

LATVIA UNIVERSITY OF LIFE SCIENCES AND TECHNOLOGIES
LATVIJAS LAUKSAIMNIECĪBAS UNIVERSITĀTE



ANNUAL 27th INTERNATIONAL SCIENTIFIC CONFERENCE
IKGADĒJĀ 27. STARPTAUTISKĀ ZINĀTNISKĀ KONFERENCE

**RESEARCH FOR RURAL DEVELOPMENT
2021**

Jelgava, Latvia, 12 - 13 May, 2021
Jelgava, Latvija, 12. -13. maijs, 2021

ONLINE at ZOOM platform

Regulations Presentations – 10 minutes
 Discussions – 5 minutes
Language English

Wednesday, 12 May/ ONLINE/ZOOM platform

9:40 – 10:00 participants enter to ZOOM platform,

10:00 **Opening of Conference and Plenary session**

Chairperson, **Irina Arhipova,**

Vice Rector of Sciences of Latvia University of Life Sciences and Technologies

Irina Pilvere, Rector of Latvia University of Life Sciences and Technologies

Opening Keynotes

Mindaugas Samuolaitis, Rolandas Drejeris, Vytautas Magnus University, Agriculture Academy, Lithuania
Organization of the Food Distribution System in the Context of Sustainability According to Institutional Dimension

Dzidra Kreišmane, Elita Aplociņa, Kaspars Naglis-Liepa, Laima Bērziņa, Olga Frolova, Arnis Lēnerts,
Latvia University of Life Sciences and Technologies

Diet Optimization for Dairy Cows to Reduce Ammonia Emissions

Mihails Šilovs, Irina Pilvere, Latvia University of Life Sciences and Technologies

The Ambiguity of Covid-19 Effect on the Latvian Fishery Sector

Wednesday, 12 May/ ONLINE/ZOOM platform

After Plenary session

Economics ONLINE/ZOOM platform

Chairperson **Lāsma Līcīte-Ķurbe**

Astra Auzina-Emsina, Velga Ozoliņa, Riga Technical University, Latvia

Transportation, Logistics and Regional Development in Covid-19 Era: Modelling Sectoral Shocks Caused by Policy and Safety Measures

Tatjana Lejava, Baiba Rivža, Maiga Krūzmētra, Latvia University of Life Sciences and Technologies

Changes in the Economy as a System: Entrepreneurship under the Influence of COVID-19

Aija Zobena, Daira Lāce, University of Latvia

Demand for Social Farming Services in Latvia: Dementia Care in Rūjiena Municipality

Armands Pužulis, Latvia University of Life Sciences and Technologies, Institute of Agricultural Resources and Economics

Rural Development Contexts - Input in Rural Attractiveness Definition

Lāsma Licite-Kurbe, Linda Groma, Latvia University of Life Sciences and Technologies

Evaluation of Social Enterprise Criteria in Latvia

Linda Groma, Lāsma Licite-Kurbe, Latvia University of Life Sciences and Technologies

Theoretical Aspects of Social Entrepreneurship in the Context of the Environment

Laura Pole, Tamara Grizane, Turība University, Latvia

Tourism Tax Model for Development of Region

Mairita Stepina, Modrite Pelse, Latvia University of Life Sciences and Technologies

Approbation of Project Management Methodology in Degraded Areas Revitalization Projects

Maryna Demianchuk, Valerijs Skribans, Odessa I.I. Mechnikov National University, Ukraine

Evaluation of Sustainable Development of Enterprises in the Digital Transformations

13.00 - 14.00 Lunch

14.00 Food Sciences/ ONLINE/ZOOM platform

Chairperson **Liene Jansone**

Darius Sargautis, Tatjana Kince, Latvia University of Life Sciences and Technologies, **Vanda Sargautiene**, University of Latvia

Review: Current Trends in Oat Protein Recovery and Utilization in Aqueous Food Systems

Liene Jansone, Solvita Kampuse, Zanda Krūma, Ivo Lidums, Latvia University of Life Sciences and Technologies

Characterization of Physical and Chemical Composition of Concentrated Fermented Cabbage Juice

Līga Marcinkoniene, Latvia University of Life Sciences and Technologies

Seasonal Impact on Goat Milk Quality in Latvian Goat Breeds

Ilze Bernate, Matins Sabovics, Latvia University of Life Sciences and Technologies

Research on Germinated Wheat Grain, Broccoli, Alfalfa, Radish and Hemp Seeds Microbiological Safety

Evalds Raits, Latvia University of Life Sciences and Technologies

Thermal Inactivation of *Thermophilic Thermoanaerobacterium Thermosaccharolyticum* and *Geobacillus Stearothermophilus* in Canned Food

Santa Pūķe, Latvia University of Life Sciences and Technologies

Pre-treatment Effect on Physico-chemical and Microbial Parameters of Smoked Baltic Sprats

Iveta Rutka, Ruta Galoburda, Janis Galins, Ainars Galins, Latvia University of Life Sciences and Technologies

Bee Drone Brood Homogenate Chemical Composition and Application: a Review

Veterinary Medicine ONLINE/ZOOM platform

Chairperson **Gundega Mūrniece**

Linda Gatīņa, Agris Ilgažs, Inga Piginka-Vjačeslavova, Latvia University of Life Sciences and Technologies, Institute of Food Safety, Animal Health and Environment BIOR, **Maksims Zolovs**, Daugavpils University

Impact of Various Surgical Devices on Healing Process in Rabbit's Spleen

Gundega Mūrniece, Aivars Bērziņš, Līga Kovalčuka, Kaspars Kovaļenko, Latvia University of Life Sciences and Technologies, **Žanete Šteingolde, Svetlana Cvetkova, Olga Valciņa**, Institute of Food Safety, Animal Health and Environment BIOR

Prevalence of Feline Corona Virus in Cats of an Animal Shelter in Latvia

Daira Viškere, Latvia University of Life Sciences and Technologies, **Ilze Matīse Van-Houtana**, IK "Matīses Veterinārās patoloģijas serviss", **Blaž Cugmas**, University of Latvia

Biophotonics Techniques for Optical Characterization of Canine and Feline Skin and Subcutaneous Tumors

Thursday, 13 May/

10.00 **Forestry and Wood Processing/ ONLINE/ZOOM platform**
Chairpersons **Inga Straupe**

Inga Straupe, Evelīna Skrastiņa, Latvia University of Life Sciences and Technologies, **Andis Lazdiņš**, Latvia State Forest Research Institute "Silava"

Afforestation of Abandoned Peat Extraction Sites with Scots Pine (*Pinus Sylvestris* L.) as a Solution of Climate Change Mitigation

Daiga Zute, Latvia State Forest Research Institute "Silava"

Carbon Storage in Coniferous Stands on Organic Soils

Solveiga Luguza, Latvia University of Life Sciences and Technologies, **Endijs Bāders, Ieva Janslaviete**, Latvia State Forest Research Institute "Silava"

Characterization of Naturally Regenerated Post-windthrow Forest Structure through Structural Spatial Indices

Ilze Kārklīņa, Latvia State Forest Research Institute "Silava", University of Latvia, **Andis Lazdiņš, Aldis**

Butlers, Jeļena Stola, Zaiga Anna Zvaigzne, Dana Purviņa, Latvia State Forest Research Institute "Silava"

Soil Carbon Stock in Fertilized Forest Stands with Mineral Soils

Silva Šēnhofa, Dagnija Lazdiņa, Mārtiņš Zeps, Latvia State Forest Research Institute "Silava"

Winter Frost Damage and its Link to Early Growth and Survival in a Poplar Clone Collection

Kārlis Bičkovskis, Latvia State Forest Research Institute "Silava"

Variables Determining Sites of Beaver Activity in Forest Drainage Systems

Agricultural Sciences ONLINE/ZOOM platform

Elgars Felcis, University of Latvia

Agroecological Practices as Sustainable Management of Common Natural Resources: The Case of Latvian Permaculture Movement

Janis Kaneps, Biruta Bankina, Inga Moročko-Bičevska, Latvia University of Life Sciences and Technologies

Virulence of *Pyrenophora tritici-repentis*: a Minireview

13.00 - 14.00 Lunch

14.00 **Environmental Engineering and Landscape Architecture/ ONLINE/ZOOM platform**
Agricultural Engineering
Rural Engineering, Water Management
Chairperson **Juris Burlakovs**

Giedre Ivaviciute, Vytautas Magnus University, Kaunas Forestry and Environmental Engineering University of Applied Sciences, Klaipeda State University of Applied Sciences, Lithuania

Analysis on the Optimality of Lithuanian Landscape Structure

Daiva Tiškute-Memgaudienė, Vytautas Magnus University, Lithuania

Change of Forest Land Cover in Lithuania during the Period 1950-2017: a Comparative Analysis

Vilda Grybauskiene, Gitana Vyčiene, Kaunas Forestry and Environmental Engineering University of Applied Sciences, Lithuania

Influence of Biological Additives on Soil Moisture Dynamics in Context of Climate Change

Juris Burlakovs, Lauris Arbidans, University of Latvia, **Jovita Pilecka, Inga Grinfelde**, Latvia University of Life Sciences and Technologies, **Dace Arina**, Institute of Physical Energetics, Latvia, **Roy Hendroko Setyobudi**, University of Muhammadiyah Malang, Indonesia

Sustainable Landfill Fine Fraction of Waste Reuse Opportunities Covering Layer Development

Vladimirs Vorohobovs, Martins Klenhofs, Institute of Aeronautics, Latvia
How to Choose Optimal Locations for Installation of Wind Turbines in Rural Areas
Information and Communion Technologies/ ONLINE/ZOOM platform

Gints Rudusans, Gatis Vitols, Latvia University of Life Sciences and Technologies
Machine Learning Methods for Classification of Sensitive Data
Education / ONLINE/ZOOM platform

Anna Vintere, Latvia University of Life Sciences and Technologies
A Study on Learning Difficulties Related to Dyscalculia and Mathematical Anxiety

POSTERS SESSION/ without presentation
/will be available ONLINE during the conference:
https://www2.ltu.lv/research_conf/programme.htm/

Economics

Migle Šontaite-Petkevičiene, Vytautas Magnus University, Lithuania
Guerrilla Marketing: a Creative and Small Budget Approach to Entrepreneurial Marketing

Lyubomir Lyubenov, Atanas Atanasov, Ivavlo Hristakov, University of Ruse, Bulgaria
Profitableness and Perspective of the Apiculture in North-Eastern Bulgaria

Sonata Staniuliene, Justine Jurova, Vytautas Magnus University, Lithuania
Remote Job Design Possibilities to Work in Lithuanian Companies from Distant Locations

Vera Hohlova, Baiba Rivža, Latvia University of Life Sciences and Technologies
The Impact of the COVID-19 Pandemic on the Unemployment Rate in Latvia

Maryna Dubinina, Iryna Ksonzhyk, Svitlana Syrtseva, Yuliia Cheban, Olha Luhova, Tetiana PISOCHENKO, Mykolayiv National Agrarian University, Ukraine
Implementation of the Compliance System in the Activities of Agricultural Enterprises in Ukraine: Prerequisites and Main Aspects

Māra Pētersone, Riga Technical University, Latvia, **Kārlis Ketners**, BA School of Business and Finance, **Danis Krieviņš**, Pauls Stradins Clinical University Hospital
Integrate Health Care System Performance Assessment for Value-Based Health Care Implementation in Latvia

Gintare Vazoniėne, Bernardas Vazonis, Vytautas Magnus University, Lithuania
Attitudes of Population towards their Wellbeing and Climate Change Interface Territorial Dimension

Iryna Honcharenko, Nataliya Shyshpanova, Mykolayiv National Agrarian University, Ukraine
Innovation as a Factor of the Labor Resources of Rural Areas Reserve

Lasma Aleksejeva, Modrite Pelse, Agnese Hauka, Latvia University of Life Sciences and Technologies
Organic Production as Part of a Sustainable Local Food Supply Chain

Inese Blanka, Latvia University of Life Sciences and Technologies
How Knowledge management may Influenced Regional Development in Latvia

Jurgita Zaleckiene, Aista Ragauskaite, Vytautas Magnus University, Agriculture Academy, Lithuania
The Application of Entrepreneurship Based Activities for Development of Agro-startups

Aiste Ragauskaite, Jan Zukovskis, Vytautas Magnus University, Agriculture Academy, Lithuania
Development of Social Innovations for Proactive Empowerment of Organizations in Rural Areas

Inguna Lazdina, Latvia University of Life Sciences and Technologies
Strategic Perspectiveness of Polycentric Development in Latvia

Agnese Hauka, Latvia University of Life Sciences and Technologies, Institute of Agricultural Resources and Economics
Developing Innovations in Agriculture by M16 "Cooperation" of CAP 2014-2020

Asta Raupeliene, Vytautas Magnus University, Lithuania
Assessment the Impact of Factors on Rural Advisers Engagement: Lithuanian Chamber of Agriculture Case

Lilita Zeltiņa, Ventspils University of Applied Sciences, Latvia
Public Goods and Urban Regeneration in Context of Urban Planning

Iryna Ksonzhyk, Mykolayiv National Agrarian University, Ukraine
Rural Tourism as an Activator of the Development of the Regions of the Baltic-Black Sea Axis
Olena Petrova, Mykolayiv National Agrarian University, Ukraine
Financial Support for the Development of Meat-Processing Factories in Ukraine
Gunita Mazure, Latvia University of Life Sciences and Technologies
Financial Platforms as Alternative Financial Instrument to Crediting

Food Sciences

Anete Keke, Ingmars Cinkmanis, Latvia University of Life Sciences and Technologies
Total Phenolic Content and Antioxidant Activity of Honey Powders

Veterinary Medicine

Dace Stankevica, Latvia University of Life Sciences and Technologies
Summary of Macroscopic Lesions in Dogs with Megaesophagus/Polyneuropathy

Forestry and Wood Processing

Lāsma Freimane, Linda Čakša, Annija Kārklīņa, Didzis Elferts, Beate Bērziņa, Latvia University of Life Sciences and Technologies, Latvia State Forest Research Institute "Silava", University of Latvia
Long-term Trends in Post-fire vegetation Recovery
Guna Petaja, Ilze Karlina, Santa Neimane, Latvia State Forest Research Institute "Silava"
Short-term Effects of Fertilization on Tree Photosynthetic Activity in a Deciduous Tree Plantation

Agricultural sciences

Vitalii Liubych, Hryhorii Hospodarenko, Uman National University of Horticulture, Ukraine
Influence of Long-term Fertilization on Yield and Quality of Spring Triticale Grain in the Right-Bank Forest-Steppe of Ukraine
Sarmīte Rancāne, Ivo Vēzis, Dzidra Kreišmane, Aija Rebāne, Aldis Jansons, Latvia University of Life Sciences and Technologies
Assessment of Perennial Ryegrass (*Lolium Perenne* L.) Genotypes under Latvia Agro-Ecological Conditions
Kintija Pekša, Latvia University of Life Sciences and Technologies
Development of Rye Diseases Depending on Cultivars and Fungicide Application

Environmental Engineering and Landscape Architecture

Water Management

Agricultural Engineering

Rural Engineering

Dainora Jankauskiene, Latvia University of Life Sciences and Technologies, **Indrius Kuklys, Lina Kukliene, Birute Ruzgiene**, Klaipeda State University of Applied Sciences, Lithuania
Some Aspects on Mapping Technologies Used for Capturin and Modelling of Small Architectural Objects
Anete Anna Zālīte, Jovita Pilecka-Ulcugaceva, Kristine Valujeva, Inga Grinfelde, Sindija Liepa, Latvia University of Life Sciences and Technologies, **Juris Burlakovs**, Estonian University of Life Sciences, **Zane Vincevica-Gaile**, University of Latvia
The Impact of Crop on GHG Emissions from Clay Soils
Vladimir Surgelas, Vivita Pukite, Irina Arhipova, Latvia University of Life Sciences and Technologies
Property Evaluation Based on Ambiguous Logic through Building Inspection in São Paulo City, Brazil
Ieva Kraukle, Ilze Stokmane, Kristine Vugule, Latvia University of Life Sciences and Technologies
Planning of Urban Forest in Riga and Major European Cities
Dace Ržepicka, Latvia University of Life Sciences and Technologies
Urban Waterfront Landscapes in Industrial Heritage Areas in Ventspils
Janis Fabriciuss, Latvia University of Life Sciences and Technologies
Timber Portal Frames with Semi-Rigid Joint: Problems and Solutions

Information and Commuation Technologies

Jekaterina Smirnova, Latvia University of Life Sciences and Technologies

Usability Evaluation of Government Managed Covi d-19 Information Websites in Latvia

Rolands Avišāns, Latvia University of Life Sciences and Technologies

Open Data in Latvia: Towards Quality or Quantity

Ainārs Belovs, Latvia University of Life Sciences and Technologies

Time-Aware Event Recommendations Using Topic Modeling

Education

Sandra Kreija-Gaikšte, Irēna Katane, Latvia University of Life Sciences and Technologies

Multidimensional and Multifunctional Context of National DefenseTraining in Latvian Schools

Marina Troškova, Latvia University of Life Sciences and Technologies

Self-Evaluation of University Teacher Competitiveness in the Context of Multilevel Higher Educational Environment