



**Latvia University
of Life Sciences
and Technologies**

**21st International Scientific Conference
STUDENTS ON THEIR WAY TO SCIENCE
(undergraduate, graduate, post-graduate students)
Collection of Programmes
April 24th, 2026**

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PLENARY SESSION

10:00 Opening of the Conference	Moderator: Joseph Horgan
Opening address by Vice-Rector Gatis Vitols, Professor, LATVIA UNIVERSITY OF LIFE SCIENCES AND TECHNOLOGIES	
10.10 – 12.15 Plenary Session	
CIRCULAR ECONOMY IMPLEMENTATION IN THE AGRICULTURAL SECTOR: EGGSHELLS' APPLICATION / Vjačeslavs Kočetkovs, Dr.eng., Commercial Director, BALTICOVO, JSC.	
ANALYSIS OF MEDIA LITERACY ELEMENTS IN LATVIAN STATE EDUCATION STANDARDS/ Joseph Horgan, M.Ed. Doctoral student, UNIVERSITY OF LATVIA, Lecturer, LATVIA UNIVERSITY OF LIFE SCIENCES AND TECHNOLOGIES	
GROWTH DYNAMICS OF SWEET CHERRY (<i>PRUNUS AVIUM</i> L.) CLONES IN LATVIA / Eva Daniela Pokule, Mudrīte Daugaviete, Solveiga Luguza, LATVIA UNIVERSITY OF LIFE SCIENCES AND TECHNOLOGIES	
RETHINKING SUSTAINABILITY COMMUNICATION PRACTICES IN SMALL AND MEDIUM-SIZED ENTERPRISES / Ilze Vīķe, Mg.sc.soc., Mg., sc. Com., and Doctoral student, RIGA STRADINS UNIVERSITY	
AWA BANCHI: TOKUSHIMA'S ANCIENT FERMENTED TEA AND ITS UNIQUE CULTURAL LEGACY / Hiroshi Sakata, Associate Professor, UNIVERSITY OF TOKUSHIMA, JAPAN	
FLOOD RISK MAPPING AND DEVELOPMENT OF CRISIS MANAGEMENT SCENARIOS FOR THE CITY OF RUJIANA / Miks Valters Vīķis, Ainis Lagzdīņš, LATVIA UNIVERSITY OF LIFE SCIENCES AND TECHNOLOGIES	
PFOS AND PFOA CONCENTRATIONS IN THE DAUGAVA RIVER BASIN / Jana Grave, Jovita Pilecka-Ulcugaceva, Inga Grinfelde, LATVIA UNIVERSITY OF LIFE SCIENCES AND TECHNOLOGIES	

Engineering and Civil Engineering

<i>Moderator: Janis Kjakste, Sandra Gusta</i>
THE IMPACT OF VOLATILE ORGANIC COMPOUNDS (VOCS) EMITTED FROM RECYCLED BUILDING MATERIALS ON INDOOR ENVIRONMENTAL QUALITY AND HUMAN HEALTH/ Andris Stankevics, Sandra Gusta, Raitis Brencis
EFFECT OF AIR HUMIDITY ON CHITOSAN ELECTROSPINNING PRODUCTIVITY AND FIBER LAYER FORMATION/ Darja Aleksejeva, Laura Andze
IMPACT OF WASTE PAPER ADDITIVE ON WOODEN PELLET PRODUCTION AND COMBUSTION PROPERTIES/ Jānis Roberts Kamšs, Aivars Kaķītis
EXPERIMENTAL PERFORMANCE OPTIMIZATION OF A VACUUM PUMP BY VARIATION OF ROTOR DIAMETER AND THICKNESS/ Martins Zirnitis, Daina Kanaška
IMPROVING THE ACCURACY OF A MAGNETOMETER SENSOR WITH DIGITAL FEEDBACK/ Toms Cukurs, Vitālijs Osadčuks
OPPORTUNITIES OF WIRELESS CHARGING FOR ELECTRIC VEHICLES/ Mairis Viliskis, Gints Birzietis

Environment and Water Management

Moderator: Linda Grinberga
IMPACT OF DRAINAGE RUNOFF USED FOR IRRIGATION ON SURFACE WATER QUALITY / Arturs Legzdins, Ieva Siksnāne, Arturs Veinbergs
INFLUENCE OF FOREST STAND SPECIES COMPOSITION ON RUNOFF WATER QUALITY / Anna Troika, Ieva Siksnane, Arturs Veinbergs
RESEARCH OF SODIUM AND MAGNESIUM CONCENTRATIONS AND SEDIMENTS IN LIEPĀJA LAKE WATERS / Ingus Silins, Inga Grinfelde, Jovita Pilecka-Ulcugaceva
THE DISTRIBUTE OF IRON AND COBALT CONTAMINATION IN LAKE LIEPĀJA AND ITS SEDIMENTS / Markuss Ernestsons, Inga Grinfelde, Jovita Pilecka-Ulcugaceva
LEAD AND ALUMINIUM CONTAMINATION IN THE SEDIMENTS AND WATER OF LAKE LIEPĀJA AND THEIR POTENTIAL IMPACT ON THE ECOSYSTEM / Ieva Rudzite, Jovita Pilecka-Ulcugaceva, Inga Grinfelde
ARSENIC AND ANTIMONY CONTAMINATION IN WATER AND SEDIMENTS OF LIEPĀJA LAKE / Patriks Voicehovics, Inga Grinfelde, Jovita Pilecka-Ulcugaceva
DISTRIBUTION OF CHROMIUM AND MANGANESE IN THE WATER AND SEDIMENTS OF LAKE LIEPAJA / Elvita Legzdina, Inga Grinfelde, Jovita Pilecka-Ulcugaceva
CONCENTRATION OF LITHIUM (LI), BORON (B) AND MOLYBDENUM (MO) IN THE WATER AND SEDIMENTS OF LAKE LIEPĀJA / Niks Gravitis, Inga Grinfelde, Jovita Pilecka-Ulcugaceva
NICKEL AND COPPER CONCENTRATION AND THEIR EFFECT ON LAKE LIEPĀJA WATERS AND SEDIMENTS / Karlis Lacis, Jovita Pilecka-Ulcugaceva, Inga Grinfelde

Agriculture & Food Science

Moderator: Irina Sivicka
DISEASES OF FABA BEAN LEAVES / Evelīna Bružus, Biruta Bankina
CULTIVATION OF TOBACCO IN LATVIA: PAST AND FUTURE / Daniils Aleksejevs, Irina Sivicka
COMPARATIVE EVALUATION OF ATMOSPHERIC AND VACUUM FRYING ON QUALITY PARAMETERS OF CARROT, SWEET POTATO AND FRYING OIL / Reina Gorkija, Liene Ozola
DEVELOPMENT OF INNOVATIVE READY-TO-EAT MEALS FOR INFANTS FROM 8 MONTHS OF AGE / Aleksandra Duboveca, Liene Ozola
QUALITY ASSURANCE IN SAUERKRAUT PRODUCTION / Elīna Zelmene, Liene Ozola
CO-FERMENTATION OF YEAST AND LACTIC ACID BACTERIA FOR THE PRODUCTION OF WHEY-BASED BEVERAGE / Keerthana Lakka, Inga Ciproviča
BIODEGRADABLE PACKAGING SOLUTIONS AS AN ALTERNATIVE FOR CARROT AND BEETROOT JELLY CANDIES / Syam Pravallika Bandaru, Klinta Kārkliņa, Sandra Muižniece-Brasava
RESEARCH ON BIOLOGICALLY ACTIVE COMPOUNDS IN MICROGREENS / Elise Sīpeniece, Zanda Krūma
FROZEN SPINACH DESSERT / Samanta Volkova, Jeļena Zagorska
DETERMINATION OF INULIN CONTENT IN FRESH AND FERMENTED DANDELION (TARAXACUM OFFICINALE) ROOT / Līga Zinta Zute, Liene Jansone

Forestry

Moderators: Marta Skavronska, Solveiga Luguza
POSSIBILITIES OF CULTIVATION OF MYRICA GALE L. IN LATVIA / Ritvars Sluga, Solveiga Luguza
CORNUS MAS CULTIVATION POSSIBILITIES IN LATVIA / Elizabete Kandere, Solveiga Luguza
OCCURRENCE OF HIMALAYAN BALSAM (IMPATIENS GLANDULIFERA ROYLE) IN BLACK ALDER FORESTS IN LIEPĀJA / Alta Egliņa, Inga Straupe, Ieva Erdberga
ASSESSMENT OF MONUMENTAL TREES IN ĶEKAVAS MUNICIPALITY / Marta Skavronska, Solveiga Luguza
GROWTH DYNAMICS OF SWEET CHERRY (PRUNUS AVIUM L.) CLONES IN LATVIA / Eva Daniela Pokule, Solveiga Luguza
PUBLIC UNDERSTANDING OF HUNTING PRACTICES / Markuss Stankūns, Artūrs Rūdulis, Edgars Dubrovskis
RAPID DETECTION OF WINDTHROWS IN FOREST CRISIS MANAGEMENT / Raimonds Bračs, Aivars Ratkevičs
EFFECTS OF HYDROLOGICAL REGIME MISCLASSIFICATION ON FOREST MANAGEMENT MODELING / Sigita Mūrniece, Aivars Ratkevičs
REMOTE SENSING RELIABILITY IN DETECTING IPS TYPOGRAPHUS DAMAGE: THE INFLUENCE OF STAND PROPERTIES IN HETEROGENEOUS MANAGED FORESTS / Jānis Pakers, Uldis Egle
APPLICATION OF REMOTE SENSING DATA TO IMPROVE THE CALCULATION OF FOREST HARVESTING SITE DIFFICULTY INDEX / Varis Radvinskaitis, Ainārs Grīnvalds, Ivars Bergmanis
DOES AGROFORESTRY HAVE POTENTIAL IN LATVIA? / Ksenija Madžuga, Uģis Ūzulnieks
DRIVERS OF FOREST LAND, MANAGEMENT AND POLICY CHANGES IN LATVIA / Daniels Beikmanis, Inga Straupe

Land Management and Geodesy; Geoinformatics and Remote Sensing, Landscape Architecture

Moderator: Vita Celmiņa
LANDSCAPE RESEARCH OF THE REHABILITATION CENTRE “LIGATNE”/ Annija Bremane, Madara Markova
TRANSFORMATION OF THE KAROSTA CANAL PROMENADE/ Annija Zomerfelde, Madara Markova
A MULTI-DIMENSIONAL ACCESSIBILITY MATRIX AS A TOOL FOR EVALUATING URBAN RIVERFRONT QUALITY: THE CASE OF THE DAUGAVA RIVER IN RIGA/ Marija Luīze Ratniece, Madara Markova
THE IMPORTANCE OF PHOTOGRAMMETRY AND LASER SCANNING TECHNOLOGIES IN THE DOCUMENTATION OF BUILDINGS AND CULTURAL HERITAGE/ Valts Zvirgzds, Vita Celmiņa
GEOSPATIAL DATA IN URBAN PLANNING: IDENTIFYING URBAN OVERHEATING RISK AREAS/ Evija Rudzīte, Armands Celms
SPATIAL ANALYSIS OF URBAN HEAT ISLANDS IN CITY OF JELGAVA/ Ieva Beāte Gerasimjonoka, Armands Celms
FLOOD RISK MAPPING AND DEVELOPMENT OF CRISIS MANAGEMENT SCENARIOS FOR THE CITY OF RUJIANA/ Miks Valters Vīķis, Ainis Lagzdīņš
THE USE OF UNMANNED AERIAL VEHICLES FOR REMOTE ASSESSMENT OF BRIDGE CONDITION/ Ainārs Sīlis, Ivars Bergmanis
THE IMPACT OF HYDROPOWER PLANTS ON HYDROLOGICAL REGIME AND FLOODPLAIN EXPANSION IN THE DUBNA RIVER/ Krista Zeiliņa, Ainis Lagzdīņš
SPATIAL DATA COMPATIBILITY BETWEEN LATVIA AND ESTONIA/ Ella Feldmane, Armands Celms
IMPACT OF A REDUCED FINAL FELLING AGE ON RUNOFF AND WATER QUALITY: MODELLING HYDROCHEMICAL PROCESSES IN THE BĒRZE RIVER CATCHMENT/ Laura Voitiņa, Artūrs Veinbergs
TOWARDS STANDARDISED VOLUME CALCULATIONS FOR MINERAL EXTRACTION / Agija Ziberte, Ivars Bergmanis
USE OF LIDAR DATA TO IMPROVE SURVEYOR WORK EFFICIENCY/ Edgars Kauranens, Uldis Egle

IMPROVEMENT OF THE LOCAL GEODETIC NETWORK IN THE NORTHERN
PART OF DOBELE / **Sandis Āboliņš, Toms Līdumnieks**

WIND TURBINE TOWER DEFORMATION MONITORING/ **Ģirts Eglītis,
Armands Celms**

Social Sciences

Moderator: Laura Dubkēviča
HISTORICAL ANALYSIS OF TECHNOLOGY BUBBLES: THE AI CASE STUDY/ Nikita Krasņikovs, Gunita Mazūre
FUTURE CAREER PLANS OF LATVIA UNIVERSITY OF LIFE SCIENCES AND TECHNOLOGIES STUDENTS AND THE FACTORS INFLUENCING THEM / Viktorija Kuzņecova, Voldemārs Bariss
THE IMPACT OF GAMES ON SOCIALIZATION, LEARNING PROCESSES AND COGNITIVE DEVELOPMENT IN THE DIGITAL AGE / Katrīna Papkovska-Jasjukeviča, Aļona Irmeja
READING COMPREHENSION AS A PREDICTOR OF MATHEMATICAL PROBLEM-SOLVING: A DESCRIPTIVE STUDY OF SIXTH-GRADE STUDENTS / Reyhan Tercan, Ayça Akin, Sinem Sezer Evcan
COLLABORATION OPPORTUNITIES IN THE ESTABLISHMENT OF A BIOREGION IN NORTH KURZEME: PROBLEMS AND SOLUTIONS / Amanda Lejniece, Dace Kaufmane
OVERCOMING POVERTY AS A PILLAR OF SUSTAINABLE DEVELOPMENT/ Olga Borisova, Regīna Baltušiņa
THEORETICAL ASPECTS OF CREATIVITY / Niks Murāns, Ginta Kronberga
INTEGRATION OF SUSTAINABILITY CRITERIA INTO THE ANALYSIS OF ECONOMIC GROWTH INDICATORS / Annija Beināroviča, Līga Proškina
THE ROLE OF SUSTAINABLE FINANCE IN ACHIEVING THE SUSTAINABLE DEVELOPMENT GOALS / Agate Bērziņa, Kaspars Naglis-Liepa
GENDER-BASED PRICE DIFFERENCES IN HYGIENE PRODUCTS AND THEIR IMPACT ON SUSTAINABLE GENDER EQUALITY IN LATVIA / Marija Lukina, Modrīte Pelše
HOW INFORMATION DISORDER AROUND NIGERIA'S FARMER-HERDER CONFLICT THREATENS NATIONAL FOOD SECURITY / Temitope Francis, Arkadiusz Dudziak
ADVANCING CIRCULAR HOUSEHOLDS IN LEISURE AND TRAVEL: A RESEARCH LANDSCAPE ANALYSIS AND FUTURE AGENDA / Chathrika Kawmadi Lokuliyana, Aija van der Steina
THE ROLE OF SOCIAL ENTERPRISES IN BUILDING SOCIAL CAPITAL IN THE EDUCATION SECTOR IN ZEMGALE / Amanda Siliņa, Lāsma Līcīte-Ķurbe, Baiba Blomniece Jurāne

DIGITAL MONITORING OF AGRICULTURAL LANDS: A COMPARATIVE ANALYSIS
OF THE CASES OF TÜRKIYE AND LATVIA / **Nasir Ahmad Hamidy, Sandija Zēverte-
Rivža**

Veterinary Medicine

Moderators: Alise Eksta, Laima Liepa
ASSOCIATION BETWEEN THE SEVERITY OF CLINICAL SIGNS AND LABORATORY PARAMETERS IN DOGS WITH LYME BORRELIOSIS IN ESTONIAN VETERINARY PRACTICE / Evija Valte, Kaspars Kovaļenko, Gundega Mūrniece
DETECTION OF <i>MYCOPLASMA BOVIS</i> IN LUNG SAMPLES OF CATTLE SLAUGHTERED AT AN ABATTOIR / Laura Bite, Lelde Tītmane
ASSOCIATION BETWEEN GENOMIC INBREEDING LEVELS AND FERTILITY AFFECTING HAPLOTYPE OCCURRENCE IN A HOLSTEIN DAIRY FARM / Gustavs Dravants, Ilga Šematoviča
EFFECT OF APPLIED PROBIOTICS OF A LIVER IN A ROSS 308 BROILER CHICKEN / Zlata Štaube, Sabīne Eglīte
THE EPIDEMIOLOGICAL SITUATION OF AUJESZKY'S DISEASE IN THE WILD BOAR (<i>SUS SCROFA</i>) POPULATION IN THE MUNICIPALITIES OF MADONA, TALSI, TUKUMS, OGRE, AND SILDUS / Anastasija Labašinska, Linda Valkovska
FIRST RECORD OF THE TREMATODE <i>CATHAEMASIA HIANIS</i> IN BLACK STORKS (<i>CICONIA NIGRA</i>) IN LATVIA / Ance Bīrone, Linda Valkovska, Alīna Kļaviņa, Dace Keidāne
SUSPECTED CANINE LEPTOSPIROSIS OUTBREAK IN LATVIA: A RETROSPECTIVE STUDY / Anete Brokāne, Daira Viškere
EVALUATION OF THE SCHIRMER TEAR TEST I AND TEAR FERNING PARAMETERS IN DOGS DURING THE GENERAL ANAESTHESIA / Grēta Elīza Gaile, Līga Kovaļčuka
TAP BLOCK VERSUS KETAMINE CRI FOR CANINE MASTECTOMY: A PILOT SIGNAL OF IMPROVED RESPIRATORY MANAGEABILITY AND INTRAOPERATIVE HEMODYNAMICS / Vesta Čiudaitė, Ieva Šidlauskaitė
DIAGNOSTIC SIGNIFICANCE OF SYNOVIAL FLUID LACTATE IN EQUINE COFFIN AND FETLOCK JOINT OSTEOARTHRITIS BASED ON ARTIFICIAL INTELLIGENCE-GENERATED OBJECTIVE ASSESSMENT OF MOVEMENT ASYMMETRY / Lema Lungytė, Indrė Poškienė

Skills for Global Communication

Moderator: Joseph Horgan, Tatjana Sinkus
THE FUTURE DEPENDS ON OUR CHOICES: A FUTURE-ORIENTED READING OF PRESIDENT ALAR KARIS' INDEPENDENCE DAY SPEECH (2026) / Eliis Kris Kristel, Evert Raudnõmm
CULTURAL EXCHANGE THROUGH DIGITAL MEDIA / Julia Domagalska, Natalia Lubińska
USE OF BOT ACCOUNTS TO CREATE THE IMPRESSION OF BAND WAGON / Sushant Joshi
GENERATIONAL MEDIA USE: DIFFERENCES, SIMILARITIES, AND CHANGING IDENTITIES / Emma Jaanson, Kayla Diener
DIGITAL MEDIA INFLUENCE ON PUBLIC OPINION AND BEHAVIOR / Monta Paula Leitlande, Ketija Bērskalēja
ROLE OF CRITICAL UNDERSTANDING OF SELF IN PERSONAL HEALTH AND PERSONAL DEVELOPMENT / Lauryna Staniulyte
PREVALENCE OF RHETORICAL TECHNIQUES IN SOCIAL MEDIA ADVERTISING / Agnieszka Cymerys, Martyna Olszewska
BRIDGING CULTURE AND INTERCULTURAL COMMUNICATION COMPETENCE FOR SUCCESSFUL CAREER DEVELOPMENT / Hassan Chahrour, Konstandin Sargsyan
NAVIGATING COMMUNICATION CHALLENGES IN MULTICULTURAL TEAMS / Amēlija Sudmale, Luīze Boļšakova, Evelīna Diāna Kundziņa
THE RISKS OF FULLY AI-GENERATED NEWS STORIES / Aušra Mikučionyte
MEDIA EXPERIENCE AND GENERATIONAL IDENTITY – DIFFERENCES AND SIMILARITIES BETWEEN MY GENERATION AND MY PARENTS' GENERATION / Olga Weselovska
CRITICAL REVISION ABOUT MAIN REASONS TO THINK CRITICALLY / Gabriele Germanaite
COMMUNICATION CHALLENGES IN MULTICULTURAL TEAMS: STRATEGIES FOR SUCCESS / Inga Tolstokorova, Edita Norvile
DISINFORMATION METHODS IN THE MANIPULATION OF ELECTIONS / Tanha Mashrufa