Partner Search Form
Horizon Europe
Health

Date 16 03 2026 Deadline … …

CONTACT

Organisation	Centre National en Électrochimie et Technologies Environnementales (CNETE)	**Department**	
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Country	Canada		

Organisation type

Research organisation type	x Research Organisation ☐ University ☐ Company ☐ Other	**Is your company a Small and Medium Sized Enterprise (SME*)?** **Number of employees:**	xYES ☐ NO 70

Your enterprise is an SME if:
- it is engaged in **economic activity**
- it has **less than 250 employees**
- it has either an **annual turnover not exceeding €50M**, **or an balance sheet total not exceeding €43M**
- it is **autonomous**

For the definition of SMEs, look at: http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en

Short introduction of key areas of institute's research:

Former participation in an FP European project?	☐ YES X NO
Project title / Acronym:	
Activities performed:	

Expertise / Commitment offered

Description of your expertise:	The National Centre for Electrochemistry and Environmental Technologies (CNETE) brings key expertise covering the entire development chain of innovative therapeutic candidates, from microbial engineering to bioreactor production, including purification and formulation steps. Upstream, CNETE relies on strong capabilities in applied molecular biology, including genetic construct design, optimisation of expression vectors, and engineering of microbial host systems, to support the rational design of therapeutic proteins such as recombinant proteins, bioactive peptides, and nanobodies. This expertise enables the tailoring of

	sequences and expression systems to optimise critical candidate properties, including expression level, stability, functionality, and compatibility with industrial-scale production. This expertise is supported by concrete achievements in the development of antimicrobial peptides, notably through the exploration of mechanisms aimed at disrupting bacterial communication pathways (quorum sensing), as well as by earlier work on multiple classes of bacteriocins, primarily developed for applications in animal health and feed. In parallel, CNETE has developed applied experience with related biotherapeutic and biotechnological approaches, including nanobodies targeting pathogens of interest in animal production systems (e.g. poultry and aquaculture), with a strong emphasis on production feasibility, product quality, and robustness under real-world conditions. CNETE has also contributed to projects involving RNA interference (RNAi) technologies, further strengthening its capabilities in translational molecular biology and the development of functional biomolecules. Building on this foundation, CNETE is involved in the development, optimisation, and scale-up of bioprocesses for the production of high–added-value biomolecules. Activities focus on improving yields, robustness, and reproducibility of fermentation processes, whether based on bacterial systems, yeasts, or other relevant microbial hosts, while integrating quality requirements and regulatory transposability considerations from the earliest stages. CNETE also supports the translation of processes from laboratory to pilot scale, adopting an approach oriented toward industrial requirements, control of critical process parameters, and preparation for GMP-compliant manufacturing. Finally, beyond therapeutic modalities themselves, CNETE has developed relevant expertise in the stabilisation and formulation of sensitive biological materials, including experience with spray-drying processes applied to biological entities for topical applications. This capability strengthens the consortium's ability to address critical formulation, stability, and storage challenges, which are often decisive for advancing therapeutic candidates toward advanced preclinical studies and, ultimately, clinical entry.
Keywords specifying your expertise:	Molecular biology, protein engineering, recombinant proteins, nanobodies, bioprocess development, fermentation, bioprocess scale-up, downstream processing, protein purification, formulation and stabilisation
Commitment offered:	X Research X Demonstration X Training X Technology X Dissemination ☐ Other:

Interested in participation in project types:			
	X Research & Innovation Action	☐ Innovation Action	☐ EIC Pathfinder

Work Programme research areas: indicate your interest

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Call topic(s): HORIZON-HLTH-2027-01-DISEASE-08: Development of innovative antimicrobials against pathogens resistant to antimicrobials	
Do you have other partners for this topic (which partners/country)?	No

I agree with the publication of my contact data: x YES ☐ NO