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Degrees

2022 MA in Social Science, Industrial Engineering and Management (BALTECH Study Centre, Riga Technical University, Latvia)

2013 PhD in Environmental Engineering (Riga Technical University, Latvia)

2009 MA in Environmental Science (Riga Technical University, Latvia)

2007 BA in Environmental Science (Riga Technical University, Latvia)

Other education and expertise

2022 PhD course "Absolute environmental sustainability assessment of production and consumption in a systems perspective" (Technical University of Denmark, Denmark). 2.5 ECTS.

2022 11th International summer school on Life cycle approaches for sustainable regional development (Forum for Sustainability through Life Cycle Innovation and IVL Swedish Environmental Research Institute, Sweden)

2022 PhD course "Resource Recovery and Biotechnology" (University of Boras, Sweden)

2020 Course "Project Management Tools" (RISEBA University of Applied Sciences) 3.0 ECTS

2019 Course "Constraint-based modelling: introduction and advanced topics" (Leiden University, The Netherlands). 35 contact hours.

2019 BESTPRAC Training school "Leaders for the future: knowledgeable and successful leaders in Research Administration" (Ljubljana, Slovenia).

2015 Summer school on Waste Management and Circular Economy (Lappeenranta University of Technology, Finland).

2014 Vocational training in Beekeeping (Latvia University of Agriculture, Latvia)

Language skills

Native language Latvian

Other language skills

	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
Russian	C1	B2	C1	C1	A2

Current employment

Since 06/2023 Researcher at Baltic Studies Centre, Riga, Latvia

Since 01/2021 Senior researcher at University of Latvia, Institute of Microbiology and Biotechnology, Riga, Latvia

Since 01/2021 Acting senior researcher at Riga Stradins University, Faculty of European Studies, Riga, Latvia (*Latvian Council of Science project CliNap*)

Previous work experience

Previous employment in academia:

11/2022 – 06/2023 Visiting researcher at Unitelma Sapienza University of Rome, Rome, Italy (HorizonEurope project SUSTRACK)

05/2020 – 04/2022 Visiting senior researcher at Latvia University of Life Science and Technology, Faculty of information Technology, Jelgava, Latvia (Horizon2020 FACCE SURPLUS project UPWASTE)

05/2019 – 01/2021 Post-doctoral researcher at University of Latvia, Institute of Microbiology and Biotechnology, Riga, Latvia

05/2019 – 04/2020 Acting senior researcher at JSC Biotehniskais centrs, Riga, Latvia (*ERDF project CryZym*)

02/2016 – 05/2018 Senior researcher at Riga Technical University, Institute of Energy Systems and Environment (RTU IESE), Riga, Latvia

04/2014 - 05/2018 Assistant professor at RTU IESE

06/2010 - 04/2014 Lecturer at RTU IESE

06/2009 - 01/2016 Researcher at RTU IESE

Previous secondary occupations:

05/2018 - 12/2019 Scientific secretary at Riga Stradins University, Research Department, Riga, Latvia

03/2006 - 11/2008 Receptionist at Laine Ltd., Riga, Latvia

06/2005 - 08/2005 Sales manager at Southwestern Co., Nashville, Tennessee, USA

Research funding and grants

Research projects:

2023 – 2026 Recycling plastic and developing hybrid living materials by capturing greenhouse gases to produce value-added products (REPLACER), M-ERA.Net research programme, funded by the Latvian Council of Science. <u>Coordinator</u>: Dr. Rohan Karande, University of Leipcig, Germany. <u>Role:</u> Work package leader and principal investigator. <u>Amount of funding attracted:</u> 300 000 EUR.

2022 – 2025 Supporting the identification of policy priorities and recommendations for designing a sustainable track towards circular bio-based systems (SUSTRACK), Horizon Europe grant No. 101081823. Coordinator: Dr. Piergiuseppe Morone, Unitelma Sapienza University of Rome, Italy. Role: Researcher.

2022 – 2023 Socio-economic context of food waste generation in Latvia, University grant funded by Riga Stradins University. <u>Coordinator</u>: Dr. Elina Dace, Riga Stradins University, Latvia. <u>Role:</u> Project leader. <u>Amount of funding attracted:</u> 20 000 EUR.

- **2021 2023** From indifference to making difference in climate policy: improving the interaction between political narrative and societal perceptions in Latvia (CliNaP), funded by the Latvian Council of Science. <u>Coordinator</u>: Dr. Andris Spruds, Riga Stradins University, Latvia. <u>Role:</u> Researcher.
- **2020 2023** Sustainable Microbial Valorisation of Waste Lipids into Biosurfactants (Waste2Surf), funded by European Regional Development Fund. <u>Coordinator</u>: Dr. Elina Dace / Dr. Egils Stalidzans, University of Latvia, Latvia. <u>Role:</u> Project leader and principal investigator. <u>Amount of funding attracted:</u> 648 000 EUR.
- **2020 2023** Decision Support Tool for an Integrated Food Waste Valorisation System, funded by European Regional Development Fund. <u>Coordinator</u>: Dr. Elina Dace, University of Latvia, Latvia. <u>Role:</u> Project leader and principal investigator. <u>Amount of funding attracted:</u> 134 000 EUR.
- **2020 2023** Sustainable up-cycling of agricultural residues: modular cascading waste conversion system (UpWaste), funded by Horizon 2020 research and innovation programme FACCE SURPLUS. <u>Coordinator</u>: Dr. Sergiy Smetana, Deutsches Institut für Lebensmitteltechnik DIL e.V., Germany. <u>Role:</u> Researcher.
- **2019 2022** *Crypthecodinium cohnii* and *Zymomonas mobilis* syntrophy for production of omega 3 fatty acid from byproducts of biofuel and sugar industry (CryZym), funded by European Regional Development Fund. <u>Coordinator</u>: Dr. Egils Stalidzans, University of Latvia, Latvia. <u>Role:</u> Researcher.
- **2018 2021** Biovalorization of olive oil mill wastewater to microbial lipids and other products via *Rhodotula glutinis* fermentation (Rhodolive), funded by Horizon 2020 research and innovation programme ERA-net CoBioTech. <u>Coordinator</u>: Mr. Alper Karakaya, Düzen Biological Sciences R&D and Production, Turkey. <u>Role:</u> Researcher.
- **2016 2017** Comparative assessment of performance of the 28 European Union Member States in agricultural greenhouse gas emissions, University grant funded by Riga Technical University. Coordinator: Dr. Elina Dace, Riga Technical University, Latvia. Role: Project leader and principal investigator.
- **2014 –2015** Finding the way to mitigate greenhouse gas emissions through sustainable agricultural policy, University grant funded by Riga Technical University. <u>Coordinator</u>: Dr. Elina Dace, Riga Technical University, Latvia. <u>Role:</u> Project leader and principal investigator.
- **2013 2015** Involvement of Human Resources for Development of Integrated Renewable Energy Resources Energy Production System, funded by the European Social Fund. <u>Coordinator</u>: Dr. Dagnija Blumberga, Riga Technical University, Latvia. <u>Role:</u> Researcher.
- **2012 2015** Closing the Life Cycle of Landfills Landfill Mining in the Baltic Sea Region for Future, funded by Swedish Institute. <u>Coordinator</u>: Dr. Julija Gusca, Riga Technical University, Latvia. <u>Role:</u> Researcher.
- **2009 2012** System thinking integration in environmental policy, funded by the European Economic Area and Norwegian Government Financial Instrument and the Republic of Latvia. <u>Coordinator</u>: Dr. Andra Blumberga, Riga Technical University, Latvia. <u>Role:</u> Researcher.

Education projects:

- **2014 2015** Cooperation development project on promoting sustainable environmental engineering education between Urgench State University and Riga Technical University, education and mobility project funded by the Ministry of Foreign Affairs of Latvia. <u>Role:</u> Project manager.
- **2011 2014** Development and implementation of the Master Programme –"Eco-Engineering environmental processing and sustainable use of renewable recourses and bio-waste", education and

mobility project financed by Trans-European Mobility Programme for University Studies (Tempus) programme. Role: Lecturer.

Contract research projects:

2023-2025 Development of methodology for measurements of food waste levels, data collection and analysis, funded by the Ministry of Environmental Protection and Regional Development. <u>Role:</u> Project leader. <u>Amount of funding attracted:</u> 100 000 EUR.

2021 Activities and forecasts of the Latvian biodegradable waste management system, funded by the State Audit Office of the Republic of Latvia. Role: Senior expert.

2019 – 2020 Assessment of investment needs in the National Waste Management Plan 2021 – 2028, funded by the Ministry of Environmental Protection and Regional Development of Latvia. Role: Senior expert.

2019 Industry impact study on the implementation of a deposit-refund system in Latvia, funded by the Latvian Chamber of Commerce and Industry. <u>Role:</u> Senior expert.

2015 Analysis of techno-economic alternatives for production and use of refuse derived fuel in Latvia, funded by the Latvian Association of Waste Management Companies. Role: Expert.

2014 Modelling greenhouse gas emissions from Latvian non-ETS sectors – projections for 2020 and 2030, funded by the Ministry of Environmental Protection and Regional Development. Role: Researcher.

2012 Screening of Latvian sanitary landfills with respect to environmental, technical and economic performance, funded by the Ltd. ZAAO. <u>Role:</u> Researcher.

2010 – 2011 Model and action plan for utilization of renewable energy sources and increase of energy efficiency in Latvia, funded by Latvian Environmental Protection Fund. Role: Research assistant.

Research output

42 publications indexed in *Scopus* database. Total number of citations in Scopus: 489. H-index in Scopus: 13. Please refer to the List of Publications attached at the end of this CV.

2 datasets published. Please refer to the List of Datasets attached at the end of this CV.

Participation with presentations in 30+ international scientific conferences, seminars, and other public events in Europe and abroad. Please refer to the List of Presentations attached at the end of this CV.

Research supervision and leadership experience

Leadership experience in research groups:

Leader of the Circularity Transitions Research Group at University of Latvia, Institute of Microbiology and Biotechnology, Riga, Latvia. Since 2022.

Supervised theses:

Raimonda Soloha. Doctoral thesis: Model for sustainability transition towards the zero-waste food supply system, since 2021

Between 2009 and 2016, 9 master's theses supervised in the programme of Environmental Engineering and 5 bachelor's theses supervised in the programme of Environmental Science, Riga Technical University.

Awards and honours

Honorary acknowledgement of the State Audit Office of the Republic of Latvia awarded for the contribution to the audit "Waste sorting and immediate challenges in the sorting of biodegradable waste", providing reasonable data on the activities and forecasts of the Latvian biodegradable waste management system, 2022.

"Publication of the year" of the Faculty of Power and Electrical Engineering, Riga Technical University", awarded by the Faculty of Power and Electrical Engineering, Riga Technical University, 2017.

"Young Scientist of the Environmental Science" award in the competition "Environmental Science Award" organized by the Latvian Environmental Science and Education Committee, 2014.

Other key academic merits, such as:

Memberships in associations and networks:

Management committee member of the COST Action CA22134 "Sustainable Network for agrofood loss and waste prevention, management, quantification and valorisation" (since 25/07/2023)

Management committee member of the COST Action CA20127 "Waste biorefinery technologies for accelerating sustainable energy processes" (since 30/06/2021)

Management committee member of the COST Action CA20133 "Cross-border transfer and development of sustainable resource recovery strategies towards zero waste" (since 30/06/2021)

Management committee member of the COST Action CA19139 "Process-based models for climate impact attribution across sectors (PROCLIAS)" (since 26/04/2020)

Member of the COST Action ES1407 "European network for innovative recovery strategies of rare earth and other critical metals from electric and electronic waste (ReCreew)" – 03/2016-03/2020

Member of the COST Action CA15115 "Mining the European Anthroposphere (MINEA)" – 03/2016 – 03/2020

Member of the International Solid Waste Association (ISWA), NGO – 2013-2016; 2022-2023

Member of the System Dynamics Society, NGO – 2013-2016

Member of the Waste Management Association of Latvia (LASA), NGO – since 2010

Member of the Association of Latvian Young Researchers (LJZA), NGO – 2010-2013; since 2022

Memberships in scientific committees and councils:

Member of the Promotion Council of Riga Technical University "RTU P-12" (with the rights to award a scientific doctoral degree in environmental engineering and energetics) – Since 1 February 2020 Member of the Council of Science of Rīga Stradiņš University – May 2018 – February 2020

Administrative or working group positions:

Member of the Working Group for the National Research Information System of the Ministry of Education and Science of Latvia – January 2019 – May 2022, MESL order Nr.1-2/19/32.

Study coordinator of foreign students Institute of Energy Systems and Environment, Riga Technical university, June 2010 – May 2018.

Expert's positions:

National expert of the science field "Engineering and technology" research area "Environmental engineering", approved by the decision No.40-3-1 on November 19, 2015, by the Latvian Council of Science. Continuously renewed (last time – 07.10.2021. decision No.1-12-60). Term – October 6, 2024.

National expert of the science field "Engineering and technology" research area "Industrial biotechnology", approved by the decision No.1-12-60 on October 7, 2021, by the Latvian Council of Science. Term – October 6, 2024.

Independent expert at the Science Fund of the Republic of Serbia; Term – 31.12.2023.

Contribution to conference committees:

Member of the Scientific Committee: First Conference on International Sustainable Resource Recovery Strategies Toward Zero Waste, Istanbul, Turkey, September 13 – 15, 2023.

Member of the Organizing Committee: Metabolic Pathway Analysis 2019, Riga, Latvia, August 12 – 16, 2023.

Staff exchange and research mobility visits abroad:

Università degli Studi di Roma Unitelma Sapienza, Italy – January 19 – February 6, 2023

Norwegian University of Life Sciences, Norway – May 30 – June 10, 2022

University of Borås, Sweden – May 21 – May 28, 2022

University of Nottingham, United Kingdom – May 2 – May 15, 2022

Thomas More University of Applied Sciences, Belgium – April 19 – April 27, 2022

Lappeenranta University of Technology, Finland – October 18 – November 5, 2021

University of Padua, Italy – August 21 – September 11, 2021

University of Helsinki, Finland - May 21-22, 2019

Aalto University, Finland - May 20, 2019

Editorial work:

Guest editor for the special issue "Sustainability Transformations in the Energy, Water and Agri-Food Sectors" for Energies, peer-reviewed, open access journal. 2021-2022.

https://www.mdpi.com/journal/energies/special issues/sustainability energy water food sectors

Publication peer-review for international scientific journals:

Resources, Conservation and Recycling; Waste Management; Applied Energy; Climate Policy; Journal of Environmental Management; Journal of Environmental Planning and Management; Ecological Economics; and other journals.

Acting as pre-examiner or opponent of a doctoral dissertation:

Elīna Strade. Optimization of the Biological Treatment of Pharmaceutical Processing Waters under Multistress Conditions. 2023. (pre-examiner).

Brigita Daļecka. Wastewater treatment from pharmaceutical substances with filamentous fungi. 2021 (pre-examiner).

Anna Kubule. Novel methods for integrated assessment of industrial symbiosis and energy efficiency. 2016 (official opponent).

Other expertise and skills

Proficiency with the Microsoft Office™ applications, internet browsers, as well as with sector specific software packages – e.g. PowerSim Studio, Vensim, SimaPro, Mendeley Desktop, etc. and current research information system Elsevier Pure. Full control of 10-finger typing.

A list of scientific publications

I. Papers published in peer-reviewed journals indexed in Scopus and/or Web of Science:

- Mukamwi, M., Somorin, T., Soloha, R., & Dace, E. (2023). Databases for biomass and waste biorefinery a minireview and SWOT analysis. Bioengineered, 14(1), [2286722]. https://doi.org/10.1080/21655979.2023.2286722
- Balina, K., Soloha, R., Suleiko, A., Dubencovs, K., Liepins, J., & Dace, E. (2023). Prospective Life Cycle Assessment of Microbial Sophorolipid Fermentation. Fermentation, 9(9) [839]. https://doi.org/10.3390/fermentation9090839
- Kleinberga, V., Palkova, A., & Dace, E. (2023). How to recognise the inevitable: Latvian media narratives on climate change. Environmental Development, 45, [100816]. https://doi.org/10.1016/j.envdev.2023.100816
- Ziemele, J., Gendelis, S., & Dace, E. (2023). Impact of global warming and building renovation on the heat demand and district heating capacity: Case of the city of Riga. Energy, 276, [127567]. https://doi.org/10.1016/j.energy.2023.127567
- Muiznieks, R., Dace, E., & Stalidzans, E. (2023). Integrated Sustainability Score Implementation as an Objective Function in Sustainable Metabolic Engineering. Fermentation, 9(6), [548]. https://doi.org/10.3390/fermentation9060548
- Ziemele, J., & Dace, E. (2022). An analytical framework for assessing the integration of the waste heat into a district heating system: Case of the city of Riga. Energy, 254(Part B), [124285]. https://doi.org/10.1016/j.energy.2022.124285
- Stikane, A., Dace, E., & Stalidzans, E. (2022). Closing the loop in bioproduction: Spent microbial biomass as a resource within circular bioeconomy. New Biotechnology, 70, 109-115. https://doi.org/10.1016/j.nbt.2022.06.001
- Daugavietis, J.E., Soloha, R., Dace, E., Ziemele, J. (2022). A Comparison of Multi-Criteria Decision Analysis Methods for Sustainability Assessment of District Heating Systems, Energies, 15(7), [2411]. https://doi.org/10.3390/en15072411
- Liepins, J., Balina, K., Soloha, R., Berzina, I., Lukasa, L. K., & Dace, E. (2021). Glycolipid biosurfactant production from waste cooking oils by yeast: Review of substrates, producers and products. Fermentation, 7(3), [136]. https://doi.org/10.3390/fermentation7030136
- Stalidzans, E., & Dace, E. (2021). Sustainable metabolic engineering for sustainability optimisation of industrial biotechnology. Computational and Structural Biotechnology Journal, 19, 4770-4776. https://doi.org/10.1016/j.csbj.2021.08.034
- Ziemele, J., Talcis, N., Osis, U., & Dace, E. (2021). A methodology for selecting a sustainable development strategy for connecting low heat density consumers to a district heating system by cascading of heat carriers. *Energy*, 230, [120776]. https://doi.org/10.1016/j.energy.2021.120776
- Timma, L., Dace, E., Kristensen, T., & Knudsen, M. T. (2020). Dynamic sustainability assessment tool: Case study of green biorefineries in Danish agriculture. *Sustainability (Switzerland)*, *12*(18), [7389]. https://doi.org/10.3390/su12187389

- Burlakovs, J., Vincevica-Gaile, Z., Krievans, M., Jani, Y., Horttanainen, M., Pehme, K. M., Dace, E., Setyobudi, R. H., Pilecka, J., Denafas, G., Grinfelde, I., Bhatnagar, A., Rud, V., Rudovica, V., Mersky, R. L., Anne, O., Kriipsalu, M., Ozola-Davidane, R., Tamm, T., & Klavins, M. (2020). Platinum group elements in geosphere and anthroposphere: Interplay among the global reserves, urban ores, markets and circular economy. *Minerals*, 10(6), 1-19. [558]. https://doi.org/10.3390/min10060558
- Dace, E., Stibe, A., & Timma, L. (2020). A holistic approach to manage environmental quality by using the Kano model and social cognitive theory. *Corporate Social Responsibility and Environmental Management*, *27*(2), 430-443. https://doi.org/10.1002/csr.1828
- Timma, L., Dace, E., & Knudsen, M. T. (2020). Temporal aspects in emission accounting—case study of agriculture sector. *Energies*, *13*(4), [800]. https://doi.org/10.3390/en13040800
- Dace, E., & Blumberga, D. (2016). How do 28 European Union Member States perform in agricultural greenhouse gas emissions? It depends on what we look at: Application of the multi-criteria analysis. *Ecological Indicators*, 71, 352-358. https://doi.org/10.1016/j.ecolind.2016.07.016
- Zoss, T., Dace, E., & Blumberga, D. (2016). Modeling a power-to-renewable methane system for an assessment of power grid balancing options in the Baltic States' region. *Applied Energy*, *170*, 278-285. https://doi.org/10.1016/j.apenergy.2016.02.137
- Malijonytė, V., Dace, E., Romagnoli, F., & Gedrovics, M. (2016). Methodology for determining the mixing ratio of selected solid recovered fuels. *Agronomy Research*, *14*, 1169-1179. https://agronomy.emu.ee/wp-content/uploads/2016/05/Vol14_S1_Malijonyte.pdf
- Blumberga, A., Timma, L., Lauka, D., Dace, E., Barisa, A., & Blumberga, D. (2015). Achieving sustainability in non-ETS sectors using system dynamics modelling practice. In X. Liu, P. S. Varbanov, J. J. Klemes, S. R. Wan Alwi, & J. Y. Yong (Eds.), *Chemical Engineering Transactions* (Vol. 45, pp. 871-876). AIDIC-Italian Association of Chemical Engineering. https://doi.org/10.3303/CET1545146
- Dace, E., Muizniece, I., Blumberga, A., & Kaczala, F. (2015). Searching for solutions to mitigate greenhouse gas emissions by agricultural policy decisions Application of system dynamics modeling for the case of Latvia. *Science of the Total Environment*, 527-528, 80-90. https://doi.org/10.1016/j.scitotenv.2015.04.088
- Dace, E., & Muizniece, I. (2015). Modeling greenhouse gas emissions from the forestry sector the case of Latvia. *Agronomy Research*, 13(2), 464-476. https://agronomy.emu.ee/vol132/13 2 22 B5.pdf
- Dace, E., Bazbauers, G., Berzina, A., & Davidsen, P. I. (2014). System dynamics model for analyzing effects of ecodesign policy on packaging waste management system. *Resources, Conservation and Recycling*, 87, 175-190. https://doi.org/10.1016/j.resconrec.2014.04.004
- Dace, E., Pakere, I., & Blumberga, D. (2013). Evaluation of economic aspects of the deposit-refund system for packaging in Latvia. *Management of Environmental Quality: An International Journal*, 24(3), 311-329. https://doi.org/10.1108/14777831311322631
- Dace, E., & Blumberga, D. (2012). An assessment of the potential of refuse-derived fuel in Latvia. *Management of Environmental Quality: An International Journal*, 23(5), 503-516. https://doi.org/10.1108/14777831211255088
- Berzina, A., Dace, E., & Bazbauers, G. (2010). Analysis of Ecodesign Implementation and Solutions for Packaging Waste System by Using System Dynamics Modeling. *Environmental and Climate Technologies*, *4*(1), 22-28. https://doi.org/10.2478/v10145-010-0013-8

- Dace, E., Berzina, A., Ozolina, L., & Lorence, I. (2010). Participation of Environmental Science Students in an Open Discussion "Riga European Green Capital". *Environmental and Climate Technologies*, *5*(1), 28-34. https://doi.org/10.2478/v10145-010-0031-6
- Blumberga, D., Kuplais, G., Veidenbergs, I., & Dace, E. (2009). Benchmarking method for estimation of biogas upgrading schemes. *Latvian Journal of Physics and Technical Sciences*, 46(4), 23-35. https://doi.org/10.2478/v10047-009-0013-2
- Blumberga, D., Kuplais, G., Veidenbergs, L., Dace, E., & Gusca, J. (2009). Modelling Of The Installed Capacity Of Landfill Power Stations. *Environmental and Climate Technologies*, *3*(3), 19-26. https://doi.org/10.2478/v10145-009-0002-y
- Dace, E., & Valtere, S. (2009). Reduction of Coal Dust Concentration in the Air by Using Renewable Resources as Dust Suppressants. *Environmental and Climate Technologies*, *3*(3), 48-53. https://doi.org/10.2478/v10145-009-0006-7

II. Papers published in peer-reviewed conference proceedings indexed in Scopus and/or Web of Science:

- Malijonyte, V., Dace, E., Romagnoli, F., Kliopova, I., & Gedrovics, M. (2016). A Comparative Life Cycle Assessment of Energy Recovery from end-of-life Tires and Selected Solid Waste. *Energy Procedia*, *95*, 257-264. https://doi.org/10.1016/j.egypro.2016.09.064
- Slotina, L., & Dace, E. (2016). Decision Support Tool for Implementation of Remanufacturing in an Enterprise. *Energy Procedia*, 95, 451-458. https://doi.org/10.1016/j.egypro.2016.09.062
- Lazdans, A., Dace, E., & Gusca, J. (2016). Development of the Experimental Scheme for Methanation Process. *Energy Procedia*, 95, 540-545. https://doi.org/10.1016/j.egypro.2016.09.082
- Tilla, I., & Dace, E. (2016). Mathematical Model for the Simulation of the Syngas Methanation Process. *Energy Procedia*, 95, 475-481. https://doi.org/10.1016/j.egypro.2016.09.070
- Gavelyte, S., Dace, E., & Baziene, K. (2016). The Effect of Particle size Distribution on Hydraulic Permeability in a Waste Mass. *Energy Procedia*, 95, 140-144. https://doi.org/10.1016/j.eqvpro.2016.09.035
- Dace, E., Blumberga, D., Kuplais, G., Bozko, L., Khabdullina, Z., & Khabdullin, A. (2015). Optimization of landfill Gas
 Use in Municipal Solid Waste Landfills in Latvia. *Energy Procedia*, 72, 293-299. https://doi.org/10.1016/j.egypro.2015.06.042
- Muizniece, I., Dace, E., & Blumberga, D. (2015). Assessing the potential of coniferous greenery from logging residues in Latvia using a system dynamics model. *Vide. Tehnologija. Resursi Environment, Technology, Resources, 2*, 219-224. https://doi.org/10.17770/etr2015vol2.240
- Muizniece, I., Dace, E., & Blumberga, D. (2015). Dynamic Modeling of the Environmental and Economic Aspects of Bio-Resources from Agricultural and Forestry Wastes. In M. Drusa (Ed.), *World Multidisciplinary Earth Sciences Symposium*, *WMESS 2015* (pp. 806-812). (Procedia Earth and Planetary Science; Vol. 15). Elsevier BV. https://doi.org/10.1016/j.proeps.2015.08.129
- Dace, E., Blumberga, D., & Veidenbergs, I. (2015). Modeling Syngas Composition in an Integrated System of Biomass Gasification, Electrolysis and Methanation. *Energy Procedia*, 75, 801-806. https://doi.org/10.1016/j.egypro.2015.07.133

- Dace, E., Rusanova, J., Gusca, J., & Blumberga, D. (2014). Selecting a catalyst for methanation process: Technical and economic performance based TOPSIS Analysis. In R. Zevenhoven (Ed.), *Proceedings of the 27th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems, ECOS 2014* (Proceedings of the 27th International Conference on Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems, ECOS 2014). Aabo Akademi University.
- Dace, E., Pakere, I., & Blumberga, D. (2013). Analysis of sustainability aspects of the packaging deposit-refund system in Latvia. In C. A. Brebbia (Ed.), *Sustainable Development and Planning VI* (pp. 729-740). (WIT Transactions on Ecology and the Environment; Vol. 173). WITPress. https://doi.org/10.2495/SDP130611
- Kuplais, G., Blumberga, D., & Dace, E. (2010). System analysis for integration of landfill energy production in regional energy supply. In V. Popov, H. Itoh, & U. Mander (Eds.), *Waste Management and the Environment V* (Vol. 140, pp. 21-30). (WIT Transactions on Ecology and the Environment). WITPress. https://doi.org/10.2495/WM100031

III. Papers published in peer-reviewed conference proceedings:

- Balina, K., Soloha, R., & Dace, E. (2022). Environmental impact of the food waste utilization instead of raw material: the potential and limitations. 762-765. Poster session presented at 13th International Conference on Life Cycle Assessment of Food, Lima, Peru.
- Denafas, G., Bucinskas, A., Burlakovs, J., Dace, E., Baziene, K., Horttanainen, M., Havukainen, J., Kaartinen, T., Rosendal, R., Kriipsalu, M., Jani, Y., Hogland, W. (2016), Investigation for Landfill Mining Feasibilities in the Nordic and Baltic Countries: Overview of Project Results. *In:* 4th International Conference on Sustainable Solid Waste Management: Proceedings, Cyprus, Limasol, 23-25 June, 2016. Limasol: pp.1-13.
- Dace E., Bendere R. (2012). Landfill mining in Latvia: Status, problems and challenges. *In: Proceedings of the 8th International Conference on Natural Sciences and Technologies for Waste and Wastewater Treatment, Remediation, Emissions Related to Climate, Environmental and Economic Effects*. Sweden, Kalmar, November 26-28, 2012: pp.185-194.

IV. Peer-reviewed books and book chapters indexed in Scopus and/or Web of Science:

Havukainen, J., & Dace, E. (2023). Waste to energy and circular economy: the case of anaerobic digestion. In M. Prasad, & M. Smol (Eds.), Sustainable and Circular Management of Resources and Waste Towards a Green Deal (pp. 105-115). Elsevier. https://doi.org/10.1016/B978-0-323-95278-1.00017-6

V. Books and book chapters:

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