



CONFERENCE

Urban Circular Bioeconomy
valorising biowaste - creating prosperity

Vitoria-Gasteiz (Spain)
10/05/2023





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Urban Circular Bioeconomy

CAFIPLA valorising biowaste - creating prosperity

The establishment of a sustainable circular urban bioeconomy requires the effective up-cycling of available biomass resources, especially as biowaste flows in cities can be used for the production of value-added bio-based products such as chemicals, plastics or nutrients. Therefore, the European Commission established already in the Bioeconomy Strategy (2018) that “...cities should become major circular bioeconomy hubs...”.

The conference will provide feasible pathways to transform biowaste into a resource/precursor for other industries via an innovative approach of the combination of a Short Chain Carboxylic Acid Platform and a Fibre Recovery.

Bioeconomy experts from Industry and Research will provide insights in biorefinery, raw material availability, technology aspects of the combined platform approaches, fermentation pathways to transform short chain carboxylic acids into added value compounds to support the implementation of a circular biowaste based bioeconomy.

Please register **FREE OF CHARGE**

<https://www.tecnalia.com/en/agenda/conference-urban-circular-bioeconomy>



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VENUE: EUROPA CONGRESS PALACE



Avenida de Gasteiz 85
01009 Vitoria-Gasteiz (Spain)



EUROPEAN GREEN CAPITAL 2012



MEET THE SPEAKERS



Nerea Briz holds a Biochemistry degree as well as a PhD in Chemistry of the University of the Basque Country. Additionally, she obtained a Master degree in Management of technology and innovation by Deusto University. She joined TECNALIA Research & Innovation (Spain) in 2001 as a researcher and took over the lead of the biomaterials business area in 2018. Since 2022, she is the Director of the Health Unit of TECNALIA.

Joseba Sanchez (Industrial Engineer from the ETSI Bilbao) He has been Head of the Waste Management Unit of the Vitoria-Gasteiz City Council (Spain) since 2008, with responsibility for the public management of waste collection and its different treatments in the city. He has previously worked in the public sector, in the Department of Environmental Planning of the Vitoria-Gasteiz City Council, as well as in the private company, in the mineral oil recovery sector in the Guascor R&D company, as well as in consulting work.



Thomas Dietrich holds an engineering degree in biotechnology and works as project manager at TECNALIA Research & Innovation (Spain). He has long-standing experiences in biomass valorization and biorefinery concepts and coordinated several EU funded research projects in this area since FP6.

With her master's degree in Geography: resource analysis and – management" **Susann Günther** worked as a GIS Junior specialist for the European Commission before joining the DBFZ (Germany) in 2021. In her function as a scientist at the DBFZ, she carries out stakeholder and spatial analysis of biogenic resources. Automatic processing and evaluation of geospatial data is one of her key tasks.



Esther Hegel develops exploitation strategies for novel biotech processes based on market analysis and environmental assessments at DECHEMA e.V. (Germany). With a background in bioprocess engineering and synthetic biology she focuses on the valorization of alternative carbon sources to produce platform chemicals.

Stef Denayer, is a business development professional, employed by several companies. He is managing Pilots4U, the European network of open access multipurpose pilot and demo facilities for the bio-economy. Actively involved in the creation of new European databases and networks Tech4Biowaste (emerging technologies for biowaste conversion), BioeconomyVentures (helping start-ups and scale-ups to finance) and The ProtIn Club (enabling innovative value chains for fermentation-based proteins).





Ing. **Thomas Willems**, (Msc. Industrial engineering in Biochemistry) started working as a project engineer at DRANCO since 2021. He is lead engineer for the supervision and research regarding Flemish and European projects. He is specialized in downstream processing and industrial scale-up of biochemistry and biotechnology processes."

Thibault Lerouge has joined FRD (Fibre Recherche Développement, France) as Project Manager, to valorise biowastes and recycled natural fibres within innovative industrial applications. He has before developed his knowledge in a large panel of materials, from metals and glass to polymers, and studied fluid transportation inside complex structures during his PhD.



Joachim Venus is head of the bioconversion research group and scientific manager of a pilot plant for bioprocesses at ATB Potsdam/Germany. The focus of his work is on the development and scale-up of fermentation processes for the production of basic chemicals based mainly on biogenic residues.

Kevin Sabbe is a biochemical engineer pursuing his PhD career at the Center for Microbial Ecology and Technology at Ghent University. He has a background in bioprocess engineering and microbial ecology, and focuses within CAFIPLA on the chain elongation process and microbiome characterisation via flow cytometry.



Ana Carolas works as Head of Operations at Biotrend S.A. (Portugal). Before joining the company she gathered research experience at the Technical University Lisbon and at NIZO Food Research (The Netherlands). She has long-standing experience in preparing and running fermentations and oversees all lab-scale fermentation trials at Biotrend.

Michael Pil is a project engineer for fermentation processes at Avecom, a spin-off company of the University of Ghent in Belgium. He graduated from the University of Ghent as a Bioscience engineer with a specialization in industrial biotechnology. As a master's thesis, he worked for one year at the Bio Base Europe Pilot Plant in Gent, where he gained experience in diverse bioprocess technologies and scaling up of fermentation processes.





Markus Neureiter is senior researcher at the Department of Agrobiotechnology at the University of Natural Resources and Life Sciences, Vienna (Austria). His main research interest is the development of microbial fermentation processes within the framework of biorefinery concepts.

Laura Oliver, senior researcher at TECNALIA Research & Innovation (Spain) with long-standing professional experience in the field of biomass valorisation and extraction of added value compounds from different resources.



Dr. Martín Soriano works as EU R&D Project manager at CETENMA (Spain). He holds a M.D in Environmental Sciences and a PhD in Soil Health and has over 15 years of experience as scientist and professor in public research organisations, private companies and universities. His main areas of expertise are circular economy, organic waste management, environmental sensors, characterisation and remediation of contaminated soils, ecosystems services and sustainable agriculture. He has participated in over 40 R&D projects and is co-author of more than 60 publications and contributions to 50 conferences.



Bruno Sommer Ferreira CEO of Biotrend S.A. (Portugal) has more than 22 years' experience in the development, optimization, monitoring and control of bioprocesses in diverse biological systems such as microalgae, yeasts, bacteria and animal cells.



Marie-Aline Pierrard has a Master of Biological Science with a specialization in ecology of fresh water and a Doctor (PhD) in Biological Sciences, Environmental Toxicology, both at Namur University. Additionally, she holds a post-Doc from the Luxembourg Institute of Health. Currently, she is working as project manager at IDELUX Environnement, a waste treatment facility.



After obtaining the title of Doctor of Science from the University of the Basque Country, **Maria Carmen Villaran** worked as substitute Professor at the University of the Basque Country. Subsequently, she continued her research activity at the LEIA, CDT. Currently, she works in Tecnalia Research Innovation as Director of the Food & Health business area.





09:00 – 09:30	Registration Conference	
	SETTING THE SCENE	
09:30 – 09:40	Welcome	Nerea Briz
09:40 – 10:00	Vitoria-Gasteiz – European Green Capital 2012	Joseba Sanchez
10:00 – 10:10	CAFIPLA – Heterogenous biowaste a valuable resource	Thomas Dietrich
10:10 – 10:30	Mapping of biogenic resource potentials across Europe – a test case for CAFIPLA transferability	Susann Günther
10:30 – 10:50	Impact and Market of Biowaste-derived Materials	Esther Hegel
	TECHNOLOGIES	
10:50 – 11:10	Conversion Technologies – Tech4Biowaste	Stef Denayer
11:10 – 11:30	Coffee Break & Networking	
11:30 – 11:50	Carboxylic Acid Platform: a new valorization approach	Thomas Willems
11:50 – 12:10	Natural Deep Eutectic Solvents – an innovative solution for the recovery of fibres from municipal biowaste	Thomas Dietrich
	TRANSFORMATION	
12:10 – 12:30	Recovery of fibres from biowaste streams via dry process, and potential in industrial applications	Thibault Lerouge
12:30 – 12:50	Biowaste as feedstock for lactic acid fermentation	Joachim Venus
12:50 – 13:10	MCCA production from LA rich waste streams	Kevin Sabbe
13:10 – 13:30	Side stream derived biopolymers	Ana Carolas
13:30 – 14:40	LUNCH BREAK & NETWORKING	
14:40 – 15:10	Development and technical scale evaluation of microbial protein production from CAP waters	Michael Pil
15:10 – 15:30	Production of Single Cell Oils from Volatile Fatty Acids – Recent developments and future perspectives	Markus Neureiter
15:30 – 15:50	Production of health-promoting Omega-3 fatty acids from Volatile Fatty Acids	Laura Oliver
	PERSPECTIVES	
15:50 – 16:10	Vitalise Europe's Urban Bioeconomy: The HOOP Project	Martín Soriano
16:10 – 16:50	Roundtable: Why urban biowaste is still waste? What are we doing with our biowaste? How can biowaste become “money”? <ul style="list-style-type: none"> • Bruno Ferreira (CEO Biotrend) • Marie-Aline Pierrard (Idelux Environnement) • Martín Soriano (CETENMA) • Moderator: M^a Carmen Villarán (TECNALIA) 	
16:50 – 17:00	Closing Session	

