



	DAY 1-3 SEPTEMBER					
8h30	REGISTRATION					
9h30	<b>Opening Ceremony</b> Manuel Ara de Oliveira - Regional Director for Environment and the Sea Silvio Moreira Fernandes - Rector of the University of Madeira Amilcar Gonçalves - President of the Madeira Water and Waste Company (ARM) Rui Caldeira - President of the Regional Agency for the Development of Research, Technology and Innovation Cândida Vilarinho - Chair of the Organizing Committee of Wastes 2025					
	Room: Auditorium					
10h00	Plenary Session I  From Data to Action: Leveraging the EU4S Madeira Super-Site for Wastewater-Based Health and Environmental Intelligence Ricardo Jardim-Goncalves, Madeira Super-Site coordinator (IDEA Institute) Faculty of Sciences and Technology, NDVA University of Lisbon/UNINDVA)  Leading with Sustainable Oxygen: SESARAM's Environmental Commitment Martinha Garcia, Farmácia do Hospital Dr. Nělio Mendonça, Madeira  Hospital of the Future: At the forefront of the Green Transition in Public Health Pedro Ramos, Coordinator of the Mission Structure for Health Units, Regional Government of Madeira  Room: Auditorium - Chair Cândida Vilarinho					
10h45		Coffee break				
	Room Auditorium - Chair: Joel Oliveira	Room Lagoon I and II - Chair: Ana Júlia Cavaleiro	Room Lagoon III - Chair: Catarina Nobre			
	Session A1: Recycling of wastes and resources recovery	Session B1: Waste-to-Energy Technologies	Session C1: Sustainable Waste Valorization Techniques			
11h15	Maia, J. (75) Integrated characterization of a high-performance concrete with glass powder incorporation	Quina, M. (191) Anaerobic co-digestion for managing multiple industrial agro-residues while generating energy	Batista, C. (265) Enhancing sustainability in additive manufacturing: feedstock from metal chips			
11h30	Paiva, H. (1) Synthesis and characterization of silico- aluminophosphate geopolymers produced from copper mine tailings	Maria, C.(174) Biogas power generation from municipal solid waste - challenges and perspectives in Angola	Luciano, A. (164) A sustainable management of volcanic ash: a focus on etna volcano			
11h45	Tochetto, G. (111) Incorporation of glass frit on geopolymer fabricated using additive manufacturing for coal-mining water remediation	Costa, L. (93) Micro-Aeration to improve anaerobic digestion of cattle slurry	Kirkelund, 6 (4) Detoxification of Ferrochrome Slag by Removing Cr with an Electrodialytic Method			
12h00	Maia J. (74) Strategic pathways for developing eco-efficient gypsum plasters from recycled materials	Bolaños, D. (49) Hydrothermal carbonization of pineapple stubble waste: effect of initial biomass properties on the heating value and energy yield of the resulting hydrochar	Bajda, T. (27) Use of ferruginous sludge from water treatment processes for adsorption of aqueous and gaseous pollutants			
12h15	Lopes, M. (80) Inclined plane shear behaviour of aggregate-geotextile interfaces: incinerator bottom ash vs. natural aggregate	Santos, A. (22) Boosting sustainable biogas production from sauce industry	Dosta, J. (89) Acidogenic fermentation of biowaste coupled with a gas permeable membrane to produce a VFA-rich liquid with high C/N ratio for polyhydroxyalkanoates production			
12h30	Maxini, G. (160) Maximizing material and energy recovery processes through Industrial symbiosis within the waste- wastewater-energy nexus		Costa, M. (73) Sustainable removal of boron from aqueous media using carob kibble waste modified by calcium chloride			
12h45		Lunch				
14h15	Plenary Session II  CIRCULAR BIOECONOMY: A KEY OPTION?  João Nunes - BLC3 Association - Technology and Innovation Campus (Portugal)  Room: Auditorium - Chair : Margarida Goncalves					
	Room Auditorium - Chair: Fernando Castro	Room Lagoon I and II - Chair: Luciana Pereira	Room Lagoon III - Chair: José Góis			
	Session D1: Wastes as Critical Raw Materials Resource	Session E1:Food waste management and bioeconomy	Session F1 : Environmental, economic and social aspects in waste management			
15h00	Schaeffer, N. (53) Selective Precipitation of Gold	Fonseca, F. (17) From waste to value: Valorization of purple onion peel as a textile bio-dye	Góis, J. (88) Packaging, and explosives and pyrotechnics wastebalancing safety and waste policies			
15h15	Braga, F. (19) Valorization of waste tantalum capacitors through the recovery of critical and valuable metals	Ribeiro, L. (67) Sustainable ethylene glycol production from cellulose over fruit peel waste-derived carbon supported Ni-W catalysts	Silva, A. (249) A hybrid approach for waste collection: Integrating heuristic and metaheuristic algorithms from or-tools			
15h30	Passos, H. (122) New hydrometallurgical processes for the recovery of valuable and critical metals from e-waste	Tudella, J. (171) Valorization of agro-industrial wine residues through extraction with green solvents	Ana, J. (144) Mapping Biowaste Generation: A Spatial Decision- making Framework for Implementation of EU Directive 2018/851			
15h45	Paiva, A. (66) Paliadium recycling from spent catalysts by solvent extraction	Scarponi, P. (103) Secondary high value product synthesis by Chlorella sp. using watermelon waste	Ribeiro, A. (225) Techno-economic analysis (TEA) of pig meat processing wastes valorisation			
16h00	Ntuli, F. (71) Electrodialytic treatment of incinerated sewage sludge ash (ISSA) for heavy metal recovery: a sustainable approach to resource recovery	Vilarinho, I. (114) Rice husk ash valorization in one-part alkali-activated materials	Fältström, E. (138) Creating incentives to reduce plastic in industrial waste bound for incineration using the measurement system fossileye			
16h15	Carvalho, R. (135) Recovery of platinum group metals from aqueous solutions using membrane filtration	Ferreira, D. (166) Sustainable valorization of wheat by-products through a green bioprocessing	Kouvo, P. (143) Effect of household source separation regulations to packaging waste and biowaste content of the mixed waste			
16h30-17h30	(All p	Poster Session posters must remain displayed until the end of the confere	ince.)			



9h15



Room Lagoon III - Chair

	Plenary Session III	
NTINUE CROWING	WITHIN LIMITOR WHEN CHANCE IS	

CAN WE CON ITHIN LIMITS? WHEN CHANGE IS MORE IMPORTANT THAN IMPROVEMENT
Pablo Kroff - Senior Consultant (Chile)

> Room: Auditorium - Chair : Fernando Castro Room Lagoon I and II - Chair: Raúl Fangueiro

	Room Auditorium - Chair: João Monteiro	Room Lagoon I and II - Chair: Raúl Fangueiro	Room Lagoon III - Chair: Conceição Paiva	
	Session A2: Marine Pollution and Bioinvasions	Session B2: Sustainable waste valorisation technologies	Session C2: Plastic waste impacts, management strategies and solutions	
10h00	Narayan, A. (125) Water quality monitoring program: insights from coastal, beaches, marina, and freshwater-seawater interactions on Madeira Island, Portugal	Cumbane, B. (194) Assessment of waste derived amendments for the in situ stabilization of acid soils from a pyrite mine	Heleno, L. (82) Separation of plastic waste by dissolution/precipitation process with green solvents	
10h15	Keshmirshekan, A. (140) Valorization of wastes from the codfish-processing Industry: collagen type I recovery using eutectic solvents	Assis, A.C. (153) Study of Phenol adsorption on to adsorvents from thermochemical processes	Muchangos. L. (95) Waste trade and Circular Economy - examining the plastic waste trade in Africa	
10h30	Ribeiro, A. (227) Identification of companies and characterization of marine plastics recycling technologies	Fernandes, A. (13) Multifunctional textiles developed by agroindustrial wastes valorization	Roman, F. (119) Sustainable carbon nanotubes derived from plastic solid waste	
10h45	Valério, N. (218) Ecotoxicological study of canned tuna organic waste	Silva, A. (232) Fully Bio-based Textile Printing Pastes: Waste into Resources	Alves, A. (187) Assessing the current situation to design a sustainable management model for agricultural plastic waste	
11h00		Coffee Break		
	Room Auditorium - Chair: Carlos Nogueira	Room Lagoon I and II - Chair: André Ribeiro	Room Lagoon III - Chair: Maria de Lurdes Lopes	
	Session D2: Management of waste streams	Session E2: Life cycle assessment and carbon footprint	Session F2: Sustainable waste valorisation technologies	
11h30	Genduso, M. (136) Metal recovery from e-waste by clays and activated carbon	Mata, T.(6) Life cycle assessment of white agglomerated cork panels: environmental impacts and waste reduction opportunities	Aguiar, I. (242) Valorization of paraffin wax waste in cement mortars: physical and mechanical behavior	
11h45	Silva, A.R. (252) Exploring anaerobic digestion for textile residues treatment and valorization	Lapa, N. (35) Life cycle assessment and energy balance of bioH2 and biogas produced from food wastes in a two-stage bioreactor	Castro, F. (246) Cement and concrete artifacts as a way to promote sustainable waste management	
12h00	Fernandes, A. (60) Bio-based textile coatings developed by valorization of textile waste and incorporation of bacterial cellulose	Borsoi G., (84) LCA and LCC of tetrahedrite-based thermoelectric devices developed within the start project	Lodeiro, I. (32) Fabrication of more sustainable hybrid alkaline cements using biomass ashes	
12h15	Sydow, M. (237) CREOSOLVE project - Disposal of used wooden railway sleepers and other creosote oil treated components using various biological methods	Anwar, T. (139) Life cycle assessment and techno-economic analysis of waste stream reincorporation in industrial scale tomato-based sauce production	Capela, M.N. (117) Impact of blowing agent and alkaline activator content on the properties of porous waste-based one-part alkali- activated materials	
12h30	Ntuli, F. (72) Electrodialytic treatment of incinerated municipality solid waste (IMSW) for resource recovery	Soares, A.C. (37) Development of sustainable rice husk biocomposites: a life cycle assessment approach	Fernandez, L. (272) Low-carbon mortars: the potential of textile waste as a co- product	
12h45		Lunch		
		Plenary Session IV		
14h.15	ADVANCING METH	ADVANCING METHODS AND TOOLS TO STUDY, SURVEY AND MONITOR MARINE LITTER POLLUTION Job o Monteiro - University of Madeira (Portugal)  Room: Auditorium - Chair: Caroline Ferreira		
	Room Auditorium - Chair: Cândida Vilarinho	Room Lagoon I and II - Chair: Nuno Lapa	Room Lagoon III - Chair: Jorge Araújo	
	Session G2: Circular economy and industrial symbioses	Session H2: Waste-to-energy technologies	Session I2: Sustainable waste valorisation technologies	
15h00	Jorio M. (236) Decision-support frameworks for industrial symbiosis practices in photovoltaic waste management	Rodrigues, P.(116) Biogas production from winery by-products: An evaluation of biochemical methane potential and kinetics	Barros, A. (201) Enzymatic Treatment of apple pomace: Enhancing bioactive properties for food and nutraceutical	
15h15	Oliveira, J. (96) Advancing circular economy in pavement engineering: a study of 50% recycled asphalt mixtures for full-scale annifications	Brito, P. (152) BioLPG production and market dynamics	applications  Sans, C.(207)  Optimized vineyard waste biochar for continuos fixed-bed adsorption of micropollutants in wastewater	
15h30	Galbor, N. (256) From waste to chitin: valorization of shrimp shell in Ecuador through circular bioeconomy	Pacheco, N. (219) Plasma gasification of sewage sludge - Mass and energy balance	Barros, D.(273) Sustainable packaging materials: reinforcement of recycled HDPE with slate waste for improved mechanical and barrier properties	
15h45	Reis, A. (228) Valorizing winery wastewaters and wine fermentation CO2 for sustainable solutions aiming at implementing a new clircular economy business model: a mini-review	Fragoso, R. (169) RE-FEED: Renewable energy production at farm level for energy efficiency and defossilization	Oliveira, V.(254) Dual Recovery of Mineral nutrients and organic compounds from swine slurry using eletrodialytic	
16h00	Genisheva, Z. (220) Ecofishval – Integrated strategy for the valorization of fish by-products towards a zero waste approach	Santos, S. (149) Assesing the influence of refused-derived fuels on the physical and combustion properties of biomass pellets	Ruiz, V. (44) pH dependent leaching characterization of trace elements from 100% waste-based sustainable materials	
16h15	Paiva, M. C. (257) Evaluation of the recycling potential of PC/ABS injection molded automotive parts to stimulate circularity pratices		Skalny, M. (43) Characterization and valorization opportunities for water decarbonization sludge	
16h30		Coffee break		
	Room Auditorium - Chair: Paulo Brito	Room Lagoon I and II - Chair: Joana Carvalho	Room Lagoon III - Chair: Margarda Quina	
	Session J2: Recycling of wastes and resources recovery	Session K2: Food waste management and bioeconomy	Session L2: Sustainable waste valorisation technologies	
17h00	Nogueira, C. (141) Lithium-ion battery recycling by physical processing: Evaluation of recovery and metal content in shredding and sieving operations	Ventura, S. (38) Applying green propolis as a co-product of honey production to develop an aqueous aerosol with antimicrobial activity	Barbosa, S. (251) Optimizing anaerobic treatment of textile wastewater: performance comparison of adapted vs. non-adapted inocula	
17h15	Moura, T. (245) Integrating plastic film recycling in product manufacturing: A design study on the reuse of low-density polyethylene	Fonseca F. (79) Valorization of Carapa guianensis fruit waste as a sustainable source of natural textile dyes	Santos, A. (250) Organic fertilizers based on circular solutions for sustainable agriculture: Nutrients and legal restrictions on manure	
17h30	Calado, M.L. (284) Recyclability assessment of PLA-based 3D printing filaments with micronised cellulose and a wax-based additive	Barros, A. (200) Grape stems valorization: Polyphenolic composition and their potential applications in the cosmetic and pharmaceutical industries	Barros, D. (274) Sustainable school furniture: manufacturing new components using PP, wood and slate waste	
17h45	Nogueira, A. (24) Machine learning-driven framework for lithium-ion battery recycling	Passos, H. (121) Sustainable processes for chicken feathers valorisation and advanced biomaterials development	Roze, M. (133) The benefits of mechanochemistry for the functionalization of co-products: the example of walnut shell as a clean label emulsifier	
18h00		Ventura S. (39) Extraction of betacyanins from food waste using eutectic solvents and pigments stabilization	Dias, C. (181) Turning Lignocellulosic Residues into High-Performance Nanomaterials: Unlocking the Potential of Nanocellulose and Nanolignin	
18h15-18h45	(All	<b>Poster Session</b> posters must remain displayed until the end of the conferen	ce.)	









DAY 3-5 SEPTEMBER

Portuguese ER 243 case study

A groundbreaking approach for producing zero

emission concrete from recycling waste

Enhancing asphalt performance: Valorising

Sustainable geopolymer materials from mine waste

for construction and dye removal applications

polyurethane waste as a bitumen modifier

Cwirzen, A. (2)

Costa, A.R. (223)

Nouairi, J. (182)

	Room Sunset II and III - Chair: Zlatina Genisheva	Room Lagoon I and II - Chair: Óscar Carvalho	Room Lagoon III - Chair: João Pedro Mendonça
	Session A3 : Sustainable waste valorisation technologies	Session B3: Recycling of wastes and resources recovery	Session C3: Environmental, economic and social aspects in waste management
9h30	Oliveira, V. (54) Dual recovery of mineral nutrients and organic compounds from swine slurry using electrodialytic process	Ferreira, S. (172)	Muzasura, W. (268) Municipal role in supporting waste recycling small businesses' resilience in South Africa's circular economy and local economic development
9h45	Andrade, C. (155) Valorization of fisheries and aquaculture wastes in Madeira island: addressing challenges and opportunities	Gaibor, N. (261) Sustainability challenges of lithium-ion batteries and opportunities in recycling and circularity	Rani, S. (167) The future of Fashion: Recycling and sustainable solutions for textile waste
10h00	Silva, T. (165) The potential of microalgae for wine effluent valorisation	Guimarães, R. (5) The influence of particle size on mechanical and thermal properties of 100% recycled EVA composites	Camacho, B. (161) Game, set, design: A collaborative match for social change and resource recovery
10h15	Cruz, V.F. (104) INOVCIRCOLIVE project: Innovating sustainable management of olive oil production surpluses	Increasing environmental performance of battery	Rosa, A. (142) Madeira coastal insight service (MCIS) in support of the implementation of EU policies and directives in an outermost region
10h30	Kanungo, T. (239) Integrating satellite observations and ground-based measurements to enhance estimation of fugitive methane emissions from landfills		Rodrigues, P. (77) Public perception and participation in the selective collection of biowaste: a case study in Guarda, Portugal
10h45	Coffee break		
	Room Sunset II and III - Chair: Ana Rita Silva	Room Lagoon I and II - Chair: Jorge Araújo	Room Lagoon III - Chair: Ana Rita Costa
	Session D3: Sustainable waste valorisation technologies	Session E3 : Environmental, economic and social aspects	Session F3 : Circular economy and industrial symbioses
11h15	Clemente, E. (243) Waste-based solar ZVI Fenton like process for	Abreu, M. (159) Validation of a GIS model to identify marginal soils in minland Partural	Oliveira, J. (23) Sustainable pavement rehabilitation using cold in-plant recycling with foamed bitumen: the

# Tsouko E. (266)

11h30

11h45

Protein extraction from renewable by-products and their transformation into biodegradable packaging films: the role of bacterial cellulose as a reinforcing agent

Design, modelling and optimisation

persistent microcontaminant removal at pilot scale

#### Najafabadi, A. (99) Eco-efficient SCC for buckling-restrained braces:

Fajardo, S. (180) Eco-friendly effluent treatment for the cork industry via electrocoagulation using metallic waste electrodes

### Tavares, C. (18)

based manufacturing technologies

minland Portugal

Medeiros, M. (85)

Selective collection - the importance of recycling bins colors in the European Union (systematic review)

Life cycle assessment in process design using laser-

## Russo, S. (62)

Recycling practises in colombian banana industries: the ecológica reconectando case study

#### **Closing Ceremony and Best Paper Award**

Roland Bachmeier - ACIF- Câmara de Comércio e Indústria da Madeira Raúl Fangueiro - Universidade do Minho/Fibrenamics

Room: Lagoon Land II \*to be confirmed

12h15-12h45

