



XVII International Scientific Conference of Environmental and Climate Technologies

15-17 MAY
2024
RIGA, LATVIA

PROGRAM

Organized by:



Sponsored by:



WEDNESDAY, 15 MAY

8.15 - 9.00

Registration and coffee

CONFERENCE OPENING

(Moderator: Dace Lauka)

9.00 - 9.10

Talis Juhna, RTU rector, Latvia

9.10 - 9.20

Julija Gusca, Head of the Study Dep. IESE, Latvia

PLENARY SESSION

(Moderator: Aiga Barisa)

9.20 - 9.50

Peter Lund, Aalto University, Finland

9.50 - 10.20

Dagnija Blumberga, Riga Technical University, Latvia

10.20 - 10.50

Thierry Rayna, Ecole Polytechnique, France

10.50 - 11.15

Break

PANEL SESSION I - DISTRICT HEATING

(Moderator: Anna Volkova)

11.15 - 11.30	Towards unified framework for district heating resilience	Ieva Pakere, Latvia
11.30 - 11.45	Design and performance comparison of district heating systems generations.	Giovanni Brumana, Italy
11.45 - 12.00	Heat Loss Determination of District Heating Pipelines, a Comparison of Numerical and Analytical Methods	Aaron Wieland, Germany
12.00 - 12.15	Potential for Solar Industrial Process Heat Systems for Tea Drying Applications – A Case Study	Christopher Enweremadu, South Africa
12.15 - 12.30	Waste-Heat Renewable Gasifier Design through Taguchi's Method and MANFIS	Chung-Neng Huang, Taiwan
12.30 - 13.30	Lunch break	

PANEL SESSION II – MODELLING

(Moderator: Agris Kamenders)

13.30 - 13.45	Comparing Lithuania's, Latvia's and Japan's Climate Policies. Are we far from the ideals of the Paris Agreement?	Audrius Sabunas, Japan
13.45 - 14.00	Climate Conscious Communities: Navigating Transformation through Simulation Games and Creative Engagement	Vita Brakovska, Latvia
14.00 - 14.15	Incorporating Life Cycle Assessment in the Green Metric ranking: a conceptual approach	Elisabetta Palumbo, Italy
14.15 - 14.30	Virtual reality for building energy efficiency	Ruta Vanaga, Latvia
14.30 - 14.45	Measuring the decarbonisation progress of buildings based on European open big data	Carlos Beltran-Velamazán, Spain
14.45 - 15.00	Challenges of Undular Jump Modelling	Oksana Halych, Ukraine
15.00 - 15.30	Break	

PANEL SESSION III – BIOECONOMY

(Moderators: Anna Kubule)

15.30 - 15.45	Biomass diversification for heat production: from theory to practice	Vladimirs Kirsanovs, Latvia
15.45 - 16.00	Circularity in bio-based industries	Ilze Vamza, Latvia
16.00 - 16.15		Francesco Romagnoli, Latvia
16.15 - 16.30	Environmental Assessment of Cellulose Pulp Production from Wood Waste using Organosolv Treatment	Aron Pazzaglia, Italy
16.30 - 16.45	Environmentally Friendly Processing of Forestry Biomass Side Streams – Coniferous Needles and Greenery	Marcis Mezulis, Latvia
16:45 - 17.00	Break	

17.00 - 18.30 POSTER SESSION I

(Moderator: Maksims Feofilovs)

19.30 SOCIAL DINNER

THURSDAY, 16 MAY

8.15 - 9.00 Registration and coffee

CONFERENCE OPENING

(Moderator: Dace Lauka)

9.00 - 9.15 Dagnija Blumberga, Riga Technical University, Latvia
Dace Lauka, Riga Technical University, Latvia

PLENARY SESSION

(Moderator: Ruta Vanaga)

9.15 - 9.45 Andra Blumberga, Latvia

9.45 - 10.15 Fabian Diaz, Latvia

10.15 - 10.45 Wolfgang Irrek, Germany

10.45 - 11.15 Break

PANEL SESSION IV – ENERGY SYSTEMS, EFFICIENCY

(Moderator: Ingo Weidlich)

11.15 - 11.30 Adoption and institutionalizing of integrated energy planning Anda Jekabsone, Latvia

11.30 - 11.45 Design of a Fertilizing Robot Application with Regard to Energy Consumption Olga Liivapuu, Estonia

11.45 - 12.00 Mechanical vapor compression desalination process: approaches to optimize compressor's consumption for brine valorization Pablo Calleja Cayon, Spain

12.00 - 12.15 Guldana Khabdullina

12.15 - 12.30 Exploring the Efficacy of Random Linear Parameter Models for Forecasting Heating Demand in District Heating Networks Hesham Ali, Estonia

12.30 - 13.30 Lunch break

PANEL SESSION V – CIRCULAR ECONOMY

(Moderator: Karlis Valters)

13.30 - 13.45 Sustainability of healthcare waste Julija Gusca, Latvia

13.45 - 14.00 Investigation on PFAS sources and removal in a municipal wastewater treatment plant Valeria Mezzanotte, Italy

14.00 - 14.15 Impact of dispersing on the production and extraction of bio-based basic chemicals from biogenic secondary waste Kyra Atessa Vogt, Germany

14.15 - 14.30 Exploring Sound Absorption Characteristics of Biodegradable Agricultural Wastes for Sustainable Acoustic Solutions Nuushuun Archie Gboe, Lithuania

14.30 - 14.45 What is the shortage of complete life cycle analysis for blended textile Tereza Bezrucko, Latvia

14.45 - 15.15 Break

15.15 - 15.30	The Potential of Water-Energy-Food Nexus to Tackle Climate Change: A Case Study of Jordan	Aiman Albatayneh, Jordan
15.30 - 15.45	Overview of low-quality biomass pellet combustion process mathematical modelling	Mikelis Dzikevics, Latvia
15.45 - 16.00	An Empirical Approach to Solar Photovoltaic Cell Temperature Prediction	Christopher Enweremadu, South Africa
16.00 - 16.15	Energy Transition Reality Check: Are Municipalities Meeting the Mark?	Kristiana Dolge, Latvia
16.15 - 16.30	Remote Solar Parks for Building Decarbonisation: A Lithuanian Case Study on Virtual Prosumers	Monika Grineviciute, Lithuania
16.30 - 16.45	The impact of RED III directive on the use of renewable fuels in transport on the example of Estonia	Roland Allmagi, Estonia
16.45 - 17.00	Break	

17.00 - 19.00 POSTER SESSION II

(Moderators: Maksims Feofilovs)

FRIDAY, 17 MAY

You can participate in the event of your choice

ENERGY EQUILIBRUM WORKSHOP

10.00 - 10.30	Registration
10.30 - 13.00	Workshop
13.00 - 14.00	Lunch

DEEP TECH EVENT

9.00 - 12.15	Registration
12.15 - 13.00	Lunch
13.00 - 14.30	Global Vision. Mandatory responsibility of Ecosystem builders
14.30 - 16.10	Deep Tech support by policy makers. Support instruments for deep tech TRL journey
16.10 - 16.50	Startup Demo Finals and Award Ceremony
16.50 - 19.00	Closing Remarks