

PURPLEGAIN

FUNDAMENTALS AND APPLICATIONS OF PURPLE BACTERIA BIOTECHNOLOGY FOR RESOURCE RECOVERY FROM WASTE

Dr. Baptiste Leroy

UMONS 17th May 2024



PURPLEGAIN'S ORGANISATION

Four working groups

Number	Title	Leader	No. participants
1	Metabolic, biochemical, and biophysical mechanisms of PPB and mathematical models	Dr Baptiste Leroy	108
2	Resource recovery from waste and wastewater and downstream procedures for PPB biomass	Dr Gabriel	132
		Capson-Tojo	
3	Building the PPB value chain	Prof Jana	63
		Klopcheska	
4	Coordination, Dissemination, and Communication	Prof David	60
		Weissbrodt	



PURPLEGAIN'S ORGANISATION

Operational structure:

Position	Name (country) – ITC		
Action Chair	Dr. Daniel Puyol (ESP)	Gender	
Action Vice-Chair	Dr. Joana Fradinho (PR) — ITC		
Grant Awarding Coordinator	Prof. Raúl Muñoz (ES)		
Science Communication Coordinator	Dr. Ralph Lindeboom (NL)	50% 50%	
Training Schools Coordinator	Dr. Ioanna Vasiliadou (GR) - ITC		
Stakeholder Coordinator	Cristina Cavinato (IT)	M W	
WG1 Leader WG1 co-leader	Prof. Baptiste Leroy (BEL) Dr. Arpita Bose (USA)		
WG2 Leader WG2 co-leader	Dr. Gabriel Capson-Tojo (FR) Dr. Luis Díaz Allegue (ES)	Country	
WG3 Leader WG3 co-leader WG3 co-leader	Dr. Jana Klopchevska (NMC) – ITC Dr. Luisa Gouveia (PR) – ITC Dr. Vasileia Vasilaki (UK)	6 <mark>%</mark> 63% ^{31%}	
WG4 Leader WG4 co-leader WG4 co-leader	Prof. David Weissbrodt (NO) Dr. José Luis Rubio (ESP) Dr. Natasa Nastic (SER) - ITC	■INT ■ITC ■ non ITC	



WHAT ARE WE DOING?

WG1 tasks and duties

Responsible persons: Baptiste Leroy, Arpita Bose

- Organisation of biannual meetings
- Deliverable 1.1 : "A roadmap to transfer knowledge gained on pure culture of purple phototrophic bacteria to the application in non-axenic mixed cultures, including strategies to fill knowledge gaps.

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Working paper 🛛 🔒 Open

Show affiliations

A roadmap to transfer knowledge gained on pure culture of purple phototrophic bacteria to the application in non-axenic mixed cultures, including strategies to fill knowledge gaps.

Working Group 1 of the PurpleGain COST action¹



WHAT ARE WE DOING?

WG1 tasks and duties Response

Responsible persons: Baptiste Leroy, Arpita Bose

- Organisation of biannual meetings
- Deliverable 1.1 : "A roadmap to transfer knowledge gained on pure culture of purple phototrophic bacteria to the application in non-axenic mixed cultures, including strategies to fill knowledge gaps.
- Deliverable 1.2 : "A comprehensive vade-mecum of methods and good practices to be applied in PPB biotech, including recommendations for harmonized performance evaluation and monitoring"



WHAT ARE WE DOING?

WG1 tasks and duties

Responsible persons: Baptiste Leroy, Arpita Bose

 Implementation of a discussion platform (forum) to foster the exchange among the WG community





✓ Four workshops already organised

1st Workshop APPLIED PHYSICS TO PPB-BASED ENVIRONMENTAL BIOTECHNOLOGY

25 APR, 2023 | SZEGED – HUNGARY





✓ Four workshops already organised







✓ Four workshops already organised

3RD WORKSHOP

Sustainability assessment of multiple PPB process chains and recovered resources to support market penetration and social acceptance

4 September 2023

Delft - Netherlands

DEADCHE BUDNIT ABILITIACT 7TH AUGUST 2023





✓ Four workshops already organised







PRACTICAL ASPECTS OF CULTURING AND MONITORING PURPLE BACTERIA MIXED AND PURE CULTURES

4 WORKSHOP

APRIL 18, 2024

LISBON - PORTUGAL

FINAL DATE TO APPLY FOR FUNDING: 23RD FEBRUARY 2024. COMMUNICATION, CONFIRMATION AND FUNDING: 4TH MARCH 2024. EARLY BIRD REGISTRATION: 31TH MARCH 2024.

purplegain.eu/4nd-workshop



✓ Training schools for Post-Docs and PhD students







✓ Visit of labs…





✓ ... and meeting again...







SHORT TERM SCIENTIFIC MISSIONS

✓ 15 grant attributed (30K€) to PhD student and PostDocs







LOTS OF NEW COLLABORATIONS

✓ 1 Horizon EU proposal submitted + 1 in preparation





TAKE HOME MESSAGE

- ✓ Incredible opportunity of networking
- ✓ Student/researcher exchanges!
- ✓ Best way to meet your peer
- ✓ Excellent way of building european project

- ✓ Be a member of the writing group!
- ✓ Avoid the chair position...
- ✓ Select a good chairman for the action
- Administrative support absolutely needed!



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COST (European Cooperation in Science and Technology) is a funding agency for research and innovation networks. Our Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.