

BIOCOMEM

Bio-based copolymers for membrane end products for gas separations

Start date of project: 01/06/2020

Duration: 3 years

WP7 – Dissemination, and Exploitation

D7.26 BIOCOMEM dissemination activities/events (including training, visit demo, etc.) M36

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v0.1	18-12-2023	First Release	TUE	
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Dissemination Level				
PU	Public			X
PP	Restricted to other program participants (including the Commission Services)			
RE	Restricted to a group specified by the consortium (including the Commission Services)			
CO	Confidential, only for BioCoMem partners of the consortium (including the Commission Services)			
CON	Confidential, only for BioCoMem partners of the Consortium			

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1. EXECUTIVE SUMMARY

1.1. Description of the deliverable content and purpose

Among the task foreseen in the BioCoMem project, dissemination and communication activities play a crucial role to spread scientific knowledge and technological developments to the largest audience.

This deliverable aims to list all the dissemination activities carried out by the Biocomem Consortium in the period M19-M42.

The following two tables are part of the Dissemination and Communication Plan. In this sense, it does contain a description of the different chosen communication channels and tools to be used to reach different audiences.

It has been updated based on all the activities during the project.

2. Dissemination Activities and events

The tables below are intended to report and keep track of all the dissemination initiatives at partners' level.

2.1 Dissemination and Communication activities

Table 1. wor

Type of activities	Main leader	Title	Date	Place	Type of audience	Estimated Number of persons reached	Countries addressed
Participation to a conference (oral presentation) - ICCMR16	TUE	Process simulation and cost evaluation of membrane systems for CO2 removal using a superstructure approach	16 th -18 th October, 2023	Donostia-San Sebastian (ES), hosted by TECNALIA	Scientific Community	~100	Mainly Eu countries, then Japan, China
Participation to conference (oral presentation) - Aachener Membran Kolloquium	TECNALIA	Bio-based PEBA-derived membranes for carbon dioxide separation	25-25 th of November 2022	Presential	Scientific community Industry, stakeholders	~100 people in the audience	world
Organization of webinar	TUE, TECNALIA, All partners	Biobased membranes for CO2 separation	26 th June 2023	Online	Scientific Community, stakeholders	~100	Mainly Eu countries
Participation to webinar	TECNALIA	Hollow fiber polymeric membranes: preparation and scale-up	26 th June 2023	Online	Scientific Community, stakeholders	~100	Mainly Eu countries
Participation to webinar	Hereon	From polymer to membrane: development of thin-film composite membrane	26 th June 2023	Online	Scientific Community, stakeholders	~100	Mainly Eu countries
Participation to webinar	TUE	Membrane based process design and economics	26 th June 2023	Online	Scientific Community, stakeholders	~100	Mainly Eu countries
Participation to webinar	QUANTIS	Biobased vs conventional polymers in the context of membranes: the LCA perspective	26 th June 2023	Online	Scientific Community, stakeholders	~100	Mainly Eu countries
Organization of webinar	TUE, TECNALIA, All partners	Pathways to demonstrate the BIOCOMEM technology for future bio-based membranes deployment in industry	November 24 th 2023	Online	Scientific Community, stakeholders	~100	Mainly Eu countries
Participation to webinar	TECNALIA	Hollow fibers membrane fabrication	November 24 th 2023	Online	Scientific Community, stakeholders	~100	Mainly Eu countries
Participation to webinar	UM	PEBA polymer synthesis pathways to membrane processing	November 24 th 2023	Online	Scientific Community, stakeholders	~100	Mainly Eu countries
Participation to webinar	Hereon	Think film composite membrane fabrication	November 24 th 2023	Online	Scientific Community, stakeholders	~100	Mainly Eu countries

Participation to webinar	TUE	Membrane-based process design and economics	November 24th 2023	Online	Scientific Community, stakeholders	~100	Mainly Eu countries
Participation to webinar	TUE	Demonstration of Biocomem membranes at TRL4 and 5	November 24th 2023	Online	Scientific Community, stakeholders	~100	Mainly Eu countries
Dissemination video launching (YouTube)	TUE, TECNALIA, All partners	BIOCOMEM 2nd video	October 9 th 2023	Online	General public	144 views	World
Dissemination video launching (YouTube)	TUE, TECNALIA, All partners	BIOCOMEM 1st video	November 25 th 2021	Online	General public	991 views	World
Social media (LinkedIn) posts of BIOCOMEM page during the last year (December 2022-December 2023)	TUE	Here comes the final Newsletter of the BIOCOMEM project, containing the latest (and final) results and remarks of this exciting project. What a journey it has been!	January 15 th 2024	Online	General public	200 impressions (after 3h posting)	World
Social media (LinkedIn) posts of BIOCOMEM page during the last year (December 2022-December 2023)	TUE	Want to know more about thin-film composite (TFC) membrane fabrication achievements at Helmholtz-Zentrum Hereon? In the last BIOCOMEM webinar, Dr. Shishatskiy gave a presentation on this topic unveiling promising results from polymers to module for industrial applications	December 19 th 2023	Online	Scientific Community, stakeholders, general public	669 impressions	World
Social media (LinkedIn) posts of BIOCOMEM page during the last year (December 2022-December 2023)	TUE	Check out Rouzbeh Ramezani's investigation on Membrane-based Process Design and Economics presented at the final BIOCOMEM webinar. Process #optimization associated with #superstructure approach is beneficial for further reduction of the cost associated with #membrane #co2capture process	December 18 th 2023	Online	Scientific Community, stakeholders, general public	815 impressions	World
Social media (LinkedIn) posts of BIOCOMEM page during the last year (December 2022-December 2023)	TUE, UM, TECNALIA	Check the latest results presented during the final BIOCOMEM webinar last week by Katrien Bernaerts and Oana David about PEBA polymer synthesis pathways to membrane processing!	December 12 th 2023	Online	Scientific Community, stakeholders, general public	328 impressions	World
Social media (LinkedIn) posts of BIOCOMEM page during the last year (December 2022-December 2023)	TUE, TECNALIA	Check the latest results presented during the final BIOCOMEM webinar last week by Oana David about polymeric hollow fiber membranes preparation, characterization and scale-up!	December 08 th 2023	Online	Scientific Community, stakeholders, general public	725 impressions	World
Social media (LinkedIn) posts of BIOCOMEM page during the last year (December 2022-December 2023)	TUE, TECNALIA, ALL	BIOCOMEM final webinar took place last week! Check out the results that were presented in terms of #biobased polymeric #membranes development, upscale, #processsimulation and #optimization, #TRL4 and #TRL5 demonstration.	December 5 th 2023	Online	Scientific Community, stakeholders, general public	260 impressions	World
Social media (LinkedIn) posts of BIOCOMEM page during the last year (December 2022-December 2023)	TUE, TECNALIA, ALL	Save the date! As BIOCOMEM project is coming to an end, the new webinar "Pathways to demonstrate the BIOCOMEM technology for future bio-	November 23 rd 2023	Online	Scientific Community, stakeholders, general public	136 impressions	World

		based membranes deployment in industry" will take place on November 24th at 10:00. You can follow online, and no registration is required.					
Social media (LinkedIn) posts of BIOCOMEM page during the last year (December 2022-December 2023)	TUE, TECNALIA, ALL	Save the date! As BIOCOMEM project is coming to an end, the new webinar "Pathways to demonstrate the BIOCOMEM technology for future bio-based membranes deployment in industry" will take place on November 24th at 10:00. You can follow online, and no registration is required.	October 24 rd 2023	Online	Scientific Community, stakeholders, general public	617 impressions	World
Social media (LinkedIn) posts of BIOCOMEM page during the last year (December 2022-December 2023)	TUE, TECNALIA, ALL	The new video of BIOCOMEM project is online.	October 6 th 2023	Online	Scientific Community, stakeholders, general public	2554 impressions	World
Social media (LinkedIn) posts of BIOCOMEM page during the last year (December 2022-December 2023)	TUE	We are pleased to announce that the first experimental campaign in relevant environment has been successfully completed at DMT Environmental Technology facilities. CO2 separation from biogas has been demonstrated at TRL5 during 240h of operation using the up-scaled thin-film composite membrane (TFCM) prepared by Helmholtz-Zentrum Hereon. Stay tuned for the next steps of the demonstration campaign within the BIOCOMEM project.	September 26 th 2022	Online	Scientific Community, stakeholders, general public	2022 impressions	World
Social media (LinkedIn) posts of BIOCOMEM page during the last year (December 2022-December 2023)	TUE, TECNALIA, ALL	Last week we had the BIOCOMEM project webinar on biobased membranes for CO2 separation. below the recordings of the webinar.	July 4 th 2023	Online	Scientific Community, stakeholders, general public	397 impressions	World
Social media (LinkedIn) posts of BIOCOMEM page during the last year (December 2022-December 2023)	TUE, TECNALIA, ALL	The webinar of BIOCOMEM on biobased membranes for CO2 separation is here. You can follow it #Today starting at 10:00. no registration required link for the #webinar	June 26 th 2023	Online	Scientific Community, stakeholders, general public	102 impressions	World
Social media (LinkedIn) posts of BIOCOMEM page during the last year (December 2022-December 2023)	TUE, TECNALIA, ALL	The webinar of BIOCOMEM on biobased membranes for CO2 separation is approaching. you can follow it on June 26th starting at 10:00. no registration required link for the #webinar	June 22 nd 2023	Online	Scientific Community, stakeholders, general public	79 impressions	World
Social media (LinkedIn) posts of BIOCOMEM page during the last year (December 2022-December 2023)	TUE, TECNALIA, ALL	The webinar of BIOCOMEM on biobased membranes for CO2 separation is approaching. you can follow it on June 26th starting at 10:00.	June 19 th 2023	Online	Scientific Community, stakeholders, general public	258 impressions	World

		no registration required link for the #webinar					
Social media (LinkedIn) posts of BIOCOMEM page during the last year (December 2022-December 2023)	TUE, TECNALIA, ALL	Catch-up with BIOCOMEM activities during the last semester and read how the project is progressing towards the final demonstration phase!	June 14 th 2023	Online	Scientific Community, stakeholders, general public	440 impressions	World
Social media (LinkedIn) posts of BIOCOMEM page during the last year (December 2022-December 2023)	TUE, TECNALIA, ALL	The M36 BIOCOMEM project meeting took place this month at Helmholtz-Zentrum Hereon in Hamburg, where partners TECNALIA Research & Innovation, TU/e SUSTAINABLE PROCESS ENGINEERING, B4Plastics, Arkema, Quantis, Maastricht University presented their progress over the last 6 months. An important milestone has been reached: the #biobased #polymeric #membranes modules for the final demonstration at TRL5 have been well received at the demo sites. The membranes are designed for 3 applications: #Postcombustion, upgrading of #naturalgas and upgrading of #biogas. Stay tuned, as the demonstration campaign is planned to start soon!	May 25 th 2023	Online	Scientific Community, stakeholders, general public	613 impressions	World
Social media (LinkedIn) posts of BIOCOMEM page during the last year (December 2022-December 2023)	TUE, TECNALIA, ALL	The M30 BIOCOMEM project meeting took place this week at Brightlands Chemelot Campus, where partners TECNALIA Research & Innovation, Technical University Eindhoven, B4Plastics, Arkema, Helmholtz-Zentrum Hereon, Quantis, Maastricht University presented their progress over the last 6 months. The scale-up of #biobased #polymeric #membranes for the final demonstration at TRL5 is on the way, while the lab scale set-up at Technical University Eindhoven to test them in relevant conditions before on-site operation is almost ready to operate! The membranes are designed for 3 applications: #Postcombustion, upgrading of #naturalgas and upgrading of #biogas.	December 23 rd 2023	Online	Scientific Community, stakeholders, general public	970 impressions	World
Periodic up-date on BIOCOMEM web page (www.biocomem.eu)	TUE, TECANLIA	Project webpage was updated periodically with: <ul style="list-style-type: none"> • bibliographic data for the new staff • project video and newsletters • public deliverables • news • 	Throughout the entire RP2	Online	Scientific Community, stakeholders, general public	Number of users: 930 Number of visits: 2386 Most of visits by direct and organic search	World

2.2 Scientific Publications

Table 2. Scientific publications (This field is only for peer reviewed articles)

Type of scientific publication	Title of the scientific publication	DOI	ISSN or eSSN	Authors	Title of the journal or equivalent / Patent Office	Number, date	Publisher /Owner (patents)	Place of publication	Year of publication	Relevant pages	Public & private participation	Peer-review	Is/Will open access provided to this publication
Article in journal	A Review on Hollow Fiber Membrane Contactors for Carbon Capture: Recent Advances and Future Challenges	10.3390/pr10102103	EISSN 2227-9717	Ramezani R, Di Felice L, Gallucci F	Processes	Volume 10 Issue 10; Published: 17 October 2022	MDPI	Online	2022	2103	No	YES	[Yes - Gold OA
Article in journal	Using a superstructure approach for techno-economic analysis of membrane processes	10.1016/j.cherd.2023.10.007	ISSN: 0263-8762 eISSN: 1744-3563	Ramezani R, Randon A, Di Felice L, Gallucci F	Chemical Engineering Research and Design	Volume 199, November 2023	ScienceDirect	Online	2023	296-311	No	YES	[Yes - Gold OA
Patent	COPOLYMERS WITH POLYAMIDE BLOCKS AND FLEXIBLE BLOCKS	Application number EP23307020.0	-	PINEAU Quentin, DAVID Oana Cristina, BENAVIDES Miren Etxeberria, OTANO Sara Miguel, BERNAERTS Katrien V., SLECKOWSKI Marcin	EU patent	November 21, 2023	ARKEMA FRANCE; FUNDACION TECNALIA RESEARCH & INNOVATION; UNIVERSITEIT MAASTRICHT; ACADEMISCH ZIEKENHUIS MAASTRICHT			25 pages	yes	yes	<i>Will be open access 18 months after patent application was filed</i>
Patent	ASYMMETRIC HOLLOW-FIBER MEMBRANE FOR GAS SEPARATION MADE OF	Application number EP23307022.6		DAVID Oana Cristina, BENAVIDES Miren Etxeberria, OTANO Sara Miguel, PINEAU Quentin, BERNAERTS	EU patent	November 21, 2023	FUNDACION TECNALIA RESEARCH & INNOVATION; ARKEMA FRANCE; ACADEMISCH ZIEKENHUIS MAASTRICHT;			42 pages	yes	yes	<i>Will be open access 18 months after patent application was filed</i>

				Katrien V., SLECZKOWSKI Marcin			UNIVERSITEIT MAASTRICHT					
Publication	Nanoscale characterization of membrane morphologies using a polyether-block-amide copolymer and its correlation with gas separation properties	Submitted for revision		Miren Etxeberria Benavides, Iban Amenabar Altuna, Francisco Jose Fernandez Carretero, Maria del Mar Diaz De Guereñu Zabarte, Monika Goikoetxea Larruskain, Jean Jaques Flat, Quentin Pineau, Rainer Hillenbran, Oana David	Journal of Membrane Science		Elsevier		2024			yes
Article in journal	Biobased PEBA for gas separation membranes (prototype B)	In progress by TECNALIA-UM. Foreseen to be submitted within Q1-2024.							2024			yes
Article in journal	Biobased PEBA for gas separation membranes (prototype C)	In progress by TECNALIA-UM. Foreseen to be submitted within Q1-2024.							2024			yes

Article in journal	Development of thin-film composite membranes for CO2 separations using bio-based polyether-block-amide copolymers as selective layers	In progress by HEREON. Results are being validated and additional ones will be included. It is expected to be submitted to MDPI Membranes during Q1-2024.							2024				yes
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