

<b>Draft Project Title</b>	In-situ bioremediation of nitrates for drinking water production
<b>Short Description of the project idea and expected outcomes</b>	<p>Nitrate is one of the main problems in groundwater worldwide for the supply of drinking water to the population. This project pretends to demonstrate at full-scale an in-situ bioremediation technology for the production of drinking water from nitrate-polluted groundwater. In-situ bioremediation is the controlled addition of organic matter in the aquifer to promote the growth of denitrifying bacteria that uses nitrate as electron acceptor for their metabolism.</p> <p>Expected outcomes of the project will be a proven and validated technology that could be implemented in many regions of Europe to overcome the problem of water supply due to nitrate pollution.</p> <p>This technology was tested with successful results at pilot scale during a Life project called InSitrare.</p>
<b>Main Objectives</b>	<ul style="list-style-type: none"> <li>- Demonstration of the technology at full-scale</li> <li>- Implement and test the technology at least in two European regions with different aquifer types.</li> <li>- Optimize the technology in terms of organic matter injection strategy</li> <li>- Optimize the monitoring of the technology including ICT, isotope analyses and microbial population determination</li> <li>- Demonstrate the economic viability of the technology comparing with existing ex-situ technologies.</li> <li>- Demonstrate the environmental benefit of implementing this technology comparing with other alternatives.</li> <li>- Disseminate the technology to be implemented in other sites in Europe</li> <li>- Increase the TRL of the technology from 7 to 9</li> </ul>
<b>List of potential activities</b>	<ul style="list-style-type: none"> <li>- Definition of the test sites</li> <li>- Hydrogeologic and geochemical study of the test sites</li> <li>- Design of the treatment for each test site using hydrogeochemical modelling</li> <li>- Operation and optimization of the technology during 1-2 years</li> <li>- Evaluation of the environmental impact of the technology using LCA</li> <li>- Evaluation of the costs of the technology</li> <li>- Dissemination of the technology benefits</li> <li>- Investigate on the legal aspects for the implementation of the technology in each European country</li> <li>- Investigate on the regions in Europe in which the technology could be implemented</li> </ul>
<b>Expected impact on European level</b>	The project will contribute to solve the problem of drinking water supply to municipalities and small communities by implementing the new technology and therefore prevent surface water overexploitation. Moreover, the restoration of contaminated wells will benefit the economic development of the municipalities, by making available their closest freshwater sources avoiding the costly transport of freshwater from other sources.
<b>Call identifier</b>	Looking for other funding opportunities rather than H2020
	I will be the project leader/coordinator
<b>Which kind of partner are you searching for?</b>	SME Industry
<b>Expertise or specific role of partners sought</b>	Owners of a site where to implement the technology
<b>Partners sought from specific country or region, please indicate</b>	Non-spanish partners
<b>Title</b>	Mr

<b>Name</b>	Biel
<b>Surname</b>	Quer
<b>Telephone</b>	+34680584184
<b>E-mail</b>	biel.quer@ctm.com.es
<b>Organisation</b>	Fundacio CTM - EURECAT
<b>Description of the organisation</b>	<p>Eurecat / Fundació CTM Centre Tecnològic (CTM) is a non-profit technological center. It aims to efficiently contribute to improving the competitiveness and the technological development of companies by providing specialized services and carrying out R&amp;D, Innovation and Demonstration projects. Eurecat / CTM has extensive experience in R&amp;D and Innovation projects at regional, national and European level. Its clients are mainly companies, agencies, governments and institutions, both private and public administrations that require research or innovation implementations.</p>