

International Conference for Young Scientists on Biorefinery Technologies and Products

Riga, April 27-29, 2022



PROGRAM

April 27, LSIWC Dzērbenes Street 27			
10:30	Registration		
11:00	Tour around the LSIWC research facilities		
12:30	Coffee		
13:00	Workshops with a Lunch break		
17:30	Welcome Reception		
April 28, Radisson Blu Latvia, Elizabetes Street 55			
9:00	Opening Ceremony		
9:10	Tips on how to identify and avoid predatory publishers and conferences. Gita Rozenberga, The Library of the University of Latvia, OpenAIRE National Open Access Desk		
9:50	The research landscape of biorefinery: a scientometric overview. Arnis Kokorevics, Latvian State Institute of Wood Chemistry		
10:30	Coffee Break		
10:50	Session 1A Chair Vladimirs Biziks	Session 1B Chair Uģis Cābulis	
12:30	Lunch Break		
13:20	Session 2A Chair Agnė Kairytė	Session 2B Chair Arturs Vīksna	
15:00	Coffee Break		
15:30	Session 3A Chair Kristīne Meile	Session 3B Chair Francesco Romagnoli	
April 28, Gutenbergs Rooftop Restaurant, Doma Square 1			
19:30	Conference Dinner		
April 29, Radisson Blu Latvia, Elizabetes Street 55			
9:00	Session 4A Chair Inese Filipova	Session 4B Chair Jānis Rižikovs	Session 4C Chair Miķelis Kirplūks
10:40	Coffee Break		
11:00	The failure of success - are research assessments helping or hurting science? Noémie Aubert Bonn, Hasselt University and Amsterdam UMC		
11:40	How to get in: the story of a young researcher reaching for the Horizon. Laura Andže, Latvian State Institute of Wood Chemistry		
12:20	Closing Ceremony, Awards		
12:30	Lunch		



LATVIJAS FINIERIS
AKCIJU SABIEDRĪBA



NACIONĀLAIS
ATTĪSTĪBAS
PLĀNS 2020



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attīstības fonds

I E G U L D Ī J U M S T A V Ā N Ā K O T N Ē

Project No. 1.1.1.5/18/I/002

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10:50-12:30	Session 1A Chair Vladimirs Biziks
	Session 1B Chair Uģis Cābulis
10:50	Suberinic acids - from isolation to feedstock for bio-polyol synthesis. D.Godina, R.Makars, A.Abolins, A.Paze, M.Kirpluks, J. Rizikovs (Latvian State Institute of Wood Chemistry)
	Impact of arginine containing fertilizer on nitrogen isotope ratio and elemental content in young conifer stands. M.Bertins, L.Busa, D.Lazdina, K.Dumins, M.Klavins, A.Viksna (University of Latvia)
11:10	Novel bio-polyols for the polyurethane synthesis. O.Gotkiewicz, H.Beneš (Institute of Macromolecular Chemistry CAS)
	Effect of various fertilizers on stable isotope ratios and amino acid content in apple seeds. L.Buša, R.Kravceviča, J.Ruško, A.Viksna (University of Latvia)
11:30	Michael donor monomer synthesis for bio-based thermoset polymers using tall oil fatty acids. R.Pomilovskis, A.Fridrihsone, M.Kirpluks (Latvian State Institute of Wood Chemistry)
	Use of wood ash in the forest ecosystem and its effect on the rare earth element content in the forest soil and blueberries (<i>Vaccinium Myrtillus L.</i>). V.Lazarenko, V.Rudoviča, A.Viksna, M.Bērtiņš, J.Burlakovs, D.Lazdiņa (Faculty of Chemistry, Department of Analytical Chemistry, University of Latvia)
11:50	Michael donor monomer synthesis for polymeric materials using rapeseed oil. D.Eihe, A.Abolins, M.Kirpluks (Latvian State Institute of Wood Chemistry)
	Bio-fertilizers of spent coffee grounds and green algae <i>Chlorella sp.</i> biomass for enhancement of soil organic matter. D.Ragauskaitė, R.Šlinkšienė (Kaunas University of Technology)
12:10	Comparison between neat tall oil fatty acid and their methyl ester epoxidation in a rotating packed bed reactor. E.Kauliņa, R.Pomilovskis, M.Kirpluks (Latvian State Institute of Wood Chemistry)
	An insight into challenges of conducting an LCA study for a food waste biorefinery. K.Balina, E.Dace (University of Latvia)
12:30	Lunch
13:20-15:00	Session 2A Chair Agnė Kairytė
	Session 2B Chair Arturs Viksna
13:20	Development of an analytical method for the determination of tar in co-produced gases in the biomass pyrolysis process. S.Osipovs, A.Pučkins (Daugavpils University)
	Characterization and evaluation of water-based ecological paint for the protection of wood materials coated using dipping technique. E.Sansonetti, D.Cīrule, E.Kuka, B.Andersons, I.Andersone, M.Danieks (Latvian State Institute of Wood Chemistry)
13:40	Study of a novel bio-refining method for obtaining 2-furaldehyde, acetic acid and pulp from birch wood. M.Puke, D.Godina, P.Brazdausks, J.Rizikovs (Latvian State Institute of Wood Chemistry)
	The study of betulin particles containing hydrogels prepared by antisolvent precipitation. A.Pāže, S.Vitolīna, R.Bērziņš, J.Rižikovs, R.Makars, D.Godiņa, A.Tereško (Latvian State Institute of Wood Chemistry)
14:00	New possibilities of using waste hemp biomass. J.Frankowski, D.Sieracka, W.Czeszak (Institute of Natural Fibres & Medicinal Plants – National Research Institute)
	Optimization of betulin colloidal aqueous suspension pretreatment for determination of particle characteristics. S.Vitolina, A.Paze, R.Berzins, J.Rizhikovs, R.Makars, D.Godina, A.Teresko (Latvian State Institute of Wood Chemistry)
14:20	Flammability studies of a pine sawdust coated with multicomponent suspension. N.Augaitis,
	Synthesis of novel C(3)-linked betulin azole conjugates. E.Jansons, J.Lugiņina, M.Turks (Institute of Organic Chemistry and Material science, Faculty

	S.Vaitkus, A.Kairytė, G.Balčiūnas, A.Kremensas, S.Vėjelis (Vilnius Gediminas Technical University)	of Materials Science and Applied Chemistry, Riga Technical University)
14:40	Potential of some Latvian industrial crops residuals for conversion to eco-friendly thermal insulation material. A.Berzins, R.Tupciauskas, M.Andzs, G.Pavlovichs (Latvian State Institute of Wood Chemistry)	Adaptation of the methylene blue adsorption method for specific surface area determination of betulin particles. R.Berzins, A.Paze, S.Vitolina, J.Rizhikovs, R.Makars, D.Godina, A.Teresko (Latvian State Institute of Wood Chemistry)
15:00	Coffee Break	
15:30-17:30	Session 3A Chair Kristīne Meile	Session 3B Francesco Romagnoli
15:30	Experimental design of cellobiose hydrolysis using activated biochar catalyst. D.Godina (Latvian State Institute of Wood Chemistry)	Water uptake and swelling of wood-plastic composites based on recycled polymer. A.Verovkins, J.Jaunslavietis, G.Shulga, B.Neiberte, S.Vitolina, T.Betkers, J.Brovkina, S.Livcha (Latvian State Institute of Wood Chemistry)
15:50	Partly unlocked macromolecule of technical lignins with vacuum, low temperature, microwave assisted pyrolysis. V.Biziks, J.Karthäuser, H.Fraundorf, H.Militz (Surfactor Germany GmbH)	Mycelium composites – an eco-friendly alternative to traditionally used synthetic packaging materials. G.D.Loris, I.Irbe, M.Škute, I.Fijipova, L.Andže (Latvian State Institute of Wood Chemistry)
16:10	Study of catalysts for suberinic acid-based adhesive polymerization. R.Makars, J.Rizikovs, A.Paze (Latvian State Institute of Wood Chemistry)	PLA/lignin composites doped with Cu nanoparticles for food packaging applications. E.S. Esakkimuthu, I.Pylypchuk, D.DeVallance, M.H.Sipponen (InnoRenew CoE)
16:30	Optimization of solvent choice in resin desorption process after the separation of wood pyrolysis liquids. A.Jermolajeva, K.Meile, A.Zhurinsh (BaltTest)	Rheological, thermal and mechanical properties of wood plastic composites based on virgin and recycled polypropylenes and birch plywood waste. K.Kalnins, J.Kajaks, J.Matvejs (Institute of Polymer Materials, Faculty of Material Science and Applied Chemistry, Riga Technical University)
16:50	Properties of Kraft lignin substituted phenol formaldehyde resin for paper impregnation. M.Thébault, H.Lammer, A.R.Mahendran (Kompetenzzentrum Holz GmbH)	A study on waste paper reinforced recycled polypropylene biocomposite. J.Jaunslavietis, J.Ozolins, M.Kalnins, G.Shulga, B.Neiberte (Latvian State Institute of Wood Chemistry)
17:10	Analysis of gas-liquid interaction and constraint handling in stirred tank bioreactors. A.Buss, A.Suleiko, N.Jekabsons, J.Vanags, D.Loca (Rudolfs Cimdins Riga Biomaterials Innovations and Development Centre of RTU, Institute of General Chemical Engineering, Faculty of Materials Science and Applied Chemistry, Riga Technical University)	
19:30	Conference Dinner at Gutenbergs Rooftop Restaurant, Doma Square 1	

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9:00-10:40	Session 4A Chair Inese Filipova	Session 4B Chair Jānis Rižikovs	Session 4C Chair Miķelis Kirpļuks
9:00	Nanocellulose-coated paper dipsticks with visual response towards heavy metal ions. A.Frigola, R.Aguado, Q.Tarrés, P.Mutjé, M.Delgado-Aguilar (University of Girona)	Enabling circular bioeconomy via estimating the potentially valorisable food loss and waste in the Northern European region. R.Soloha, L.K.Lukasa, K.Balina, E.Dace (University of Latvia)	Bioeconomy based biorefining solutions for valorisation of food wastes to obtain bioactive and functional ingredients. L.Klavins (The Natural Resource Research Centre of the University of Latvia)
9:20	The protective coatings of the lignocellulose-based composite boards formed using the drying and semi-drying oils. D.Vasiliauskienė, G.Balčiūnas, R.Boris, A.Kairyte, A.Kremensas, J.Urbonavičius (Vilnius Gediminas technical university)	The resource potential of fermentation residues. A.Stikane, E.Dace, E.Stalidzans (Institute of Microbiology and Biotechnology, University of Latvia)	Vanillic and Meldrum's acid containing antioxidant. L. Bērziņa, I. Mieriņa (Riga Technical University)
9:40	Densified juniper wood for use in bone implants. L.Andze, M.Andzs, M.Skulte, V.Nefjodov, R.Tupciauskas (Latvian State Institute of Wood Chemistry)	Waste rapeseed cooking oil is perspective substrate for biosurfactant synthesis via yeast <i>Starmerella Bombicola</i>. I.Berzina, L.K.Lukasa, J.Liepins (Institute of Microbiology and Biotechnology, University of Latvia)	Determination of antioxidant activity in fractions of pyrolysis liquids. E.Volkova, K.Meile, A.Zhurinsh (Latvian State Institute of Wood Chemistry)
10:00	Cellulose Modification with maleic anhydride. V.Fridrihsone, J.Zoldners, M.Skute, L.Andze, I.Filipova (Latvian State Institute of Wood Chemistry)	Development of low-cost medium for <i>Bacillus Subtilis</i> spore obtainment. E.Didrihsone, O.Grīgs, E.Bolmanis (Latvian State Institute of Wood Chemistry)	Valorization of liquid by-products from hemp carbonization. M.Zouari, L.Marrot, K.Meile, R.Herrera Diaz (Innorennew CoE)
10:20	Homogeneous synthesis of cellulose palmitate derivatives in ionic liquid via transesterification. N.Savale, E.Tarasova, I.Krasnou, V.Gudkova, A.Krumme (Tallin University of Technology)	Medium formulation and fed-batch cultivation of <i>Methylosinus Trichosporium</i>. A.Suleiko, K.Dubencovs, A.Suleiko, J.Vanags, S.Glukhikh (Latvian State Institute of Wood Chemistry)	Torrefaction of pulp industry sludge: Experimental validation, opportunities and challenges. T.R.K.C Doddapapenei, L.Pärn, T.Kikas (Institute of Forestry and Engineering, Estonian University of Life Sciences)
10:40	Coffee Break		
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The publication of the Conference Special Issue in *Key Engineering Materials* will be ensured by



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