



EU FP7 IAPP Marie Curie Action. Project Number 611593.

Key achievements are outlining satisfactory results

The [SLUDGEtreat](#) project is focused on adding value of sewage sludge life cycle by improving sludge quality, reducing costs, developing cutting-edge technologies based on electro-osmosis and using eco-friendly nanostructured materials and coatings to be used as anodes in the electro-dewatering process.

Pamplona, June 19, 2018. A successful follow-up meeting took place on June 18th at AIN's headquarters in Pamplona where representatives from SLUDGEtreat consortium explained their progresses and planned future actions framed on objectives of the project.



The main achievements until now can be summarised as following:

- (i) Designed and engineered a lab-scale device as proof-of-concept of an innovative electro-dewatering (EDW) process
- (ii) Analysed novel approaches to use materials to serve under very demanding conditions, as those facing the anodes for EDW process
- (iii) Designed and engineered a first industrial EDW prototype, based on an innovative concept (patent pending)
- (iv) Assessment of entire life cycle and costing structures for the novel EDW process

POLIMI's staff presented the EDW results achieved by means of the lab-scale device, focusing on the study of test parameters (time, electric field, pressure, polymer dosage) and sludge type that could give the highest sludge DS content. The results of EDW tests carried out on different anode materials, such as PVD coatings (FLUBETECH), nanostructured coatings (POLIMI) and commercial materials (based on Mixed Metal Oxides) have been discussed. Moreover, LCA and cost assessment of the EDW prototype have been introduced to the partners.

FLUBETECH's staff showed several options of PVD coatings studied and based on previous results they proposed new solutions and approaches for corrosion resistant applications. AIN's staff presented a comprehensive characterization of all the materials/coatings developed by FLUBETECH, POLIMI and AIN.

Staff from X2 showed the design of the EDW machine and presented the preliminary results achieved with the prototype tested at Carpi's WWTP.