers, Chairman; Joint Activities Management Committee of Organizations Representing Civil Engineers, member
- Dr. L. Šeduikytė – European Climate, Infrastructure and Environment Executive Agency (CINEA), expert
- Dr. D. Vaičiukynienė – International Federation for Structural Concrete (FIB) working group TG7.8 “Recycled Materials and Industrial By-Products to Produce High-Performance Concrete Structures”, member
- Dr. J. Vaičiūnas – Kaunas County Branch of the Lithuanian Union of Civil Engineers, member of the Council
- Dr. V. Vaitkevičius – Lithuanian Standards Board Technical Committee LST TK 46 “Roofs and Building Waterproof Isolation”, member
- Dr. K. Zaleckis – National Commission for Cultural Heritage, member; Kaunas Council of Experts on Architecture and Urban Planning (KAUET), member

## Key Achievements in Science and Art

- Dr. V. Petruelis. The Cross of the Knight of the Order of the Lithuanian Grand Duke Gediminas
- G. Balčytis. Architectural Title-Belt “Kaunas Architect of the Year”
- V. Baltus. Residential building project - nominee of EUmies Awards
- G. Janulytė Bernotienė. National Architecture Award in the category “Conversion”
- Dr. V. Petruelis, et al. National Architecture Award in the category “For Architectural Theory and Dissemination”
- G. Janulytė Bernotienė, et al. First place in the professional category of the National Urbanism and Architecture Awards “Smart City 11”
- E. Januškienė, et al. Award in the nomination “Best Architectural Education Project” at the exhibition “Architecture: Kaunas 2025”
- Dr. D. Pupekis, et al. Founders' Honors award of the Bentley Going Digital Awards
- M. Stakvilevičius. First place in the student category of the National Urbanism and Architecture Awards “Smart City 11”
- Dr. P. Spūdys. Winner of the KTU Competition for the Most Active Young Researchers

## Main Publications

- Energy Reports, DOI: [10.1016/j.egyr.2025.11.033](https://doi.org/10.1016/j.egyr.2025.11.033)
- Journal of Building Engineering, DOI: [10.1016/j.jobe.2025.113059](https://doi.org/10.1016/j.jobe.2025.113059)
- Scientific Reports, DOI: [10.1038/s41598-025-00455-y](https://doi.org/10.1038/s41598-025-00455-y)
- Journal of Materials in Civil Engineering, DOI: [10.1061/JMCEE7.MTENG-18465](https://doi.org/10.1061/JMCEE7.MTENG-18465)
- Scientific Reports, DOI: [10.1038/s41598-025-98658-w](https://doi.org/10.1038/s41598-025-98658-w)
- Sustainability, DOI: [10.3390/su17093883](https://doi.org/10.3390/su17093883)
- Advances in Concrete Construction, DOI: [10.12989/acc.2025.19.5.301](https://doi.org/10.12989/acc.2025.19.5.301)
- Journal of Energy Storage, DOI: [10.1016/j.est.2025.115539](https://doi.org/10.1016/j.est.2025.115539)
- Case Studies in Construction Materials, DOI: [10.1016/j.cscm.2025.e04572](https://doi.org/10.1016/j.cscm.2025.e04572)
- Energy and Buildings, DOI: [10.1016/j.enbuild.2025.115633](https://doi.org/10.1016/j.enbuild.2025.115633)
- Energy and Buildings, DOI: [10.1016/j.enbuild.2025.115579](https://doi.org/10.1016/j.enbuild.2025.115579)
- Biomass Conversion and Biorefinery, DOI: [10.1007/s13399-024-05434-3](https://doi.org/10.1007/s13399-024-05434-3)
- Construction and Building Materials, DOI: [10.1016/j.conbuildmat.2025.140431](https://doi.org/10.1016/j.conbuildmat.2025.140431)
- Energy, DOI: [10.1016/j.energy.2025.134429](https://doi.org/10.1016/j.energy.2025.134429)
- Landscape Architecture and Art, DOI: [10.22616/j.landarchart.2025.26.05](https://doi.org/10.22616/j.landarchart.2025.26.05)

## Patents / Patent Applications

- Patent / application [LT 7153 B / LT 2023554 A](#)

## Scientific Events

- [5th International Congress Building Digital Twin BDTIC2025](#)
- [1st Building Digital Twin Scientific Conference BDTSC2025](#)
- [Student Scientific Conference "Smart Built Environment 2025"](#)
- [6th Baltic Conference of Young Researchers in Architecture, Landscape Architecture, Urbanism and Civil Engineering \(conference for PhD students\)](#)

## Projects

- [Circular REDesign for a Resource-efficient, Innovative, and Transformative Built Environment \(CRedIBIE\), 2025-2029](#)
- [Sustainability in Construction through Integrated Digital Tools \(SUSTAINOVATE\), 2025-2028](#)
- [Connecting Critical Pedagogies, Inclusive Art Forms and Alternative Barometers for Urban Sustainability \(CIRCULARTs\), 2024-2028](#)
- [GreenCities, 2024-2027](#)
- [Development of Innovative Concretes and Composite Sound Barriers Using Dispersed e-Waste and Crushed Polystyrene Pellets, 2024-2027](#)
- [Sustainable production of bilayer block from industrial waste and by-products using alkali activation technology, 2024-2026](#)
- [20th Century Lithuanian Diaspora archCulture Metavisata \(LtDI Metavisata\), 2024-2026](#)
- [Transforming Waste into High-Performance 3D Printable Cementitious Composite \(TRANSITION\), 2023-2026](#)
- [Heritage in Depopulated European Areas \(HerInDep\), 2023-2026](#)
- [Multi-Country Support to Advance Building Decarbonization \(TSIC-RoC-19044\), 2023-2025](#)
- [Implementation of Circular Economy in the Built Environment \(CircularB\), 2022-2026](#)
- [European Network for Fostering Large-Scale Implementation of Energy Geostructure \(FOLIAGE\), 2022-2026](#)
- [Building Performance Digitalisation and Dynamic Logbooks for Future Value-Driven Services \(CHRONICLE\), 2022-2025](#)
- [Boosting Research for a Smart and Carbon Neutral Built Environment with Digital Twins \(SmartWins\), 2022-2025](#)
- [Modular Energy Islands for Sustainability and Resilience \(MODENERLANDS\), 2021-2025](#)

## Collaboration

### Foreign Research and Study Institutions

- [Milan Polytechnic](#), Italy
- [Aristotle University of Thessaloniki](#), Greece
- [Frederick University](#), Cyprus
- [Charles University in Prague](#), Czechia
- [University of the Highlands and Islands](#), United Kingdom
- [Riga Technical University](#), Latvia
- [Slovenian National Building and Civil Engineering Institute](#), Slovenia
- [Centre for Research and Technology Hellas – CERTH](#), Greece
- [Comillas Pontifical University](#), Spain
- [Linköping University](#), Sweden
- [University College Cork](#), Ireland
- [University of Porto](#), Portugal

### Industry and Business

- [Lifosa](#), AB
- [HELSTOMM](#), UAB
- [Staticus](#), UAB
- [Smiltynės perkėla](#), AB
- [Perdanga](#), UAB
- [Lidl Lietuva](#), UAB
- [Kauno gelžbetonis](#), UAB
- [Peri Lietuva](#), UAB
- [YIT Lietuva](#), UAB
- [Etapas Group](#), UAB
- [Serfas](#), UAB
- [Sika Baltic SIA Lietuva](#)
- [Bentley Systems, Inc.](#), USA
- [Arcadis, NV](#), Netherlands
- [Contecht, GmbH](#), Germany
- [Innotrope SAS](#), France

## Dissemination of Research (Art) Results to Society

- [Vytautas Baltaus' project nominated for the EUmies Awards - an assessment of the balance of authenticity and modernity](#) (in Lithuanian), V. Baltus
- [Architecture beyond sight: how our senses change the perception of space](#) (in Lithuanian), R. Chmieliauskaitė
- [Scientists on panel renovation: how can it change the pace of building renovation?](#) (in Lithuanian), J. Černeckienė
- [Apartment building facade renovation solutions: what should be considered when choosing the most suitable one?](#) (in Lithuanian), J. Černeckienė
- [The cost of wasting resources: used oil pollutes the environment, even though it can be easily recycled](#) (in Lithuanian), E. Ivanauskas
- [KTU architecture students and lecturers will invite to an exhibition at Kaunas Artists' House about a different kind of sustainability](#) (in Lithuanian), E. Januškienė
- [Industry-changing digital twins – a technology that saves resources](#) (in Lithuanian), A. Jurelionis
- [Optimization of indoor air quality systems in a building: a comprehensive approach to a healthy and efficient indoor environment](#) (in Lithuanian), A. Jurelionis
- [Rūta Leitanaitė, who returned to KTU: architects must be able to listen](#) (in Lithuanian), R. Leitanaitė
- [Architectural historian V. Petrulis: the beauty of cities – even in the uninherited past](#) (in Lithuanian), V. Petrulis
- [Smart cities: how technologies changing the future of cities?](#) (in Lithuanian), D. Pupeikis
- [Digital modeling of building maintenance and operation: data integration challenges and possible solutions](#) (in Lithuanian), D. Pupeikis, L. Morkūnaitė
- [KTU experts reveal why cultural heritage is important for community unity](#) (in Lithuanian), L. Šeduikytė, A. Mlinkauskienė, I. Gražulevičiūtė-Vilenišké, E. Januškienė
- [“In Lithuania. Under the buildings.” KTU scientists found something special](#) (in Lithuanian), T. Ždankus
- [Lithuanian scientists propose storing thermal energy underground under buildings](#) (in Lithuanian), T. Ždankus
- [KTU Journal of Sustainable Architecture and Civil Engineering](#)

**INSTITUTES**



**Researchers / PhD Students**

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**Projects**

8



**Publications**

15



**Patents**

2



**Doctoral  
Dissertations  
Defended**

1

## Science Fields



T 004 Environmental Engineering

## Priority Research Thematics



Chemical and Environmental Technologies



Sustainable Energy



Innovation Management and  
Entrepreneurship

## R&D Services and Infrastructure

- [Institute's open access research facilities and services](#)



## Representation, Memberships

- Dr. V. Varžinskas – Baltic University Programme, member of the Board; Lithuanian Responsible Business Association (LAVA), member of the Sustainability expert group; Lithuanian Standards Board Technical Committee LST TK 42 “Packing”, Chairman; President Valdas Adamkus Award, member of the Committee
- Dr. J. Dvarionienė – Urban Europe Research Alliance, member; UN Life Cycle Initiative, member; Forum for Sustainability through Life Cycle Innovation (FSLCI), member
- Dr. I. Gurauskienė – Lithuanian Responsible Business Association (LAVA), member of the Sustainability expert group; Lithuanian Standards Board Technical Committee LST TK 98 “Digital Product Passport”, member; Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES), member; Nordic Baltic Textile Transition Group, member of the Steering Group
- Dr. J. Kruopienė – Advisory Committee for the Registration of Plant Protection Products under the Ministry of Agriculture of the Republic of Lithuania, member; Advisory Council of the Lithuanian Hydrometeorological Service under the Ministry of Environment of the Republic of Lithuania, member
- Dr. I. Kliopova – Monitoring Committee for the 2021-2027 European Union Funds Investment Programme, alternate member

## Main Publications

- Sustainability, DOI: [10.3390/su17188438](https://doi.org/10.3390/su17188438)
- Sustainability, DOI: [10.3390/su17104411](https://doi.org/10.3390/su17104411)
- European Polymer Journal, DOI: [10.1016/j.eurpolymj.2025.114156](https://doi.org/10.1016/j.eurpolymj.2025.114156)
- The International Journal of Life Cycle Assessment, DOI: [10.1007/s11367-025-02554-4](https://doi.org/10.1007/s11367-025-02554-4)
- Processes, DOI: [10.3390/pr13061884](https://doi.org/10.3390/pr13061884)

## Scientific Events

- Workshop on Sustainability Performance Assessment (SPA 2025) of the 25th International Conference on Computational Science and Its Applications

## Patents

- Patents [EP 4108308 B1](#), [PL 4108308 T3](#)

## Projects

- Preventing Groundwater Contamination Related to Global and Climate Change Through a Holistic Approach on Managed Aquifer Recharge (MAR2PROTECT), 2022-2026
- Chemicals Risk Management and Assessment of Alternatives: Tools and Best Practices to Support Circularity, Create More Sustainable Products and Avoid Regrettable Substitution (LIFE FitforREACH-2), 2023-2027
- Reducing Hazardous Substances in Construction to Safeguard the Aquatic Environment, Protect Human Health and Achieve More Sustainable Buildings (NonHazCity 3), 2023-2025
- Regions Adapting to Climate Change (ADAPTO), 2024-2028
- Fast-Tracking the National Narrative for Climate-Neutral Urban Futures (CapaCITIES 2.0), 2025-2027

## Collaboration

### State Institutions and Public Organizations

- Alytus City Municipality Administration
- Keep the Archipelago Tidy Association, Finland
- Bogdan Janski Bure Misie Community Foundation, Poland
- Halden Municipality, Norway
- City of Stockholm Municipality, Sweden
- Marker Municipality, Norway
- IPAK International Project Management Agency, Klagenfurt on Lake Worthersee, Austria
- Nordregio, Sweden
- Lithuanian Airports

## Bendradarbiavimas

### Foreign Research and Study Institutions

- [Leipzig University](#), Germany
- [Helmholtz-Zentrum Berlin](#), Germany
- [Istanbul Technical University](#), Turkey
- [University of Latvia](#), Latvia
- [SINTEF AS](#), Norway
- [Tallinn University of Technology](#), Estonia
- [Szewalski Institute of Fluid-Flow Machinery of the Polish Academy of Sciences](#), Poland
- [Finnish Institute of Natural Resources LUKE](#), Finland
- [SYKLI Environmental College](#), Finland
- [Aalborg University](#), Denmark
- [NOVA University Lisbon](#), Portugal
- [University of Tunis El Manar](#), Tunisia
- [Water Technology Centre CETAQUE](#), Spain
- [IHE Delft Institute for Water Education](#), Netherlands
- [Galician Enterprise-University Foundation FUEGA](#), Spain
- [Interdisciplinary Centre of Marine and Environmental Research CIIMAR](#), Portugal
- [Instituto de Telecomunicacoes](#), Portugal
- [University of Bologna](#), Italy
- [University of Stellenbosch](#), South Africa
- [Austrian Institute of Technology](#), Austria
- [Linköping University](#), Sweden
- [4ward Energy Research](#), Austria
- [Smart Innovation Norway](#), Norway
- [W.E.I.Z. Forschungs & Entwicklungs GmbH](#), Austria
- [Climate KIC Holding BV](#), United Kingdom
- [Campus Roslagen AB](#), Sweden
- [Mineral and Energy Economy Research Institute of the Polish Academy of Sciences](#), Poland

### Industry and Business

- [ArtGlaco, UAB](#)
- [Elgama Elektronika, UAB](#)
- [Alytus Regional Waste Management Centre, UAB](#)
- [Keluva, UAB](#)
- [Néra planetos B, UAB \(Looptex\)](#)
- [9 zuikiai, MB](#)
- [Jonavos vandenys, UAB](#)

### Dissemination of Research Results to Society

- [KTU expert on the harm of plastic to humans: found in food and breast milk, but recycling is stalling](#) (in Lithuanian), A. Torkelis
- [Through the harmony of "One Health" we discover the silver lining – the creation of sustainable well-being](#), Dr. I. Gorauskienė, U. V. Paulauskaitė
- [Lithuania is already seeing the changes, but many actions are overdue: "The yellow light is already burning bright"](#) (in Lithuanian), Dr. Ž. Stasiškienė
- [KTU doctoral student: energy-efficient LED lights are not always eco-friendly](#) (in Lithuanian), G. Tulušienė
- [KTU journal Aplinkos tyrimai, inžinerija ir vadyba / Environmental Research, Engineering and Management](#)



**Researchers /  
PhD Students**

22 / 2



**Publications**

11



**Projects**

3

## Science Fields



T 002 Civil Engineering



T 008 Materials Engineering



H 003 History and Theory Arts

## Priority Research Thematics



Functional Materials and Technologies



Construction Technologies



Sustainable Energy



Architecture, Urban Activities and  
Cultural Heritage

## R&D Services and Infrastructure

- [Institute's open access research facilities and services](#)

## Representation, Memberships

- Dr. V. Petrulis – [National Commission for Cultural Heritage](#), member; [ICOMOS ISC20C Bureau](#), member; [Baltic Region Heritage Committee](#), [Working Group on 20th Century Built Cultural Heritage](#), member; [Lithuanian Chapter of the International Working Group on Documentation and Protection of Modern Architecture "DoCoMoMo LT"](#), member
- Dr. K. Banionis – [Lithuanian Standards Board Technical Committee LST TK 60 "Windows and Doors"](#), Chairman; [Lithuanian National Accreditation Bureau](#), [Laboratory Accreditation Committee](#), member
- Dr. M. Augonis – [Lithuanian Standards Board Technical Committee LST TK 38 "Building Constructions"](#), member; [Lithuanian Association of Civil Engineers](#), [Kaunas County Community](#), [Civil Engineers Certification Commission \(building structures\)](#), member
- Dr. E. Ramanauskas – [Architects' Chamber of Lithuania](#), member; [Lithuanian Association of Landscape Architects](#), member



## Main Publications

- Landscape Architecture and Art, DOI: [10.22616/j.landarchart.2025.27.09](https://doi.org/10.22616/j.landarchart.2025.27.09)
- Landscape Architecture and Art, DOI: [10.22616/j.landarchart.2025.26.09](https://doi.org/10.22616/j.landarchart.2025.26.09)
- Land, DOI: [10.3390/land14091759](https://doi.org/10.3390/land14091759)
- Case Studies in Construction Materials, DOI: [10.1016/j.cscm.2025.e05528](https://doi.org/10.1016/j.cscm.2025.e05528)
- Buildings, DOI: [10.3390/buildings15203775](https://doi.org/10.3390/buildings15203775)

## Projects

- [Formation of Urban Structure of Lithuanian Residential Areas, Taking into Account Forecasts of Climate Change of the Country, 2023-2026](#)
- [The Meta-Universe of 20th-Century Lithuanian Diaspora Architectural Culture \(LtDI Metavisata\), 2024-2026](#)
- [Islands of Freedom: The Architectural Legacy of Lithuanian Displaced Persons in North America \(LaSal\), 2025-2029](#)

## Key Achievements in Science and Innovation

- Dr. V. Petruelis. [The Cross of the Knight of the Order of the Lithuanian Grand Duke Gediminas](#)
- Dr. V. Petruelis, Dr. B. Tranavičiūtė, Dr. P. T. Laurinaitis. [National Architecture Award in the category "For Architectural Theory and Dissemination"](#)

## Collaboration

### Foreign Research and Study Institutions

- [Riga Technical University](#), Latvia
- [International Educational Corporation](#), Kazakhstan

### State Institutions and Public Organizations

- [Ministry of Environment of the Republic of Lithuania](#)
- [Construction Sector Development Agency](#)
- [Department of Cultural Heritage under the Ministry of Culture of the Republic of Lithuania](#)
- [Kelmė District Municipality](#)
- [Alytus City Municipality](#)
- [Ukmergė District Municipality](#)
- [Tauragė District Municipality](#)

### Industry and Business

- [Stalių gaminiai, AB](#)
- [Kauno tiltai, AB](#)
- [Doleta, UAB](#)
- [Ryterna Entry, UAB](#)
- [Asmodas, UAB](#)
- [VMG Lignum, UAB](#)
- [Rockwool, UAB](#)
- [Baltijos pašvaistė, UAB](#)
- [Baltijos plienas, UAB](#)
- [Bauroc, UAB](#)
- [Rūdupis, UAB](#)
- [Saint Gobain statybos gaminiai, UAB](#)

- [Sakret LT, UAB](#)
- [TopColor, UAB](#)
- [Aconitum, UAB](#)
- [Association of Mineral Wool Producers](#)
- [Kauno planas, UAB](#)
- [Elberta, UAB](#)
- [Actis Isolation SA, France](#)
- [ATI France, SAS, France](#)
- [Sakret, SIA, Latvia](#)
- [Aknaproof, OU, Estonia](#)
- [Aluthermo, SA, Belgium](#)

## Dissemination of Research Results to Society

- [Interview on Lithuanian radio programme "Let's Sit Down and Talk" \(in Lithuanian\), Dr. V. Petruelis](#)
- [Book "Jonas Mulokas: The Search for Architectural Identity in a Global World" \(Dr. V. Petruelis, Dr. B. Tranavičiūtė, Dr. P. T. Laurinaitis\) review by M. B. Richardson](#)
- [The work of Lithuanian scientists: are the country's cities preparing to live under conditions of climate change, war, and other potential threats? \(in Lithuanian\), Dr. E. Ramanauskas](#)
- [The ABC of building energy efficiency: even small details can cause increased heating costs \(in Lithuanian\), Dr. K. Banionis](#)
- [How does the longevity of panel apartment buildings depend on their maintenance? \(in Lithuanian\), Dr. M. Augonis](#)



**Researchers / PhD Students**

17 / 3



**Projects**

8



**Publications**

15



**Patents**

1



**Doctoral  
Dissertations  
Defended**

2

## Science Fields



T 001 Electrical and Electronics Engineering



T 010 Measurement Engineering

## Priority Research Thematics



Biomedical Engineering and Medical Technologies

## Representation, Memberships

- Dr. V. Marozas – [Swiss National Science Foundation \(SNSF\)](#), expert; [Singapore National Research Council](#), expert; [Neuroscience Institute of Lithuanian University of Health Sciences](#), member of the Council; [Institute of Endocrinology of Lithuanian University of Health Sciences](#), member of the Council
- Dr. Habil. A. Lukoševičius – [Advisory Commission on the Activities of the Research Council of Lithuania in the Organisation for Economic Co-operation and Development](#), member

## R&D Services and Infrastructure

- [Wearable device testing system AECG 100, PPG-1R-525, PPG-2R-940 \(WhaleTeq, Taiwan\)](#).
- As a member of EBRAINS LT, the Institute joined the [Europe's Digital Infrastructure for Brain Research EBRAINS](#)
- [Institute's open access research facilities and services](#)



## Main Publications

- Biomedical Signal Processing and Control, DOI: [10.1016/j.bspc.2025.108008](https://doi.org/10.1016/j.bspc.2025.108008)
- IEEE Sensors Journal, DOI: [10.1109/JSEN.2025.3577912](https://doi.org/10.1109/JSEN.2025.3577912)
- PLOS Digital Health, DOI: [10.1371/journal.pdig.0000585](https://doi.org/10.1371/journal.pdig.0000585)
- Ultrasonics Sonochemistry, DOI: [10.1016/j.ultsonch.2025.107381](https://doi.org/10.1016/j.ultsonch.2025.107381)
- Biomedical Signal Processing and Control, DOI: [10.1016/j.bspc.2025.107641](https://doi.org/10.1016/j.bspc.2025.107641)

## Patents

- Patent [US 12369839 B2](#)

## Key Achievements in Science and Innovation

- [Kaunas Chamber of Commerce, Industry and Crafts Award in the category "Business and Science"](#)

## Scientific Events

- [Symposium "Advanced Biomedical Engineering Solutions for Everyday Life"](#)

## Projects

- [Uncertainty Quantification for Machine Learning Models Applied to Photoplethysmography Signals \(QUMPHY\)](#), 2023-2026
- [Wearable Continuous Point-of-Care Monitoring, Risk Estimation and Prevention for Deep Vein Thrombosis \(ThrombUS\)](#), 2024-2027
- [A Federated Paradigm of Real-World Data Sources Utilization for the Empowerment of Diagnosis, Prognosis and Risk Assessment of Cardiovascular Conditions \(CVDLINK\)](#), 2024-2027
- [Non-invasive Methods for Monitoring Cardio-renal Function in Heart Failure Patients \(healthHFulness\)](#), 2024-2027
- [Developing a Wearable-Guided Paradigm for Deciphering a Personal Arrhythmogenic Chain in Paroxysmal Atrial Fibrillation \(decipherAF\)](#), 2024-2027

## Collaboration

### Foreign Research and Study Institutions

- [Lund University](#), Sweden
- [University of Zaragoza](#), Spain
- [Vienna University of Technology](#), Austria
- [Athena Research Center](#), Greece
- [National Yang Ming Chiao Tung University](#), Taiwan
- [University of Cambridge](#), United Kingdom
- [University of Eastern Finland](#), Finland
- [German National Metrology Institute \(PTB\)](#), Germany
- [National Laboratory for Metrology and Testing \(LNE\)](#), France
- [Lodz University of Technology](#), Poland
- [West Pomeranian University of Technology in Szczecin](#), Poland
- [Brno University of Technology](#), Czechia

### Industry and Business

- [dHealthIQ, UAB](#)
- [Teled, UAB](#)
- [Gruppo Fos Lithuania, UAB](#)
- [True medical, UAB](#)
- [Orthobaltic, UAB](#)
- [Teltonika Telemedic, UAB](#)
- [ProDentum, UAB](#)
- [Micro Flow Medix, BV](#), Netherlands

## Dissemination of Research Results to Society

- [The smartwatch already functions as a personal health consultant: what does the future hold?](#) (in Lithuanian), Dr. V. Marozas
- [Lithuanians and partners are developing AI for more accurate diagnosis and treatment of heart disease](#) (in Lithuanian), Dr. V. Marozas
- [Lithuanian scientists present a smart system for integrated post-stroke monitoring](#), dr. D. Jeglevičius
- [A Lithuanian woman is developing an innovation for heart activity monitoring – a smart bracelet that will show whether there are signs of myocardial infarction](#) (in Lithuanian), K. Eitminavičienė
- [A video report on the myocardial infarction detection technology being developed at the KTU Biomedical Engineering Institute](#) (in Lithuanian, from 26 min.), K. Eitminavičienė



**Researchers /  
PhD Students**

15 / 2



**Publications**

19



**Projects**

11

## Science Fields



T 005 Chemical Engineering

## Priority Research Thematics



Food Systems and Biotechnologies

## Representation, Memberships

- Dr. A. Šalaševičienė – Working Group “Food Systems” of the Standing Committee on Agricultural Research of the EC Directorate General for Research and Innovation, member; ISEKI- Food Association, member; European Food Safety Authority Article 36 List of Competent Authorities Network, KTU representative; Joint Programming Initiative “A Healthy Diet for Healthy Life”, KTU representative and member of the Management Board; Scientific Council of the Ministry of Agriculture of the Republic of Lithuania, member
- Dr. K. Almonaitytė – EU Horizon Europe Programme Committee “Food, Bioeconomy, Natural Resources, Agriculture and the Environment”, national expert
- Dr. S. Kiselišvionienė – Lithuanian Standards Board Technical Committee LST TK 51 “Food Analysis – Horizontal Methods”, member
- Dr. I. Mačionienė – Lithuanian National Accreditation Bureau, expert

## Scientific Events

- Strategic international discussion on the integration of complementary proteins into health-promoting food systems in Lithuania
- Life Sciences Baltics 2025 conference workshop “Current challenges and opportunities in novel foods”
- Webinar “Can AI accelerate the transition to a healthy and sustainable food system?”

## R&D Services and Infrastructure

- Institute's open access research facilities and services



## Projects

- [Promoting Commercial Fishing of Round Goby in the Baltic Sea](#), 2023-2026
- [Tomorrow's 'Wheat of the Sea': Ulva, a Model for an Innovative Mariculture \(SEAWHEAT\)](#), 2021-2025
- [Innovation in Forestry Biomass Residue Processing: Towards Circular Forestry with Added Value Products \(CEforestry\)](#), 2023-2026
- [Combination of Wet Extrusion and Fermentation Processes for the Improvement of Protein Quality and Digestibility of Matrices Based on Plant Byproducts \(TECHNOGEST\)](#), 2022-2025
- [Food4Health \(HDHL F4H\)](#), 2025-2028

## Main Publications

- Waste Management, DOI: [10.1016/j.wasman.2025.114784](#)
- Innovative Food Science and Emerging Technologies, DOI: [10.1016/j.ifset.2025.104094](#)
- Food Chemistry: X, DOI: [10.1016/j.fochx.2025.102900](#)
- LWT, DOI: [10.1016/j.lwt.2025.117505](#)
- International Journal of Molecular Sciences, DOI: [10.3390/ijms26146677](#)

## Collaboration

### Foreign Research and Study Institutions

- [Aalto University](#), Finland
- [Finnish Forest Centre](#), Finland
- [Umea University](#), Sweden
- [Natural Resources Institute Finland](#), Finland
- [Mineral and Energy Economy Research Institute of the Polish Academy of Sciences](#), Poland
- [Centria University of Applied Sciences](#), Finland
- [University of Latvia](#), Latvia
- [International Life Sciences Institute](#), Belgium
- [University of Bologna](#), Italy
- [Wageningen University](#), Netherlands
- [Institute for Nutrition](#), Slovenia
- [University of Reading](#), United Kingdom
- [National Research Institute for Agricultural, Food and Environment \(INRAE\)](#), France
- [Lund University](#), Sweden
- [LAB University of Applied Sciences](#), Finland
- [University of Parma](#), Italy
- [Fraunhofer Institute for Ceramic Technologies and Systems IKTS](#), Germany
- [University of Helsinki](#), Finland
- [National University of Food Technologies](#), Ukraine
- [Norwegian Institute of Bioeconomy Research](#), Norway
- [Teagasc](#), Ireland
- [Technical University of Munich](#), Germany
- [Laval University](#), Canada
- [SINTEF Ocean AS](#), Norway
- [VTT Technical Research Centre of Finland](#), Finland
- [University of Aveiro](#), Portugal
- [University of Iceland](#), Iceland
- [Technical University of Denmark](#), Denmark
- [National Research and Development Institute for Food Bioresources \(IBA\)](#), Romania

### Industry and Business

- [Krekenavos agrofirma](#), UAB
- [Valentis](#), UAB
- [Biovela-Utenos mėsa](#), UAB
- [Varėnos pienelis](#), UAB
- [Desė](#), PJ
- [Rokiškio pieno gamyba](#), UAB
- [Pienas LT](#), ŽŪK
- [Vilkyškių pieninė](#), AB (VILVI group)
- [Saldoga](#), UAB
- [Mėmelio fermentuotas](#), UAB
- [Spila](#), UAB
- [Pieno žvaigždės](#), UAB
- [Aconitum](#), UAB
- [Delikatesas](#), UAB
- [Maltosa](#), UAB
- [Daumantai LT](#), UAB
- [Granex](#), UAB
- [Moguntia Baltija](#), UAB
- [Lietuvos kepėjas](#), UAB
- [BHJ Baltic](#), UAB
- [OHO Group](#), UAB
- [Kauen Craft](#), UAB
- [Rokiškio sūris](#), AB

## Dissemination of Research Results to Society

- [From fears to initiatives: the potential of the bioeconomy in strengthening the resilience of rural communities](#) (in Lithuanian), Dr. A. Šalaševičienė
- [How to grow a steak in a test tube?](#) (in Lithuanian), Dr. I. Pauliukaitytė
- [Science and complementary proteins](#) (in Lithuanian), Dr. A. Šalaševičienė
- [From snack bars to pasta: the boom in added proteins may also have negative consequences](#) (in Lithuanian), A. Zabulionė
- [Scientist: If you have a serious illness, you should not expect honey to help; there is no evidence for this](#) (in Lithuanian), A. Zabulionė



**Researchers / PhD Students**

23 / 5



**Projects**

2



**Publications**

17



**Patents / Patent Applications**

5 / 2

## Science Fields



T 009 Mechanical Engineering

## Priority Research Thematics



Artificial Intelligence and Robotics



Functional Materials and Technologies



Biomedical Engineering and Medical Technologies



Information and Communication Technologies



Diagnostic Technologies



Food Systems and Biotechnologies



Electronics and Electrical Engineering



Mechanical and Transportation Engineering

## Representation, Memberships

- Dr. Habil. V. Ostaševičius – Lithuanian Academy of Sciences, full member; Royal Swedish Academy of Engineering Sciences (IVA), foreign member
- Dr. R. Daukševičius – Lithuanian Academy of Sciences, full member
- Dr. A. Vilkauskas – Lithuanian Engineering Industry Association (LINPRA), Vice-President

## R&D Services and Infrastructure

- Institute's open access research facilities and services



## Main Publications

- Noninvasive Therapeutic Technologies: Stimulation of Physiological Processes, DOI: [10.1007/978-3-031-79025-6](https://doi.org/10.1007/978-3-031-79025-6)
- Smart Materials and Structures, DOI: [10.1088/1361-665X/ada59b](https://doi.org/10.1088/1361-665X/ada59b)
- Pharmaceuticals, DOI: [10.3390/ph18030404](https://doi.org/10.3390/ph18030404)
- World Neurosurgery, DOI: [10.1016/j.wneu.2025.124133](https://doi.org/10.1016/j.wneu.2025.124133)
- Journal of Physics D: Applied Physics, DOI: [10.1088/1361-6463/ae1d8b](https://doi.org/10.1088/1361-6463/ae1d8b)

## Projects

- [Machine Learning Algorithms for Cow Health Analysis and Prediction \(MALACA\)](#), 2024-2026
- [AI-assisted Model-based Engineering and Robotised Hybrid Additive Manufacturing of Customized Multi-material Biocomposite Structures for Health and Transportation Technologies \(RoboHybridFab\)](#), 2024-2027
- [The Effect of Ultrasound, Drugs, and Bacterial Biofilms on Endothelial Cell Properties \(Ultracell\)](#), 2024-2025

## Patents / Patent Applications

- Patent [EP 4369912 B1](#)
- Patent [EP 4442237 B1](#)
- Patent [EP 4368565 B1](#)
- Patent / application [LT 7147 B](#) / [LT 2023547 A](#)
- Patent / application [LT 7146 B](#) / [LT 2023548 A](#)

## Scientific Events

- [29th international conference "Mechanika-2025"](#)
- [29th international scientific conference "Transport Means – 2025"](#)

## Key Achievements in Science and Innovation

- Dr. Habil. V. Ostaševičius. [KTU Most Innovative Scientist Award \(male category\)](#).
- Dr. Habil. V. Ostaševičius, Dr. V. Jūrėnas, Dr. M. Venslauskas with coauthor. [First place in the KTU Best Monographs Competition](#) for the monograph "[Noninvasive Therapeutic Technologies: Stimulation of Physiological Processes](#)"

## Collaboration

### Foreign Research and Study Institutions

- [Silesian University of Technology](#), Poland
- [Queen Mary University of London](#), United Kingdom
- [Sheffield Hallam University](#), United Kingdom

### Industry and Business

- [Abilij, UAB](#)
- [Signata, UAB](#)
- [Ozas, UAB](#)
- [Litvalda, UAB](#)
- [Motus vita, UAB](#)
- [Ortopedijos technika, UAB](#)
- ["Kaunas Žalgiris" Football Academy](#)
- [Theriofarm, Belgium](#)

## Dissemination of Research Results to Society

- [KTU scientists have created a rehabilitation system that saves lives after injuries and reduces their potential in the future](#) (in Lithuanian), Dr. A. Domeika
- [Rethinking rehabilitation: adaptive, intelligent and measurable](#), Dr. A. Domeika
- KTU journal [Mechanika](#)



**Researchers / PhD Students**

30 / 9



**Projects**

18



**Publications**

29



**Doctoral Dissertations Defended**

1

## Science Fields



N002 Physics



T008 Materials Engineering

## Priority Research Thematics



Diagnostic Technologies



Functional Materials and Technologies



Sustainable Energy

## R&D Services and Infrastructure

- [Nanoparticle size and Zeta-potential analyzer - Zetasizer Ultra Red, Malvern Panalytical](#)
- [UV-Vis-NIR spectrophotometer with accessories - V-770, Jasco](#)
- [Stylus surface profilometer - Dektak Pro, Bruker](#)
- [Atmospheric pressure gas mass spectrometer - GSD 350 O1, OmniStar, Pfeiffer Vacuum](#)
- [Optical spectrum analyzer - AQ6373E-10-L1-F, Yokogawa](#)
- Since 2019, the Institute's infrastructure has been a part of the European [EuroNanoLab](#) network. This network unites 44 cleanroom research infrastructures from 14 countries, providing world-class nanotechnology services and expertise for research work. The [EuroNanoLab](#) network applies open access rules, and its services are available to all external users.
- [Institute's open access research facilities and services](#)



## Representation, Memberships

- Dr. Habil. S. Tamulevičius – Lithuanian Academy of Sciences, full member; University of Southern Denmark, honorary professor; European doctoral network “Physics and Chemistry of Advanced Materials (PCAM)”; member of the Executive Committee; European distributed infrastructure network “EuroNanoLab”, member of the Steering Committee
- Dr. T. Tamulevičius – Young Academy of the Lithuanian Academy of Sciences, alumnus; International Council on Materials Education (ICME), member of the Council; North European Initiative Nanotechnology (NiNa), member of the Board of Curators
- Dr. Š. Meškinis – Association Quantum Lithuania, Director
- Dr. B. Abakevičienė – CERN Baltic Group, Head

## Main Publications

- Journal of Materials Processing Technology, DOI: [10.1016/j.jmatprotec.2025.118994](https://doi.org/10.1016/j.jmatprotec.2025.118994)
- ACS Applied Materials and Interfaces, DOI: [10.1021/acscami.5c03330](https://doi.org/10.1021/acscami.5c03330)
- Optics and Laser Technology, DOI: [10.1016/j.optlastec.2025.112912](https://doi.org/10.1016/j.optlastec.2025.112912)
- Biosensors and Bioelectronics, DOI: [10.1016/j.bios.2025.117143](https://doi.org/10.1016/j.bios.2025.117143)
- Carbon, DOI: [10.1016/j.carbon.2024.119704](https://doi.org/10.1016/j.carbon.2024.119704)

## Projects

- Towards Single-Photon Detection at Room Temperature: A Graphene Phototransistor with Photogating and Electron Multiplication (PhotoGEM), 2025-2027
- Novel Optical Nanocomposite Sensors for Analysis of Micro and Macro Elements in Corn Plants (SENS4CORN), 2024-2027
- Research Infrastructure Access in Nanoscience & Nanotechnology (RIANA), 2024-2028
- Ultrasensitive sensors for the detection of Lithium Ion Batteries fails (NanoTRAACES), 2022-2025
- Gradient Metasurfaces for Ultrafast Laser Beam Shaping (M-ULBS), 2024-2027

## Key Achievements in Science and Innovation

- Dr. Habil. S. Tamulevičius. The Cross of the Knight of the Order of the Lithuanian Grand Duke Gediminas
- Dr. M. Juodėnas. Winner of the KTU Competition for the Most Active Young Researchers

## Scientific Events

- 27th International Conference - School “Advanced Materials and Technologies”
- 8th International Conference Nanotechnology and Innovation in the Baltic Sea Region (NIBS 2025)
- 5th CERN Baltic Conference (CBC 2025)

## Collaboration

### Industry and Business

- Spinaero SRO, Czechia
- Inospectra, UAB
- Light Conversion, UAB
- Holtida, UAB
- Nanoversa, UAB
- AkzoNobel Baltics, UAB
- Precizika Metrology, UAB
- Monospektra, UAB
- Kongsberg NanoAvionics, UAB
- Smart Factory, UAB
- Ortho Baltic, UAB

## Collaboration

### Foreign Research and Study Institutions

- [Mulhouse Institute of Materials Science \(IS2M\)](#), France
- [Gwangju Institute of Science and Technology \(GIST\)](#), Korea
- [Poznan Adam Mickiewicz University](#), Poland
- [National Institute for Materials Science \(NIMS\)](#), Japan
- [CERN](#), Switzerland
- [University of Latvia](#), Latvia
- [Slovak University of Technology in Bratislava](#), Slovakia
- [University of Turin](#), Italy
- [University of Rzeszow](#), Poland
- [Chalmers University of Technology](#), Sweden
- [The University of Texas at El Paso](#), USA
- [University of Aveiro](#), Portugal
- [FEMTO-ST institute](#), France
- [National Research Council](#), Italy
- [University Paris Cite](#), France
- [Latvian Institute of Agricultural Resources and Economics \(AREI\)](#), Latvia
- [Simon Fraser University](#), Canada
- [Leibniz Institute of Photonic Technology](#), Germany
- [Institute of Physics of the Czech Academy of Sciences \(FZU\)](#), Czechia

### Dissemination of Research Results to Society

- [Nanoscale Horizons Emerging Investigator Series: Dr Mindaugas Juodėnas, Kaunas University of Technology, Lithuania](#), Dr. M. Juodėnas
- [Scientist: Clean room - what is it?](#) (in Lithuanian), Dr. M. Juodėnas
- [Breakthrough in the world of nanotechnology: Lithuanian scientists are successfully finding ways to apply nanomaterials in industry](#) (in Lithuanian), Dr. S. Račkauskas
- [Found a way to adapt nanoparticles for industrial use: more than one modification was needed](#) (in Lithuanian), Dr. S. Račkauskas
- [The "lotus effect" for solar cells: coating developed at KTU cleans itself and increases efficiency](#) (in Lithuanian), Dr. S. Račkauskas
- KTU journal [Medžiagotyra / Materials Science](#)



**Researchers / PhD Students**

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**Projects**

15



**Publications**

15



**Patents**

2



**Doctoral  
Dissertations  
Defended**

1

## Science Fields



T 001 Electrical and Electronics Engineering



T 010 Measurement Engineering

## Priority Research Thematics



Artificial Intelligence and Robotics



Electronics and Electrical Engineering



Biomedical Engineering and Medical  
Technologies



Functional Materials and Technologies



Diagnostic Technologies



Information and Communication  
Technologies

## Research Infrastructure

- Dr. R. Raišutis. The Kazimieras Baršauskas Prize of the Lithuanian Academy of Sciences in the field of electronics and electrical engineering

## R&D Services and Infrastructure

- Institute's open access research facilities and services



## Representation, Memberships

- Dr. R. Raišutis – Sustainable Nuclear Energy Technology Platform (SNETP), member; Institute of Electrical and Electronics Engineers (IEEE), member; European Structural Integrity Society (ESIS), member; European Federation of Societies for Ultrasound in Medicine and Biology (EFSUMB), member; International Committee for Non-Destructive Testing (ICNDT), member; Lithuanian Society for Non-Destructive Testing and Technical Diagnostics (LNBD), President
- Dr. R. Šlīteris – Lithuanian Standards Board Technical Committee LST TK 66 “Non-Destructive Testing”, member
- Dr. E. Jasiūnienė – European Aeronautics Science Network (EASN), member of the Board of Directors and Scientific advisory officer; Expert Committee of Natural and Technical Sciences of the Research Council of Lithuania, member; Lithuanian Society for NDT and Technical Diagnostics, Chair of the Board; Lithuanian Standards Board Technical Committee LST TK 66 “Non-Destructive Testing”, member; NDT.net, member of the Advisory Board; Academia NDT International, member

## Main Publications

- Scientific Reports,  
DOI: [10.1038/s41598-025-02668-7](https://doi.org/10.1038/s41598-025-02668-7)
- IEEE Transactions on Instrumentation and Measurement, DOI: [10.1109/TIM.2025.3579845](https://doi.org/10.1109/TIM.2025.3579845)
- Ultrasonics Sonochemistry,  
DOI: [10.1016/j.ultsonch.2025.107381](https://doi.org/10.1016/j.ultsonch.2025.107381)
- ACS Applied Electronic Materials,  
DOI: [10.1021/acsaelm.4c01725](https://doi.org/10.1021/acsaelm.4c01725)
- Journal of Nondestructive Evaluation,  
DOI: [10.1007/s10921-024-01146-w](https://doi.org/10.1007/s10921-024-01146-w)

## Patents

- Patent [EP 4269999 B1](#)
- Patent [US 12272057 B2](#)

## Projects

- Intelligent Weld Inspection (iWeld), 2022-2026
- DNA Microfactory for Autonomous Archiving (DNAMIC), 2023-2026
- Next Generation Multiple Architecture Battery Systems for Industry (TEMPEST), 2023-2026
- Future Instrumentation and Control Based on Innovative Methods and Disruptive Technologies for Higher Safety Level (FIND), 2024-2028
- Coupled Problems for Decarbonization in Industry and Power Generation (COMBINE), 2025-2029

## Collaboration

### Foreign Research and Study Institutions

- State Scientific and Technical Center for Nuclear and Radiation Safety, Ukraine
- VTT Technical Research Centre of Finland, Finland
- French Alternative Energies and Atomic Energy Commission (CEA), France
- Technical University of Munich, Germany
- University of Southampton, United Kingdom
- University of Bath, United Kingdom
- University of Patras, Greece
- National Institute of Chemistry, Slovenia
- Imperial College London, United Kingdom
- KU Leuven, Belgium
- Tallinn University of Technology, Estonia
- Slovenian National Building and Civil Engineering Institute, Slovenia
- Italian National Agency for New Technologies, Energy and Sustainable Economic Development, Italy
- Chalmers University of Technology, Sweden
- Intra-University Consortium for Nuclear Technology Research, Italy
- Center for Advanced Studies, Research and Development in Sardinia, Italy
- Karman Institute of Fluid Dynamics, Belgium
- Karlsruhe Institute of Technology, Germany

## Collaboration

### Foreign Research and Study Institutions

- Nuclear Research and Consultancy Group, Netherlands
- Paul Scherrer Institute, Switzerland
- Study Center for Nuclear Energy SCK•CEN, Belgium
- Delft University of Technology, Netherlands
- Technologies for Nuclear Energy State Owned Company. RATEN, Romania
- Royal Institute of Technology, Sweden
- Fraunhofer Society for the Promotion of Applied Research, Germany
- Federal Institute for Materials Research and Testing, Germany
- Netherlands Organisation for Applied Scientific Research, Netherlands
- Ruhr University Bochum, Germany
- Goethe University Frankfurt, Germany
- University of Bologna, Italy
- Institute of Telecommunications, Portugal
- German Society for Non-Destructive Testing DGZfP, Germany
- Sabanci University, Turkey
- Ghent University, Belgium
- Technical University of Dresden, Germany
- Bialystok University of Technology, Poland
- Helmholtz Centre Dresden-Rossendorf (HZDR), Germany

### Industry and Business

- Modsonic Instruments Manufacturing Co (P) Ltd, India
- Dekra Industrial, UAB
- Genomika, UAB
- Danspin, UAB
- Kongsberg NanoAvionics, UAB
- Lietuvos geležinkeliai, AB

## Dissemination of Research Results to Society

- Early diagnosis of insidious disease: AI system developed in Lithuania recognized in the U.S. (in Lithuanian), Dr. R. Raišutis
- Greta Rupšytė - researcher and lecturer (in Lithuanian), G. Rupšytė



**Researchers / PhD Students**

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**Projects**

6



**Publications**

12



**Patents / Patent Applications**

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**Doctoral  
Dissertations  
Defended**

1

## Science Fields



T 001 Electrical and Electronics Engineering



T 010 Measurement Engineering

## Priority Research Thematics



Biomedical Engineering and Medical Technologies



Diagnostic Technologies



Electronics and Electrical Engineering

## Representation, Memberships

- Dr. A. Ragauskas – Brain Monitoring with Information Technology (BrainIT), member of the Steering Group; Cerebral Autoregulation Research Network (CARNET), member; European Society of Neurosonology and Cerebral Hemodynamics (ESNCH), member
- Dr. Y. Hamarat – Cerebral Autoregulation Research Network (CARNET), member; European Society of Neurosonology and Cerebral Hemodynamics (ESNCH), member; International Psychogeriatric Association (IPA), member
- Dr. V. Petkus – Cerebral Autoregulation Research Network (CARNET), member
- Dr. L. Bartušis – Cerebral Autoregulation Research Network (CARNET), member

## R&D Services and Infrastructure

- Institute's open access research facilities and services



## Main Publications

- Critical Care,  
DOI: [10.1186/s13054-025-05295-w](https://doi.org/10.1186/s13054-025-05295-w)
- Neurology,  
DOI: [10.1212/WNL.0000000000210040](https://doi.org/10.1212/WNL.0000000000210040)
- BMJ Mental Health,  
DOI: [10.1136/bmjment-2024-301181](https://doi.org/10.1136/bmjment-2024-301181)
- Sensors, DOI: [10.3390/s25134042](https://doi.org/10.3390/s25134042)
- Minerva Anestesiologica,  
DOI: [10.23736/S0375-9393.25.18890-1](https://doi.org/10.23736/S0375-9393.25.18890-1)

## Patents / Patent Applications

- Patent [EP 4166069 B1](#)
- Patent Application [US 2025255507 A1](#)
- Patent Application [EP 4483785 A1](#)
- Patent Applications [US 2025000468 A1](#),  
[EP 4485364 A1](#)

## Projects

- [Comparative Study of Real-Time Cerebral Autoregulation Monitoring Technologies During Cardiac Surgery \(Cerebrate\)](#), 2025-2027
- [Innovative Non-Invasive Monitoring for Enhancing Neuroprotection and Reducing Postoperative Cognitive Decline in Cardiac Surgery Patients \(Neuropulse\)](#), 2024-2026
- [Non-Invasive Monitoring of Intracranial Pressure Pulse Waves and Brain Slidness](#), 2023-2025
- [Research and Development of Innovative Non-Invasive High Temporal Resolution Intracranial Pressure Waves Monitoring Technology](#), 2023-2025
- [R&D of Non-Invasive Innovative Intracranial Waves Monitoring System for Diagnostics and Treatment Monitoring of Patients with Normal Tension Glaucoma \(ICPinNTG\)](#), 2023-2025

## Collaboration

### Foreign Research and Study Institutions

- [University of Vienna](#), Austria
- [Heidelberg University](#), Germany
- [Maastricht University](#), Netherlands
- [University of Edinburgh](#), United Kingdom
- [University of Milan](#), Italy
- [University of Barcelona](#), Spain
- [Uppsala University](#), Sweden
- [KU Leuven](#), Belgium
- [University of Oslo](#), Norway
- [Vita-Salute San Raffaele University](#), Italy
- 65 institutions from countries of the European Union participating in the [CENTER-TBI](#) project

### Industry and Business

- [Axioma metering](#), UAB
- [Techlinija](#), MB
- [Vaizduote](#), UAB
- [Biomapas](#), UAB
- [Sonovum GmbH](#), Germany
- [Rigshospitalet](#), Denmark
- [LivaNova](#), United Kingdom
- [Terumo Corporation](#), USA
- [San Raffaele Hospital](#), Italy
- [Instituto Dante Pazzanese de Cardiologia](#), Brazil
- [Braille Biomédica](#), Brazil
- [Medtronic](#), USA
- [Spectrum Medical](#), United Kingdom

## Dissemination of Research Results to Society

- [Paradoxes and Challenges of Education and Training in the 21st Century](#) (from 3:37) (in Lithuanian), Prof. Dr. A. Ragauskas

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