•	•	•	•	•	•	•	•	•	•	•	•				•	•	•	•	•	•	•			•	•	•			•	•	•	•		•	•	•	•	•	•	•		•	•	•	•	•	•	•		•	•
•	•	•	•	•	•	•	•	·	•	•	•							•		•									·	•	•				•	•	•	•			,	•	·	•	•	•	•	•		•	•
•	•	•	•	•	•	•	•	•	•	•	•				•	•	•			•				•		•			•	•	•	•		•	•	•	•	•				•	•	•	•	•	•	•		•	•
•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•		•	•		•	·	•	•		•	•	•	•			•	•	•	•	•	•		,	•	•	•	•	•	•	•		•	•
•	•	•	•	•	•	•	•	•	•	•	•			•	•	•	1			•			•		•	•			•	•				•	•	•	•	•	•	•		•	•	·	·	•	•	·		•	·
•	•	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•		•	•		•	-	•	•			•	•	1			•	•	·	•	•	•	•	,	•	•	•	·	•	•	•	,	•	•
•	•	•	•	•						•	•				•	•	•	•		•	•		•	-	•	•			•	•	÷	-		•	•	•	•	•		•			•		•	•	•	•	,	•	•
•		•													•	•		-	U.	•				-	•							•																	,	•	•
																		•																																	
																																																	,		
																	6									T																								-	
•		•	•	•	•	•	•	•		•	•				•					•									•		-		4	•	·	·	·					•		•			•	•		•	•
•	•	•	•	•	•	•	•	•	•	•	•			•	•	1	·	•		•	•								•	•				•	·	·	·	•				•	•	•	•	•	•	•		•	•
•	•	•	•	•	·	•	•	•	•	•	•	•		•	•	•		-	1	•	•		•			-		•	•	•	•	•	h	·	•	•	•	•	•		,	•	•	•	•	•	•	•		•	•
•	•	•	•	•	·	•	•	•	•	•	•			•	•	•	•	•	•	•	•	-	•	•	•	•			•	•	•	•		•	•	•	•	•	•	•		•	•	•	•	•	•	•		•	•
•	•	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•		•	•	•	•			•	•	•	•		•	•	•	•	•	•	•		•	•	•	•	·	•	•)	•	•
•		•	•	•	•	•	•	•							•	•	•	•		•				•	•	-				•			_	•	•	•	•	•							•	•	•	•	,	•	•
•		•	•	•																											Г																		,	•	•
•																																	5																		
																																																	,		
																			-					-																											
					-	-	-												De	to			×+.	ź.		E		21.															-		_		-	-			-
•		•	•	•	•	•	•	•	•	•	•							_		:te	н I • •	JU	51	aĸ		ru	_		122				ש			•	. .					·	·	·	•	•	•	•		•	•
•	•	•	•	•	•	•	•	•	·	•	•	•		•	Hea	ad	ot	Ac	am	nin	ist	ra	tíc	วท	ar	١d	Ει	Iro	op	ea	n I	Pro	Dje	ect	ts	Ot	TIC (9	•	•	'	•	·	•	·	•	•	C	3	L	Α
Glas	S-C	eran	nic ir	nov	vatio	n eo	cosys	stem	n for	im	plen	nen	tatic	on o	ſ		·	•	·	•	•		•	•	•	•			•	•	•	•		•	·	•	•	•	•	•	,	•	·	•	•	•	•	C	2	Е	R
new	res	sear	ch di	irect	ion	in a	oplic	atio	ns													(•	•			•					•	•	•		•			,	•		•	•		•	ł	н	U	В

university embedded CoE with quasi faculty status

- Basic/fundamental research
- Training doctoral program (chemical engineering and technologies - inorganic technology and non-metallic materials)
- Applied research and international networking



FunGlass

Centre for functional and surface functionalized glass



G

- C Ξ R
- H U B

	Prof. Dušan Galusek	Prof. Alicia Durán	Prof.Lothar Wondraczek	Prof. Aldo Boccaccini	Prof. Enrico Bernardo
	Director	Coatings	Functional Glass	Biomaterials	Glass Processing
unGlass	Alexander Dubček	Instituto de Ceramica	Friedrich Schiller	Friedrich Alexander	Universitá degli Studi
cientific	University of Trenčín	y Vidrio, Madrid	Universität Jena	Universität Erlangen-	di Padova
Board	Slovakia	Spain	Germany	Nürnberg, Germany	Italy
	TREASCHINGE SIS	CSIC		FAU	

F

Glass-ceramic innovation ecosystem for implementation of new research direction in applications







VILA - joint department of the IIC Slovak Academy of Sciences & TnUAD Prof. Dušan Galusek



Central Laboratories Dr. Dagmar Galusková



Administration and Projects Office Dr. Peter Hošták

Glass-ceramic innovation ecosystem for implementation of new research direction in applications

CILA CER

Basic Information

Glass-ceramic innovation ecosystem for implementation of new research directions in applications

HORIZON-WIDERA-2022-ACCESS-04-01 — Excellence Hubs 101087154- GlaCerHub

> **1.6.2023 – 31.5.2027 (48Months)** €4,994,751.25

The scope: The Glass and Ceramics Innovations

What is GlaCerHub Project About?

Why does society fund research institutions?



RESEARCH GENERATES : **PROSPERITY**



& TECHNOLOGY ALLIANCE



••



G L A C E R

FunGlass Ecosystem



research direction in applications

GLA CER

H U B

The Solution

The GlaCerHub project will look to drive the virtuous cycle of innovation and economic growth by taking advantage of the historical and present-day competitive advantage in the **glass and ceramics sectors** to support a **place-based innovation ecosystem** in the border region between South Moravia, Czechia and Trenčín, Slovakia.

Specifically, the GlaCerHub will create appropriate structures that will deliver:

- intense innovation focused **networking (local Chapters)**
- results-oriented training of future innovators
- targeted activities to support technology transfer
- development of a <u>common R&I strategy</u>

- Action plan to assure **long-term sustainability** of GlaCerHub
- <u>Communication and dissemination plan</u> to engage citizens and increase the visibility of GlaCerHub's importance to the region

Research Topic Chosen



HUB



Main challenges during the proposal preparation

Time and coordination of quadruple-helix consortium.

How to convert project story into implementation structures.

Impact: measurable and verifiable, ambitious yet realistic.

Space constraints (final phase).

Feedback from evaluators - Excellence

The proposal plausibly promotes the creation of a new innovation ecosystem built on existing competences.
The overall objective is very convincing and well supported by existing technology/competence in the area of the hub.

The state of the art of the **research component** has been **only briefly assessed**.

Overall the project objectives are <u>specific, achievable and realistic</u>. The supporting objectives are clearly formulated and are <u>linked to the work packages</u>.

(2) Nevertheless, the proposal does **not sufficiently present** the **measurability** of the objectives.

The proposal appropriately includes an infrastructure strategy and investment plan.
 However, the way that the project will mobilize national investments in R&I capacity is not sufficiently explained.

③ The creation of the **governance structures is particularly well laid out**, and it is very well designed for the project.

The challenges are very well identified, in particular with respect to how the quadruple helix will be established and how it will work.
Glass-ceramic innovation ecosystem for implementation of new research direction in applications

GLA

F

UB

н

Feedback from evaluators - Impact

The pathways to achieve the expected impacts with respect to training and courses are appropriately planned and plausible.

The proposed work has the potential to strengthen linkages between science and business, and this is supported by the consortium of the proposal as well as the planned work.

The **technology transfer** and training is very **well planned** including entrepreneurial skills.

Potential barriers are very <u>well identified</u> and are financial, social, environmental, and technical in nature with very appropriate consideration of their mitigation.

③ The **plan for dissemination is well structured** considering the target audience of the quadruple helix constituting the actors of the project.

Output: Bowever some of the dissemination activities are underestimated compared to the scale of the project.
Exploitation strategies with respect to the R&I pilots are not sufficiently explained.

Feedback from evaluators - Implementation

The work packages are well balanced between research and technological development and other activities such as the design and support structures. The interrelation of work packages is clearly evident.

③ Overall resources assigned to work packages are adequate for their effective implementation, the costs are adequate too.

(C) However, **resources allocated to two partners are relatively high** compared to the resources allocated to the SMEs and NGOs, and this is not sufficiently justified.

The Consortium includes different R&I ecosystems including research institutes, investors, regional and societal actors at two different EU countries. <u>The consortium matches the project's objectives on the glass industry</u>.

③ The composition of the consortium matches well the project's objectives and the **partners are competent** in the area of the project.

(2) Whilst the quadruple helix is present, **insufficient detail on the operational income of businesses** has been provided.

GLA



Have a story to tell.

Sell your strengths but acknowledge your weaknesses (convert them into opportunities)

Scientific excellence matters....

but needs to be supported with proper administrative/implementation structures.

GLA CER



This presentation is a part of dissemination activities of projects FunGlass and GlaCerHub. These projects received funding from the European Union's Horizon 2020 and Horizon Europe research and innovation programme under grant agreement No 739566 and grant agreement No 101087154.

CONTACT

- Peter Hošták Ph.D.
- <u>peter.hostak@tnuni.sk</u>
 - +421-32-7400500

www.funglass.eu

FunGlass - Centre for Functional and Surface Functionalized Glass Alexander Dubček University of Trenčín Študentská 2, 911 50 Trenčín, Slovak Republic