



EU FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION  
(2014 - 2020)

**Societal Challenge 5:** Climate Action, Environment, Resource Efficiency and Raw Materials

## PARTNER is looking for a Project.-

### 1) PARTNER OFFERED

Organisation	AIMEN	Type of organisation (IND, SME, RES, HE, others)	RES
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I am familiar with the European Framework Programme:

YES

I have experience as a Partner or Coordinator:

YES

If yes, in which programmes/projects?

AIMEN has participated in 18 FP projects (1 under FP6 and 17 under FP7), of which 9 are or have been coordinated by AIMEN. Additionally we have participated in more than 10 R&D&I projects under other international programmes.

We are now coordinating two projects under WASTE(water), SWINGS - Safeguarding Water resources in INdia with Green and Sustainable technologies, GA n° 308502 and HIGHWET - Performance and validation of HIGH-rate constructed WETlands, GA n° 605445.

Role in desired project	technology development: X	research: X	demonstration: X
	dissemination:	training:	other:
Topic/s in which I am interested	Topics of Climate action, environment, resource efficiency and raw materials (HORIZON 2020 – WORK PROGRAMME 2014-2015): <ul style="list-style-type: none"> <li>- WASTE-2-2014: A systems approach for the reduction, recycling and reuse of food waste.</li> <li>- WASTE-7-2015: Ensuring sustainable use of agricultural waste, co-products and by-products.</li> </ul>		

**Expertise offered and what I would like to do**

AIMEN Technology Centre was set up in 1967 as an initiative of the industry as a non-profit private association. The Centre is focused in developing and strengthening the competitive capacities of companies through the promotion and execution of R&D&i activities, as well as providing technological services of high added value.

AIMEN provides industry with technological services and engages in R&D&i activities in different areas such as environmental technologies, laser processing, joint technologies, materials and manufacturing processes, engineering, industrial design, simulation and automatics or industrial organization.

AIMEN is linked to several industrial areas that go from aeronautics to chemical and petrochemical, automotive, shipbuilding, construction, energy, metal mechanical, etc.

**AIMEN's Background in waste(water) treatment or valorisation**

Environmental Unit of AIMEN has been involved actively in the R&D&I activities regarding organic waste treatment/valorization as well as cost-effective and sustainable wastewater treatment technologies. Some of the **recent publications** most related to these topics are the following:

- P. Lodeiro, A. Gudiña, L. Herrero, R. Herrero, M. Sastre. (2010). Aluminium removal from wastewater by refused beach cast seaweed. Equilibrium and dynamic studies. Journal Hazardous Materials, 178, 861-866.

- L. Regueiro, M. Carballa, J.A. Álvarez, and J. M. Lema (2012). "Enhanced methane production from pig manure anaerobic digestion using fish and biodiesel wastes as co-substrates". Bioresource Technology, 123, 507–513.

- F. Moscoso, F.J. Deive, P. Villar, R. Pena, L. Herrero, M.A. Longo, M.A (2012). Sanromán. Assessment of a process to degrade metal working fluids using "Pseudomonas stutzeri" CECT 930 and indigenous microbial consortia. Chemosphere, 86(4), 420-426.

- I. Campos, J.A. Álvarez, P. Villar, A. Pascual, L. Herrero (2013). "Foundry sands as low-cost adsorbent material for Cr (VI) removal". Environmental Technology, 34 (10), 1267 – 1281.

- I. Rodriguez, R. Pena, J. A. Álvarez, J. M. Lema and M. Carballa (2013). Feasibility of spent metalworking fluids as co-substrate for anaerobic co-digestion. Bioresource Technology (in press).

Some **relevant R&D projects** related to these activities are:

- SWINGS project: "Safeguarding Water Resources in India with Green and Sustainable Technologies"; FP7-ENV-2012; GA: 308502; 2012/2015. AIMEN: Coordinator.
- HIGHWET project: "Performance and validation of HIGH-rate constructed WETlands"; FP7-SME-2013; GA: 605445; 2013/2015. AIMEN: Coordinator.
- METALGAS project: "Valorisation of oily waste streams of engineering sector through anaerobic co-digestion"; Xunta de Galicia (Regional Government); 2010/2012. AIMEN: Coordinator.
- PROBIOGAS project: "Development of farm-industrial biogas production sustainable systems in Spain"; Spanish Science and Education Department; GA: PSE-120000-2008-10; 2008/2011. AIMEN staff was involved.

**AIMEN's Expertise and Contribution in waste(water) treatment or valorisation**

Environmental Unit of AIMEN has carried out plenty of experiences in different areas of waste(water) treatment or valorisation. The main processes that have been worked in the last years are the following:

	<ul style="list-style-type: none"> <li>- Waste or by-product recycling as low-cost sorbents for adsorption techniques to treat industrial wastewater.</li> <li>- Valorisation of agro-industrial and food waste (livestock, fish canning, slaughterhouse, dairy, biodiesel plants, etc.) using anaerobic co-digestion in order to maximise biogas production at laboratory and pilot scale.</li> <li>- Optimization of blends of different agro-industrial waste to maximise the methane potential and biodegradation of organic waste.</li> <li>- Development of cost-effective and sustainable wastewater treatment technologies based in natural process.</li> <li>- Diagnosis of energy eco-efficiency and sustainable management of industrial processes.</li> </ul> <p>In addition, taking into account the large technological services provided to industrial sector, AIMEN has the capacity to bring into projects companies and SMEs related to the requested expertise.</p>
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**2) COORDINATOR / PROJECT sought after (for proposal submission only)**

**WP topic :**

- WASTE-2-2014: A systems approach for the reduction, recycling and reuse of food waste.
- WASTE-7-2015: Ensuring sustainable use of agricultural waste, co-products and by-products.

**Project type**

<b>Research and Innovation Action</b>	<b>X</b>
<b>Innovation Action</b>	
<b>CSA</b>	
<b>SME Instrument</b>	

**Keywords of project:**

waste(water) treatment or valorisation

**I AGREE WITH THE PUBLICATION OF MY DATA.**

**PLEASE FILL IN THE PROFILE FORM AND RETURN IT TO: [lydia.gonzalez@cdti.es](mailto:lydia.gonzalez@cdti.es)**