

Biosystems Engineering, 2014 time schedule

Day	Time					
Thursday 8.05.14	9.00 – 10.00	Registration and morning coffee (Estonian University of Life Sciences, Institute of Technology, 56 Kreutzwaldi Str., Tartu)				
	10.00 – 10.15	OPENING: Vice-rector of research Prof. Ülle Jaakma (Institute of Technology, room A204) Opening remarks and welcome: Director of Institute of Technology Margus Arak				
		PLENARY SESSION (Institute of Technology, room A204):				
	10.15 – 10.45	Efforts to optimize biogas production in anaerobic digestion – Bo Mattiasson , Professor of Department of Biotechnology, Lund University, Sweden				
	10.45 – 11.15	Determination of silage density in bunker silos using a radiometric method – Thomas Hoffmann , Leibniz-Institute for Agricultural Engineering Potsdam-Bornim, Germany				
	11.15 – 11.45	KIC InnoEnergy – Leading Engine for Innovation and Entrepreneurship in Sustainable Energy – Gregory Rubinchik , Senior Manager, KPMG, Latvia				
	11.45 – 13.00	LUNCH at the main building of Estonian University of Life Sciences, 1 Kreutzwaldi Str., Tartu				
Thursday 8.05.14		AGRICULTURAL ENGINEERING (Institute of Technology, room B136) Chair: Prof. Jukka Ahokas	PRODUCTION ENGINEERING (Institute of Technology, room A310) Chair: PhD Tõnu Leemet	VEHICLES AND FUELS (Institute of Technology, room B200) Chair: PhD Timo Kikas	FOOD SCIENCE AND TECHNOLOGY (Institute of Technology, room A402) Chair: Prof. Väino Poikalainen	RENEWABLE ENERGY (Institute of Technology, room A204) Chair: Prof. Andres Annuk
		Adaptive tillage systems – M.H. Jørgensen : Denmark	Evaluation of the friction force by instrumented rubber wheel test – R. Chotěborský , M. Linda: Czech Republic	Composition of corncobs as a substrate for fermentation of biofuels – M. Pointner , P. Kuttner, T. Obrlik, A. Jäger and H. Kahr: Austria	Vegetable ingredients in soft cheese made from concentrated skim milk by ultrafiltration – N. Iakovchenko and L. Silantjeva: Russia	Deviations between wind speed data measured with nacelle-mounted anemometers on small wind turbines and anemometers mounted on measuring masts – A. Allik , J. Uiga and A. Annuk: Estonia
		The quality evaluation of different soil tillage technologies – J. Mašek , P. Novák, M. Kroulík and J. Chyba: Czech Republic	ISO/TS 16949 among Latvian production companies focused on automotive industry – G. Civcisa and A. Grislis : Latvia	Using steam explosion pretreatment method for bioethanol production from floodplain meadow hay – M. Tutt , T. Kikas, H. Kahr, M. Pointner, P. Kuttner and J. Olt: Estonia & Austria	The unique characteristics of milky-wax ripe walnuts and their usage – O. Orlova and U. Nasonova: Russia	Productivity of poplar hybrid (<i>Populus balsamifera</i> x <i>P. laurifolia</i>) in Latvia – A. Jansons , S. Zurkova, D. Lazdina and M. Zeps: Latvia

		The measurement of stubble cultivator draught force under different soil conditions – P. Novák , J. Chyba, F. Kumhála and P. Procházka: Czech Republic	Developing and testing a method for evaluating the performance of coatings on end mills in semi-industrial conditions – T. Leemet, J. Allas , M. Madissoo, E. Adoberg, R. Saar: Estonia	Antioxidant studies for animal-based fat methyl ester – K. Sirviö, S. Niemi, V. Vauhkonen, E. Hiltunen and A. Savola : Finnland	Liposomal beta-carotene as a functional additive in dairy products – L. Zabodalova, T. Ishchenko, N. Skvortcova , D. Baranenko and V. Chernjavskij: Russia	Combined management response and indicator based evaluation methodology of implementation of environmental management system at a wood pellet production industry – S.N. Kalnins , S. Valtere, J. Gusca and D. Blumberga: Latvia
		Research of a material and structural solution in the area of conventional soil processing – P. Novák, M. Müller and P. Hrabě: Czech Republic	Cellular structures from perforated metallic tape and it's using for electromagnetic shielding solutions – V. Mironovs, M. Lisičins, I. Boiko , T. Koppel and V. Zemchenkovs: Latvia	Utilization of urban waste in bioethanol production: potential and technical solutions – M. Raud , R. Kesperi, T. Oja, J. Olt and T. Kikas: Estonia	The effect of modified atmosphere storage on the postharvest quality of the raspberry 'Polka' – U. Moor , P. Põldma, T. Tõnutare, A. Moor and M. Starast: Estonia	Experimental study on optimisation of the burning process in a small scale pellet boiler due to air supply improvement – V. Kirsanovs , A. Žandeckis, I. Veidenbergs, I. Blumbergs, M. Gedrovičs and D. Blumberga: Latvia
		Soil damage reduction and more environmental friendly agriculture by using advanced machinery traffic – Z. Kvíz , M. Kroulik and J. Chyba: Czech Republic	Logistics aspects influencing resultant strength of adhesives at practical application – M. Müller , P. Valášek: Czech Republic	The effect of biofuels on the quality and purity of engine oil – K. Veselá , M. Pexa and J. Mařík: Czech Republic	Resource assessment for potato biorefinery: Side stream potential in Northern Ostrobothnia – M. Ahokas , A.-L. Välimaa, T. Löötjönen, A. Kankaala, S. Taskila and E. Virtanen: Finland	Determinants of household electricity consumption savings: A Latvian case study – I. Laicāne , A. Blumberga, M. Rošā and D. Blumberga: Latvia
		Development of an active boom controller for field sprayers – H. Karadöl and S. Arslan : Turkey	EPDM rubber recycling in epoxy composite systems – P. Valášek , M. Müller: Czech Republic	Possibilities of using vegetable oil to power diesel engines as well as their impact on engine oil – V. Höning and J. Hromadko: Czech Republic	Effect of cooling rates and low crystallization temperatures on morphology of lactose crystals obtained from Ricotta cheese whey – A. Pisponen , S. Pajumägi, H. Mootse, A. Sats, V. Poikalainen and A. Karus: Estonia	The first three-year development of ALASIA poplar clones AF2, AF6, AF7, AF8 in biomass short rotation coppice experimental cultures in Latvia – D. Lazdiņa , A. Bārdulis , A. Bārdule, A. Lazdiņš, M. Zeps and Ā. Jansons: Latvia
		Storage technologies of picked hops during harvest – L. Vent and A. Rybka: Czech Republic	Analysis and synthesis on the worksheet of Mathcad of the walking linkage of Theo Jansen with flywheel – A. Aan , M. Heinloo: Estonia	Use of butanol as a fuel for internal combustion engines – V. Höning , M. Kotek and J. Mařík: Czech Republic	Estimation of particle size distribution in bovine colostrum whey by dynamic light scattering (DLS) method – A. Sats ,	Case study of increasing photovoltaic energy solar fraction in a conventional office building in northern latitudes – P. Pikk and

					H. Mootse, S. Pajumägi, A. Pisponen, V. Tatar and V. Poikalainen: Estonia	A. Annuk: Estonia
		Effect of technical and biological potential on dairy production development – M. Gaworski and A. Leola: Poland & Estonia	Machining quality when lathing blanks with ceramic cutting tools – V. Maksarov , A. Khalimonenko and D. Timofeev: Russia	Review of promising strategies for zero-waste production of the third generation biofuels – L. Podkuiko , K. Ritslaid, J. Olt and T. Kikas: Estonia	Farm-to-table concept: How the industry and commerce are integrated to the academic education system – P. Maijala , M. Närwä, A. Pasila: Finland	Cleaner production in biowaste management – J. Pubule , A. Kamenders, S. Valtere and D. Blumberga: Latvia
		Heating of large agricultural and industrial buildings – M. Zajicek , P. Kic: Czech Republic	The dynamics of chip formation in turning – T. Tärgla : Estonia	The impact of biofuels and technical engine condition to its smoke - Zetor 8641 Forterra – M. Pexa and J. Mařík : Czech Republic	Bakery products cooling. Automatic control and maintaining of the bakery products cooling process parameters – A. Pastukhov , V. Danin: Russia	Overview of the waste-to-energy sector in Latvia: driving forces for a cluster creation – A. Beloborodko , M. Rosa, F. Romagnoli and D. Blumberga: Latvia
		Forced Convection in Drying of Poultry Manure – A. Aboltins, P. Kic : Latvia & Czech Republic	Testing of the oscillations damping capability by external turning with the use of alternate bars in the construction of the turning tool holder – M. Madissoo : Estonia	Influence of the drop size of bioethanol fuel in air-fuel mixture on combustion process of spark ignition engine – R. Ilves , A. Küüt, T. Kikas and J. Olt: Estonia	An alternative method for meat shear energy estimation during ageing – A. Pöldvere , L. Lepasalu, A. Tänavots, et al.: Estonia	The feasibility of phase change materials in building structures for saving heating energy in the Nordic climate – M. Kivisté , R. Lindberg: Finland
	15.00 – 15.20	COFFEE BREAK , room A202				
Thursday 8.05.14	15.20 – 17.00	AGRICULTURAL MACHINERY AND AGROTECHNOLOGY (Institute of Technology, room B136) Chair: prof. Marek Gaworski	ERGONOMICS (Institute of Technology, room A220) Chair: Prof. Mati Pääsuke	VEHICLES AND FUELS (Institute of Technology, room B200) Chair: PhD Timo Kikas	FOOD SCIENCE AND TECHNOLOGY (Institute of Technology, room A402) Chair: Prof. Eero Puolanne	
		Influence of soil compaction by farm machinery crossings and livestock on water infiltration rate on grassland – J. Chyba , M. Kroulík, K. Krištof, P.A. Misiewicz, K. Chaney: Czech Republic	Ergonomics is slowing down ageing and postponing ageing related diseases – Ü. Kristjuhan : Estonia	The impact of bioethanol fuel on the output parameters of a two-stroke reciprocating engine – A. Küüt, R. Ilves, A. Vlasov , K. Soots: Estonia	Effect of ultrasonic treatment on metabolic activity of <i>Propionibacterium shermanii</i> , cultivated in nutrient medium based on milk whey – E. Suchkova, B. Shershakov and D. Baranenko: Russia	

		Light tractor simulator – J. Ahokas and T. Jokiniemi: Finland	Usage of pressure mapping systems in assessment of ergonomic quality a review – M. Reinvee , K. Jansen: Estonia	Effect of E85 fuel on performance parameters, fuel consumption and engine efficiency – Škoda Fabia 1.2 HTP – J. Čedík , M. Pexa, M. Kotek and J. Hromádko: Czech Republic	Fermented sauces for child nutrition from age three – L. Nadtochii and A. Korjagina : Russia
		Constructive and kinematics parameters of the picking device of blueberry harvester – M. Arak and J. Olt: Estonia	The impact of light conditions on identifying facial features – V. Nídlová and J. Hart: Czech Republic	Effect of E85 fuel on harmful emissions – Škoda Fabia 1.2 HTP – J. Čedík , M. Pexa, M. Kotek and J. Hromádko: Czech Republic	Effect of cold treatment on the amino acid composition of veal – D. Baranenko , V. Kolodyaznaya and Y. Broyko: Russia
		Continuously adjustable berry sorter – K. Soots , V. Maksarov, J. Olt: Estonia & Russia	Microbiological environment in special rooms of University campus – P. Kic , L. Růžek: Czech Republic	Comparison of the effect of gasoline – ethanol E85 – butanol on the performance and emission characteristics of the engine Saab 9-5 2.3 l turbo – J. Mařík , M. Pexa, M. Kotek and V. Höning: Czech Republic	Microdairy – V. Poikalainen : Estonia
		Energy consumption in different grain preservation methods – T. Jokiniemi , S. Jaakkola, M. Turunen and J. Ahokas: Finland	Discomfort and work load characteristics in supermarket cashiers – T. Sirge , J. Ereline, T. Kums, H. Gapeyeva, M. Pääsuke : Estonia	Transport demands in suburbanized locations – M. Lukeš , M. Kotek and M. Růžička: Czech Republic	
		Efficient harvest lines for Short Rotation Coppices (SRC) in Agriculture and Agroforestry – R. Pecenka, D. Ehlert, H. Lenz : Germany	Transition to Low Carbon Society. Evaluation Methodology – S. Kalnins , J. Gusca, S. Valtere, D. Blumberga: Latvia		
		IceTag3D™ accelerometers in cattle lameness detection – E. Kokin , J. Praks, I. Veermäe, V. Poikalainen, M. Vallas: Estonia	Reducing exposure to extremely low frequency electromagnetic fields from portable computers – T. Koppel and P. Tint: Estonia		
		Fodder feeding peculiarities introducing VMS automatized cow milking system –	Physical Load Analysis in Hotel Cleaning Work – H. Kalkis , Z. Roja,		

		A. Saliņš , J. Priekulis, A. Laurs: Latvia	V. Kalkis: Latvia		
			What is priority in the problem of ageing? – Ü. Kristjuhan : Estonia		
Thursday 8.05.14	Time	POSTER SESSION (Institute of Technology, second floor)			
	17.00 – 18.30	Analysis and synthesis on the worksheet of Mathcad of the walking linkage of Theo Jansen with flywheel – A. Aan , M. Heinloo: Estonia			
		On the potential of lupin protein concentrate made by enzymatic hydrolysis of carbohydrates in dairy-like applications – L. Kuznetsova, L. Zabodalova and D. Baranenko : Russia			
		Application of high temperature catalysis to abate emissions from a small scale combustion system – R. Bindig, S. Butt and I. Hartmann			
		Technical and economical analysis of harvesting and ensilaging of corn grain – J. Barwicki, S. Gach, K. Koprysz, S. Ivanovs , A. Adamovics and O. Valainis: Poland & Latvia			
		Modelling of biomass cogeneration plant efficiency – G. Cimdina , I. Veidenbergs, A. Kamenders, J. Ziemele, A. Blumberga and D. Blumberga: Latvia			
		Reliability of detection of sources of infrared radiation in security alarm and distress signal systems – J. Hart , V. Níldlová and M. Přikry: Czech Republic			
		Exposure to high or low frequency noise at workplaces: differences between assessment, health complaints and utilization of adequate personal protective equipment – S. Kalle , K. Reinhold, J. Paju: Estonia			
		Cooperative Problem-Based Learning Approach in Environmental Engineering Studies – S.N. Kalnins , S. Valtere, J. Gusca, K. Valters, D. Blumberga: Latvia			
		Mechanical ventilation with a heat recovery system in renovated apartment buildings – E. Kamendere , A. Zandeckis, A. Kamenders, J. Ikaunieks and C. Rochas: Latvia			
		A study of pressure drop in an experimental low temperature wood chip dryer – K. Klavina, A. Cinis and A. Zandeckis: Latvia			
		Evaluation of sustainability aspect – energy balance of briquettes made of hemp biomass cultivated in Moldova – M. Kolarikova , T. Ivanova and B. Havrlan: Czech Republic			
		A multi-factor approach to evaluate environmental impact statements – L. Laivina , J. Pubule and M. Rosa: Latvia			
		Quantitation of vitamins A and E in raw sheep milk during lactation period – T. Michlová , Š. Horníčková, H. Dragounová and A. Hejtmánková: Czech Republic			
		Investigation of Casein Micelle Particle Size Distribution in Raw Milk of Estonian Holstein Dairy Cows – H. Mootse , A. Pisponen, S. Pajumägi, A. Polikarpus, V. Tatar, A. Sats and V. Poikalainen: Estonia			
		AC-link based new microgrid system for research of local power flow management – M. Märss , A. Annuk, A. Allik and J. Uiga: Estonia			
		Studying of mixing speed and temperature impacts on rheological properties of wheat flour dough using Mixolab – A. Pastukhov and H. Dogan: Russia & USA			
		Experimental research of proximity sensors for application in mobile robotics in greenhouse environment – V. Osadcius, A. Pecka , A. Lojans and A. Kakitis: Latvia			
		Review of promising strategies for zero-waste production of the third generation biofuels – L. Podkuiko , K. Ritslaid, J. Olt and T. Kikas: Estonia			
		An alternative method for meat shear energy estimation during ageing – A. Pöldvere , L. Lepasalu, A. Tänavots, J. Olt, U. Sannik, A. Sats, R. Saar, R. Martinson and V. Poikalainen: Estonia			
		Analysis of economical, social and environmental aspects of agroforestry systems of trees and perennial herbaceous plants – S. Rancāne, K. Makovskis, D. Lazdiņa, M. Daugaviete, I. Gūtmane and P. Bērziņš: Latvia			
		Life cycle assessment of bio-methane supply system based on natural gas infrastructure – M. Repele, A. Paturska, K. Valters and G. Bazbauers: Latvia			
		Analysis of physical and mechanical properties and of gross calorific value of Jatropha curcas seeds and waste from pressing process – J. Ružbarský, M. Müller and P. Hrabě: Czech Republic			

		Use of <i>Delvotest T</i> for quantitative estimation of β-lactam antibiotic residues in waste milk and for evaluation of thermal treatment efficiency – a methodical pilot study – A. Sats , H. Mootse, L. Lepasalu and V. Poikalainen: Estonia
		Some practical applications of e-learning in OHS and ergonomics in higher education – V. Siirak , P. Tint and A. Traumann: Estonia
		Experimental pilot device for thermal analysis of biomass co-firing – V. Suzdalenko, M. Gedrovics, V. Vitolins and K. Kass: Latvia
		Integrated analysis of biomass co-firing with gaseous fossil fuel. Environmental criteria analysis – V. Suzdalenko, M. Gedrovics, E. Vigants, L. Lieplapa and R. Vanaga: Latvia
		Air quality in school and university facilities and improvement possibilities – A. Traumann , P. Tint, M. Kritsevskaja, D. Klauson: Estonia
		Using steam explosion pretreatment method for bioethanol production from floodplain meadow hay – M. Tutt , T. Kikas, H. Kahr, M. Pointner, P. Kuttner and J. Olt: Estonia & Austria
		Comparative study on anti-oxidant activity of garlic grown in different regions – R. Vokk , E. Tedersoo, T. Lõugas, K. Valgma and J. Rosend: Estonia
		Cleaner pellet production – an energy consumption study using statistical analysis – H. Vigants, P. Uuemaa, I. Veidenbergs and D. Blumberga: Latvia
		Analysis of wood fuel use development in Riga – J. Ziemele, I. Pakere, N. Talcis, G. Cimdiņa, G. Vīgants, I. Veidenbergs and D. Blumberga: Latvia
	19.00 – 22.00	Official Conference Dinner at Restaurant Atlantis , 2 Narva Str., Tartu http://www.atlantis.ee/
Friday 9.05.14	9.30 10.30 12.00 12.30 13.30 14.00	EXCURSION: Start at Institute of Technology. Mooste manor complex , (distillery, clay and wool workshops, manor house). Exposition: Oonega rock paintings. Presentation “Mysterious pictures of Finno-Ugrian rock art“ – Prof. V. Poikalainen. Coffee break. Return to Tartu via Põlva.