



Researchers / PhD Students

148 / 73



Projects

62



Publications

133



Patents / Patent Applications

4 / 13



Doctoral
Dissertations
Defended

18

Science Fields



N 003 Chemistry



T 004 Environmental Engineering



T 005 Chemical Engineering

Priority Research Thematics



Chemical and Environmental Technologies



Functional Materials and Technologies



Food Systems and Biotechnologies



Applied and Medicinal Chemistry



Sustainable Energy

Research Infrastructure

- Analytical Platform for Organic Synthesis Process Evaluation (Shimadzu LCMS-2050)
- Inert Atmosphere Gloveboxes with Integrated Evaporation System
- 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, Feed”, Chair; Lithuanian Standards Board Technical Committee LST TK 51 “Food Analysis”, Chair; Working Group of the National Quality System for Agricultural and Food Products under Ministry of Agriculture of the Republic of Lithuania, expert; 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; public institution “Ekoagros”, Council member
- Dr. I. Jasutienė – Committee of Experts on Protected Designations under the 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 (ASIIN), Germany, expert
- 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, member-national delegate, member of ISEKI-Food Association Academy; International Society for Nutritional Supplements and Functional Foods (ISNFF), International Advisory Board member; Institute of Food Technologists, International Chapter and Nutraceutical and Functional Foods Division, member; European Chemical Society (EuChemS), Food Chemistry Division, Lithuanian representative; NAPA Society (Nutrition and Physical Activity on Aging, Obesity, and Cancer), Board member; Global Harmonisation Initiative (GHI), Ambassador of Lithuania; Expert Committee on Natural and Technical Sciences of Research Council of Lithuania, member
- Dr. R. Rutkaitė – Lithuanian Standards Board Technical Committee LST TK 68 “Plastics”, member
- Dr. L. Pečiulytė – Lithuanian Standards Board Technical Committee LST TK 68 “Plastics”, member
- Dr. O. Baniukaitienė – International Society for Tissue Engineering and Regenerative Medicine (TERMIS), member
- Dr. R. Rutkaitė – International Association of Engineers (IAENG), member
- Dr. Habil. J. V. Gražulevičius – Lithuanian Academy of Sciences, member
- Dr. O. Bezvikonnyi – American Chemical Association, member
- Dr. S. Grigalevičius – Lithuanian Academy of Sciences, member
- Dr. G. Kručaitė – Young Academy of the Lithuanian Academy of Sciences, member
- Dr. R. Šiaučius – Lithuanian Academy of Sciences, member and member of Presidium; Research and International Cooperation Charity and Support Foundation of Lithuanian Academy of Sciences, Board member
- Dr. K. Baltakys – Lithuanian Chemical Industry Companies Association, President; Education Policy Committee of the Lithuanian Confederation of Industrialists, member; Lithuanian Chemical Society, Board member; Science Committee of the Lithuanian University Rectors' Conference, member
- Dr. A. Eisinas – Young Academy of the Lithuanian Academy of Sciences, member
- Dr. T. Dambrauskas – International Confederation for Thermal Analysis and Calorimetry (ICTAC), Council member
- 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 Association, member; World Biomaterials Association, member
- Dr. I. Barauskienė – International Society of Electrochemistry, member
- Dr. E. Griškonis – 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
- Dr. R. Šlinkšienė – Lithuanian Standards Board Technical Committee LST TK 57 “Fertilizers”, member
- Dr. A. Šulčiūtė – European Chemical Society, member; International Society of Electrochemistry, member
- Dr. E. Valatka – Lithuanian Chemical Society, Deputy Chairman; International Society of Electrochemistry, member
- Dr. N. Žmuidzinavičienė – 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, member

Representation, Memberships

- Dr. T. Malinauskas, Dr. E. Arbačiauskienė, Dr. J. Solovjova, Dr. K. Rakštys – American Chemical Society (ACS), members
- Dr. T. Malinauskas – European Materials Research Society (EMRS), member
- Dr. A. Magomedov – Union of Young Scientists of Lithuania, 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

Main Publications

- ACS Energy Letters,
DOI: [10.1021/acsenenergylett.4c00306](https://doi.org/10.1021/acsenenergylett.4c00306)
- Journal of Materials Chemistry A,
DOI: [10.1039/d3ta03423b](https://doi.org/10.1039/d3ta03423b)
- ACS Applied Materials and Interfaces,
DOI: [10.1021/acsam.3c17811](https://doi.org/10.1021/acsam.3c17811)
- ACS Applied Materials and Interfaces,
DOI: [10.1021/acsam.4c12662](https://doi.org/10.1021/acsam.4c12662)
- ACS Applied Materials and Interfaces,
DOI: [10.1021/acsam.4c04105](https://doi.org/10.1021/acsam.4c04105)
- ACS Applied Materials and Interfaces,
DOI: [10.1021/acsam.3c13950](https://doi.org/10.1021/acsam.3c13950)
- Advanced Optical Materials,
DOI: [10.1002/adom.202401402](https://doi.org/10.1002/adom.202401402)
- Environmental Pollution,
DOI: [10.1016/j.envpol.2024.124870](https://doi.org/10.1016/j.envpol.2024.124870)
- Journal of CO2 Utilization,
DOI: [10.1016/j.jcou.2024.102890](https://doi.org/10.1016/j.jcou.2024.102890)
- Analytical Chemistry,
DOI: [10.1021/acs.analchem.4c03906](https://doi.org/10.1021/acs.analchem.4c03906)
- Journal of Water Process Engineering,
DOI: [10.1016/j.jwpe.2024.105457](https://doi.org/10.1016/j.jwpe.2024.105457)
- European Journal of Medicinal Chemistry,
DOI: [10.1016/j.ejmech.2024.116777](https://doi.org/10.1016/j.ejmech.2024.116777)
- LWT, DOI: [10.1016/j.lwt.2024.116857](https://doi.org/10.1016/j.lwt.2024.116857)
- ACS Applied Materials & Interfaces,
DOI: [10.1021/acsam.3c18260](https://doi.org/10.1021/acsam.3c18260)
- Surfaces and Interfaces,
DOI: [10.1016/j.surfin.2024.104002](https://doi.org/10.1016/j.surfin.2024.104002)

Patents / Patent Applications

- Patent, [EP 4119169 B1](https://patents.google.com/patent/EP4119169B1)
- Patent, [JP 7497941 B2](https://patents.google.com/patent/JP7497941B2)
- Patent/applications, [LT 7108 B](https://patents.google.com/patent/LT7108B) / [LT 2023 514 A](https://patents.google.com/patent/LT2023514A),
[EP 4438670 A1](https://patents.google.com/patent/EP4438670A1)
- Patent/applications, [LT 7114 B](https://patents.google.com/patent/LT7114B) / [LT 2023 517 A](https://patents.google.com/patent/LT2023517A),
[EP 4446375 A1](https://patents.google.com/patent/EP4446375A1)
- Patent applications, [EP 4447643 A1](https://patents.google.com/patent/EP4447643A1),
[US 2024349587 A1](https://patents.google.com/patent/US2024349587A1), [JP 2024152533 A](https://patents.google.com/patent/JP2024152533A)
- Patent application, [EP 4455292 A1](https://patents.google.com/patent/EP4455292A1)
- Patent application, [EP 4450969 A1](https://patents.google.com/patent/EP4450969A1)
- Patent application, [EP 4450588 A1](https://patents.google.com/patent/EP4450588A1)
- Patent application, [EP 4446386 A1](https://patents.google.com/patent/EP4446386A1)
- Patent application, [US 2024407409 A1](https://patents.google.com/patent/US2024407409A1)
- Patent application, [US 2024188609 A1](https://patents.google.com/patent/US2024188609A1)

Scientific Events

- [2nd Central and Eastern European Conference on Physical Chemistry & Materials Science \(CEEPCMS2\)](#).
- [22nd Baltic Polymer Symposium \(BPS 2024\)](#).
- [Student Scientific Conference “Chemistry and Chemical Technology 2024”](#)
- [Jonas Janickis Chemistry Contest](#)

Internships

- Dr. G. Šarapajevaitė. [University of Bologna](#), Italy, 2024-02-06 – 2024-05-29, The formation of metal sulphide and biopolymer composite

Key Achievements in Science and Innovation

- Dr. Habil. J. V. Gražulevičius, Dr. J. Simokaitienė, Dr. D. Volyniuk. [Lithuanian Science Prize in the field of natural sciences](#)
- Dr. Š. Daškevičiūtė. [Prize of the L'Oréal-UNESCO Baltic Young Talent Programme “For Women in Science”](#)
- Dr. I. Ancutienė. [Theodor Grotthuss Medal for merits to the science of chemistry and for the education of Lithuanian chemists](#)
- Dr. D. Kriščiūnė, dr. E. Augustinienė. [Awards of the Competition “The Best 2023 Dissertations” in the fields of natural, technology, medicine and health, and agricultural sciences](#)
- Dr. L. Jūrienė, Dr. A. Magomedov. [Lithuanian Academy of Sciences Young Scientist scholarships](#)
- R. Beresnevičiūtė. [Letter of Commendation of Young Scientists and Doctoral Students' Research Works Competition of the Lithuanian Academy of Sciences in the field of technical sciences](#)

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
- [Baltic Approaches to Handling Plastic Pollution under a Circular Economy Context \(BALTIPLAST\)](#), 2023-2025
- [Two-Step Synthesis of Low-Lime Cement, Its Structure and Properties \(LIMECEM\)](#), 2021-2024
- [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
- [Investigation of Branched C5-dicarboxylic Acid Metabolism and Development of Chemolithoautotrophic Cell Factory for Itaconic Acid Production from Carbon Dioxide \(ITABIO\)](#), 2024-2027
- [Development of an Innovative Cannabinoid-Enriched Prebiotic from Fibrous Hemp Products and its' Benefits for the Human Microbiota Evaluation](#), 2023-2026
- [Materials Recovering from Multi-Layer Composite Waste by Simultaneous Delamination and Leaching: Theory, Technology and Circularity \(SIMULARITY\)](#), 2023-2026

Collaboration

Foreign Research and Study Institutions

- [University of Porto](#), Portugal
- [Autonomous University of Barcelona](#), Spain
- [University of Trento](#), Italy
- [Ternopil Ivan Puluj National Technical University](#), Ukraine
- [Lviv Polytechnic National University](#), Ukraine
- [Kyiv National University of Technologies and Design](#), Ukraine
- [University of Banja Luka](#), Bosnia and Herzegovina
- [Leather and Footwear Research Institute](#), Romania
- [Aarhus university](#), Denmark
- [Lund University](#), Sweden
- [University of Turin](#), Italy
- [University of Sheffield](#), United Kingdom
- [Hamburg University of Technology](#), Germany
- [University of Applied Sciences Vienna](#), Austria
- [Zurich University of Applied Sciences](#), Switzerland
- [Riga Technical University](#), Latvia
- [National Taiwan University of Science and Technology](#), Taiwan
- [National Chung Cheng University](#), Taiwan
- [Aalto University](#), Finland
- [Abai Kazakh National Pedagogical University](#), Kazakhstan
- [Autonomous University of Madrid](#), Spain
- [Atomic and Alternative Energy Commission](#), France
- [Danish Technological Institute](#), Denmark
- [Eindhoven University of Technology](#), Netherlands
- [University of Exeter](#), United Kingdom
- [Indian Institute of Technology](#), India
- [Yuan Ze University](#), Taiwan
- [Gdańsk University of Technology](#), Poland
- [Université Grenoble Alpes](#), France
- [Heriot-Watt University](#), United Kingdom
- [Taras Shevchenko National University of Kyiv](#), Ukraine
- [Latvian Institute of Organic Synthesis](#), Latvia
- [University of Latvia](#), Latvia
- [Ivan Franko National University of Lviv](#), Ukraine
- [University of Malaya](#), Malaysia
- [National Tsing Hua University](#), Taiwan
- [University Paris](#), France
- [University of Würzburg](#), Germany
- [Silesian University of Technology](#), Poland
- [Tallinn University of Technology](#), Estonia
- [University of Tours](#), France
- [University of Turku](#), Finland
- [Universitat Rovira i Virgili](#), Spain

Collaboration

Foreign Research and Study Institutions

- Uppsala University, Sweden
- V. Lashkaryov Institute of Semiconductor Physics, Ukraine
- University of Haute-Alsace, France
- Centria University of Applied Sciences, Finland
- Agricultural University of Athens, Greece
- Sivas Cumhuriyet University, Turkey
- University of Burgundy, France
- University of Hohenheim, Germany
- University of Mostar, Bosnia and Herzegovina
- University of Novi Sad, Serbia
- University of Zagreb, Croatia
- University of Aveiro, Portugal
- Brno University of Technology, Czechia
- Technical University of Munich, Germany
- University of Bologna, Italy
- Slovak Academy of Sciences, Slovakia
- Riga Technical University, Latvia
- Lehigh University, USA
- Swiss Federal Laboratories for Materials Science and Technology, Switzerland
- Babeş-Bolyai University, Romania
- University of Split, Croatia
- Institute of Physics, University of Belgrade, Serbia
- University of Kaiserslautern-Landau, Germany
- Lodz University of Technology, Poland
- Budapest University of Technology and Economics, Hungary
- Jaroslav Heyrovsky Institute of Physical Chemistry, Czechia
- Artois University, France
- University of Vienna, Austria
- University of Liège, Belgium
- University of Orléans, France
- Cranfield University, United Kingdom
- INSA Rouen, France
- National Chung Hsing University, Taiwan
- University of Galway, Ireland
- National Institute for Industrial Environment and Risks (INERIS), France
- University of Ljubljana, Slovenia
- University of Liege, Belgium
- Swiss Center for Electronics and Microtechnology (CSEM), Switzerland
- Polymer Competence Center Leoben, Austria
- Bureau of Geological and Mining Research (BRGM), France
- Helmholtz Centre Berlin for Materials and Energy GmbH (HZB), Germany
- University of Valencia, Spain
- University of Groningen, Netherlands
- National Research Council (CNR), Italy
- Italian Institute of Technology (IIT), Italy
- VTT Technical Research Centre of Finland, Finland
- University of Oxford, United Kingdom
- EPFL, Switzerland
- Ben-Gurion University of the Negev, Israel
- Universitat Jaume, Spain
- Bar-Ilan University, Israel
- Palacký University Olomouc, Czechia
- Cornell University, USA
- University of Padua, Italy
- Pontifical Catholic University of Valparaíso, Chile
- University of Maryland, USA

Industry and Business

- UAB "Ortho Baltic"
- UAB "Medicata Filia"
- UAB "Reola"
- UAB "HI-LABS"
- UAB "Valentis"
- UAB "Nanoversa"
- UAB "3D Creative"
- AB "MV GROUP Production"
- AB "Pieno žvaigždės"
- AB "Volfas Engelman"
- AB "Žemaitijos pienas"
- UAB "Addere Care"
- UAB "Allive Europe"
- UAB "ATUTU"
- UAB "BC solutions"
- UAB "Biosyyd"
- UAB "Biržų duona"
- UAB "Divaks"
- UAB "Energenas"
- UAB "Genba Taste"
- UAB "Involutus"
- UAB "Kėdainių konservų fabrikas"
- UAB "Linea libera"
- UAB "Natural Market Holding"
- UAB "Natūralus pluoštas"
- UAB "OMG Bubble Tea"
- UAB "Švyturys-Utenos alus"
- AB "Akmenės cementas"
- AB "Silikatas"
- UAB "Kauno stiklas"
- AB "Achema"
- UAB "Bauroc"

Collaboration

Industry and Business

- AB "Dolomitas"
- UAB "Heidelberg Materials Lietuva Cementas"
- UAB "Ecostone solutions"
- AB "Kauno energija"
- UAB "Finegri"
- UAB "Stikloporas"
- MB "Virmalda"
- UAB "Cosmoway"
- UAB "Prolabs"
- UAB "Biotecha"
- UAB "Tranvia"
- UAB "VMG grupė"
- UAB "Veika"
- UAB "All in container"
- UAB "Fivrec"
- AB "KN Energies"
- UAB "Filter"
- UAB "Jotron"
- UAB "Axioma Metering"
- UAB "Montuotojas"
- UAB "Epsoma"
- UAB "AXIS Engineering"
- UAB "Kauen craft"
- UAB „Dargesta"
- UAB „Boros grupė"
- MB "Bious labs"
- UAB "Kauno kogeneracinė jėgainė"
- UAB "Hollister Lietuva"
- UAB "Vandenvala"
- UAB "DP acetate"
- UAB "Litmus LT"
- UAB "LZT"
- UAB "OQEMA"
- Vipergen, ApS, Denmark
- Doma, SIA, Latvia
- Novaled, GmbH, Germany
- Red Sea Farms, LTD, United Arab Emirates
- HANWHA Q.CELLS, GmbH, Germany
- Mondragon Assembly, Spain
- VON ARDENNE, GmbH, Germany
- FOM Technologies, A/S, Denmark
- Teknisolar, SRL, Italy
- Dyename, AB, Sweden
- Yparex, BV, Netherlands
- Becquerel Institute France, France
- 3SUN, SRL, Italy
- Ark Metrica, LTD, United Kingdom
- Tokyo Chemical Industry, Japan
- Lomartov, SL, Spain

Dissemination of Research Results to Society

- It's impressive what KTU scientists have done. The invention has attracted the interest of a Japanese company (in Lithuanian), Dr. T. Malinauskas, Dr. V. Getautis, L. M. Svirskaitė
- Unlearned lessons from major fires in Lithuania: hazardous materials can persist for decades (in Lithuanian), Dr. V. Kaunelienė
- Organic materials synthesized by KTU scientists – used in the production of OLED devices in Taiwan (in Lithuanian), Dr. D. Tavgenienė
- KTU scientists' innovation for domestic use solar cells – a way to avoid energy loss (in Lithuanian), Dr. Habil. J. V. Gražulevičius
- Bioplastics researchers at KTU: pollution is caused by people, not by plastics, Dr. R. Rutkaitė, Dr. A. Amobonye
- In the laboratory, tiny replicas of organs being developed will help reduce the use of animals in research (in Lithuanian), Dr. E. Krugly
- Eggs without antibiotics, low-fat cottage cheese, and other bold labels – are such products truly healthier (in Lithuanian), Dr. A. Šipailienė
- Scientists develop cellulose recycling method with applications ranging from textiles to medical devices, I. Pauliukaitytė
- New project of KTU and partners – sheep wool for wound healing (in Lithuanian), Dr. V. Valeika
- KTU professor: applying circular economy principles in the EU economy can reduce CO₂ emissions by up to 4% (in Lithuanian), Dr. T. Dambrauskas
- KTU scientist: invisible danger lurking on our plates, at home and beyond (in Lithuanian), Dr. I. Urniežaitė
- KTU's new food technology set to transform senior care in nursing homes, Dr. D. Leskauskaitė
- Hazardous chemicals found in cosmetics: Lithuania among the countries investigated (in Lithuanian), Dr. V. Kaunelienė
- KTU chemists – in an exclusive NATO network (in Lithuanian), Dr. V. Kitrytė-Syrpa, Dr. T. Prasauskas