



## BioRural Knowledge-exchange Workshops: Advancing the European Rural Bioeconomy



Workshop 5:  
**Bioenergy**



**16-18 April 2024**  
**Online event**  
14:00h CET

**Register**  
**Here**



We are delighted to invite you to the BioRural Knowledge-exchange Workshop, a transformative event dedicated to advancing the European Rural Bioeconomy. Join stakeholders from across Europe to explore innovative solutions and strategies for promoting small-scale bio-based initiatives in rural areas.

### **Benefits of attending the workshop**

- Inspiration for rural businesses, industry professionals, community leaders, policymakers and other actors sharing the passion and ambition of advancing rural bioeconomy.
- Gain insights into the European rural Bioeconomy and success stories of bio-based solutions.
- Explore the BioRural Toolkit for information sharing and decision-making support.
- Engage in interactive workshops and contribute to regional development.
- Shape the future of sustainable rural communities.

*Save the Date and join us in shaping the future of rural communities through bio-based solutions!*

For workshop updates and registration, please follow us on <https://biorural.eu>



**Starts at 14:00 Central European Time**  
**Day 1 - Basic concept(s), technical principles (16 April 2024)**

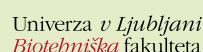
<b>14:00</b> Bioenergy in the EU context	<i>Manolis Karampinis (Bioenergy Europe)</i>
<b>14:15</b> Biomass-based solid fuels production	<i>Edmundo Marques (Polytechnic Institute of Viseu)</i>
<b>14:30</b> Direct combustion heat-producing boilers	<i>Juliana Maschmann (SCIVEN)</i>
<b>14:45</b> Pyrolysis and Gasification	<i>Octávio Alves (BioRef-CoLab)</i>
<b>15:00</b> Biogas and Biomethane	<i>Dimitris Kourkoumpas (CERTH/CPERI)</i>
<b>15:15</b> Q&A session	<i>Moderator: José Baranda (University of Coimbra)</i>
<b>15:30</b> Closure of Day 1	

**Starts at 14:00 Central European Time**  
**Day 2 - Showcase of good practices, factors of success (17 April 2024)**

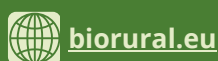
<b>14:00</b> Small scale, low temperature, biomass based CHP systems: A Case Study	<i>Jorge André (University of Coimbra)</i>
<b>14:15</b> Biogas lab operation, main characteristics, and the utilization of digestate	<i>Themis Sfetsas (QLAB/BLAG)</i>
<b>14:30</b> Yilkins technology: integrated solutions to decarbonize energy production and bio-chemical industry	<i>Juan Carlos Estrada (Yilkins)</i>
<b>14:45</b> Energy Community producing pellets in Greece	<i>Vasilis Filippou (ESEK)</i>
<b>15:00</b> Q&A session	<i>Moderator: João Santos (University of Coimbra)</i>
<b>15:30</b> Closure of Day 2	

## Starts at 14:00 Central European Time Day 3 - Cross-cutting themes (18 April 2024)

<b>14:00</b> Life Cycle Assessment and associated methods for sustainability evaluation in bioenergy	<i>Fausto Freire (University of Coimbra)</i>
<b>14:15</b> Solar drying and gasification of Sewage Sludge to obtain bioenergy	<i>Virginia Lopez (CEDER-CIEMAT)</i>
<b>14:30</b> 2nd generation bioethanol production from forest management and agriculture residues	<i>Ana Brásio (Prio)</i>
<b>14:45</b> Advanced biofuels for transportation	<i>Kostis Atsonios (CERTH/CPERI)</i>
<b>15:00</b> GAMS utilization on biogas sector: a case study	<i>Stelios Rozakis (IUNG-PIB)</i>
<b>15:15</b> Follow-up session: Q&A, moderated discussion with the presenters	<i>Moderator: José Baranda (University of Coimbra)</i>
<b>15:30</b> Closure of workshop	



Funded by  
the European Union



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## SPEAKERS



### MANOLIS KARAMPINIS



Manolis Karampinis is Director of the Business Development and Membership Department of Bioenergy Europe since October 2022. Among others, his duties include the management of the European Pellet Council (EPC) and the coordination of the Working Groups on Pellets and Agrobiomass. Prior to joining Bioenergy Europe, Manolis had more than 15 years of experience in the bioenergy sector as a research associate at Centre for Research and Technology Hellas (CERTH). Manolis has a degree in Chemical Engineering, a MSc. in Energy Generation and Management, and a MSc. in Techno-economic Systems, all from the National Technical University of Athens.

### EDMUNDO MARQUES



Edmundo Manuel Tavares Marques is an Adjunct Professor at the School of Technology and Management of the Polytechnic Institute of Viseu, Portugal, where he has been teaching since 1996. He graduated in Mechanical Engineering in 1990 at the Coimbra University. He got a post-graduation in Hygiene and Safety in 2003 at Porto Polytechnic, and a MSc degree in Engineering of Lignocellulosic Materials in 2007 at Lisbon University. He has a PhD in Mechanical Engineering by Porto University in 2019. Since 2009, he directed his research interests towards Bioenergy, specifically the production of solid biofuels from agricultural by-products and native forest species (trees and shrubs).

### JULIANA MASCHMANN



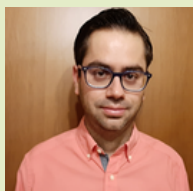
Juliana Maschmann, Head of Communications at SCIVEN, holds a degree in Industrial and Management Engineering and an Executive Master in Digital Marketing. Specializing in facilitating the energy transition for high-energy consumers, Juliana blends her expertise in engineering with her passion for digital marketing to demystify complex energy concepts across various sectors.

### OCTÁVIO ALVES



Octávio Alves is a researcher at BIOREF - Collaborative Laboratory for Biorefineries, and works in the area of thermochemical processes for biomass valorisation. In this domain, he has been participated in projects specifically focused on gasification, gas cleaning, and pyrolysis technologies. He holds a PhD in Bioenergy concluded at NOVA University of Lisbon, where he developed pilot-scale experiments of gasification using biomass and fractions from municipal wastes to obtain a synthetic gas for energy production. He also participated in some scientific publications related with the field, among them 11 journal papers and five book chapters.

### DIMITRIS KOURKOUMPAS



Dimitrios-Sotirios Kourkoumpas is a Senior Mechanical Research Engineer in CERTH/CPERI. He is specialized in the simulation and development of LCA/LCC for integrated advanced energy systems. His basic scope of research is the sustainable management of energy resources in environmental, economic and social terms under the framework of a circular economy approach focusing mainly on advanced biomass exploitation technologies with emphasis in biogas/biomethane, RES and energy storage solutions, waste management, CO<sub>2</sub> utilization, design/development of solutions for smart factories and ecosystem restoration.

### JORGE ANDRÉ



Jorge André was born in Lisbon (Portugal) in 1961. He graduated in Mechanical Engineering from the Instituto Superior Técnico (Lisbon) and the University of Coimbra. Along the academic career he has done research on thermo-aerodynamics, forest fires and industrial ecology. In the late years he focused on how to find and foster business opportunities based on engineering innovation in the energy field, as a means of strengthening the engineering role in the Portuguese industry. Together with some colleagues and former students of the Mechanical Engineering Department of the University of Coimbra, he cofounded and is the R&D Director of Sciven, an engineering company that is near to launch into the market mini Combined Heat and Power and Waste Heat Recovery systems based on low and medium-to-high (e.g., for industrial WHR) grade heat sources.

### THEMIS SFETSAS



Mr. Themistoklis Sfetsas is an experienced analytical scientist with a demonstrated history of working in the research industry. He holds a BSc (Organic Chemistry & Biochemistry, 2005) and MSc (Didactics in Chemistry, 2009) of Aristotle University of Thessaloniki. He has studied the organic synthesis of prototype hydrazone and quinoline derivatives. A research fellow for many years with CPERI/CERTH, he developed several innovative methodologies for bio-oils and fuels analysis. Themistoklis has extensive experience in research projects focusing on the evaluation and characterization of pyrolysis oils. As the technical and quality control manager of Q-lab (2012-), he has developed various analytical methodologies and quality systems. He has contributed to numerous publications in international journals and serves as a reviewer for scientific articles. His latest research has included anaerobic digestion processes and microalgal culture systems, while he recently embarked on a PhD program titled "Anaerobic digestion effluents treatment by advanced microalgal cultivation" (2019-).

## SPEAKERS



### JUAN CARLOS ESTRADA



With a humanistic background in literature, linguistics and philosophy (Mexico, UNAM), Juan Carlos Estrada has more than 10 year's experience in project development within the bio-economy sector, mostly regarding innovative technologies and upcycling value chains. He is based in the Netherlands since 2012.

### VASILIS FILIPPOU



Mr. Vasilis Filippou is a researcher and expert in the fields of forestry, renewable energy, and sustainable development. Currently serving as a scientific associate at the Center for Research and Technology Hellas (CERTH). Holding a Ph.D. in Industrial Wood Utilization from Aristotle University of Thessaloniki, Mr. Filippou has dedicated his career to exploring innovative solutions for utilizing forest biomass sustainably. With a robust background in European projects, research, and teaching, he has been instrumental in numerous national and international initiatives. Mr. Filippou's research endeavors, ranging from the analysis of logging residues to the enhancement of wood properties through various treatments.

### FAUSTO FREIRE



Fausto Freire is associate Professor at the University of Coimbra (UC), with research and teaching on Life Cycle Assessment (and other life-cycle based approaches), and Circular Economy systems to enhance the sustainability of products and systems. Founder and coordinator of the Center for Industrial Ecology; member and co-founder of the coordination committee of the Energy for Sustainability initiative at UC. Faculty at the MIT-Portugal program and MIT visiting Scholar (2010-2012, several months). Fulbright Scholar at the University of Michigan in 2008. Prof. Freire has studied and coordinated several large projects on products, industrial and energy systems, and supervised 15 PhD thesis. Evaluator for H2020 projects, Fulbright Foundation, European Science Foundation, A3ES, .... Senior member and expert in Energy of the Portuguese Engineers Association.

### VIRGINIA LOPEZ



After obtaining her PhD in Biochemistry and Molecular Biology, Gabriela Droga Mazovec pursued her research work at the Jožef Stefan Institute and later on at the Institute for Molecular and Cell Biology, in Portugal. Her experience with the biotechnology industry started with a 5-years collaboration with the group Sanolabor d.d., where she had the opportunity to interact with some of the most prominent biotechnology and pharmaceutical companies. Her background in academia, experience with the industry and understanding of the patenting process enables her to understand the academic partners' perspective, as well as the critical view necessary for the successful commercialization of new technologies.

### ANA BRÁSIO



Ana Brasília has a PhD in Chemical Engineering from the University of Coimbra with a focus on developing solutions for the bioenergy industry. As a result of her research activities, she has contributed to several publications, patents, theses and posters. Currently, she is part of the PRIO team and is responsible for the development of several R & D and Innovation projects for new bioenergy production processes that contribute to the energy transition and, consequently, to the decarbonization of society. In 2023 she graduated in Advanced Energy Management from AESE Business School. To find out more, see: <https://www.linkedin.com/in/anabrasio/>.

### KOSTANTINOS ATSONIOS



Dr. Konstantinos Atsonios is a PhD Mechanical Engineer from the National Technical University of Athens (NTUA) and he is a Research associate at CERTH/CPERI since 2010. He specializes in the study of advanced energy systems and processes, mainly related to low carbon emissions. Having participated in several national and European funded projects, he has experience in process modelling and energy system design and performing thermodynamic calculations on various processes, including thermal plants, biorefineries, synthetic fuels production, energy storage concepts, low carbon technologies at industrial applications. He is the coordinator of the H2020 EU funded BioSFerA project (<https://biosfera-project.eu/>) and the Horizon Europe FUELPHORIA project (<https://fuelphoria.eu/>). Over 80 papers in scientific journals, international conferences, and workshops and 1600 citations (according to Scopus).

### STELIOS ROZAKIS



Stelios Rozakis (B.A. Economics, DEA Sociology, MPA and PhD Agricultural Economics) is Professor and head of the Bioeconomy and Biosystems Economics Lab in the Technical University of Crete, Greece, and he has collaborated in research with the Soil Institute and Plant Cultivation (IUNG-PIB) in Poland. His teaching and research interests focus on decision making, multicriteria analysis and mathematical programming applied to agriculture, energy and the bioeconomy with more than 100 peer-reviewed papers, chapters in books and conference communications.