



VYTAUTAS MAGNUS
UNIVERSITY
AGRICULTURE
ACADEMY



The 10th International Scientific Conference

RURAL DEVELOPMENT 2021:

*Challenges for Sustainable Bioeconomy
and Climate Change*

21-23 September, 2021

PROGRAMME

Vytautas Magnus University
Akademija, Kaunas district, Lithuania
<http://www.ruraldevelopment.lt>

Dear Participants of the Conference,

We are pleased to invite you to participate already in the 10th International Scientific Conference ‘Rural Development 2021: Challenges for Sustainable Bioeconomy and Climate Change’. It already became as biannual tradition to meet colleagues all over the world here. In addition, we are pleased that this event became a common area for international scientific interdisciplinary discussion on rural development and innovations.

It is a pleasure for us to welcome you at Vytautas Magnus University Academy of Agriculture, which is developing due to the challenges of smart growth and bioeconomy. The University is becoming more and more advanced in science and more open to society for cooperation and sharing knowledge.

The Mission of University reveals our main aspiration: to develop and disseminate scientific knowledge and sincerely strive for save and healthy food and full-fledged living environment for all citizens of Lithuania.

We are able do more „step by step“ with global changes and innovations by sharing innovative ideas, experience and results of our researches.

The existing and rising challenges of bioeconomy will be discussed in different Conference sections:

- Agro-innovations and Food Technologies;*
- Biosystems Engineering and Environment Integrity (Dedicated to the 75th Anniversary of Engineering Sciences in University);*
- Multifunctional Approach for Sustainable Use of Bio-Resources;*
- Social Research for Sustainable Bioeconomy and Climate Change.*

Together we can create synergy from broad participation from different sectors of the society, the scientists, practitioners, policy makers, private sector actors, NGOs, even young researchers and students. All the participants will be awarded the possibility to express their attitude towards the scientific issues related to rural development, especially in the focus of bioeconomy challenges.

Prof. dr. Astrida Miceikienė

*Chancellor of the Vytautas Magnus University Agriculture Academy,
Chairperson of Scientific Committee*

Scientific committee:

Chairperson – prof. dr. Astrida Miceikienė – Chancellor of the Vytautas Magnus University Agriculture Academy

Vice-chairperson – assoc. prof. dr. Judita Černiauskienė – Editor-in-Chief of the Proceedings of “Rural Development” International Conference

Members:

Prof. habil. dr. Irina Pilvere (Latvia University of Life Sciences and Technologies, Latvia)

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Assoc. prof. dr. Jiri Mašek (Czech University of Life Science in Prague, Czech Republic)

Assoc. prof. dr. Anabela Paiva (University of Trás-os-Montes and Alto Douro, Portugal)

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Dr. Aleksejs Nipers (Latvia University of Life Sciences and Technologies, Latvia)

Dr. Donatello Caruso (University of Foggia, Italy)

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Vice-chairperson of conference - assoc. prof. dr. Judita Černiauskienė

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Minvydas Liegus

Proceedings of the International Scientific conference “Rural Development 2021” will be applied for indexing by Clarivate Analytics Web of Science (CA WoS), Business Source Complete (EBSCO).

All papers have been peer reviewed by two reviewers and will be published submitted on the Opened Journal System in the Proceedings of the International Scientific conference “Rural Development 2021” until 1st of January, 2022.

Website of the OJS: <https://ejournals.vdu.lt/index.php/rd>
Conference website: <http://www.ruraldevelopment.lt>

Tuesday, 21st September, 2021

Event place: Central Building of Vytautas Magnus University Agriculture Academy, Studentų str. 11, Akademija, Kaunas distr., Lithuania

8.00–9.00	Registration of Participants (<i>Lobby of Central Building, Studentų str. 11, Akademija</i>)
9.00–13.00	Plenary Session (<i>Hall of Central Building, 2nd floor</i>) Chairpersons: Assoc. prof. dr. Anastasija Novikova, Assoc. prof. dr. Rytis Skominas <i>Vytautas Magnus University (Lithuania)</i> ONLINE LINK TO PLENARY SESSION BROADCAST CLICK HERE
9.00–9.30	Welcome speech
9.30–10.00	Innovation & knowledge exchange / EIP-AGRI <i>Pacôme Elouna Eyenga (Belgium)</i>
10.00–10.30	The bioeconomy transformation from an innovation economics point of view <i>Prof. dr. Andreas Pyka (Germany)</i>
10.30–11.00	Protein and nitrogen: a key challenge for sustainable bioeconomy and climate change <i>Dr. Christian Huyghe (France)</i>
11.00–11.30	Coffee break
11.30–12.00	Thinking about forest as a socio-ecological system <i>Prof. dr. Vilis Brukas (Sweden)</i>
12.00–12.30	Denitrifying woodchip bioreactors for nutrient removal in agricultural drainage <i>Prof. dr. Arvydas Povilaitis (Lithuania)</i>
12.30–13.00	Development of agricultural engineering science <i>Prof. dr. Egidijus Šarauskis, Assoc. prof. dr. Rolandas Domeika (Lithuania)</i>
13.00–14.00	Lunch (<i>5th floor Lobby of Central Building</i>)
14.00–17.30	Business and Science Forum “Green deal: the way improving the well-being of society and business” <i>(Hall of Central Building)</i> ONLINE LINK TO FORUM BROADCAST CLICK HERE
19.00	Gala Dinner (<i>Raudondvaris Manor Arts Incubator, Pilies str. 1, Raudondvaris</i>)

Wednesday, 22nd September, 2021

8.30–13.00	<p>Parallel Sessions (<i>5th floor, Central Building</i>)</p> <p>Section 1. Agro-innovations and Food Technologies</p> <p>Section 2. Biosystems Engineering and Environment Integrity</p> <p>Section 3. Multifunctional Approach for Sustainable Use of Bio-Resources</p> <p>Section 4. Social Research for Sustainable Bioeconomy and Climate Change</p>
10.30–11.00	<p>Coffee break and poster presentation</p>
13.00–14.00	<p>Lunch (<i>5th floor Lobby of Central Building</i>)</p>
14.00–15.00	<p>Final Plenary Session (<i>Hall of Central Building</i>)</p> <p>Chairperson: assoc. prof. dr. Jolita Greblikaitė (<i>Vytautas Magnus University</i>)</p> <p>Speakers:</p> <p>Section 1. Agro-innovations and Food Technologies Assoc. prof. Rimantas Vaisvalavičius (<i>Vytautas Magnus University</i>)</p> <p>Section 2. Biosystems Engineering and Environment Integrity Prof. dr. Algirdas Jasinskas (<i>Vytautas Magnus University</i>)</p> <p>Section 3. Multifunctional Approach for Sustainable Use of Bio-Resources Prof. dr. Darius Danusevičius (<i>Vytautas Magnus University</i>)</p> <p>Section 4. Social Research for Sustainable Bioeconomy and Climate Change Prof. dr. Vilma Atkočiūnienė (<i>Vytautas Magnus University</i>)</p>
15.30–18.00	<p>Kaunas City Tour (<i>visiting Kaunas city historical places</i>)</p> <p>With the help of the professional tour guide tourists will find facts, stories and legends about most important places such as Kaunas Castle, City Hall Square, Cathedral Basilica of Apostles St. Peter and St. Paul, Vytautas Church, Thunder House, Laisvės Avenue, Vieniybės Square and much more.</p>

Thursday, 23rd September, 2021

10.00–12.00	Cultural Tour (VMU Botanical Garden) 10.00–11.00 Visit to scientific collections of medicinal plants and pomology. Tour guides: Ona Ragažinskienė, Remigijus Daubaras, Laima Česonienė. 11.00–12.00 Excursion to VMU Botanical Garden Park (orangery on request). Tour guide Edita Braun.
10.00–16.00	Visiting exhibition “Ką pasėsi...2021”

Business and Science Forum

“GREEN DEAL: THE WAY IMPROVING THE WELL-BEING OF SOCIETY AND BUSINESS”

Tuesday, 21st September, 2021 *Hall of Central Building (2nd floor) of Vytautas Magnus University Agriculture Academy, Studentų str. 11, Akademija, Kaunas distr., Lithuania*

The purpose of the forum is to facilitate discussions on strategic approaches, challenges and opportunities in developing the sustainable EU's economy, the business initiative for efficient use of resources by moving to a clean and circular economy, to ensure biodiversity and reduce pollution, effecting local and global decisions in order to achieve goals regarding well-being of society and business.

8.00–9.00 Registration of Participants (*Lobby of Central building, Studentų str. 11, Akademija*)

9.00–11.00 Plenary session

9.00–9.30 Welcome speech

9.30–11.00 Green Deal: Best Business Practice Improving the Well-being of Society and Business

Moderators: lect. dr. **Erika Besusparienė** and lect. dr. **Aušra Nausėdienė**
(Vytautas Magnus university Agriculture Academy)

Sharing good practices and experience. (Near the Hall of Central Building, 2nd floor)

Companies offering natural products:

- **The Cannabis Growers, Processors and Business Innovators Association (KAPVIA)** will introduce a variety of cannabis products and provide a taste of both individual cannabis food ingredients (oils, hulled seeds, protein) and consumer products: chocolate protein bars, seed mixes and protein blends.
- **“Dream Food”** business of self-employed Asta Teresevičienė. She is developer and producer of raw fruit and berry dried pulp (sheet) product technology.

Companies offering innovative solutions for business:

- **UAB “Nando Labs”** innovative solutions “Biospectrum” – it is an organic enriched microbiological product that enhances plant productivity and improves soil conditions. Presenter Jonas Ignatavičius;
- **Lithuanian Agricultural Advisory Service (LAAS)** innovative solutions:
 - o **The Applied Innovation Research and Results Information System (TITRIS)** collects, publicizes, and compiles data on applied innovation research and results that can potentially contribute to more efficient, sustainable, and environmentally friendly farming. Presenter Laura Girdžiūtė;
 - o **Precision farming.** Soil sampling, analyses, and preparation of a variable rate fertilization plan is a complex of services for soil improvement strategy that helps to balance the nutrient content required to achieve optimal and uniform yields on farmers' fields. Presenter Lukas Šapranauskas;
 - o **Electronic services of information, consultation and training in implementing integrated plant protection (the information system) (IKMIS)** was created by the Lithuanian Agricultural Advisory Service in cooperation with researchers, taking into account the needs of farmers, current European agricultural issues, implementing the EU Strategy on Sustainable Use of Pesticides, the Law on Plant Protection of the

11.00–11.30 Coffee break

11.30–15.30 1 SESSION

11.30–13.00 Discussion with Producers of Bioproducts. Product Demonstration and Degustation (Near the Hall of Central Building, 2nd floor)

13.00–14.00 Lunch (5th floor Lobby of Central Building)

[ONLINE LINK TO FORUM BROADCAST CLICK HERE](#)

14.00–15.30 1 panel discussion: Farm to fork strategy – for a fair, healthy and environmentally-friendly food system

Moderator: Mindaugas Maciulevičius, Founder and Director of Public Institution “Baltic Sustainable Bioeconomy development agency”.

Panel discussion speakers:

- **Vilma Atkočiūnienė.** Professor at Faculty of Bioeconomy Development, Vytautas Magnus University Agriculture Academy.
- **Kristina Simonaitytė.** Minister adviser of Ministry of Agriculture of the Republic of Lithuania.
- **Aušrys Macijauskas.** Chairman of the Lithuanian Grain Growers Association.
- **Andreas Meyer-Aurich.** Leibniz Institute for Agricultural Engineering and Bioeconomy, Humboldt University of Berlin.

Key themes for open discussion:

- The importance of science in implementation farm to fork strategy.
- Instruments to encourage change in existing practices to ensure healthy and environmentally-friendly food.
- European Green Deal – New Investments Opportunities.
- Barriers to business to produce healthy and environmentally-friendly food.
- Food loss and waste are key to achieving sustainability.

15.30–15.45 Coffee break

15.45–17.30 2 SESSION

15.45–17.30 Special session: Business incentives to address European green deal challenges? (Hall of Central Building, 2nd floor)

Keynote speakers:

- “Make Sustainability Stick for Society and Business: The role of societal culture. Case of Iceland“ **Prof. Dr. Inga Minelgaite** (University of Iceland);
- “The Role of Water in Agricultural Spray Solutions“, Presenter **Jonas Ignatavičius**, (UAB “Nando Labs”), co-authors **Ernestas Zaleckas** and **Dainius Steponavičius**, (Vytautas Magnus University, Agriculture Academy).

2 panel discussion regarding special session

Moderator: Rasa Tumaševičiūtė, Soil expert at Ministry of Agriculture and working group on Climate Change Mitigation and Adaptation leader at LSJR, Climate pact ambassador, Circular Economy Consultant, PhD student in ecology and environmental science.

Panel discussion speakers:

- **Ieva Valeškaitė.** Ministry of the Economy and Innovation of the Republic of Lithuania.
- **Marius Čepulis.** Minister adviser of Ministry of Environment of the Republic of Lithuania
- **Jonas Ignatavičius.** UAB “Nando labs”

- **Kristina Šermukšnytė-Alešiūnienė.** VŠĮ “AgriFood Lithuania DIH”, PhD student at Institute of Economics and Rural Development (*Lithuania*)

Key themes for open discussion:

- Challenges of green deal development.
- Investing in environmentally-friendly technologies: is it present or future?
- Business role introducing innovative food products.
- How the food sector is changing, where business needs to move?
- Healthy food at a low price: is it possible?
- Business solutions in reducing the use of chemicals for healthier food.

Section 1.

AGRO-INNOVATIONS AND FOOD TECHNOLOGIES

Wednesday, 22nd September 2021

1.1 Quality of Food Raw Materials 1.2 Plant Growth Optimization for Sustainable Crop Production 1.3. Integration of Environmentally Friendly Products into Farming System	
IN PERSON <u>Auditorium No. 524 Central building (Studentų str. 11, Akademija)</u> Chairpersons assoc. prof. dr. Rimantas Vaisvalavičius, PhD student Aušra Rudinskienė	
8.30–8.45	Soil tillage for sustainability Vaclovas Bogužas, Vaida Steponavičienė, Jūratė Aleinikovienė, Aušra Sinkevičienė, Alfredas Sinkevičius <i>Vytautas Magnus University (Lithuania)</i>
8.45–9.00	Antifungal properties of Coriandrum sativum extracts on <i>Fusarium spp.</i> in vitro Lina Dėnė¹, Siegrid Steinkellner², Alma Valiuškaitė¹ <i>¹Lithuanian Research Centre for Agriculture and Forestry (Lithuania)</i> <i>²Vienna University of Natural Resources and Life Sciences (Austria)</i>
9.00–9.15	Plant extracts as biofungicides against soil-borne pathogen Simona Chrapačienė, Neringa Rasiukevičiūtė, Alma Valiuškaitė <i>Lithuanian Research Centre for Agriculture and Forestry (Lithuania)</i>
9.15–9.30	Organic fertilizers from meat and bone meal with biological preparations to increase soil and plant productivity Zita Kriaučiūnienė, Rita Čepulienė, Ernestas Zaleckas, Egidijus Šarauskis, Vilma Naujokienė <i>Vytautas Magnus University (Lithuania)</i>
ONLINE Chairpersons assoc. prof. dr. Rimantas Vaisvalavičius, PhD student Aušra Rudinskienė Log in link to online session, click here	
9.45-10.00	The lighting and nutrition strategies for efficient uptake of mineral nutrients in kale microgreens Viktorija Vaštakaitė-Kairienė, Aušra Brazaitytė, Jurga Miliauskienė, Kristina Laužikė, Rūta Sutulienė, Giedrė Samuolienė <i>Lithuanian Research Centre for Agriculture and Forestry (Lithuania)</i>
10.00	Coffee break

POSTERS	
	<p>Fermentation of milk whey permeate with different dairy Propionibacteria strains</p> <p>Unigunde Antone¹, Janis Liepins², Ingmars Cinkmanis¹, Jelena Zagorska¹ ¹Latvia University of Life Sciences and Technologies (Latvia) ² University of Latvia (Latvia)</p>
	<p>Influence of different raw materials powder on nutrition value of yogurt bites</p> <p>Dovilė Levickienė, Jurgita Kulaitienė, Nijolė Vaitkevičienė, Elvyra Jarienė Vytautas Magnus University (Lithuania)</p>
	<p>The content of mineral elements in <i>Solanum</i> spp. fruits</p> <p>Jūratė Staveckienė, Jurgita Kulaitienė, Judita Černiauskienė Vytautas Magnus University (Lithuania)</p>
	<p>The beef meat quality before and after wet-aging</p> <p>Judita Černiauskienė, Jurgita Kulaitienė, Živilė Tarasevičienė, Jovita Baranovska Vytautas Magnus University (Lithuania)</p>
	<p>Cowslip (<i>Primula Veris</i> L.) chemical composition dependence on the soil</p> <p>Aurelija Paulauskienė, Živilė Tarasevičienė Vytautas Magnus University (Lithuania)</p>
	<p>Studies of the variability of polyphenols and carotenoids in different duration fermented organic leaves of fireweed (<i>Chamerion Angustifolium</i> L.) holub</p> <p>Marius Lasinskas¹, Elvyra Jariene¹, Nijole Vaitkeviciene¹, Jurgita Kulaitiene¹, Katarzyna Najman², Ewelina Hallmann² ¹Vytautas Magnus University (Lithuania); ²Warsaw University of Life Sciences (Poland)</p>
	<p>Effect of biological preparations and different nitrogen fertilization on soil and winter wheat crop</p> <p>Rita Čepulienė, Darija Jodaugienė Vytautas Magnus University (Lithuania)</p>
	<p>Crop yield and economics of reduced intensity tillage systems, straw and green manure combinations</p> <p>Vaclovas Bogužas, Asta Bendoraityte, Vaida Steponavičienė, Aušra Sinkevičienė, Linas Skinulienė, Alfredas Sinkevičius Vytautas Magnus University (Lithuania)</p>
	<p>The comparison of photosynthesis parameters of different wheat (<i>Triticum aestivum</i> L.) varieties</p> <p>Ilna Vagusevičienė, Sonata Kazlauskaitė, Irena Pranckietienė, Gintarė Sujetovienė, Arvydas Kanapickas Vytautas Magnus University (Lithuania)</p>
	<p>Impact of fertilization on agroforestry system combining rows of wild Cherry and small-leaved Lime with legume and perennial grass in Latvia</p> <p>Andis Bardulis, Sarmite Rancane, Mudrite Daugaviete, Dagnija Lazdina Latvian State Forest Research Institute "Silava" (Latvia)</p>

	<p>The influence of biological preparations and their mixtures on soil agrochemical properties in winter wheat</p> <p>Lina Marija Butkevičienė, Vaida Steponavičienė, Vaclovas Bogužas, Lina Skinulienė, Tadas Kerdokas <i>Vytautas Magnus University (Lithuania)</i></p>
	<p>Effect of long term crop rotations on soil properties in spring barley crops</p> <p>Lina Skinulienė, Lina Marija Butkevičienė, Vaclovas Bogužas, Aušra Sinkevičienė, Vaida Steponavičienė <i>Vytautas Magnus University (Lithuania)</i></p>

Section 2.

BIOSYSTEMS ENGINEERING AND ENVIRONMENT INTEGRITY (Dedicated to the 75th Anniversary of Engineering Sciences in University)

Wednesday, 22nd September 2021

- 2.1 Agricultural Machinery and Technologies**
- 2.2 Durability of Engineering Structures and Sustainable Construction**
- 2.3 Energy Processes in Biotechnologies**
- 2.4 Land Use Planning and Advanced Geomatics**
- 2.5 Power and Transport Machines**
- 2.6 Reliability of Mechanical Systems**
- 2.7 Renewable Energetics**
- 2.8 Safety of Environment and Technologies**
- 2.9 Sustainable Animal Husbandry**
- 2.10 Sustainable Management of Water Resources**

IN PERSON

Auditorium No. 505 Central building (Studentų str. 11, Akademija)

Chairperson prof. dr. Eglė Jotautienė

8.30–8.45	Operational efficiency and environmental impact of wastewater treatment plants in Lithuanian rural areas Midona Dapkienė, Laima Česonienė, Jolanta Kuzmickienė <i>Vytautas Magnus University (Lithuania)</i>
8.45–9.00	Possibilities to reuse a ceramic waste as concrete aggregates Rytis Skominas, Wojciech Sas, Andrzej Głuchowski, Raimondas Šadzevičius, Dainius Ramukevičius <i>Vytautas Magnus University (Lithuania)</i>
9.00–9.15	Multi-criteria comparative analysis of water-supply and sewerage pipes and rings manufactured from different materials Vincas Gurskis, Rytis Skominas, Raimondas Šadzevičius <i>Vytautas Magnus University (Lithuania)</i>
9.15–9.30	Influence of aerobic pretreatment of poultry manure on the biogas production process Mantas Rubežius¹, Kęstutis Navickas¹, Kęstutis Venslauskas¹, Rolandas Bleizgys¹, Bronius Žalys², Antonio Comparetti³ ¹ <i>Vytautas Magnus University (Lithuania)</i> ² <i>Lithuanian Energy Institute (Lithuania)</i> ³ <i>University of Palermo (Italy)</i>
9.30–9.45	Potassium extraction from biomass ash Valdas Paulauskas <i>Vytautas Magnus University (Lithuania)</i>
9.45-10.00	Intelligent systems for modern combine harvesters Eglė Jotautienė, Antanas Juostas <i>Vytautas Magnus University (Lithuania)</i>

10.00–10.15	Climate change effects on water resources in Konya basin in Turkey Yusuf Ersoy Yıldırım <i>ESOGÜ (Turkey)</i>
10.15-10.30	Field Studies of Temperature Distribution in a Straw Building Wall Dainius Ramukevičius, Raimondas Šadzevičius, Rytis Skominas, Vincas Gurskis <i>Vytautas Magnus University (Lithuania)</i>
10.30-10.45	Prognosis of durability of concrete by evaluating freezing and thawing cycles Raimondas Šadzevičius¹, Dainius Ramukevičius¹, Justyna Dzięcioł², Katarzyna Gabryś² ¹ <i>Vytautas Magnus University (Lithuania)</i> ² <i>Warsaw University of Life Sciences (Poland)</i>
10.45	Coffee break
ONLINE Chairperson assoc. prof. dr. Gediminas Vasiliauskas <u>Log in link to online session, click here</u>	
8.30–8.45	Valuation of the effects of feed supplements on the dairy cows feeding behavior with innovative sensor system Mingaudas Urbutis, Ramūnas Antanaitis, Mindaugas Televičius, Dovilė Malašauskienė <i>Lithuania university of health sciences (Lithuania)</i>
8.45–9.00	Methodical optimisation of drivetrains of agricultural machinery with a special focus on their electrification and energy efficiency Roland Schmetz <i>Rhine Waal University of Applied Sciences (Germany)</i>
9.00–9.15	Construction and application of high heat energy efficiency mobile micro-eco-houses for receiving prophylactic procedures and self-isolation of Coronavirus Covid-19 and other cold viral infections Edmunds Visockis <i>Latvian University of Life Science and Technology (Latvia)</i>
9.15–9.30	Integrated land and water management for sustainable agriculture: regional and global trends Vasily Nilipovskiy <i>State University of Land Use Planning (Russia)</i>
9.30-9.45	Coffee break
9.45-10.00	Experimental studies of workability of hardening cutting edges of parts Olga Sharaya, Alexander Pastukhov, Evgeny Timashov, Dmitry Bakharev <i>Belgorod State Agricultural University named after V. Gorin (Russia)</i>
10.00-10.15	Solutions and effectiveness of water protection structures in forest drainage system maintenance: examples from Latvia Zane Kļaviņa, Ivars Kļaviņš, Arta Bārdule, Zane Lībiete <i>Latvian State Forest Research Institute "Silava" (Latvia)</i>

10.15–10.30	<p>Developing an operation strategy for a hybrid diesel-wind-photovoltaic system used to power an autonomous and remote fishing pond</p> <p>Florin Nenciu, Iulian Voicea, Valentin Vladut <i>INMA Bucharest - National Institute for Research-Development of Machines and Installations designed for Agriculture and Food Industry (Romania)</i></p>
10.30-10.45	<p>Energetic and economic evaluation of fish co-stream processing</p> <p>Kęstutis Venslauskas¹, Kęstutis Navickas¹, Marja Nappa², Revilija Mozūraitė³, Rasa Šližytė³, Vidmantas Župerka¹ ¹<i>Vytautas Magnus University (Lithuania)</i> ²<i>VTT Technical Research Centre of Finland (Finland)</i> ³<i>SINTEF Fisheries and Aquaculture (Norway)</i></p>
10.45-11.00	<p>Influence of biological pretreatment of poultry manure on biochemical methane potential and ammonia emission</p> <p>Mantas Rubežius¹, Rolandas Bleizgys¹, Kęstutis Navickas¹, Kęstutis Venslauskas¹, Egidijus Buivydas², Carlo Greco³ ¹<i>Vytautas Magnus University (Lithuania)</i> ²<i>Lithuanian Energy Institute (Lithuania)</i> ³<i>University of Palermo (Italy)</i></p>
11.00-11.15	<p>Water management priorities in Central Asia - Tobol River case study</p> <p>Józef Mosiej¹, Zh. S. Mustafejev², A. T. Kozyrkajeva², B. E. Tastemirova² ¹<i>Warsaw University of Life Sciences - SGGW (Poland)</i> ²<i>KazNARU (Kazakhstan)</i></p>
POSTERS	
	<p>Investigation of spray drift reduction solutions for agriculture</p> <p>Dainius Steponavičius¹, Remigijus Zinkevičius¹, Ernestas Zaleckas¹, Kristina Lekavičienė¹, Albinas Andriušis¹, Tadas Jomantas¹, Jonas Ignatavičius² ¹<i>Vytautas Magnus University (Lithuania)</i> ²<i>UAB „Nando Labs“ (Lithuania)</i></p>
	<p>Innovative frame wood constructions concept for high energy efficiency ecobuildings</p> <p>Edmunds Visockis, Oskars Vitols, Sandra Gusta, Raimunds Seligovskis <i>Latvian University of Life Science and Technology (Latvia)</i></p>
	<p>Perspectives for the development of the territory in the context of territory planning documents: a case study of Molėtai district municipality</p> <p>Jolanta Valčiukienė, Daiva Juknelienė, Virginija Atkocevičienė <i>Vytautas Magnus University (Lithuania)</i></p>
	<p>Reducing the number of unscheduled repairs of traction gear of EMU trains by introducing modern technical solutions</p> <p>Dmitrijs Gorbacovs, Janis Eiduks, Fjodors Mihailovs <i>Riga Technical University (Latvia)</i></p>
	<p>Microwave enhanced chromium extraction from sewage sludge and soil-sludge mixtures using biodegradable chelants</p> <p>Valdas Paulauskas, Ernestas Zaleckas, Dovile Tumosaitė <i>Vytautas Magnus University (Lithuania)</i></p>

	Uptake of heavy metals by vegetables growing on sewage sludge Valdas Paulauskas¹, Alfreda Kasiulienė², Gerda Junevičiūtė¹ ¹ <i>Vytautas Magnus University (Lithuania)</i> ² <i>Lulea University of Technology (Sweden)</i>
	Operating efficiency of mono and poly PV panels of different orientation in real-world use Stanislavs Gendelis, Daniles Heincis, Jevgenijs Telicko <i>University of Latvia (Latvia)</i>
	Allocation of homogenized bio-solution in cattle manure and digestate effect for neutralization of gas emissions Vilma Naujokienė, Jonas Čėsna, Rolandas Bleizgys <i>Vytautas Magnus University (Lithuania)</i>

2.7.1 Workshop. BRANCHES: Boosting Rural Bioeconomy Networks – Lithuanian-Polish Network	
IN PERSON <u>Auditorium No. 514 Central building (Studentų str. 11, Akademija)</u> Chairperson prof. dr. Algirdas Jasinskas	
8.30–8.45	Welcome and introduction; Bioeconomy networking – presentation of project BRANCHES Algirdas Jasinskas¹, Johanna Routa² ¹ <i>Vytautas Magnus University (Lithuania);</i> ² <i>LUKE (Finland)</i>
8.45–9.00	Presentation of the Lithuanian and Polish regions represented in BRANCHES Algirdas Jasinskas¹, Jarosław Sarnowski², Tomasz Balicki² ¹ <i>Vytautas Magnus University (Lithuania);</i> ² <i>Marshal Office of Warmia and Mazury (Poland)</i>
9.00–9.15	Energy systems in rural areas in the light of recommendations of EIP-Agri Focus Group “Enhancing production and use of renewable energy on the farm” Janusz Gołaszewski¹, Algirdas Jasinskas², Marek Marks¹, Kinga Treder¹ ¹ <i>University of Warmia and Mazury (Poland);</i> ² <i>Vytautas Magnus University (Lithuania)</i>
9.15-9.30	BIOGAL the green biogas plant in Boleszyn Agnieszka Pyzel¹, Andrzej Galiński² ¹ <i>The Warmia and Mazury Agricultural Advisory Center Located in Olsztyn (Poland);</i> ² <i>BIOGAL, Boleszyn (Poland)</i>
9.30-9.45	Evaluation of preparation and use of multi-crop plants for solid biofuel Rita Petlickaitė^{1,2}, Algirdas Jasinskas², Kęstutis Romaneckas², Marius Praspaliauskas¹ ¹ <i>Lithuanian Energy Institute (Lithuania);</i> ² <i>Vytautas Magnus University (Lithuania)</i>

<p>ONLINE</p> <p>Chairperson prof. dr. Algirdas Jasinskas</p> <p><u>Log in link to online session, click here</u></p>	
10.00-10.15	<p>Management of agricultural post-production residues for energy production in rural areas - a case study</p> <p>Maciej Neugebauer, Wojciech Miąskowski, Janusz Gołaszewski <i>University of Warmia and Mazury in Olsztyn (Poland)</i></p>
10.15-10.30	<p>Conditions for the market development of bioenergy in Poland</p> <p>Karolina Babuchowska <i>University of Warmia and Mazury in Olsztyn (Poland)</i></p>
10.30-10.45	<p>Demonstration of successful networking of different national and foreign actors involved in the potato value chain – CN Nidzica (Poland)</p> <p>Tomasz Bieńkowski <i>CN Nidzica (Poland)</i></p>
<p>POSTERS</p>	
	<p>Use of distance methods in cannabis cultivation</p> <p>Jiri Souček¹, Marie Bjelková¹, Patrik Burg¹, Algirdas Jasinskas² ¹ <i>Research Institute of Agricultural Engineering, Prague (Czech Republic)</i> ² <i>Vytautas Magnus University (Lithuania)</i></p>

Section 3.

MULTIFUNCTIONAL APPROACH FOR SUSTAINABLE USE OF BIO-RESOURCES

Wednesday, 22nd September 2021

<p>3.1 Biodiversity and Sustainability of Ecosystems</p> <p>3.2 Monitoring and Management of Environment Quality</p> <p>3.3 Inventory, Management and Productivity of Forest Resources</p> <p>3.4 Management and Conservation of Wildlife Resources</p> <p>3.5 Forest Ecosystem Services</p> <p>3.6 Aqua Farming – Techniques and Methods</p>	
<p>IN PERSON</p> <p><u>Auditorium No. 503 Central building (Studentų str. 11, Akademija)</u></p> <p>Chairpersons: prof. dr. Gediminas Brazaitis, prof. dr. Darius Danusevičius</p>	
8.30–8.45	<p>Possibilities for the diversification of activities of State Forest Enterprise in Lithuania</p> <p>Ekaterina Makrickiene, Robertas Kalvaitis <i>Vytautas Magnus University (Lithuania)</i></p>
8.45–9.00	<p>Pinus sylvestris natural regeneration after gradual continuous felling in Vaccinosa, Myrtillosa and Hylocomiosa</p> <p>Edgars Dubrovskis, Olga Miezite, Liga Liepa, Solveiga Luguza <i>Latvia University of Life Sciences (Latvia)</i></p>
9.00-9.15	<p>Acoustic recording as a method for woodpecker population monitoring</p> <p>Gediminas Brazaitis, Kastytis Šimkevičius, Loreta Bisikirskienė <i>Vytautas Magnus University (Lithuania)</i></p>
9.15-9.30	<p>Autochthonous woodlands with Tilia cordata: genetic diversity and effects of exotic genepools</p> <p>Darius Danusevicius, Jurata Buchovska, Ruta Kembryte, Virgilijus Baliuckas <i>Vytautas Magnus University (Lithuania)</i></p>
9.30-9.45	<p>Climate change and genetic background for species shifts</p> <p>Darius Danusevicius, Jurata Buchovska, Ruta Kembryte <i>Vytautas Magnus University (Lithuania)</i></p>
9.45-10.00	<p>Transpiration rate of Scots pine trees on very oligotrophic soils of normal moisture in relation to different meteorological condition</p> <p>Diana Sidabrienė <i>Vytautas Magnus University (Lithuania)</i></p>
10.00-10.15	<p>Ecological Forest Management in Lithuania</p> <p>Gediminas Brazaitis <i>Vytautas Magnus University (Lithuania)</i></p>
10.15-10.30	<p>Regeneration of Pinus sylvestris L. from seed trees in Vacciniosa and Myrtillosa</p>

	Olga Miežīte, Edgars Dubrovskis, Baiba Jansone, Linards Sisenis <i>Latvia University of Life Sciences and Technologies (Latvia)</i>
10.30-11.00	Coffee break
11.00-11.15	The importance of Green Infrastructure and Ecosystem Services for human well-being: a Lithuanian perspective Evaldas Makrickas, Michael Manton <i>Vytautas Magnus University (Lithuania)</i>
11.15-11.30	Condition and management of trees in park of Smalininkai Lina Straigyte <i>Vytautas Magnus University (Lithuania)</i>
11.30-11.45	Water balance of agriculture commodities production mix; a case study of the Czech Republic 1961 – 2019 Karel Malec, Zdeňka Gebeltoová, Pavel Kotyza, Mansoor Maitah <i>Czech University of Life Sciences Prague (Czech Republic)</i>
11.45-12.00	Spatial planning towards peatland conservation in the Neman River basin Michael Manton <i>Vytautas Magnus University (Lithuania)</i>
ONLINE Chairperson lect. Mantas Pilkauskas <u>Log in link to online session, click here</u>	
8.30–8.45	The Importance of Research on the Introduction of Medicinal (Aromatic) Plants for the Increase of their Diversity and their Rational Use Ona Ragažinskienė , Audrius Sigitas Maruška, Erika Šeinauskienė, Sandra Saunoriūtė <i>Botanical Garden of Vytautas Magnus University (Lithuania)</i>
8.45–9.00	Linking the data of forest ecosystems to the flux tower footprint Joonas Kollo, Steffen Manfred Noe, Ahto Kangur, Allar Padari <i>Estonian university of life sciences (Estonia)</i>
9.00-9.15	Development of young stands after different intensity regeneration fellings Ivars Kļaviņš, Zane Kļaviņa, Zane Lībiete, <i>Latvian State Forest Research Institute "Silava" (Latvia)</i>
9.15-9.30	Reduction of wood basic density in decayed grey alder stems Jānis Liepiņš, Alise Bleive, Andis Lazdiņš, Kaspars Liepiņš <i>Latvian State Forest Research Institute "Silava" (Latvia)</i>
9.30-9.45	Coffee break
9.45-10.00	Heavy metal tolerance and accumulation potential of coastal accessions of trifolium fragiferum, a promising forage species Gederts Ievinsh, Andis Karlsons, Una Andersone-Ozola <i>University of Latvia (Latvia)</i>
10.00-10.15	Practical application of hydrological peatland model

	Edmunds Jansons, Arnis Cirulis, Oskars Java, Andris Lapans <i>Vidzeme University of Applied Sciences (Latvia)</i>
10.15-10.30	N ₂ O and CH ₄ emissions from naturally wet and drained nutrient-rich organic forest soils Aldis Butlers, Arta Bārdule, Gints Spalva, Edgars Muižnieks <i>Latvian State Forest Research Institute "Silava" (Latvia)</i>
10.30-10.45	Soil properties in Scots pine (<i>Pinus sylvestris</i> L.) forest stands in Tervete Nature Park in Latvia Inga Straupe, Aigars Indriksons, Ieva Erdberga, Anna Dūviņa <i>Latvia University of Life Sciences and Technologies (Latvia)</i>
POSTERS	
	Impact of orienteering competitions on ground vegetation of pine forests at the seaside Inga Straupe, Ieva Ivbule <i>Latvia University of Life Sciences and Technologies (Latvia)</i>
	Impact of fish processing by-product amendment on soil properties Rimantas Vaisvalavičius, Rūta Dromantienė, Irena Pranckietienė, Jūratė Aleinikovienė <i>Vytautas Magnus University (Lithuania)</i>
	Multi-cropping approach for agrosystem sustainability Kęstutis Romaneckas, Jovita Balandaitė, Algirdas Jasinskas, Ugnius Ginelevičius <i>Vytautas Magnus University (Lithuania)</i>
	The comparison of soil properties in the multi-cropping system Aušra Rudinskienė, Aušra Marcinkevičienė, Zita Kriaučiūnienė, Rimantas Velička, Robertas Kosteckas <i>Vytautas Magnus University (Lithuania)</i>
	The influence of under-sown cover crops on soil properties in the spring oilseed rape agrocenosis Aušra Marcinkevičienė, Arūnas Čmukas <i>Vytautas Magnus University (Lithuania)</i>
	Bioeconomic aspects of legumes use in laying Hen diets Sallija Cerina, Liga Proskina <i>Latvia University of Life Sciences and Technologies (Latvia)</i>
	Crop quality aspects of potato varieties and breeding clones in organic farming systems Lidija Vojevoda, Ilze Skrabule <i>Institute of Agricultural Resources and Economics (Latvia)</i>
	Organic mulches: physical barrier, organic material with alleopathic effect, source of nutrients for plants and soil fauna Rita Pupalienė, Karolina Armonaitė <i>Vytautas Magnus University (Lithuania)</i>
	Lower storeys of main tree species in pioneer deciduous tree stands of fertile forests habitats Marius Šilingas, Gerda Šilingienė

	<i>Vytautas Magnus University (Lithuania)</i>
	Differences of Secondary Growth of Norway Spruce (<i>Picea abies</i> (L.) Karst) seedlings Simonas Šilingas, Gerda Šilingienė <i>Vytautas Magnus University (Lithuania)</i>
	Development of vegetation after group selective felling in urban pine forest Inga Straupe, Edgars Bergs <i>Latvia University of Life Sciences and Technologies (Latvia)</i>
	Wolf depredation on livestock in Lithuania in 2019-2021 Renata Špinkytė-Bačkaitienė, Petras Adeikis, Kastytis Šimkevičius, Artūras Kibiša <i>Vytautas Magnus University (Lithuania)</i>
	Agricultural land as a multifunctional good Renata Marks-Bielska, Stanisław Bielski <i>University of Warmia and Mazury in Olsztyn (Poland)</i>
	COVID-19-induced changes in outdoor recreation habits in Latvia during winter holiday season of 2020/2021 Edgars Jūrmalis, Arta Bārdule, Zane Lībiete <i>Latvian State Forest Research Institute "Silava" (Latvia)</i>
	Genetic diversity and parentage analysis in use for dna marker-based forest reproductive material traceability system in Lithuania Darius Kavaliauskas, Barbara Fussi, Monika Sirgėdienė, Darius Danusevičius <i>Vytautas Magnus University (Lithuania)</i>
	The influence of heavy metals on the biological activity of sod-podzolic soil Tatyana Guseva, Yury Mazhaisky <i>Ryazan State Medical University named after Academician I. P. Pavlov (Russia)</i>
	Impact of litter turnover on carbon cycling in forests with drained and naturally wet nutrient-rich organic soils in Latvia Guna Petaja, Kaspars Polmanis, Linards Krumšteds <i>Latvian State Forest Research Institute "Silava" (Latvia)</i>

3.1.1 Monitoring and Management of Environment Quality

IN PERSON

Auditorium No. 512 Central building (Studentų str. 11, Akademija)

Chairperson assoc. prof. dr. Jūratė Žaltauskaitė

8.30–8.45	Forage grasses productivity, quality, and response to N-fertilisation Aušra Marcinkevičienė, Zita Kriaučiūnienė, Rimantas Velička, Robertas Kosteckas, Aušra Rudinskienė, Inga Adamonytė <i>Vytautas Magnus University (Lithuania)</i>
8.45-9.00	Sustainable forage crops productivity under climate extremes: resilience, nutritional quality and implications for future management

	Jūratė Žaltauskaitė, Gintarė Sujetovienė, Irena Januškaitienė, Giedrė Kacienė, Austra Dikšaitytė, Diana Miškelytė, Inesa Kniuiipytė, Aušra Marcinkevičienė, Romualdas Juknys <i>Vytautas Magnus University (Lithuania)</i>
9.00-9.15	The effect of recurrent drought on the efficiency of photosynthetic light use by fescue (<i>xFestulolium loliaceum</i> Huds. P. Fourn.) Irena Januškaitienė, Austra Dikšaitytė, Jūratė Žaltauskaitė, Giedrė Kacienė, Gintarė Sujetovienė, Diana Miškelytė, Aušra Rudinskienė, Eglė Danilaitė, Romualdas Juknys <i>Vytautas Magnus University (Lithuania)</i>
ONLINE	
Chairperson assoc. prof. dr. Jūratė Žaltauskaitė	
<u>Log in link to online session, click here</u>	
9.30-9.45	Agriculture land afforestation with fast-growing woody crops: economic evaluation according to yields of previous experimental trials Kristaps Makovskis, Dagnija Lazdina, Dina Popluga <i>Latvian State Forest Research Institute "Silava" (Latvia)</i>
9.45-10.00	Changes in grass sward productivity in 4-field crop rotation depending on the number of rotation cycles Livija Zarina <i>Institute of Agricultural Resources and Economics (Latvia)</i>
POSTERS	
	The effect of recurrent drought on the efficiency of photosynthetic light use by fescue (<i>xFestulolium loliaceum</i> Huds. P. Fourn.) Irena Januškaitienė, Austra Dikšaitytė, Jūratė Žaltauskaitė, Giedrė Kacienė, Gintarė Sujetovienė, Diana Miškelytė, Aušra Rudinskienė, Eglė Danilaitė, Romualdas Juknys <i>Vytautas Magnus University (Lithuania)</i>
	What determines the flowering of Aster l., Heterotheca cass., Miyamayomena kitam. and Symphyotrichum Nees genera plants? Arūnas Balsevičius, Sonata Kazlauskaitė, Indrė Lukšytė, Ričardas Narijauskas <i>Vytautas Magnus University (Lithuania)</i>
	Innovative biological products in organic bean growing technology Sonata Kazlauskaitė¹, Ilona Vagusevičienė¹, Audronė Žebrauskienė¹, Kimete Lluga Rizani², Elena Survilienė³ ¹ <i>Vytautas Magnus University (Lithuania)</i> ² <i>University of Prishtina (Albanian)</i> ³ <i>Kaunas Forestry and Environmental Engineering college (Lithuania)</i>

Section 4

SOCIAL RESEARCH FOR SUSTAINABLE BIOECONOMY AND CLIMATE CHANGE

Wednesday, 22nd September 2021

4.1 Behavioural, Social and Cultural Changes for the Green Deal
4.3 Social Innovations for Bioeconomy Development, including COVID19

IN PERSON

Auditorium No. 515 Central building (Studentų str. 11, Akademija)

Chairperson lect. dr. Aušra Nausėdienė

8.30–8.45	What solutions for waste management? Issues of flows and governance exemplified by the Łódź agglomeration (Poland) Konrad Czapiewski, Damian Mazurek <i>Institute of Geography and Spatial Organization, Polish Academy of Sciences (Poland)</i>
8.45–9.00	Human and social capital as a factors determining development of rural accommodation facilities: the case of Lodz region Tomasz Napierała, Katarzyna Leśniewska-Napierała <i>University of Lodz, Faculty of Geographical Sciences (Poland)</i>
9.00–9.15	Attitudes of the Lithuanian population to household garbage and sewage disposal Gediminas Merkys¹, Nijolė Čiučiulkienė¹, Daiva Bubelienė² ¹ <i>Vytautas Magnus University (Lithuania)</i> ² <i>Seimas of the Republic of Lithuania (Lithuania)</i>
9.15–9.30	The role of green finance in addressing climate change Asta Bendoraitytė, Vilija Aleknevičienė <i>Vytautas Magnus University (Lithuania)</i>
9.30–9.45	Research and innovation as drivers of sustainability and competitiveness of the bioeconomy: a comparative analysis in BIOEAST countries Vlada Vitunskienė, Agnė Dapkuvienė <i>Vytautas Magnus University (Lithuania)</i>
9.45–10.00	The effect of pandemic on labour law Özgür Oğuz¹, Dalia Perkumienė² ¹ <i>Anadolu University (Turkey)</i> ² <i>Vytautas Magnus University (Lithuania)</i>
10.00	Coffee break
POSTERS	
	Tendencies of youth subjective wellbeing assessment in Lithuania: territorial approach Gintarė Vazonienė <i>Vytautas Magnus University (Lithuania)</i>

	<p>Tourism in challenging times. Travellers' behaviour and attitude towards the responsible tourism</p> <p>Deimena Montvydaitė, Daiva Labanauskaitė <i>Klaipėda University (Lithuania)</i></p>
	<p>Forecasting the population of retirement age in rural Russia</p> <p>Tatiana Blinova, Svetlana Bylina <i>Institute of Agrarian Problems of the Russian Academy of Sciences (Russian Federation)</i></p>
	<p>Analysis of sustainable dairy farming practices in the EU and foreign countries</p> <p>Jolita Greblikaitė¹, Judita Astrovienė¹, Neringa Gerulaitienė², Rolandas Rakštys¹ <i>¹Vytautas Magnus University (Lithuania)</i> <i>²Kaunas University of Technology (Lithuania)</i></p>
	<p>Renovation of multi-apartment residential buildings in Latvia</p> <p>Intra Lūce¹, Iveta Amoliņa², Mārcis Neibergs¹ <i>¹College of Law (Latvia)</i> <i>²Riga Technical University (Latvia)</i></p>
	<p>Green economy as a new opportunity to stimulate export and attract investments: The cases of Georgia and Lithuania</p> <p>Vazha Verulidze¹, Astrida Miceikienė² <i>¹Batumi Shota Rustaveli State University (Georgia)</i> <i>²Vytautas Magnus University (Lithuania)</i></p>
	<p>Afforestation as a type of peatland recultivation and assessment of its affecting factors in the reduction of GHG emissions</p> <p>Emīls Mārtiņš Upenieks, Agnese Rudusāne <i>Latvian State Forest Research Institute "Silava" (Latvia)</i></p>
	<p>Impact of nitrogen tax on nitrogen use in Lithuania</p> <p>Aušra Nausėdienė¹, Andreas Meyer-Aurich², Astrida Miceikienė¹ <i>¹Vytautas Magnus University (Lithuania)</i> <i>²Leibniz Institute for Agricultural Engineering and Bioeconomy (Germany)</i></p>
	<p>EU multi-annual financial framework investments for the green transition</p> <p>Ludmila Aleksejeva, Zaiga Vitola, Inta Ostrovska <i>Daugavpils University (Latvia)</i></p>

4.2 Rethinking Agricultural and Rural Development Policies and Institutional Frameworks

IN PERSON

Auditorium No. 506 Central building (Studentų str. 11, Akademija)

Chairperson assoc. prof. dr. Anastasija Novikova

8.30–8.45	<p>Youth opinion about work in agriculture: evidence from Lithuania</p> <p>Laura Girdžiūtė, Erika Besusparienė, Aušra Nausėdienė, Anastasija Novikova <i>Vytautas Magnus University (Lithuania)</i></p>
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8.45-9.00	<p>Evolution of rural development in Turkey</p> <p>Fatma Handan Giray <i>Eskisehir Osmangazi University (Turkey)</i></p>
9.00-9.15	<p>Progressing circular and sustainable bioeconomy and energy systems in rural areas</p> <p>Janusz Gołaszewski¹, Algirdas Jasinskas², Marek Marks¹, Kinga Treder¹ ¹<i>University of Warmia and Mazury (Poland);</i> ²<i>Vytautas Magnus University (Lithuania)</i></p>
9.15-9.30	<p>Long-term vision for rural development and critical enablers for achieving it - case of Mazowieckie region</p> <p>Paweł Chmieliński, Barbara Wieliczko <i>European Rural Development Network (Poland)</i></p>
9.30-9.45	<p>Young farmer support in the Czech Republic</p> <p>Kotýza Pavel, Brož David, Smutka Luboš, Malec Karel <i>Czech University of Life Sciences Prague (Czech Republic)</i></p>
9.45	<p>Coffee break</p>
<p>ONLINE</p> <p>Chairperson assoc. prof. dr. Jurgita Baranauskienė</p> <p><u>Log in link to online session, click here</u></p>	
10.00–10.15	<p>Knowledge and innovation partnerships for sustainable territorial development</p> <p>Sandra Sumane, Anda Adamsonė-Fiskovica, Linda Cirule, Mikelis Grivins, Emils Kilis, Marija Stefanija Skudra, Talis Tisenkopfs <i>Baltic Studies Centre (Latvia)</i></p>
10.15-10.30	<p>Models of vertical cooperation: the experience of Eastern European countries</p> <p>Jan Žukovskis, Julius Ramanauskas, Vitalij Zinovchuk <i>Vytautas Magnus University (Lithuania)</i></p>
10.30-10.45	<p>Changes in accessibility of educational infrastructure in rural areas - evidence from Poland</p> <p>Agnieszka Wojewódzka-Wiewiórska, Maciej Stawicki <i>Warsaw University of Life Sciences (Poland)</i></p>
10.45-11.00	<p>Factors for sustainable developments of regions: case of Latvia</p> <p>Svetlana Polovko, Gunta Grinberga-Zalite <i>Latvia University of Life Science and Technologies (Latvia)</i></p>
11.00-11.15	<p>Coffee break</p>
11.15-11.30	<p>Comparative analysis of the system and mechanisms to support the development of agri-food exports in Ukraine and the EU</p> <p>Iryna Tytarchuk, Yuliia Nehoda, Yelyzaveta Bieliaieva, Taliat Bielialov <i>National University of Kyiv-Mohyla Academy (Ukraine)</i></p>

11.30-11.45	<p>Comparison of farms focusing on plant production in the production and economic conditions of the Slovak Republic and Lithuania</p> <p>Patrik Rovný, Rebecca Brodňanová, Katarína Bírová <i>Slovak University of Agriculture in Nitra (Slovakia)</i></p>
11.45-12.00	<p>Innovative means of formation of the concept of assessment of sustainable development in the system: enterprise - industry - region – state</p> <p>Daniela Hupková, Yelyzaveta Synetska, Dobošová Eudmila, Erika Loučanová <i>Slovak University of Agriculture in Nitra (Slovak Republic)</i></p>
12.00-12.15	<p>Multiperiodic optimization model of investment project of acquisition of means of mechanization</p> <p>Jozef Repisky <i>Slovak University of Agriculture in Nitra (Slovak Republic)</i></p>
POSTERS	
	<p>Methodological approaches for the evaluation of projects innovations</p> <p>Antanas Maziliauskas, Rasa Pakeltienė, Jurgita Baranauskienė <i>Vytautas Magnus University (Lithuania)</i></p>
	<p>Revenue of rural municipalities as an instrument for increasing financial autonomy</p> <p>Laima Skauronė <i>Vytautas Magnus University (Lithuania)</i></p>
	<p>Fostering agriculture and rural development by decision support systems</p> <p>Vilma Atkočiūnienė, Sigitas Vaitkevičius <i>Vytautas Magnus University (Lithuania)</i></p>
	<p>Biogas industry characteristics in Latvia</p> <p>Janis Millers, Irina Pilvere <i>Latvia University of Life Sciences and Technologies (Latvia)</i></p>
	<p>Innovation & Knowledge Exchange including EIP-AGRI of the new European CAP Network</p> <p>Pacôme Elouna Eyenga¹, Antanas Maziliauskas², Rasa Pakeltienė² ¹<i>EU CAP Network Innovation & Knowledge Exchange – EIP-AGRI (Belgium)</i> ²<i>Vytautas Magnus University (Lithuania)</i></p>

<p>4.4 Smart Villages: Alternative Models for Development of Rural Areas 4.4.1 Challenges of Smart Rural Tourism Development (Project “SMARTRURAL. Towards Smart Rural Tourism Development”) 4.5 Trends of Market Development and Challenges for Bio-Based Products in Sustainable Value Chains</p>	
<p>IN PERSON</p> <p><i>Auditorium No. 509 Central building (Studentų str. 11, Akademija)</i></p> <p>Chairperson assoc. prof. dr. Rasa Pranskūnienė</p>	
8.30–8.45	<p>Theming in smart villages context</p> <p>Ingrida Kazlauskienė <i>Vytautas Magnus University (Lithuania)</i></p>
8.45-9.00	<p>Discussing the concept: Smart rural tourism</p> <p>Rasa Pranskūnienė <i>Vytautas Magnus University (Lithuania)</i></p>
<p>ONLINE</p> <p>Chairperson assoc. prof. dr. Rasa Pranskūnienė</p> <p><u>Log in link to online session, click here</u></p>	
9.30-9.45	<p>Smart villages in Portugal: the case of Penamacor</p> <p>Anabela Dinis <i>University of Beira Interior (Portugal)</i></p>
9.45-10.00	<p>Learning for employment - analysis of the components forming the successful product innovation in entrepreneurship</p> <p>Līga Braslīna, Martins Danusevics, Anda Batraga, Aija Legzdina <i>University of Latvia (Latvia)</i></p>
10.00-10.15	<p>Sustainable rural tourism - best practices from the Czech Republic - Hotel Na Farmě</p> <p>Liběna Jarolímková, Blanka Bejdáková, Jiří Vaníček <i>Prague University of Economics and Business (Czech Republic)</i></p>
<p>POSTERS</p>	
	<p>Formation of sustainable pricing policy for organic product certification services</p> <p>Dalia Juočiūnienė <i>Vytautas Magnus University (Lithuania)</i></p>
	<p>Decision making process in B2B: main factors influencing commercial solutions in agriculture</p> <p>Lina Pilelienė, Kęstutis Rėklaitis <i>Vytautas Magnus University (Lithuania)</i></p>

	Sustainable models of rural development Nataliia Maievska <i>Polissya National University (Ukraine)</i>
	Defining the European Heritage Marketer Rasa Pranskūnienė <i>Vytautas Magnus University (Lithuania)</i>
	Between smartness and storytelling Erika Zabulionienė, Rasa Pranskūnienė <i>Vytautas Magnus University (Lithuania)</i>

4.6 Resilient and Sustainable Food Systems Development	
IN PERSON	
<u>Auditorium No. 516A Central building (Studentų str. 11, Akademija)</u>	
Chairperson prof. dr. Vilma Atkočiūnienė	
8.30–8.45	Strengthening the sustainability of the local food system by choosing ecolocalization scenario Vilma Atkočiūnienė <i>Vytautas Magnus University (Lithuania)</i>
8.45–9.00	Towards a strategic approach to research and innovation in Central and Eastern Europe for food system transformation Paweł Chmieliński <i>European Rural Development Network (Poland)</i>
9.00–9.15	Key issues in measuring environmentally sustainable growth of agriculture Lina Lauraitienė, Vlada Vitunskienė <i>Vytautas Magnus University (Lithuania)</i>
ONLINE	
Chairperson prof. dr. Vilma Atkočiūnienė	
Log in link to online session, click here	
9.30–9.45	The role of local food systems in rural communities Līga Paula, Dace Kaufmane, Līga Proškina, Kaspars Naglis-Liepa, Karina Beinarovica <i>Latvia University of Life Sciences and Technologies (Latvia)</i>
9.45-10.00	Food self-sufficiency in Latvia: Local food versus imported food Aivis Bikernieks <i>Latvia University of Life Sciences and Tehnologies (Latvia)</i>

10.00-10.15	<p>COVID19 impacts on the dairy supply chain in Estonia</p> <p>Anne Poder, Ants-Hannes Viira, Merje Kaaret, Rando Värnik <i>Estonian University of Life Sciences (Estonia)</i></p>
10.15	Coffee break
POSTERS	
	<p>Peculiarities of organization and marketing of short food supply chains</p> <p>Rasa Pakeltienė, Gintarė Vaznonienė <i>Vytautas Magnus University (Lithuania)</i></p>
	<p>Comparative analysis of bio-business models and justification of their management improvement</p> <p>Judita Astrovienė, Jolita Greblikaitė <i>Vytautas Magnus University (Lithuania)</i></p>

Notes



VMU AA Campus Plan

1. **Central Building** (Faculty of Agronomy, Faculty of Forest Sciences and Ecology)
2. **II Building** (Faculty of Agricultural Engineering)
3. **III Building** (Faculty of Bioeconomy Development, Faculty of Water and Land Management)
4. **IV Building** (Agricultural Science and Technology Park, Valley "Nemunas" Administration)
5. **VI Building**
6. **VII Building** (Institute of Forest Management and Forestry Institute)
7. **VIII Building** (Open Access Research Center)
8. **I Dormitory**
9. **II Dormitory**
10. **III Dormitory** (Kindergarten-nursery)
11. **IV Dormitory** (Health Care Center PSPC)
12. **V Dormitory** (Subdistrict administration, shop)
13. **VII Dormitory**
14. **Exhibition Pavilion No.1**
15. **Exhibition Pavilion No.2**
16. **Exhibition Pavilion No.3**
17. **Communication and Technology Transfer Center**

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