



The global conference dedicated to PROCESSES AND TECHNOLOGIES APPLIED TO BIOMASS

MARCH 15-16-17, 2022 LILLE, FRANCE

SHOWGUIDE



Organized by:



Platinium sponsors:





Supported by:







INNOVATE IN INDUSTRIAL BIOTECHNOLOGY

STIMULATE INNOVATION

At Genopole, we seek to sound new knowledge, for the development of innovations that will contribute to human well-being, as concerns health and the environment.

The main fields of activity developed on-site are:

- ∞ bioeconomy,
- 'computational genomics,
- innovative therapies.

LINKING SCIENCE... ...TO BIOECONOMY

A pioneer in synthetic biology, Genopole is increasingly attracting researchers and industrials active in that field and the progress being made is enabling a large range of industrial applications.

GIP GENOPOLE

20 rue Henri Desbruères - F-91000 Evry - FRANCE T: +33 (0)160 878 300 - www.genopole.fr

Genopole benefits from the support of











Genopole, France's leading biocluster in the Paris Region, accommodates, accompanies and connects companies and laboratories in all fields of biotechnologies.



A NETWORK OF SCIENTISTS AND INDUSTRIALS

Abolis - Altar - Cearitis - Core Biogenesis - Evaldepol - Ever Dye -FabMid - Fermentation Bioproduction Platform - Glowee - Gourmey - Greenwell - Metabolic Genomics Laboratory - NextProtein -Nutropy - Proteinea - Phagos - Pymabs - Safe Insight -STH Biotech - Synhelix - Synovance - Watchfrog - Ynsect

BIOKET WOULD LIKE TO THANKS ALL ITS 2022 SPONSORS

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GOLD

























































































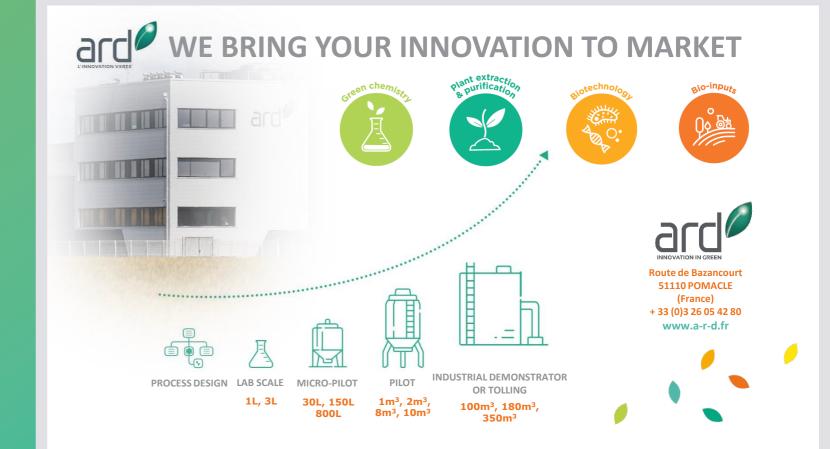






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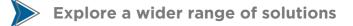


CHROMATOGRAPHY DEVELOPMENT FOR BIOMASS PRODUCTS

Purification process, from lab to industrial



THANKS TO NOVASEP IN-HOUSE PROCESS SIMULATION







EDITO

2022 marks a special year for #BIOKET, since your world conference dedicated to processes and technologies applied to biomass, is organized by Bioeconomy For Change (B4C), ex IAR, this year.

This change of name assures more effectively the meaning of our action. On a daily basis, we take action to make the bioeconomy a positive change for everyone and in the long term. Four pillars are the basis of our new brand: Citizens, Competitiveness, Climate and Connection to create a collective and profitable dynamic for the actors of the bioeconomy. The themes explored by #BIOKET are fully in line with this approach by providing sustainable solutions that meet these issues and these major challenges of tomorrow.

After the success of its two first editions in 2018 (Strasbourg) and 2021 (online) which gathered each 300+ delegates from all over the world, #BIOKET is back this year in Lille with high ambition to boost once again the emergence of innovative projects and business partnerships.

You are more than 350 delegates for this new edition, confirming how essential KETs are. KETs play a central role when it comes to biomass transformation optimisation. They underpin the shift to a greener economy, are instrumental in modernising our industry and drive the development of entirely new industries.

We trust that #BIOKET will provide an abundance of opportunities to promote your business and technologies, to expand your network and build new international partnership with the key players and experts of the sector.

#BIOKET is offering you lots of opportunities to meet your tomorrows partners such as networking breaks and dinner or the pre-scheduled B2B meetings.

Our thanks to all delegates, speakers, sponsors and partners who make #BIOKET the unique conference dedicated to technologies and processes applied to biomass!

Boris DUMANGE Director General





The Global conference dedicated to Processes and Technologies Applied to Biomass

At the time of industry 4.0, circular economy and the constant optimisation of production processes, Key Enabling Technologies constitute an essential stake for industrial sectors.

Biomass is a wonderful resource that can be converted in a wide range of high added products: biobased chemicals, materials, food products and ingredients, energy...

However, the adaptation and optimisation of technologies and transformation processes to fully valorise all biomass fractions is a real challenge. At the time of Industry 4.0, Key Enabling Technologies (KETs) underpin the shift towards a greener and more sustainable economy. They play a key role in the modernisation of the industrial base while fostering the development of future industries.

In this context BIOKET, aims to contribute to the rise of key enabling technologies in the bioeconomy sector.

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Follow us



@BIOKETech



BIOKET Bioeconomy Key Enabling Technologies platform



BIOKET's Showguide 2022 6 March 15-16-17, 2022 Lille, France



CHANGE WITHOUT REINVENTING THE WHEEL...

Conscious of the huge challenges ahead, we believe in new ways of producing, eating, getting about, building and taking care of our health. We believe in the latest practices that promote the bioeconomy and fuel its development across every market and sector supported by a circular model. We believe in food that nourishes sustainable projects. We believe in materials that encourage sustainable building. We believe in biofuels to replace fossil fuels. We believe in all the innovations we have at our disposal that take care of us as much as they do the planet. Because we believe in a much better future, we also believe the bioeconomy is there to support this change...

AND THAT CAN CHANGE EVERYTHING.

bioeconomyforchange.eu

AN ECOSYSTEM DESIGNED FOR COLLECTIVE **ACTION**



Promote your actions

Inform your decisions





Grow your network

Bring your innovations to life

THE NETWORK IN FIGURES

500

committed to change

350

€2.5

European projects backed in 2021

Bioeconomy For Change (formerly IAR) is the leading network for the bioeconomy in France, in Europe and globally. With a team of 35 specialists and an ecosystem of 500 members, we work collectively from upstream agriculture activities through to the commercialisation of finished products. Be part of the change. Join us.





2022 ADVISORY BOARD



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Maria BARBOSA Director of AlgaeParc Research (WUR)





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PROGRAMMING COMMITTEE

Johan DE CONINCK -**Christophe LUGUEL -**

Louis TIERS -

March 15-16-17, 2022 Lille, France

PROGRAMME AT A GLANCE

MARCH 15

10h00 - 12h30:	Plenary session - KETs to unlock the potential of algae for a thriving European blue bioeconomy
13h00 - 18h00:	Innovation Tours • STELLA • SAS PIVERT • LESAFFRE
14h00 - 17h00:	Pre-scheduled B2B meetings
14h00 - 14h45:	Start-up pitches - session 1
14h45 - 17h15:	The Circular Bio-based Europe Joint Undertaking (CBE JU) to fund projects advancing competitive circular bio-based industries in Europe
17h15 - 18h00:	Start-up pitches - session 2
18h00 - 19h30:	Welcome reception

MARCH 16

8h30 – 10h00:	Pre-scheduled B2B meetings
10h00 – 12h30:	Plenary session - Digital Biofoundries, a game changer for the Industry (sponsored by Genopole)
14h00 - 18h30:	Pre-scheduled B2B meetings
14h00 – 15h45:	Breakout sessions • KETs for ecoextraction & ecosynthesis processes • KETs to produce High Added Value Molecules • The scalling up journey of KETs
16h30 – 18h15:	Breakout sessions • KETs for a circular bioeconomy • KETs for purification processes • The biotech KETs
18h30 - 19h30:	« Cheese & Wine » Cocktail (sponsored by Eurodia)
20h00 – 23h00:	Networking dinner

MARCH 17

8h30 - 9h30:	Pre-scheduled B2B meetings
9h30 - 11h00:	Plenary session - KETs and strategies to reduce the fossil fuel dependence of the aviation and its connected professions (sponsored by Leaf)
11h30 – 13h00:	Pre-scheduled B2B meetings
11h30 - 13h00:	 Breakout sessions Biomass balance approach: Renewable resources for high performance and low carbon emissions KETs to produce bioenergy The biocatalysis KETs
14h00 – 17h00:	 Workshops Physico-chemical pre-treatments of biomass: State of play and applications (sponsored by Carnot 3BCAR) Creating Value from Waste. Capturing Carbon from Industrial Emissions to produce Sustainable Fuels & Chemicals (sponsored by LanzaTech) Lignocellulosic sustainable biorefining processes and technologies for high value-added products (sponsored by IDE Trois-Rivières)

BIOKET's Showguide 2022 12 March 15-16-17, 2022 Lille, France



MARCH 15

9h15-10h00:	Registration & participant's welcome
10h00 - 12h30: Rotterdam 1-2	 Plenary session - KETs to unlock the potential of algae for a thriving European blue bioeconomy Chaired by Jean-Paul CADORET - EABA/Algama State of the art of KET to cultivation and processing of microalgae Prof. Dr. Maria BARBOSA - AlgaeParc / Wageningen University and Research (WUR) Technologies to develop Microalgae based new functionalities for Health applications Olivier LEPINE - Algosource Microphyt SCALE - first of its kind industrial platform towards sustainable microalgae-based solutions Vicent USACHE- Microphyt CO2 to alternative proteins and oils through hybrid vertical microalgae farming Diego GRUMBACH - Solmeyea
12h30 – 14h00:	Networking Lunch
13h00 – 18h00:	Innovation Tours: STELLA - PIVERT - LESAFFRE
14h00 - 17h00:	Pre-scheduled B2B meetings
14h00 - 14h45:	Start-up pitches - session 1
14h45 - 17h15: Rotterdam 1-2	The circular bio-based Europe Joint Undertaking (CBE) to fund projects advancing competitive circular bio-based industries in Europe
	 The Circular Bio-based Europe Joint Undertaking (CBE JU) Philippe MENGAL - CBE-JU Funding your project in France Christophe LUGUEL - B4C - Bioeconomy For Change Microphyt example Vincent USACHE - Microphyt Fibenol example Karl PEEBO - Fibenol What makes a great (biorefinery) technology? Matti HEIKKILÄ - Metgen
17h15 - 18h00:	Start-up pitches - session 2
18h00 - 19h30:	Welcome reception



8hoo - 8h3o:	Registration & participant's welcome
8h30 - 9h50:	Pre-scheduled B2B meetings
10h00 - 12h30: Eurotop	Plenary -Digital Biofoundries, a game changer for the Industry (sponsored by Genopole) Chaired by Fiona MISCHEL - Synbiobeta General welcome Christophe RUPP-DAHLEM - B4C - Bioeconomy For Change Frédéric MOTTE - Région Hauts-de-France Genopole, innovation for life sciences Christophe LANNEAU - Genopole Presentation of synthetic biology: review of the last news, trends, evolution and innovation on Synthetic Biology Fiona MISCHEL - Synbiobeta Smart modelling platform for digital biofonderies: Fail fast to succeed earlier Rémi PEYRAUD - iMEAN Panel discussion Christophe LANNEAU - Genopole Massimo MERIGHI Sean SIMPSON - LanzaTech BIOKET 2023 announcements
12h30 – 14h00:	Networking lunch
14h00 – 16h00:	Pre-scheduled B2B meetings

BIOKET's Showguide 2022 14 March 15-16-17, 2022 Lille, France

DETAILED PROGRAMME

MARCH 16

14h00 – 15h45: Rotterdam 1-2

KETs for ecoextraction & ecosynthesis processes

Chaired by Florent ALLAIS - URD ABI

- EcoXtract®: an Innovative, Efficient and Biobased Technology for the Extraction of Edible Oils, Plant-Based Proteins and Natural Ingredients
 Gabriel DUFOUR – EcoXtract
- Ultrasonic Biorefining: A low energy, efficient process to separate fibrous biomass into high-value biochemicals
 Miranda LINDSAY-FLYNN - Bio-Sep
- Development of high value products based on phycocyanin co-product extraction from Spirulina within SPIRALG project
 Maud BENOIT-LE GELEBART - Algaia
- Is water moisture a poison or a solution to improve supercritical CO2 extraction of spent coffee grounds
 Alexandre VANDEPONSEELE – Savoie Mont Blanc University
- Case Studies of Electrosynthesis and Electrodialysis processes in Product/ Process development of Biobased Products

Irene FRDFI MFIFR - Innoverda

14h00 - 15h45: Turin

KETs to produce High Added Value Molecules

Chaired by Fabien DESWARTE - L'Oréal

 Shrubby everlasting cells: how to bring eco-innovation into skin moisturizing challenges

Rémi LAVILLE - SEPPIC

 Sustainable Fragrances & Flavours: should we stick to traditional production methods?

Dmitry BACHIN - EV Biotech

 Beads Impact Continuous Heated Mechanochemical Reactor for Greener Chemical Routes

Remy NGUYEN - Deasyl

- CSBR, Cashew shell bio refinieries
 Pierluigi FERRI Elmira Industrial Supplies
- Environmental benign production of ingredients of industrial relevance

 Dr. Lucie PFALTZGRAFF GreenTech Innovation Center, Luxembourg Institute of
 Science and Technology (LIST)



14h00 – 15h45: Liege 1-2

The scaling up journey of KETs

Chaired by Luuk VAN DER WIELEN - Bernal Institute

- Scaling up the Electrochemical production of biobased chemicals
 Frederik DE BRUYN VITO
- Reinforcement Learning in new bioprocess design Albert MESTRE - INTEMIC
- Modeling of a krill oil extraction factory: from laboratory results to cost price prediction using an innovative methodology
 Yohann LE GUENNEC - Ypso-Facto
- Scaling up additive manufacturing of Cellulose-based materials in electrical insulation, automotive and shipbuilding industries
 Heli KANGAS - VTT
- Seaweed biomass cultivation: from napkin sketch to mechanized harvesting Gediminas TAMOSAITIS - Metal Production

15h45 - 16h30:

Networking break

16h30 - 18h30:

Pre-scheduled B2B meetings

16h30 – 18h15: Rotterdam 1-2

KETs for a circular bioeconomy

Chaired by Ludo DIELS - Antwerp University / VTO

- Valuable protein recovery from animal processing by-products of rendering plants for different industrial applications
 Mayra LACRUZ - INESCOP
- Biorizon bio-aromatics Platform established, time for impact Paul KONST - TNO
- WASTE2FUNC: Lactic acid and biosurfactants sourced from sustainable agricultural and industrial (food) WASTE feedstocks as novel FUNCtional ingredients for consumer products

Sofie LODENS - Bio Base Europe Pilot Plant

 Metha-HYn Project, development of integrated technologies at the service of circular bioeconomy

Marine JUGE - ENGIE

 Low temperature pre-treatment - opportunities for biogas production from biowaste and combined production of cellulose and lignin

Friedrich STREFFER - Streffer Vv GmbH

BIOKET's Showquide 2022 16 March 15-16-17, 2022 Lille, France



MARCH 16

16h30 – 18h15: Turin

KETs for purification processes

Chaired by Maria BARBOSA - Wageningen University & Research

 Separation of Caproic and Caprylic Acid from a Maize Silage-Based Fermentation Broth

Arne GRONGROFT - DBFZ

- Latest Developments in Production Scale Centrifugal Partition Chromatography: Instrumentation and Applications for The Purification of Bioactive Ingredients Grégoire AUDO - Gilson Purification
- Use of pervaporation membranes in separation of aqueous fermentation broths
 Mark GRONNOW BDC Biorenewables Development Centre
- How process modeling can enhance process design: chromatography development for biomass products
 Quentin SANLAVILLE - Novasep Process Solutions
- Sustainable water management in biobased downstream processing Hank VLEEMING - Process Design Center (PDC)

16h30 – 18h15: Liege 1-2

The biotech KETs

Chaired by Olivier ROLLAND – TWB

• Improving heterologous protein production in yeast with automated massively parallel CRISPR genome editing

Laura KLITTEN - Inscripta Inc

 Accelerating scientific products claims through multi-causal in silico data analysis

Lucie FRIEDLANDER - Eagle Genomics Fabian GRANDKE - Eagle Genomics

- Novel reactor prototype for pressurized gas fermentations
 Heleen DE WEVER VITO
- Enabling fast, clean, and affordable production of natural bioproducts through bioreactor innovations

Kirsten STEINBUSCH - Delft Advanced Biofuels

 Artificial promotors: Creating new genetic vocabulary for synthetic biology Sylvain JULIEN - e-ZYVEC

18h30 - 19h30:

« Cheese & Wine » cocktail – sponsored by Eurodia

20h30 - 23h00:

Networking dinner

CUSTOM-DESIGNED PROCESS SOLUTIONS FOR BIOBASED CHEMISTRY

Organic acids production

Demineralization & separation of amino–acids

Biomass valorization (C5 & C6 purification)

& many more...





EURODIA is delighted to offer you a nice « Cheese & Wine » Cocktail.

Join all the participants for an hour of informa networking and discover some French « art de vivre »

March 16th from 18h30 to 19h30

Exhibition Area - Lille Grand Palais

BIOKET's Showquide 2022 18 March 15-16-17, 2022 Lille, Fran

Networking Dinner

CCI Grand Lille - Palais de la Bourse 40 Place du Théâtre - 59800 Lille

How to get there?

Only 15 minutes by walk from Lille Grand Palais





March 16th - from 20h00 to 23h00

Registration for the dinner was mandatory



exclusive, high performance ingredients to satisfy the beaut

www.noveal.com











MARCH 17

Registration & participant's welcome 8h00 - 8h30: Pre-scheduled B2B meetings 8h30 - 9h30: Plenary - KETs and strategies to reduce the fossil fuel dependence of the aviation 9h30 - 11h00: and its connected professions (sponsored by Leaf by Lesaffre) Rotterdam 1-2 Chaird by Xavier TYTELMAN – Starburg · Challenges and Perspectives of industrial fermentation: from Idea to Industry Marcelo AMARAL - Leaf by Lesaffre · How to build a sustainable aviation? Target and levers in the energy field Xavier TYTELMAN - Aviation NXT Panel discussion: · Marcelo AMARAL - Leaf by Lesaffre · Damien GAUDIN - Air France · Geraldine PIC-PARIS - Neste • Sjoerd RAIJMANS - SkyNRG · Stéphane THION - TotalEnergies

11h00 - 11h30: Networking break

Pre-scheduled B2B meetings 11h30 - 13h00:



MARCH 17

11h30 – 13h00: Rotterdam 1-2 Biomass balance approach: Renewable resources for high performance and low carbon emissions

Chaired by Astrid PALMIERI - BASF Italia

- Ways towards a sustainable bio-economy
 Daniela THRAEN Helmholtz Centre for Environmental Research GmbH (UFZ)
- The mass balance methodology: an effective and sustainable way of using alternative feedstocks in production systems
 Adisa AZAPAGIC - The University of Manchester
- Biomass Balance and Sustainable Development at BASF Thomas MAIREY - BASF France
- Jallatte "J'Respect" shoes range, the first safety shoe 100% made of Biomass Balance-certified Isocyanate-terminated Polyurethane (ITPU) Stéphanie CADENE - Jallatte SAS

11h30 – 13h00: Turin

KETs to produce bioenergy

Chaired by Markus WOLPERDINGER - Fraunhofer IGB

- Maintaining Production Yield in Bioethanol Production Dominik STEINBERGER - PALL Corporation
- Enabling circularity and sustainability Joris SPAAN - Yilkins
- A new way of doing chemistry by combination of cold plasma and catalysis Vincent SIMONNEAU -ENERGO
- Turning waste and CO2 into methane through biological methanation
 Vincent GUERRE Enosis Energies
- HPTLC a valuable analytical partner for valuable results at various step of your bioenergetic project.

Pierre-BERNARD SAVARY - Chromacim



MARCH 17

11h30 – 13h00: Cologne 1-2

Turin

Cologne 1-2

Rotterdam 1-2

The biocatalysis KETs

Chaired by Audrey ROBIC - Codexis

- New biomanufacturing processes using the power of enzyme-based catalysts Jordi LOPEZ - EnginZyme AB
- Harnessing Komagataella phaffii for recombinant protein production Claudia RINNOFNER - myBIOS
- Unlock new his atalysis The unspecific peroxygenase enzyme panel
 Dr. Hannah B Aminoverse
- Integrate flow cytometry analyses in bioprocesses to improve the performance of microbial biocatalysts
 Delphine LESTRADE - TWB

13h00 - 14h00: Networking Lunch

14h00 - 17h00 **Workshops**

 Physico-chemical pre-treatments of biomass: State of play and applications (sponsored by Carnot 3BCAR)

> Creating Value from Waste. Capturing Carbon from Industrial Emissions to produce Sustainable Fuels & Chemicals (sponsored by LanzaTech)

 Lignocellulosic sustainable biorefining processes and technologies for high value-added products

(sponsored by IDE Trois-Rivières)

BIOKET's Showguide 2022 23 March 15-16-17, 2022 Lille, France

CHAIRPERSONS & SPEAKERS

Plenary:



KETs to unlock the potential of algae for a thriving European blue bioeconomy



Chaired by: Jean-Paul CADORET - EABA/AlgamaFoods

Jean-Paul CADORET, PhD, is president at EABA and CSO of AlgamaFoods. Previously he was the managing director of the company Greensea. He's the author of more than 80 publications and 10 patents.



Prof. dr Maria BARBOSA is Professor in Microalgae Biotechnology

& Director of AlgaePARC at Wageningen University and Research Centre. She coordinates several large research programs covering the entire microalgae production chain.



Diego GRUMBACH is a biotech engineer from

engineer from ENSTBB (France) & University of

Montréal (Canada). He's currently working at Solmeyea to make sustainable food a reality through CO2-fixating microalgae technology.



olivier LEPINE
is one of the
founders and the
Managing Director
of AlgoSource. He

has a master degree in Physics & chemistry and a master degree from the National School of Petroleum (France). He has served in the energy industry during 7 years abroad before joining the microalgae sector in 2004.



Vincent USACHE is a life science engineer from AgroParisTech and holds an MBA.

He has 20 years of experience in the commercial and technical development of high value-added ingredients, carried out within multinational companies.





The Circular Bio-based Europe Joint Undertaking (CBE JU) to fund projects advancing competitive circular bio-based industries in Europe



Chaired by: Christophe LUGUEL

Christophe LUGUEL has a Master of Engineering in Agronomy. He occupied various positions in sales, marketing or business development in chemical & biotech companies. He's currently Director Europe of IAR and also Vice Chair of BIC, Board and member of the governing board of BBI.



Matti HEIKKILÄ has a Biotech Engineering degree and an MBA with 17

years of experience

in bio-based industries. He is Chief Operating Officer at MetGen, driving innovation and growth of the company as a part of the external ecosystem.



Philippe MENGAL is the executive director of the CBE-JU, and previously

from BBI-JU. Before

he held strategic managerial positions in bioeconomy businesses as CEO of 3 companies & Global R&D Director of a multinational company.



Karl PEEBO. Trained in fermentation sciences, one of the earliest employees in Fibenol, Karl is

the product manager with main focus on cellulosic sugars and lignin. Publicly funded projects are under his coordination in Fibenol



Vincent USACHE is a life science engineer from AgroParisTech and holds an MBA. He has 20 years of experience in the commercial and technical development of high value-added ingredients, carried out within multinational companies.

Start-up pitches

Animated by:



Pierre KERHASCOET is IBF's EU Project Manager. He joined IBF in May 2021 and he is working on the coordination of BioeconomyVentures – an EU project all about boosting private investments in the European bioeconomy.



Stéphane ROUSSEL, Partner at ECBF, has 10+ years of track record in VC investments and 25 years in the advanced materials & chemical industry. He founded & lead Rhodia and Solvay Ventures, achieving profitable exits & successful corporate-startup partnerships.

BIOKET's Showguide 2022 24 25 March 15-16-17, 2022 Lille, France

Plenary:



Digital Biofoundries, a game changer for the Industry (sponsored by Genopole)



KETs for ecoextraction & Ecosynthesis processes

Chaired by: Florent ALLAIS - URD ABI - AgroParisTech



Chaired by: Fiona MISCHEL - Synbiobeta

Fiona MISCHEL began her career as a science communicator, then editor in chief of SynBioBeta. She now serves as SynBioBeta's Director of International Outreach where she builds partnerships, community, and awareness, and expands the global synbio network.



Christophe **LANNEAU** is Research & Platforms dpt. director at

Genopole. Open-minded scientist with strong expertise in life sciences to support with Open Innovative projects that seek from public/private research solution impacting global health, manage public funding and assure relationship management.



Dr Sean SIMPSON obtained masters from the University of Nottingham and PhD from York

University. He is currently the founder and Chief Science Officer of LanzaTech. He's the author of over 20 publications and 200 patents.



Mass MERIGHI is Lesattre's Head of Metabolic Engineering and Director

of Biofoundry. He worked at bioengineering companies (Ginkgo Bioworks, Glycosyn) in pathways engineering and industrial microbiology, and studied at Harvard.



Rémi PEYRAUD is CEO and cofounders of iMEAN, a startup launched in 2018.

He is a biochemist and get his PhD in 2011 at ETH Zürich. He conducted pioneer research at INRAE Toulouse France on modelling living organisms using systems biology approaches



Dr Maud BENOIT-LE GELEBART is ALGAIA's services manager and partnership

biomass

Breakout session:

developer. She is in charge of the management of private collaborations linked to the analyse and development of algae-based ingredients.



Gabriel DUFOUR is Global Business Development Manager, EcoXtract® at

Florent ALLAIS, PhD, is the director of URD ABI - AgroParisTech. His research investigates

the combined use of biotechnologies, green chemistry and downstream processing for the

development and optimization of sustainable processes and high value-added products from

Pennakem Europa. He has a MSc in Food, Agricultural & Life sciences and a MSc in Energy economics & sustainable development. He worked in the oil & protein industry and nutrition & health care industries.



Irene ERDELMEIER Ph. D. in Organic Chemistry & Chemical Engineer, founded

INNOVERDA in 2017. Previously she worked as Head of Chemistry at Bioxytech, was project lead at L'Oréal, and co-founder & Director of Chemistry of Tetrahedron.



Miranda LINDSAY-FYNN is a cofounding investor & commercial director of Bio-Sep.

Entrepreneur with wide sector experience (industrial biotech, retail, digital technology), she's a graduate of Biological Sciences (Univ. of Edinburgh) and an MBA (London BS).



Alexandre **VANDEPONSEELE** is a 3rd year PhD degree focusing

biomass valorization by innovative technologies at the EDYTEM Institute. He is working on the supercritical CO2 extraction of spent coffee grounds for lipids and polyphenols recovery.

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KETs to produce High Added Value Molecules



The scaling-up journey of KETs

Breakout session:



Chaired by: Fabien DESWARTE - L'Oréal

Dr. Fabien DESWARTE is L'Oréal's Sustainable Innovation Manager. He has over 15 years of experience in the area of green chemistry and biorefining and has worked in a variety of roles in academia, government and industry.



Dmitry BACHIN defended his PhD in Plant Physiology and worked in IT. His experience

in biology and software development was a perfect match to work in industrial biotechnology, so joined EV Biotech.



Pierluigi FERRI is CEO at Elmira Industrial Supplies (2017). He has 10 years in sales

projects for bio materials for CASE, foams and composites. ExaPhen polyols and cardanol supply chain.



Rémi LAVILLE. PhD in Chemistry of Marine Natural Products, is a Chemical Engineer.

Since 2016 he is in charge of the Innovation & Development Team in Extraction & Plant Biotechnology at Biotechmarine, subsidiary of SEPPIC.



Rémi NGUYEN, PhD in molecular & supramolecular chemistry, entered as post-doctoral

researcher under the financial support of Deasyl at iCleHS lab (Paris Sciences & Lettres univ.) to develop continuous flow mechanochemical processes for green chemistry.



Dr. Lucie **PFALTZGRAFF** has ten years' experience working on bio-based

economy-related innovation support for leading consultancies in the field. She now facilitates collaborations between industry and LIST.



Dr. ir. Frederik De **BRUYN** is Business Development Manager at the Unit of Sustainable

Chemistry at VITO. He focuses on setting up projects within the scope of circular bioeconomy and electrochemistry. He has a Master's degree in Bioscience Engineering (Ghent Univ.) and a PhD (Centre for Industrial Biotechnology and Biocatalysis).



Albert MESTRE is a Chemical engineer with a postgraduate degree in Al. His research is

focused on generative design of biochemical processes. He founded Intemic to offer this technology through a SaaS.



Limerick) and Bernal Professor for Biosystems Engineering and Design.

Chaired by: Luuk VAN DER WIELEN - Bernal Institute

Dr. Heli KANGAS is Technology Manager at VTT Technical Research Centre of Finland.

Prof.dr.ir. Luuk A.M. van der WIELEN holds a MSc degree in Chemical Engineering (Twente

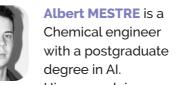
University) and a PhD degree (DUT). Since 2017, he is Director of the Bernal Institute (University of

She is the coordinator of EU H2020 SPIRE project NOVUM (novel manufacturing technologies for cellulose-based electrical insulation components).



Yohann LE **GUENNEC** is a french chemical engineer from ENSIC (Ecole

Nationale Supérieure des Industries Chimiques). He did a PhD in chemical engineering thermodynamics where he developed accurate phase equilibrium models currently used for optimal processes designs in companies such as Total





professional path led to several sales and engineering positions. Since 2012 he's the co-founder and CEO of the professional engineering company Metal Production.

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KETs for a circular bioeconomy





Chaired by: Ludo DIELS - Antwerp University / VITO

Ludo Diels, Dr. in chemistry & biotechnology is professor emeritus at Antwerp University. Chair of the advisory structure of Processes4Planet & of the public-private-partnership A.SPIRE



Marine JUGE is deputy manager of the Biogas, Biomass & Waste Lab at ENGIE Lab CRIGEN.

She joined ENGIE in 2014 where she is involved in several R&D projects related to gasification of biomass and to anaerobic digestion.



Dr. Paul KÖNST has the position of Sr. Scientist at Dutch Research institute TNO and is Program

Manager of the Sugar Horizon of Shared Research Program Biorizon, which has the mission to enable commercial production of bio-aromatics.



Mayra LACRUZ works on bioeconomy projects at the Footwear

Innovation and Technology Center, INESCOP. She is a geological engineer, lecturer, consultant and specialist in sustainability and circular economy.



Breakout session:

KETs for purification processes



Chaired by: Maria BARBOSA - AlgaeParc / Wageningen University & Research

Prof. dr Maria BARBOSA is Professor in Microalgae Biotechnology & Director of AlgaePARC at Wageningen University and Research Centre. She coordinates several large research programs covering the entire microalgae production chain.



Grégoire AUDO has a Masters Degree in "Natural product purification & identification"

and an MBA. His career focused around the development of innovative extraction and purification techniques. He is now in charge of the purification platform at Gilson.



Arne GRÖNGRÖFT graduated in Energy and Environmental Engineering in 2008 at Hamburg

University of Technology. He joined DBFZ in the same year and is head of the working group on separation technologies and process design (currently 7 researchers) since 2011.



Mark GRONNOW holds a PhD from University of York **Green Chemistry** Centre. Research

interests are adding value to biomass & waste, sugar as a platform chemical & microwave pyrolysis. Mark is passionate about industrial collaboration and scale-up. He currently sits on RSC **Industry & Technology Division** Council.



Dr. inq. Sofie **LODENS** holds a PhD in Bioscience Engineering. For 2 years she is working

as Project Acquisition Coordinator and coordinates several projects in the biobased economy/ industrial biotechnology such as WASTE2FUNC (BBI-JU), SECRETed (H2020) and FUCATIL (Moonshot Flanders).



Friedrich STREFFER, PhD in biophysical chemistry (TU Berlin), drives

as CTO the scale up of the LX-Process as well as its integration to different downstream processes. He is the author of more than 20 numerous scientific publications.



Quentin **SANLAVILLE** is R&D engineer at Novasep, working on

industrial purification process developments. He has been involved in various projects related to resins and membranes with a focus on chromatography research at laboratory & pilot scale.



Hank VLEEMING holds a PhD in Chemical Engineering (TU Eindhoven)

and worked at IFP and Technip before he joined PDC in 1999. He leads a team of specialists in development, integration, and optimization of biobased & circular processes. He designed/ evaluated 16 biorefining technologies.

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MARCH 16

The biotech KETs



MARCH 17



Chaired by: Olivier ROLLAND -Toulouse White Biotechnology

Olivier ROLLAND is Managing Director of TWB and has 10+ years in strategy, business & product development in the bioeconomy. He was Director, Sustainable Fuel Strategy at Boeing and also spent 8 years at Total where he managed the alliance with Amyris in synthetic biology.



Chaired by: Xavier TYTELMAN - Aviation NXT

KETs and strategies to reduce the fossil fuel

dependence of the aviation and its connected

Xavier TYTELMAN is a former crew member of the fleet air arm, now a consultant dedicated to sustainability in aviation.



is Project Manager at VITO and leading VITO's activities on gas fermentations.

She currently coordinates the Horizon2020 project BioRECO2VER. She is (co)author of >90 peer-reviewed publications and inventor of 5 patent families.



Lucie FRIEDLANDER, has over 20 years of professional experience in R&D

and business development (public institutions, pharmaceutical industry). She's now extended Eagle Genomics activities and partnerships in Southern Europe & Belgium.



Fabian GRANDKE, PhD in bioinformatics (LMU Munich), has a broad background

in applied bioinformatics. He is the scientific face of Eagle Genomics. His passion for life sciences is complemented with a deep understanding of data science & technology.



Marcelo do AMARAL holds a PhD in Chemical engineering. He acquired 20 years

professions (sponsored by Leaf)

of experience in the bioethanol and green chemistry industries in many international companies. He was the CEO of Global Yeast and now leads Leaf by Lesaffre.



Damien GAUDIN, agricultural engineer, has been an Air France executive for

22 years. He graduated in air transport strategy from ENAC. He organized the «States of the Air» event & led the «Sustainable Aviation Observatory» project (2021).



Geraldine
PIC-PARIS is
working at Neste
as a Key Account
Manager for

EU, MEA and Africa within the Renewable Aviation team. She has a long history within the aviation industry working 18 years for Air Total and Total Renewables (solar and wind).



Sylvain JULIEN, PhD in Life Sciences, has been a cancer researcher for 15 years with

>30 scientific publications. In 2013, he initiated the project to create e-Zyvec as an answer to a long-standing interest in valorization of scientific knowledge and transfer of technology. He is now managing the research & innovation activities of e-Zyvec.



Laura KLITTEN has worked in genetics, ncRNAs, molecular biology and new technologies in a

variety of industrial roles for the last 9 years. Dr. Klitten act as the scientific link between inscripta and partners. She earned her M.Sc and Ph.D degrees at the University of Copenhagen, Danemark



Kirsten STEINBUSCH is CTO at DAB and holds a PhD in Env. Biotechnology from

Wageningen University. She has 12 years' experience as executive in commercializing innovative biotechnology solutions and spon out two successful biotech startups.



Sjoerd RAIJMANS is heading several early-stage projects which aim to develop

commercial-scale SAF production capacity. Next to that Sjoerd led several consulting projects whereby the SkyNRG team advices industry partners on SAF.



Stephane
THION is leading
Sustainable Aviation
Fuels activities
at TotalEnergies

since 2019. He has over 20 years extensive international experience developing sustainable and innovative renewable energy and chemical solutions.

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Biomass Balance approach: Renewable resources for high performance and low carbon emissions



KETs to produce bioenergy

Breakout session:



Chaired by: Astrid PALMIERI - BASF Italia

Astrid PALMIERI is Senior Sustainability Community Manager for EMEA at BASF. She has 20 years of international business development and sustainability management experience in the chemical and energy sectors.



Adisa AZAPAGIC is Professor of Sustainable Chemical Engineering at the

University of Manchester. Her research interests include life cycle sustainability assessment, carbon footprinting, sustainable production and consumption and corporate sustainability



stéphanie CADENE has 15 years' experience in marketing in the

Luxury industry.

She is now leading the marketing and communication strategy for Jallatte in France, with the objective to develop the visibility and the desirability of the brand.



Thomas MAIREY
has joined BASF
in 2020, following
the purchase of
Solvay's Polyamide

activity.

With 10 years of experience in communication and public affairs, he is now leading sustainability

topics and customer relations.



Chaired by: Markus WOLPERDINGER - Fraunhofer IGB

Markus WOLPERDINGER studied chemistry at the Ludwig-Maximilians-University of Munich and received his doctorate in physical chemistry on laser spectroscopy of biological systems. He is the director of the Fraunhofer IGB and has 25+ years of experience in various management positions in industry.



Pierre BERNARD-SAVARY is the founder of the Chromacim company as well as

the Thin Layer Chromatography Club and Chromacim. He belongs to several committees such as the French national association of separation sciences.



Vincent GUERRE, CEO of ENOSIS, is dedicated to making bioenergy a reality. Before

funding ENOSIS, he built a strong experience in the energy and gas industry as head of marketing & sales and CEO.



Vincent SIMONNEAU graduated from IFP School in 2004, he started

his career as process engineer for gas treatment technologies at PROSERNAT, and coordinated all gas treatment technologies activities at AXENS before joining ENERGO as a CEO in 2020.



Prof. **Daniela THRÄN** heads
the Dept. of
Bioenergy at the
Helmholtz Centre

for Environmental Research (UFZ). She leads research projects in the field of bioenergy, bioeconomics & the spatial impact of renewable energies and developed the «Smart Bioenergy» approach.



Dominik STEINBERGER worked at the Max Planck Institute for Polymer Research

in the field of organic chemistry where he received his PhD in macromolecular chemistry. Since 2014 he is working for Pall in various roles of the technical department.



Joris SPAAN,
Business
Development
at Yilkins, is a
specialist in the

development and implementation of new business models in the bio-based economy with a special focus on biomass as primary material.

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The biocatalysis KETs



Chaired by: Audrey ROBIC



Audrey ROBIC has Pharm D and PhD in Biotechnology. After several years as R&D Manager with a focus on Enzyme Technology and business development, she is now driving Codexis' growth in the European market with a focus on pharma, food, and animal nutrition.



Claudia **RINNOFNER** is the founder of the biotech company myBIOS. She earned

her PhD at Graz University of Technology (TUG) at the Institute of Molecular Biotechnology focusing on recombinant protein production.



Hannah **BRAB** studied Biotechnology at **RWTH Aachen** University. In 2020,

she obtained her PhD at Heinrich Heine University Düsseldorf with Professor Jörg Pietruszka, followed by post-doctoral studies. She has been working as a product specialist at Aminoverse B.V. since October 2021



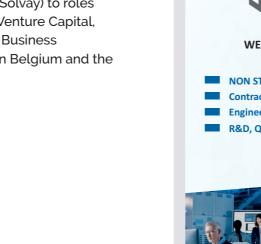
Jordi LOPEZ joined EnginZyme in 2020 as Director of Business Development.

Chemical engineer and MBA, with 15+ years of international experience involving technical functions in process development (Saint-Gobain, Solvay) to roles in Innovation/Venture Capital, Marketing and Business development in Belgium and the USA.



Delphine LESTRADE works at TWB as head of cytometry service. She develops

and defines protocols for high throughput cytometry assays for identification and characterization of microorganisms in biocatalyser.





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HOW VITO CONTRIBUTES TO A SUSTAINABLE WORLD



alternative feedstock





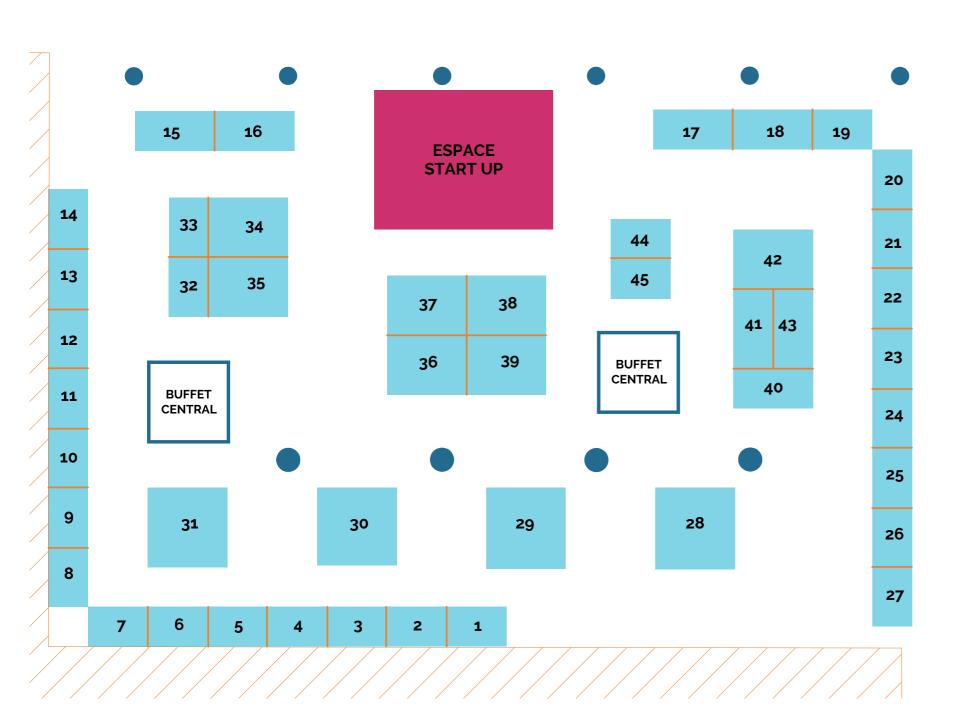


SUSTAINABLE CHEMISTRY

More info? www.vito.be Contact roel.vleeschouwers@vito.be

EXHIBITION FLOORPLAN

COMPANIES' EXHIBITING



- TWB Toulouse White Biotechnology
- 2 Sairem
- 3 Ypso-Facto
- 4 IPSB
- 5 Clextral
- 6 Scalibur
- **7** Chromacim
- 8 URCA Université de Reims Champagne Ardenne
- **9** GEA
- **10** Lebas Industries
- **11** Biorea
- **12** Extractis
- **13** e-Zyvec
- 14 aquila biolabs
- 5 Tournaire Equipement
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- **26** ProSim
- 27 De Smet Engineers & Contractors (DSEC)
- **28** B4C Bioeconomy For Change (ex IAR)
- 29 Genopole
- 30 IDE Trois Rivières
- 31 Région Hauts de France
- 32 De Dietrich
- 33 Lyophitech
- 34 Dunkerque Promotion
- 35 PIVERT
- **36** ARD
- 7 TAMI Industries & SIVA
- 38 Axens
- **39** Stella
- 40 LanzaTech
- 41 PALL Corporation
- **42** Université de Lille
- **43** Luxembourg Institute of Science and Technology (LIST)
- 44 Lihme Protein Solutions
- 45 Inscripta Inc

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Genopole, France's leading biocluster in the Paris Region,accommodates, accompanies and connects businesses and laboratories in all fields of biotechnologies. Genopole is increasingly attracting researchers and industrials active in the field of synthetic biology and the progress being made is enabling a large range of industrial applications.

www.genopole.fr



Waterfront and university city, home to many research and technology transfer centres in bio-industries, Trois-Rivières is the North American gateway to the bioeconomy. Trois-Rivières metropolitan region has one of the largest industrial park in Canada with a reliable green energy supply and a market of 480 million consumers.

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GOLD



R&D company offering development & industrial services (lab, pilot, industrial demonstrator, tolling) in the fields of plant extraction, green chemistry, cellulosic biomass, industrial biotechnology, bio-inputs, bio-energies.

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Axens has developed extensive knowhow and industrial experience in the renewables field to sustain the challenges of the energy transition actors & to help clients to build a sustainable future with inventive and performing solutions.

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PIVERT supports industrial innovation towards industrialization in chemistry and biotechnology. This support is carried out from the laboratory to the pilot scale (from the gram to a few tons of end product).

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GOLD



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The University of Lille houses 62 laboratories, 47 platforms and 10 research centers. Its research has been recognized through prestigious labels / funding: 7 facilities of excellence (EQUIPEX) and 5 laboratories of excellence (LABEX).

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SILVER



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The Luxembourg Institute of Science and Technology (LIST) presents its GreenTech Innovation Center, working to develop, scale-up, and help commercialise bio-based products and bioprocesses.

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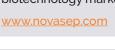
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SILVER



Novasep is a major player in the field of purification services and technologies for the industrial biotechnology markets.





Pall Corporation designs and supplies a wide range of Filtration and Separation technologies to eliminate solid and liquid contaminants from fluids.

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Tournaire Equipment supplies leading-edge equipment for processing natural raw materials. It is capable of designing a complete process with premium solution

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VITO develops cleantech technologies that tackle today's societal challenges. We create new biobased value chains and develop technologies for process intensification. VITO is your R&D

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Carnot 3BCAR is a French structured R&D network, offering its competencies for companies' innovation in the field of biomass valorization with Bioenergy, Biobased molecules & materials.

3bcar.fr



Bio Base Europe Pilot Plant: An independent stateof-the-art pilot and demonstration facility for process development, scale-up and custom manufacturing of biobased products and processes

www.bbeu.org



aquila biolabs is a German biotechnology start-up developing innovative technologies for the control and analysis of bioprocesses in bioreactors and incubation shakers.



Biorea, Agrial Group, relies on its patented technology of air-lift fermentation to provide tailor-made services from R&D and scale-up until production.

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extractis.com



e-Zyvec is a biotech specialized in genetic engineering, and provides integrated services in molecular biology, for design and production of tailor-made DNA vectors.

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iMEAN is a French biomodeling company leader in developing innovative bioinformatics tools & in silico models of living organisms such as plants, microorganisms and more.

imean-biotech.com

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Inscripta is a life science technology company enabling scientists to solve some of today's most pressing challenges with the first benchtop system for genome editing.

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Processium is an independent company specialized in design, development & optimisation of processes for chemical, biobased and biotechnological industries. Processium aims at transforming lab protocoles into industrial processes.

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IPSB, subsidiary of Laporte group, is a process engineering company involved in Agroindustries, White Biotechnology and Agrifood. Together we design your tailored project.

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Our aim is to apply gentle, industrial and cost effective separation technique from our tool box of unique Controlled Affinity Separation (CAS) Techniques to retrieve Proteins

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SCALIBUR is a Horizon 2020 project creating a circular economy for urban biowaste

www.scalibur.eu



Syngulon is a synthetic biology startup developing original genetic technologies using bacteriocins, antimicrobial peptides produced by a wide variety of microorganisms.

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The AEBB cluster of Université de Reims Champagne-Ardenne, the CMQ Bioeco Academy and the Condorcet Research Federation are 3 major players in research and training in bioeconomy in the north east of France

www.univ-reims.fr



The EU Funded project VALUEWASTE (GA No. 818312) proposes an integrated approach in urban biowaste upcycling to produce added-value products in a cascading approach through the development of proteins for food and feed and bio-fertilisers.

www.valuewaste.eu



Ypso-facto helps life science industries to develop, optimize and secure chemical and bioprocesses with a synergistic offer: software tools and consulting services

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INNOVATION TOURS

March 15th, 2022

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PIVERT is an innovative SME anchored at the heart of the Hauts-de-France ecosystem performing industrialisation of agricultural resources valorisation processes.

PIVERT offers 3 service proposals meeting the

- «Time to Market» challenge and speeding up the whole innovation process, therefore avoiding the need for heavy investment in medium sized equipment and allowing business opportunities at minimal cost:
- Research & Innovation: to unlock together technological bottlenecks to develop new products.
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- **Technological hosting:** to speed-up your business plan within our industrial site.





INNOVATION TOURS

STELLA

Stella, part of the French group (Dewavrin Cosmetics), is delighted to welcome the BIOKET's participants for a factory tour in Mouscron (Belgium)

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This new business model offers a custom service for the treatment of any kinds of fats, the benefits of which you will learn during this visit.

Discover the molecular distillation technology and the opportunities and targeted application sectors.

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from field to market

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Stand #35



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- HIGH PERFORMANCE
- VEGETABLE OIL
- FATS, WAXES
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COSMETICS







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TO BETTER NOURISH AND PROTECT THE

PLANET

A key global player in fermentation for nearly 170 years, passionately committed to our mission, we push boundaries to reveal the full potential of microorganisms within our businesses:

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- Food taste & pleasure
- Healthcare
- Industrial biotechnology

We work with customers, partners and researchers to find ever more relevant answers to the needs of food, health, naturalness and respect for our environment.



To nourish 10 billion people, in a healthy way, in 2050 by making the most of our planet's resources is a major and unprecedented issue. We believe that fermentation is one of the most promising answers to this challenge.



INNOVATION TOURS

LESAFFRE

Lesaffre is a key global player in fermentation whose history began in Lille over a century ago. Nowadays, Lesaffre, as a company established on all continents with a 2,2 billion euro turnover, counts 10,700 employees and more than 85 nationalities. On the strength of this experience and diversity, we work with customers, partners and researchers to find ever more relevant answers to the needs of food, health, naturalness and respect for our environment.

As a science and technology company, Lesaffre is continually looking for new opportunities for innovation that will help our customers. To accelerate the development of innovative projects, we are able to draw on 570 R&D experts and three science-focused research platforms.

During the Innovation Tour, guided by our R&D experts, you will explore the infinite potential of microorganisms and 2 science-focused research platforms to accelerate the development of innovative projects.

- A research platform focused on microbial diversity and the interactions of microorganisms (yeasts, bacteria, phages, filamentous fungi, etc.) with a wide variety of substrates. Using this platform, we aim to optimize microorganism cultures, exploit them to the fullest and create an optimal environment. Lesaffre's expertise in fermentation and bioconversion processes lies at the heart of this platform. Our genetics, microbiology, enzymology, genomics, metabolomics, computational biology and bioinformatics researchers use cutting-edge equipment to ramp up research activities such as fermentation and robotized characterization tools.
- A research platform focused on promoting the transformation of substrates. With expertise in innovative technologies such as autolysis, separation, purification, drying, freezedrying and encapsulation, we have developed process engineering that enables us to meet our customers' needs. These include various ferments (yeasts, bacteria and filamentous fungi), other relevant microorganisms and functional fractions, molecules and metabolites for a wide variety of applications.







Workshop:

Physico-chemical pre-treatment of plant biomass: state of play and applications (sponsored by Carnot 3BCAR)

March 17th, 2022

Organised by INRAE with contributions of academic and industrial stakeholders, this workshop aims at presenting the state of the art of the physico-chemical pre-treatments for overcoming recalcitrance of lignocellulosic biomass. Pretreatment is an essential step in deconstructing the biomass before conversion processes, making it more reactive to chemical and biological catalysts, but it remains an important challenge for industrial transposition.

Research advances

Toulouse, INRAE

- Physico-chemical pre-treatments of biomass state-of-the-art,
 Diania Garcla-Bernet Laboratoire de Biotechnologie de l'Environnement, INRAE
- Twin screw extrusion a suitable technology for biomass deconstruction. Application example: New Pretreatment for second generation biofuel plants.
 Virginie Vandenbossche, Toulouse-INP, Laboratoire de Chimie Agro-Industrielle, LCA, Université de
- Pretreatment of miscanthus using choline chloride based deep eutectic solvents,
 Pierre-Alann CALT Laboratoire Réactions et Génie des Procédés, Université de Lorraine

Industrial uses of physico-chemical pre-treatments of biomass

- Dry Vapocracking Treatment of lignocellulosic biomass: a new industrial process for biomass pretreatment
- Frédéric Martel (Européenne de Biomasse)
- Microwave technologies consulting
 Marilena Radoiu (Microwave Technologies Consulting)
- Physico-chemical pretreatment of lignin to produce bio-aromatic fractions for industrial application: from lab to pilot,
- Roel Vleeschouwer VITO
- Twin-screw extrusion and drying technologies for industry Lionel Danos - Clextral

Organizers:

- Gabriel Paës and Caroline Rémond (FARE, Reims)
- · Cécile Barron and Abdellatif Barakat (IATE, Montpellier)
- · Diana Garcia-Bernet (LBE, Narbonne)
- · Virginie Vandenbossche (LCA, Toulouse)
- Coraline Caullet (3BCAR, Paris)

Workshop:



March 17th, 2022

Creating Value from Waste. Capturing Carbon from Industrial Emissions to produce Sustainable Fuels & Chemicals (sponsored by LanzaTech)

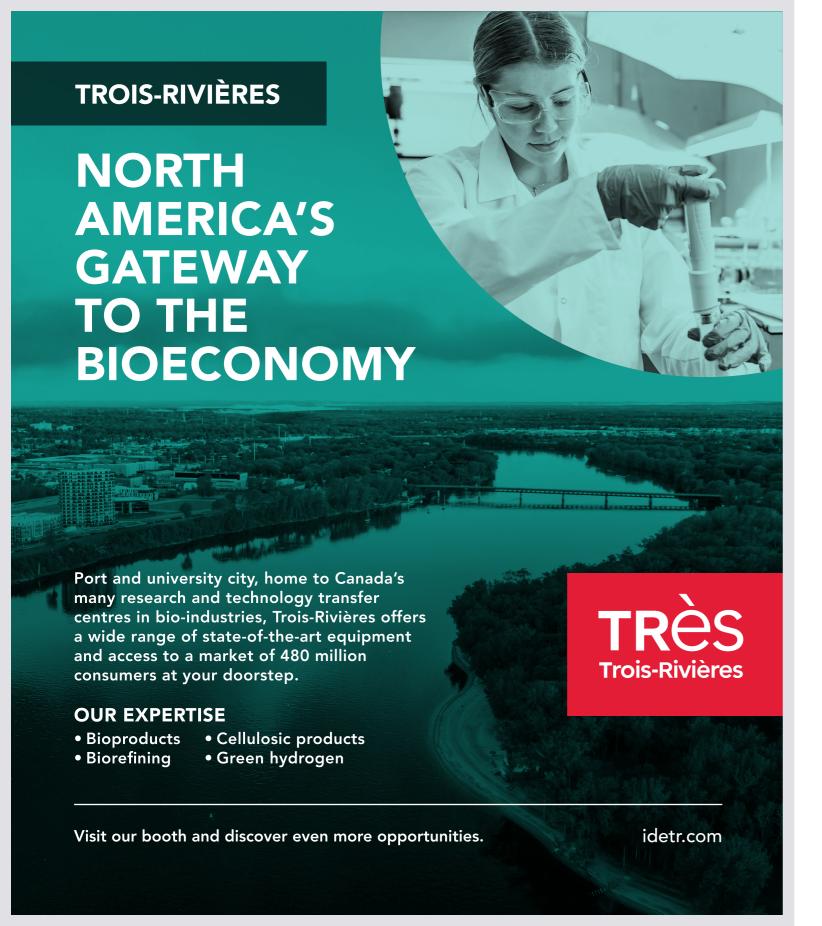
Workshop Agenda:

- Introduction to LanzaTech technology
 Sean Simpson LanzaTech
- The Renewable Carbon Initiative (RCI) Speeding up the transition from fossil carbon to renewable carbon for all organic chemicals and materials
 Michael Carus - Nova Institute
- From Concept to Commercialization; scaling up LanzaTech technology in the Steel Industry
 Wim Van der Stricht ArcelorMittal
- From Technology to Market with CarbonSmart PlasticsCedric Dever L'Oreal Patrick Pinenq - TotalEnergies Babette Pettersen - LanzaTech
- From Waste Wood to Advanced Biofuels with Gasification and Gas Fermentation
 Vincent Calleja - TH2Florent Bourgarel
 - GazoTech
- Industrial off-gases for Chemical Production Michael-Helmut Kopf - Senior Research Manager at BASF

PANEL: "The Role of Recycled Carbon as a Key Enabling Technology for a Carbon Neutral Economy"

- · Sean Simpson
- · Michael Carus
- · David VandeWiele
- · Michael-Helmut Kopf
- · Wim Van der Stricht
- Vincent Calleja





Workshop:



March 17th, 2022

Lignocellulosic sustainable biorefining processes and technologies for high value-added products (sponsored by IDE Trois Rivieres)

14h00	Introduction of the workshop by the Canadian commercial delegate (Embassy of Canada France)
14h05	Overview of the Canadian biobased industry and presentation of bioindustry clusters by Dr. Patrice MANGIN PhD
14h30	From the root to the top of the tree, Maximizing the use of the forest resource in Quebec-Canada by Jean-Philippe JACQUES and Delegation du Québec specialist (TBD) • Presentation of the Quebec strategy for the biosourced economy and the positioning of the Mauricie region • Presentation of Innofibre's new Biobased Products HUB • New concept in recyclable and compostable packaging • The paper mill of the future - integrated biorefinery project
15h15	Coffee break
15h30	The Canadian Bio Economy leadership by Canadian specialist (TBD)
15h40	Integrating Canada into its Biobased value chain from Europe; the Neste approach
15h50	Gaspésie CleanTech Hub with their project of reducing the footprint of the major Canadian Cement Plant by Simon BARNABE, Ph. D.
16h00	Bioindustrial Canada (BIC), an AgSci partner for pre-commercial research for bioproducts technologies – A.J. (Sandy) MARSHALL
16h10	Round table
16h25	Closing remarks

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March 15-16-17, 2022 Lille, France

START-UP VILLAGE



Avecom is an expert in steering and optimizing microbial processes. Our innovations are applied in environmental remediation, biodegradation, and sustainable feed and food ingredients



BHSL's miniaturised Fluidised Bed Combustion Technology (100kW to 5MW thermal) allows the conversion of low value biomass such as manures, wastewater sludges, MBM and digestate into energy.



The vision of B-COS is to become key to resilient plants, animals and people. We want to do this by delivering a reliable and cost-competitive technology for tailor-made chitooligosaccharides.



Biomede diagnoses heavy metals in soils and naturally removes them using plants so-called hyperaccumulative.



Bloom Biorenewables is at the forefront of the global transition to a circular bioeconomy. The company turns residue biomass into sustainable alternatives to petroleum for industries such as plastics, fragrances or fuels.



Embion transforms biomass into highly functional and active ingredients for food, feed and cosmetics through its proprietary platform technology.



CSBR proposes a patented chemistry improving cashew-shell-oil's molecule. We have turned it into a rich bio-refinery of a variety of high-value monomers for manufacturing, pharma, fragrances and insect-attractants.



ENERGO is developing a totally new way of doing chemistry, based on the combination of cold plasma and catalysis allowing to generate products at desired rates and yields that are otherwise unattainable by conventional catalytic means.



Promoting carbon neutrality and circular economy, ENOSIS designs and sells equipment recycling CO2 into sustainable methane, a substitute to natural gas



We create microbial production platforms for highvalue chemicals using cutting edge computational modelling technology to provide industry with effective production methods



We're reshaping the textile industry with efficient dyeing processes and sustainable colors. We boost production capacities as we can dye 5x faster with 15x less energy and without using any petrochemicals.



Chemical recycling of plastic waste and animal protein waste for refining into fuel such as Diesel and Gasoline low carbon



Intemic is combining (bio)process simulation with artificial intelligence to build digital twins of new unit operations and democratize generative flowsheet design



LYOPHITECH has developed and patented a new dynamic freeze-drying process. We offer R&D services and industrial lyophilization, working in strict anaerobic atmosphere.

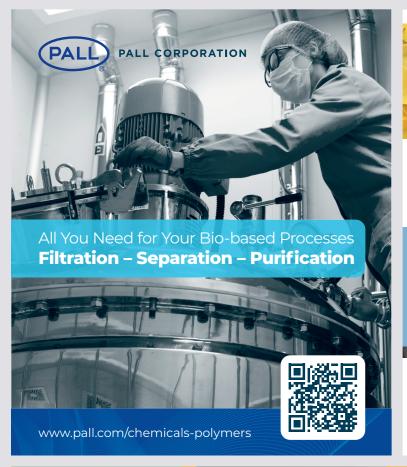


Net-zero carbon livestock is our vision to climate crisis. We provide solutions to capture the livestock enteric fermentation methane in a sustainable circular economy.



ZYMOPTIQ's mission is to facilitate the measurement of enzymatic activity in many different industrial contexts (Feed, Food&Beverage, Nutrition, Detergent...) in a wide range of use cases

BIOKET's Showguide 2022 54 March 15-16-17, 2022 Lille, France







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IN THE HEART OF TOMORROW'S INDUSTRY 4.0. THE UNIVERSITY OF LILLE IS DEVELOPING INTERNATIONAL, INNOVATIVE, **CUTTING-EDGE RESEARCH IN BIOECONOMY.**

OBJECTIVES

- Understand and monitor global changes
- Seek alternative solutions to the exploitation of fossil resources
- Evaluate the impact of climate change on Earth, people and societies



33 patents since 2013

















STRENGTHS

- · A privileged position inside European networks, taking the lead on scientific and technological processes at the heart of biorefineries, and expertise within French consortia.
- Socio-economic collaboration and strong links with industrial partners.
- Regional initiatives (e.g. Rev3 and Eura Industry Innov') and linkswith the regional technopole parks.

HOW WE WORK

- As experts in the Lille area, we are developing an innovative approach to research integrating a large number of disciplines. Chemistry and Biotechnology are deeply involved via participation in INTERREG projects, CPER projects, Chaire Industrielle Charles Viollette...
- We have had numerous successes in industrial and fundamental research, including the construction of the first cross-border research unit BioEcoAgro, in association with the INRAE, the TERRA institute of the University of Liege (Belgium) and the UPIV (Amiens).

The University of Lille also integrates into the reflection process input from historians, philosophers, political scientists and legal scholars to question the acceptability of new behaviors

The Biorefinery BIOREF Master's, an Erasmus Mundus program, is educating a new generation of interdisciplinary scientists in a renewed bioeconomy-based society (master-bioref.eu).



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