



Circular Economy and Sustainable solutions
for Agrifood in the Mediterranean

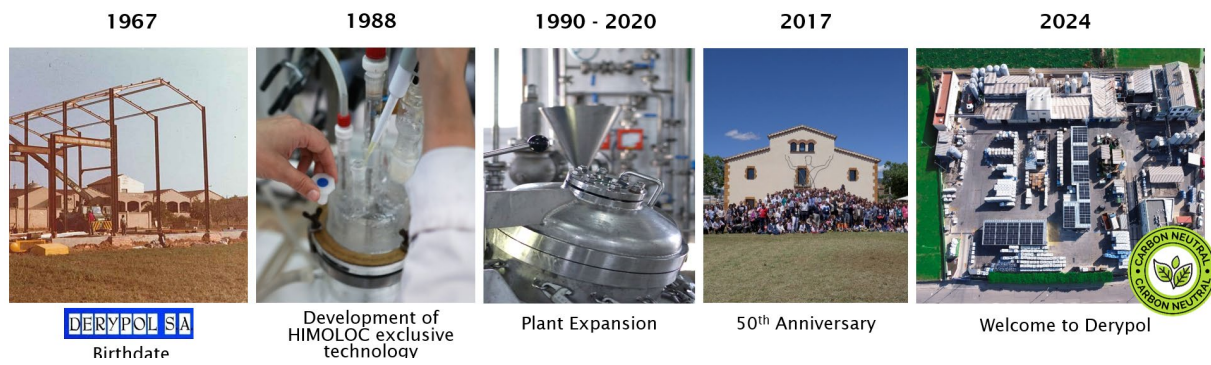
Challenge C8

CESAM SME linked to this challenge: DERYPOL



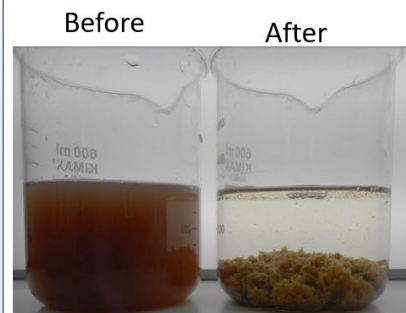
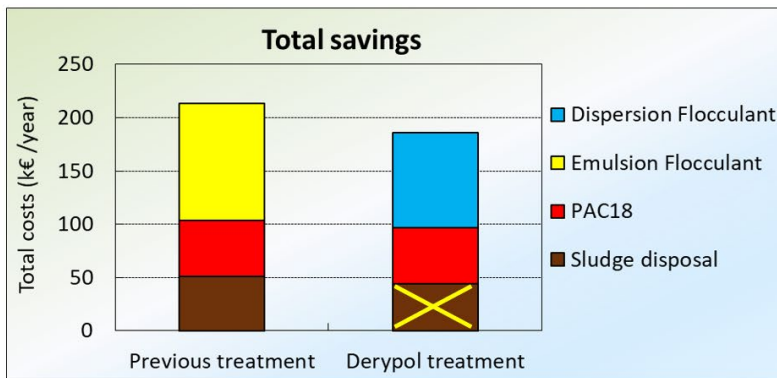
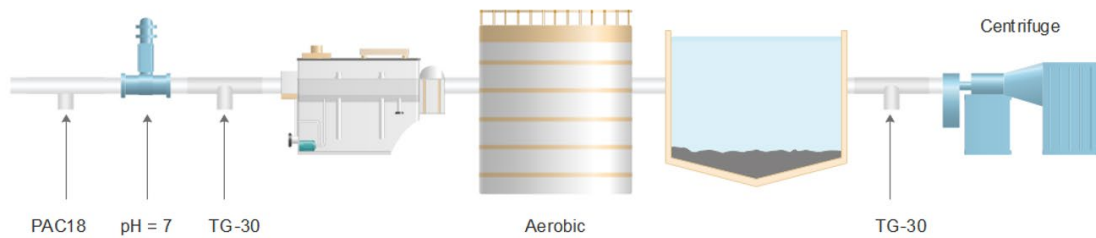
BACKGROUND: Describe your SME and your technology (please describe having in mind that the applicants do not know you or your technology, you can add pictures/ diagrams/ tables):

- DERYPOL is a developer and producer of flocculants (polymers) located in les Franqueses del Valles (Spain). Founded by Dr. Solé in 1967, the company is exporting to more than 70 countries.
- We have developed a unique type of flocculants known as HIMOLOC technology or “water-brine dispersions” which are free of solvents, surfactants and mineral oils.
- These flocculants are used in Wastewater Treatment, for the solid-liquid separation in physic-chemical and sludge dewatering treatment.
- We believe that a solvent-free flocculants applied in a WasteWater Treatment Plant from Agrifood industry contributes to greater reusability of the sludge coming from wastewater treatment in application in agriculture and fertilizer.



Example of WasteWater Treatment Plan:

Case 1: Slaughterhouse (Summary)



CHALLENGE DESCRIPTION

Challenge line	C8
Title of the challenge	Revalorization of WasteWater Sludge into Organo-Mineral Fertilizer.
Objective(s) of the challenge	The objective of the challenge is to take WasteWater Sludge after dewatering and, for example, through a safe chemical process, convert it into effective organo-mineral fertilizer.
Expected results of the challenge	The expected results are a conversion of the WasteWater Sludge into a fertilizer that is: <ul style="list-style-type: none"> • Rich in nutrients (Nitrogen, Phosphorous, Potassium) • Odorless • Non-Toxic • Economic
Relevance of the challenge in the frame of CESAM project	This challenge is critical for the CESAM project. The main objective of the DERYPOL participation is to demonstrate in industrial/field cases that alternative technologies are available to Reuse WasteWater Treatment Sludge in Agriculture: <ul style="list-style-type: none"> • Recovering Nutrients • Reducing or Removing Disposal Costs
Type(s) of SME(s) we are looking for (sector, type of entity, size...)	<ul style="list-style-type: none"> • Innovative • Chemical Knowledge • Background in Agriculture and Fertilizers
Expected work for the applicant SME	The challenge is to take WasteWater Sludge after dewatering and through a safe chemical process (for example: oxidation process) convert it in pathogen-free, odorless and rich in nutrients fertilizer. The process should be safe and inexpensive to provide an economic fertilizer. DERYPOL will provide the WasteWater Sludge to be worked by the SME. Depending on the results obtained by the SME, laboratory or field scale trials will be performed vs standard fertilizers with the aim to compare the cost-performance.
Maximum amount granted for this challenge	30.000€
Funding rate	100%
Duration of the work and proposed starting period	6-12 approx. MONTHS Starting from May 2025

Effort for the applicant SME	R&D Cost of Development Lab Scale Fertilizer Production Cost Depending on the SME – Laboratory Equipment Cost
Intellectual Property Rights dispositions	The IPR will remain to the SME.
Other information (if applicable)	