

Biosystems Engineering 2019, SCHEDULE

Day	Time			
Wednesday 08.05.2019	9.00 – 10.00	Registration and morning coffee (Estonian University of Life Sciences, Institute of Technology, 56 Kreutzwaldi Str., Tartu) Room A202		
	10.00 – 10.15	OPENING: (Institute of Technology, room A204) Rector of Estonian University of Life Sciences Prof. Mait Klaassen Opening remarks and welcome: Director of Institute of Technology Margus Arak		
		PLENARY SESSION (Institute of Technology, room A204):		
	10.15 – 10.45	Advances In X-ray Computed Tomography Technology And Their Applications In Life Sciences – Dr. Andre Beerlink , YXLON International GmbH, Germany		
	10.45 – 11.15	Farm Health and Safety Adoption In Ireland through Engineering and Behaviour – Prof. John McNamara , University College Dublin, Ireland		
	11.15 – 11.45	Practical Insights on Sustainability Challenges Incurred in the Agri-Food Sector – Prof. Rajeev Bhat , Estonian University of Life Sciences, Estonia		
	11.45 – 12.15	ICT related agritechologies, trends and new challenges – Prof. István Szabó , Szent Istvan University, Hungary		
	12.15 – 13.30	LUNCH Institute of Technology, room B135		
	13.30 – 15.10	ERGONOMICS AND ERGODESIGN (Room B200) Chair: Prof. John McNamara	VEHICLES AND FUELS (Room B119) Chair: Assoc.Prof. Risto Ilves	FOOD SCIENCE AND TECHNOLOGY (Room A204) Chair: Prof. Rajeev Bhat
		Work Posture Load Evaluation in Medium Size Metal Processing Enterprise in Latvia – H. Kalkis , Z. Roja, K. Bokse, S. Babris, I. Roja: Latvia	Combustion characteristics of compression ignition engine operating on rapeseed oil-diesel fuel blends – J. Čedík , M. Pexa, D. Mader and R. Pražan: Czech Republic	Utilization of image analysis for description of drying characteristics of selected tropical fruits – M. Wasserbauer, D. Herak , C. Mizera and P. Hrabec: Czech Republic
		Determining the influence of factors on retroreflective properties of traffic signs – M. Khrapova : Czech Republic	Combustion studies of a non-road diesel engine with several alternative liquid fuels– M. Hissa , S. Niemi, K. Sirviö, A. Niemi, T. Ovaska, O. Nilsson, S. Heikkilä and N. Vanhala: Finland	Surface wax composition of wild and cultivated Northern berries – L. Klavins , J. Kviessis and M. Klavins: Latvia
		Use of Qualimetry Method in Production Labour Estimation – D. Maksimov , H. Kalkis, Y. Perevoschikov, Z. Roja: Russia, Latvia	Effect of long-term operation of combustion engine running on n-butanol – rapeseed oil – diesel fuel blend – M. Holúbek , M. Pexa, J. Čedík and D. Mader: Czech Republic	The study of physical properties of spray dried whey and milk permeates lactose – K. Žolnere , I. Ciproviča: Latvia
		Dynamics of WA incidence by severity, gender and lost workdays in Estonian agricultural sector and sub-sectors in 2008–2017 – A. Enn , E. Merisalu: Estonia	Effect of alternative liquid fuels on the exhaust particle size distributions of a medium-speed diesel engine – T. Ovaska , S. Niemi, K. Sirviö, S. Heikkilä, K. Portin and T. Asplund: Finland	Development of formulation and technology of yogurt with prolonged shelf life enriched with biologically active substances from fennel seed extract – I. Dubrovskii, T. Arseneva, T. Evstigneeva, S. Gorshkova, Y. Bazarnova, N. Iakovchenko : Russian Federation
		Hygrothermal analysis of masonry wall with wool glass interior insulation – K. Leiten , P. Kirotar, M. Kiviste: Estonia	The impact of the bioethanol fuel on the exhaust gas emission of a two-stroke engine – K. Küüt : Estonia	Development of formulation and technology of fermented dairy beverage for musculoskeletal disease prevention – M. Gurda , N. Iakovchenko, A. Lepeshkin: Russian Federation

			The Effect of Preheating the Fuel Mixture on the Spark Ignition Internal Combustion Engine's Efficiency Parameters and Exhaust Gas Emission – V. Raide: Estonia	
	15.10 – 15.40	Tour of Laboratories <i>Coffee Break</i> Room B135		
	15.40 – 17.20	AGRICULTURAL ECONOMICS (Room B200) Chair: Dr. Anne Põder	PRODUCTION ENGINEERING (Room B119) Chair: Dr. Tõnu Leemet	FOOD SCIENCE AND TECHNOLOGY (Room A204) Chair: Prof. Rajeev Bhat
		Digitalization as an Essential SME Growth Factor Contributing to the Viability of Rural Space – B. Rivza , M. Kruzmetra and I. Gudele: Latvia	Analysis of plant materials pre-treated by steam explosion technology for their usability as insulating materials – T. Schnabel, H. Huber, A. Petutschnigg, A. Jäger: Austria	Phenolic and volatile compound composition influence to specialty coffee cup quality – I. Laukaleja , Z. Kruma: Latvia
		Bioenergy in Agricultural Companies: Financial Performance Assessment – M. Nurmet , M. Mõtte, K. Lemsalu and J. Lehtsaar: Estonia	Research on influence of cyclic degradation process on changes of structural adhesive bonds mechanical properties – V. Kolář , M. Tichý, M. Müller, P. Valášek, A. Rudawska: Czech Republic, Poland	Effect of Different Sugar Sources on <i>P. rhodozyma</i> Growth and Astaxanthin Production – O. Kanwugu , T. Glukhareva, E. Kovaleva and S. Shatunova: Russian Federation, Australia
		Benchmarking the GHG Emissions Intensities of Crop and Livestock-derived Agricultural Commodities Produced in Latvia – A. Lenerts , D. Popluga, K. Naglis-Liep: Latvia	Thermal analysis of asynchronous machines under intermittent loading – Z. Vondrášek, V. Ryženko , M. Linda: Czech Republic	Biosynthesis of glycosidase inhibitors on wheat bread wastes hydrolysate medium by <i>Streptomyces sp.</i> 170 – N. Sharova, M. Ibrahim , A. Prensiva, T. Vybornova, N. Barakova, B. Manzhieva: Russian Federation
		A systematic approach to exploring the role of primary sector in the development of Estonian bioeconomy – M. Mõtte , J. Lillemets and R. Värnik: Estonia	Management of parts and components for units and assemblies in mechanical engineering industry and its impact on the environment – V. Mitrofanovs , I. Boiko and Ē. Geriņš: Latvia	The effect of cadmium and lead pollution on growth and physiological parameters of field beans (<i>Vicia faba</i>) – V. Alle , A. Osvalde, M. Vikmane and U. Kondratovics: Latvia
		Cost-effectiveness of ammonia emissions' reduction measures in dairy farms: Latvia's case – L. Melece: Latvia	Effect of hemp fibre length on the properties of polypropylene composites – P.F. Alao , H. Kallakas, T. Poltimäe and J. Kers: Estonia	Effect of high pressure processing on raw pork microstructure and water holding capacity) – S. Sazonova, I. Gramatina , D. Klava, R. Galoburda: Latvia
		Potential social lifecycle impact analysis of bioenergy from household and market wastes in African cities – I.S. Dunmade: Canada		
	18.00	Welcome Reception hosted by Mayor of Tartu, Tartu Town Hall, Raekoja plats 1a		

Thursday 09.05.2019	9.00 – 10.00	Morning coffee (Estonian University of Life Sciences, Institute of Technology, 56 Kreutzwaldi Str., Tartu) Room B135			
	10.00 – 12.40	BIOENERGY AND BIOFUELS (Room A202) Chair: Prof. Alexander Jäger	WASTE RECOVERY, NANOMATERIALS (Room B200) Chair: Prof. Erwan Rauwel	AGRICULTURAL ENGINEERING (Room A204) Chair: Prof. Istvan Szabo	RENEWABLE ENERGY (Room B119) Chair: Dr. Alo Allik
		Recent advancements in biomass torrefaction: An overview on process, product distribution and economic and environmental feasibility – M. Cahyanti , T.R.K.C. Doddapaneni, T. Kikas: Estonia	Management of wastewater from landfill of inorganic fiberglass – K. Tihomirova , V. Denisova, K. Golovko, O. Kirilina–Gutmane, L. Mezule, T. Juhna: Latvia	Ranking Irrigation Schemes based on Principle Component Analysis in the Arid Regions of Turkey – S. Kartal, H. Değirmenci and F. Arslan: Turkey	Autonomous Photovoltaic System for Night-time Lighting in the Stable – M-Q. Dang, J. Šafránková , M. Libra, V. Poulek, P. Kouřim, J. Sedláček: Czech Republic
		Hydrothermal carbonization and torrefaction of cabbage waste – B. Tamelová , J. Malat'ák, J. Velebil: Czech Republic	Selenium in nanosized form as an alternative to microfertilizers – O. Chernikova, Yu. Mazhayskiy , L. Ampleeva: Russian Federation	Finding Least Fragmented Holdings with Factor Analysis and a New Methodology: A Case Study of Kargılı Land Consolidation Project from Turkey – F. Arslan , H. Değirmenci, M. Rasva and E. Jürgenson: Turkey/Estonia	Energy management algorithms for buildings that use predominantly photovoltaics and energy storage to achieve energy independence – V. Saikovski and A. Annuk: Estonia
		Torrefaction – the process for biofuels production by using different biomasses – D. Urbancl , J. Kropce, D. Goričanec: Slovenia	PHB-co-HV polymer production by halophilic organisms from organic acids – L. Sparlinek , V. Leitner and G. Müller: Austria	Modelling of operator's focusing scheme along working hours: harvesting operation – I. Szabó , M. Hushki, Z. Bártfai A., L. Kátai: Hungary	Usage of grid support inverter on long distribution grid lines – V. Osadčuks , A. Pecka, A. Galiņš: Latvia
		Properties of biofuel fly ash and capabilities of its use for agricultural needs – M. Kulokas , V. Zaleskas, N. Pedišius, M. Praspaliauskas, K. Buinevičius: Lithuania	Physical-chemical properties and possible applications of clay minerals and humic acid composite materials – M. Jemeljanova , R. Ozola and M. Klavins: Latvia	Effect of two housing systems on performance and longevity of dairy cows in Northern Italy – L. Leso, P. Pellegrini, M. Barbari : Italy	Wind and Solar Energy Storage Possibilities for Net Zero Energy Buildings in Weak Grid or Off-Grid Situations – E.Jõgi : Estonia
		Physicochemical properties and agglomeration parameters of biogas digestate with addition of calcium carbonate – M. Dąbrowska, A. Świętochowski , A. Lisowski: Poland	Hydrogen production using waste aluminium dross: from industrial waste to next-generation fuel – K. Singh , A. Meshram, D. Gautam and A. Jain: India	Planting and tending productivity comparison in mounds and disc trenches using containerized and bare-root coniferous seedlings – K. Makovskis , D. Lazdina, S. Kaleja, G. Spalva and K. Dumins: Latvia	Analysis of non-stationary flow interaction with simple form objects – I. Tipans , J. Viba, M. Irbe and S. K. Vutukuru: Latvia
		Anaerobic digestion as part of the cascade processing of biomass – S. Rasi : Finland	Photocurrent generation in carbon-based nanohybrids combined with HfO ₂ nanoparticles – P. Rauwel , A. Galeckas, F. Ducroquet and E. Rauwel: Estonia, Norway, France	Modular sensory hardware and data processing solution for implementation of the precision beekeeping – V. Komasilovs , A. Zacepins, A. Kviesis, S. Fiedler, S. Kirchner: Latvia/Germany	Single Family House Heating System for Cold Climates Based on Locally Produced Electricity – J.Kalder: Estonia

		Food Waste – Occurrence along the Food Chain, Composition and Anaerobic Digestion – U. Baier: Switzerland	The energy intensity of the briquetting process in terms of profitability of waste treatment – V. Liška: Czech Republic,	Discrete element simulation of rapeseed shear test – J. Kuře, L. Hájková, M. Hromasová, R. Chotěborský and M. Linda: Czech Republic	Heat Storage Energy Balance and Optimization of Insulation – M. Hovi, J. Kalder, A. Annuk: Estonia
		Green Gas Production Systems – J. Murphy: Ireland	Plant mediated syntheses of silver nanoparticles using common weed (Plantago Major L.) – S. Kõünal, M. Visnapuu, O. Volubujeva, M. Soares Rosario, P. Rauwel and E. Rauwel: Estonia		The influence of changing hydropower potential on performance parameters of pump in turbine mode – M. Polák: Czech Republic
	12.40 – 13.10	Tour of Food Laboratories			
	12.40 – 14.40	LUNCH AND POSTER SESSION Institute of Technology, Estonian University of Life Sciences, 56 Kreutzwaldi Str, Tartu Room B135			
	12.40 – 14.40	POSTERS			
		AGRICULTURAL ENGINEERING			
	P001	Determining external friction angle of barley malt and malt crush – A. Vágová, M.Hromasová, M. Linda and P.Vaculík: Czech Republic			
	P002	Conventional tropical fruit drying – P.Hrabe, D. Herak, C.Mizera and M. Wasserbauer: Czech Republic			
	P003	Measurement Robotic Arm (MRA) for the evaluation of localization sensors properties – P. Matějka, J. Kadeřábek and V. Shapoval: Czech Republic			
	P004	Surface water runoff of different tillage technologies for maize – P.Novák, P.Kovaříček, J.f Hůla and M. Buřič: Czech Republic			
	P005	Impacts of some cultivated crops on water erosion in the Central Bohemia Region – A. Melicharová, J.Mašek and P. Novák: Czech Republic			
	P006	Challenges of mechanisation of smallholders in Sub-Saharan Africa – S. Peets, P. Misiewicz and S. Woods: United Kingdom			
	P007	Effect of rotors on the parameters of hop drying in belt dryers – A. Rybka, P. Heřmánek and I.Honzík: Czech Republic			
	P008	Common and distinctive features of fen and raised bog peat humic acids for use in agriculture – J.Krumins, R. Krukovskis, M. Klavins and L. Kalnina: Latvia			
	P009	Role of humic substances in agriculture and variability of their content in freshwater lake sapropel – K. Stankevica, Z. Vincevica-Gaile and M. Klavins: Latvia			
	P010	The environmental noise level in the rejuvenation pruning on centuries-old olive tree – L. Maria M. Abenavoli, G. Zimbalatti, A. De Rossi and A. R. Proto: Italy			
	P011	Effect of foliar fertilization of microelements on highbush blueberry (<i>Vaccinium corumbosum</i> L.) nutrient status and yield components in cutover peatlands – A. Karlsons and A.Osvalde: Latvia			
	P012	The effect of liquid nutritional supplements density on dosing accuracy in a feeding station for dairy cattle – J. Chlebowski, M. Gaworski, T. Nowakowski and A. Szcześniak: Poland			
	P013	Measure of thermal transmittance of two different infill wall built with bamboo cultivated in Tuscany – G. Bambi and G. Hari: Italy			
	P014	Influence of the bentonite-containing acrylic humectant composite on the soil microflora – E. Mellelo, E. Samuilova, T. Denisov, D. Martynova and R. Olekhnovich: Russia			
	P015	Development of symbiotic interactions in the faba bean (<i>Vicia faba</i> L.) roots – L. Dubova, A. Senberga, I. Alsina, L. Strauta and I. Cinkmanis: Latvia			
	P016	Conversion of an industrial cutaway peatland to a Betulacea family tree species plantation – S. Neimane, S. Celma, A. Butlers, D. Purviņa and D. Lazdiņa: Latvia			

P017	Development of land use and land use change matrix using geospatial data of National forest inventory – L.L.Krumsteds, J. Ivanovs, J. Jansons and A. Lazdins: Latvia
P018	Review: Soil compaction and controlled traffic farming in arable and grass cropping systems – D. Antille, J. Galambošová and S. Peets: United Kingdom
P019	Design and construction of a low-cost remotely piloted aircraft for precision farming applications – M.Gonçalves Moreira, G.Araujo E Silva Ferraz, E.Massayuki Iwasak, B. Diennevan Souza Barbosa, P. Ferreira Ponciano Ferraz and F. Alves Damasceno: Brazil
P020	Holistic vision of bioeconomy. Concept of transdisciplinarity nexus towards sustainable development – L.Zihare, I.Muizniece and D. Blumberga: Latvia
P021	Does slope affect the vitality of stumps in chestnut coppices? A case study in the Aspromonte National Park (Southern Italy) – D.Russo, Fabio Lombardi, Pasquale Marziliano and G. Macri: Italy
P022	Single cell oil production from waste biomass: review of applicable agricultural by-products – K. Spalvins and D. Blumberga: Latvia
P023	Theoretical investigation of the movement stability of agricultural machines and machine aggregates – A. Rucins, V.R bulgakov, H. Kaletnik and T. Goncharuk: Latvia
	BIOENERGY AND BIOFUELS
P024	The production of methane from the straw pellets by adding enzymes – V. Dubrovskis, I. Plume and I. Straume: Latvia
P025	Wheat straw and lipids: UV-mutagenized <i>Yarrowia lipolytica</i> for the conversion of wheat straw hydrolysate into lipids – D. Atzmüller, F.Hawe and A. Cristobal-Sarramian: Austria
P026	The potential of energy recovery from by-products of small agricultural farms in Nigeria – M. Bappah, J.Bradna, J. Velebil, J. Malatak: Czech Republic
P027	Use of ethanol production and stillage processing residues for biogas production – V. Dubrovskis, I. Plume and I. Straume: Latvia
P028	Assessment of fuel properties and emission concentrations of CO and NOx on selected herbaceous biomass – J. Malat'ák, J.Bradna and J. Velebil: Czech Republic
P029	Contribution to the energy situation in Tajikistan by using residual apricot branches after pruning as an alternative fuel – S. Akhmedov, T. Ivanova, S.Abdulloeva and V. Krepl: Tajikistan: Czech Republic
P030	Particle size and shape characterization of feedstock material for biofuel production – V. Chaloupková, T. Ivanova and V.Krepl: Czech Republic
P031	Trace metals in anaerobic biomass digestate – V. Paulauskas and A. Kasiuliene: Lithuania
P032	Concept of technology for management subsidiary product of methane fermentation extended of energetic aspects – M. Gaworski and M.Bloch-Michalik: Poland
P033	Study of co-culture for bioethanol production – S. Kumar, T. R Sreekrishnan and G. P Agarwal: India
	AGRICULTURAL ECONOMICS
P034	Digitalization as an Essential Growth Factor Contributing in SME Development (experience of Latvia and Romania) – B. Rivza, M.Kruzmetra Kruzmetra, I. Gudele and D. Foris: Latvia
P035	The efficiency of nitrogen fertilizer on the dry matter yield of tall fescue and festulolium grown as feedstock for combustion – A. Adamovics, R. Platece, S. Ivanovs and I. Gulbe: Latvia
P036	Legumes as feed: economic consideration – L. Proškina, I. Pilvere and Sa. Cerina: Latvia
P037	Estonian dairy farms' technical efficiency and factors predicting it – H. Luik-Lindsaar, R. Poldaru and J. Roots: Estonia
P038	Modelling of the Bioeconomy system using Interpretive structural modelling – Z. Indzere, I. Muizniece and A. Kubule: Latvia
P039	Holistic vision of bioeconomy. Concept of transdisciplinarity nexus towards sustainable development – L.Zihare, I.Muizniece and D. Blumberga: Latvia
	ERGONOMICS AND ERGODESIGN
P040	Reduction of moisture and thermal conductivity of wet walls by special plaster – M.Topol, P. Kic and P. Neuberger: Czech Republic

P041	Reliability of palms security under difficult conditions – V. Hartová and J. Hart: Czech Republic
P042	Assessment of luggage compartment parameters based on the preferences of a heterogeneous driver group – M.Hruška: Czech Republic
	FOOD SCIENCE AND TECHNOLOGY
P043	Investigation of various factors on the germination of chia seeds sprouts (<i>Salvia hispanica</i> L.) – L. Nadtochii, V. Nazarova, A. Apalko, A. Proskura, M. Muradova, A. Popova and M. Srinivasan: Russia
P044	The Study of the Effect of Acid Whey pH on Lactobionic Acid Production by <i>Pseudomonas taetrolens</i> – I.Sarenkova and I. Ciprova: Latvia
P045	Technology development of obtaining essential fatty acids from hydrobionts hydrolyzates – E. Kuprina, V. Filipov, V. Abramzon and A. Malova: Russia
P046	Investigation of extruded cereals enriched with plant by-products – D. Konrade, I. Lidums, D. Klava, E. Ence and A.Kirse-Ozolina: Latvia
P047	Development of a binding system for frozen berries in the production of confectionery – M. Kremenevskaya, V. Aret, E. Tambulatova, V. Satanina, O. Sosnina, T. Shkotova, E. Kuprina, I. Makeeva, A. Manuylov and A. Kurilovich: Russia
P048	Winter rye grain quality of hybrid and population cultivars – A. Linina, D. Kunkulberga and A. Kronberga: Latvia
P049	The effect of ageing time on some quality characteristics of two muscle groups from the carcass of Aberdeen Angus bulls – R. Soidla, K. Kerner, M. Tepper, A. Tänavots and T.Kaart: Estonia
P050	Possibility and prospects of preservation of minor components in technology of fruit raw materials conservation – I. Simakova, V. Strizhevskaya, M. Pavlenkova, S. Nemkova, N. Nosachyova and C. Volf: Russia
P051	Blends of unrefined vegetable oils for functional nutrition – I. Simakova, C.Volf, V. Kozyryova, E. Karagulova, V. Strizhevskaya and O. Popova: Russia
P052	The effect of humic acids on the natural resistance of the body of broiler chickens and the quality of their meat – I. Simakova, A. Vasilyev, K. Korsakov, L. Gulyaeva and S.Lifanova: Russia
P053	Some morphological and chemical characteristics of oregano (<i>origanum vulgare</i> L.) In Latvia – I. Sivicka, A. Adamovics, S. Ivanovs and E. Osinska: Latvia
P054	Development of encapsulated extracts on the basis of meadowsweet (<i>Filipendula ulmaria</i>) in the composition of functional foods with oncoprotective properties – L. Nadtochii, D. Baranenko, A. Lepeshkin, V. Ilina and A. Chechetkina Russia
P055	Analytical evaluation of aromas in beer after use of wine yeasts for fermentation – A. Jäger, K. Krennhuber, D. Weilguni, A. Cristobal-Sarramian: Austria
	LIVESTOCK ENGINEERING
P056	Compost-bedded pack barns in the state of Minas Gerais: architectural and technological characterization – V. C. Oliveira, F. A. Damasceno, C. E. A. Oliveira, P. F. P. Ferraz, G. A. S. Ferraz, J. A. O. Saraz: Brazil
P057	Measurements of wireless detectors used to monitor animal movements in livestock farms – J. Hart and V. Hartová: Czech Republic
P058	The course of drying and colour changes of alfalfa under different drying conditions – P. Kic: Czech Republic
P059	Enrichment of the grains from rye wort after shock-activator-disintegrating processing – A. Sabirov, N. Barakova, D. Nsengumuremyi, E. Samodelkin: Russia
P060	Pigsys – improving pig system performance through a whole system approach – A.Zacepins, V.Komasilovs, A. Kviesis and N. Bumanis: Latvia
P061	Possibilities of Monitoring Cattle via GSM and A-GPS – A. Sirotek and J. Hart: Czech Republic
P062	Effect of concentrate supplementation on fattening performance and carcass composition of finished meat-goat kids – E. Aplocina and L. Degola: Latvia
P063	Effect of environmental temperature during the of brooding period on growing period of pullets viscera and tibia – M.G.L. Cândido, I.F.F. Tinôco, M. Barbari, L.C.S.R. Freitas, T.C. dos Santos, R. R. Andrade, R. S. Gates, L. Conti, G. Rossi: Italy
P064	Computational fluids dynamics (CFD) in the spatial distribution of air velocity in prototype designed for animal experimentation in controlled environments – M.O. Vilela, R.S. Gates, M.A. Martins, M. Barbari, L. Conti, G. Rossi, S. Zolnier, C.G.S. Teles Junior, H.H.R. Zanetoni, R.R. Andrade, I.F.F.Tinôco: Italy
P065	Alternative form to obtain the black globe temperature from environmental variables – H.H.R. Zanetoni, I.F.F. Tinôco, M. Barbari, L. Conti, G. Rossi, F.C. Baêta, M.O. Vilela, C.G.S. Teles Junior, R.R. Andrade: Italy

P066	A software to estimate heat stress impact on dairy cattle productive performance – C.G.S. Teles Jr., R.S.Gates, M. Barbari, L. Conti, G.Rossi, M.O. Vilela, C.F.F. Souza, I.F.F. Tinôco: Italy
P067	The nutrition value of different soy bean varieties growing in Latvia for pig feeding – L. Degola, V. Sterna, I. Jansons, S. Zute: Latvia
P068	Most appropriate measures for reducing ammonia emissions in Latvia's pig and poultry housing – J. Priekulis, L. Melece, A. Laurs: Latvia
P069	Spatial variability of litter temperature, relative air humidity and skin temperature of chicks in a commercial broiler house – P. F. P. Ferraz, G. A. S. Ferraz, L. Schiassi, V. H. B. Nogueira, M. Barbari, F. A. Damasceno: Brazil
P070	Behavioural and physiological responses of rabbits – P. F. P. Ferraz, G. A. S. Ferraz, M. Barbari, M. A. J. G. Silva, F. A. Damasceno, D. Cecchin and J.O. Castro: Brazil
P071	Use of thermography for the evaluation of the surface temperature of japanese quail submitted at different temperatures – J.O. Castro, T. Yanagi Junior, A. L. Abreu, P.F. P. Ferraz, G.B. Moura, D. Cecchin and L. Conti: Brazil
P072	Spatial distribution of thermal variables, acoustics and lighting in compost dairy barn with climate control system – F. A. Damasceno, C. E. A. Oliveira, G. A. S. Ferraz, J. A. C. Nascimento, M. Barbari, P. F. P. Ferraz: Brazil
P073	Geostatistics applied to evaluation of thermal conditions and noise in compost dairy barns with different ventilation systems – C. E. A. Oliveira, F. A. Damasceno, P. F. P. Ferraz, J. A. C. Nascimento, G. A. S. Ferraz, and M. Barbari: Brazil
P074	Thermal comfort of pigs housed in different installations – D. Cecchin, P.F.P. Ferraz, A.T. Campos, F.A.Sousa, P.I.S. Amaral, J.O. Castro and L. Conti, V.M.F da Cruz: Brazil
P075	Investigation of fly larvae <i>Lucilia Caesar</i> application in pet feed composition – L. Nadtochii, D. Baranenko, R. Melchakov, M. Muradova, Alexey Istomin, Alexandr Istomin: Russia
P076	The Pea (<i>Pisum sativum</i>) feeding estimation in Beef Cattle ration – L. Degola, E. Aplociņa: Latvia
P077	Model for ammonia emissions' assessment and comparison of various dairy cattle farming systems and technologies – A.Aboltins, L. Melece, J. Priekulis: Latvia
	NANOMATERIALS AND NANOCOMPOSITES
P078	Polymer acrylic hydrogels with protein filler: Synthesis and characterization – M. Baidakova, V. Sitnikova, M. Uspenskaya, R. Olekhovich and M. Kremenevskaya: Russia
	PRECISION AGRICULTURE
P079	Crop production dependence on precision fertilizer application systems and agromicrolandscape conditions – N. Tcyganova, A. Ivanov and V. Smelik: Russia
P080	Soil-climatic conditions affecting yield and starch content of maize silage – V.Voltr, P. Froněk, and M. Hruška: Czech Republic
P081	SAMS - International Partnership on Innovation in Smart Apiculture Management Services – A. Zacepins, V. Komasilovs and A.Kviesis: Latvia
P082	Properties of soil and peat humic substances from Latvia – M. Klavins, O. Purmalis, S. Grandovska, L.Klavina: Latvia
P083	Variety, sowing rate and disease control affect faba bean yield components – I. Plūduma-Pauniņa, Z. Gaile, B. Bankina and R. Balodis: Latvia
P084	Effect of nitrogen rate and forecrop on nitrogen use efficiency in winter wheat (<i>triticum aestivum</i> L.) – L. Litke, Z. Gaile and A. Ruža: Latvia
P085	Principal components in the study of soil and plant properties in precision coffee farming – G. A. S. Ferraz, P. F. P. Ferraz, F. B. Martins, F. M. Silva, F. A. Damasceno, M. Barbari: Brazil
P086	Spatial variability of soil fertility attributes and productivity in a coffee crop farm – G. A. S. Ferraz, R. C. Avelar, N. L. Bento, F. R. Souza, P. F.P. Ferraz, F. A. Damasceno, M. Barbari: Brazil
P087	Analysis of flight parameters and georeferencing of images with different control points obtained by RPA – L. M. Santos, G. A. S. Ferraz, M. T. Andrade, L. S. Santana, B. D. S. Barbosa, D. T. Maciel and G. Rossi: Brazil

	P088	RGB vegetation indices applied to grass monitoring: a qualitative analysis – B. D. S Barbosa, G.A.S Ferraz, L. M. Gonçalves, D. B. Marin, D. T. Maciel, P.F.P Ferraz, G. Rossi: Brazil		
	P089	Effect of nitrogen fertilization management on mineral nitrogen content in soil and winter wheat productivity – I. Skudra and A. Ruža: Latvia		
	P090	Energy-ecological compatibility of tomato (<i>lycopersicon esculentum</i> mill.) transplants cultivating under different light quality of irradiation – S. Rakutko, A.Avotins and I. Alsīņa: Latvia		
	P091	A research on models of the photosynthetic light response curves on the example of evergreen types of plants – S. Korsakova, Yu. Plugatar, O. Ilnitsky, M. Karpukhin: Russian Federation		
	P092	Evaluation of Locally Built Threshing Machine Performance for Rosemary (<i>Rosmarinus officinalis</i>) Plants – D. Yilmaz, M.E. Gokduman: Turkey		
		PRODUCTION ENGINEERING		
	P093	Linear pressing of coconut copra meal (<i>Cocos nucifera</i> L.) under different temperatures – C. Mizera, D. Herak, P. Hrabec and M. Wasserbauer: Czech Republic		
	P094	Improving the quality of critical tractor parts through the dynamic stabilization of the manufacturing process in regard to CNC machines – J.Olt, V.Maksarov, A. Efimov: Russia		
	P095	Suitability of 2.4 GHz and 5 GHz wireless communications in production processes – J.Hart and J. Bradna: Czech Republic		
		RENEWABLE ENERGY		
	P096	Reliable Renewable Hybrid Energy Solutions – E. Hiltunen, R. Koivisto and A. Mäkiranta: Finland		
	P097	An analysis of influences of blinds and solar radiation on microclimate in office rooms during summer days: a pilot study – D. Van Cao and P. Kic: Czech Republic		
	P098	Analysis of non-stationary flow interaction with simple form objects – I. Tipans, J. Vība, M. Irbe and S. K. Vutukuru: Latvia		
		VEHICLES AND FUELS		
	P099	Periodic polynomial regression analysis of urban driving characteristics – A. Grislis and J. Kreicbergs: Latvia		
	P100	Exhaust particle number of a non-road diesel engine fuelled by methyl esters with different fatty acid compositions – T. Ovaska, S. Niemi, K. Sirviö and O.Nilsson: Finland		
	P101	Feasibility of new liquid fuel blends for medium-speed engines – K. Sirviö, S. Niemi, S. Heikkilä, J. Kiijarvi, M. Hissa and E. Hiltunen: Finland		
	P102	Behavior of B20 fuels in arctic conditions – K. Sirviö, Se.Niemi, R. Help, S. Heikkilä and E. Hiltunen: Finland		
	P103	Possibilities to Identify Defective Electric Automobile Batteries – D. Berjoza, V. Pirs and Inara Jurgena: Latvia		
	P104	Reliability of parking assistants depending on the material of detected obstacles – V. Hartová and M. Kotek: Czech Republic		
	P105	Analysis of operating parameters of hybrid vehicle under real traffic condition – M. Kotek and V. Hartová: Czech Republic		
	P106	Irish national farm accident survey – preliminary results – 2017 – E. Dillon, J. McNamara, J. Lennori, B. Moran: Ireland		
	P107	Use of risk assessment to promote farmers health – J. McNamara, P. Griffin, J. Phelan, J. Kisella: Ireland		
	P108	EU COST Action: safety culture and risk management in agriculture (SACURIMA) – J. McNamara, J. Leppälä, G. van der Laan, C. Colosio, M. Jakob, S. VanderBroucke, L. Girdziute, E. Merisalu, A. M. Heiberg, R. Rautiainen: Ireland		
	14.40 – 16.00	BIOENERGY AND BIOFUELS (Room A202) Chair: Prof. Jerry Murphy	PRECISION AGRICULTURE (Room B119) Chair: Prof. Merrit Shanskiy	AGRICULTURAL ENGINEERING (Room A204) Chair: Prof. Simone Pascuzzi
		International applications of anaerobic digestion towards integrated sustainable solutions –	Assessment of production zones modelling accuracy based on satellite imaging and yield	Methodology of the stress determination in the tool module during the work of the agriculture

		B. McCabe: Australia	measurement of selected agriculture plot – Z. Jelínek , K. Starý, J. Kumhálová: Czech Republic	machine – A. Kešner, R. Chotěborský, M. Linda and M. Hromasová: Czech Republic
		Flexible biogas systems – J. Liebetrau: Germany	Controlled traffic farming delivers better crop yield of winter bean as a result of improved root development – M. Kaczorowska-Dolowy , R. J. Godwin, E. Dickin, D.R. White P.A. Misiewicz: United Kingdom	Measurement Robotic Arm (MRA) for the evaluation of localization sensors properties – P. Matějka, J. Kadeřábek , V. Shapoval: Czech Republic
		Ammonia – technical challenges and solutions for high nitrogen substrates – C. Banks: United Kingdom	Comparison of lycopene and β -carotene content in tomatoes determined with chemical and non-destructive methods – I. Alsina , L. Dubova, M. Duma, I. Erdberga, A. Avotiņš, S.Rakutko: Latvia/Russia	Development of intelligent system of mobile robot movement planning in unknown dynamic environment by means of multi-agent system – A. Nemeikšis , V. Osadčuks: Latvia
		The freezing pre-treatment of lignocellulosic material: A cheap alternative for Nordic countries – V. Rooni , M. Raud, T. Kikas: Estonia	The effect of sowing date on cover crop biomass and nitrogen accumulation – M. Toom , L. Talgre, P. Pechter, L. Narits, S. Tamm and E. Lauringson: Estonia	Robotic electromechanical object control by means of variable structure system – D. Nemeikšytė , V. Osadčuks: Latvia
	16-16.20	Coffee Break Room B135		
	16.20-17.40	The impact of substrate – enzyme proportion for efficient hydrolysis of hay – L. Mezule , I. Berzina and M. Strods: Latvia	Influence of organic and inorganic fertilization on soil properties and water infiltration – M. Stehlík , A. Czako, M. Mayerová, M. Madaras : Czech Republic	Effect of strip tillage on the energy, environmental and agronomical indicators of faba beans cultivation – E. Šarauskis , K. Romaneckas, A. Sakalauskas, K. Lekavičienė, Z. Kriauciūnienė, S. Buragiene, A. Jasinskas, V. Naujokienė: Lithuania
		Review: Evaluation of new genetic toolkits and their role for ethanol production in cyanobacteria – R. Gundolf , S. Oberleitner, J. Richter: Austria	The influence of biochar as a peat replacement on germination and seedling growth in soilless growing media – O. Escuer , K. Karp, J. Escuer-Gatius, H. Raave, M. Shanskiy	Theoretical study on sieving of potato heap elements in spiral separator – V. Bulgakov , S. Pascuzzi, S. Nikolaenko, F. Santoro, A. S. Anifantis: Ukraine/Italy
		Evaluation of Giant Knotweed and Bulrush as Perspective Non-Traditional Herbaceous Energy Plants and Quality Assessment of Biofuel Produced from These Plants – D. Streikus , A. Jasinskas, E. Šarauskis, E. Jotautienė, R. Miėdažys and A. Annuk: Lithuania/Estonia	Morphological variability of <i>Botrytis cinerea</i> – causal agent of Japanese quince grey mould – I. Jakobija , B. Bankina, A. Senberga: Latvia	Numerical modelling of process of cleaning potatoes in spiral separator – V. Bulgakov , S. Nikolaenko, I. Holovach, V. Adamchuk, Z. Ruzhylo: Ukraine
		Ionic Liquids: a way to separate and purify lignin from biomass residues – I. Hasanov , U. Mäeorg, T. Kikas : Estonia	Possibilities for the biological control of yellow rust (<i>Puccinia striiformis</i> f. sp. <i>tritici</i>) in winter wheat in Latvia in 2017–2018 – L. Feodorova-Fedotova , B. Bankina and V. Strazdina: Latvia	An experimental investigation of performance levels in a new root crown cleaner – V. Bulgakov , S. Pascuzzi, M. Arak, F. Santoro, A. S. Anifantis, Y. Ihnatiev and J. Olt: Ukraine/Italy/Estonia
	19.00 – 23.00	OFFICIAL CONFERENCE DINNER at Restoran "Kolm Tilli", 42 Kastani Str., Tartu https://kolmtilli.ee/en		
Friday 10.05.2019	9.45 – 13.30	EXCURSIONS <i>Please select only one during registration!</i>		

Excursion to ERM (Estonian National Museum, Muuseumi tee 2, www.erm.ee) (2,5 hours)

9.45 Bus leaves for ERM from Institute of Technology (Fr. Kreutzwaldi 56) and stops in midtown at 10.00

Back from ERM 12.30

Tartu City Tour (1,5 hours)

10.30 Gathering at the City Hall Square, at the fountain

Visit to Environment-friendly high-efficiency 13 MW Kesklinna Central Cooling Station at 16A Turu Str., Tartu
and **Tartu Water Treatment Plant** at 118 Tähe Str., Tartu (3,5 hours)

9.45 Bus leaves for visits from Institute of Technology (Fr. Kreutzwaldi 56) at 9.45 and stops in midtown at 10.00