



POLITECNICO
MILANO 1863

DIPARTIMENTO DI
INGEGNERIA CIVILE E AMBIENTALE

ENVIRONMENTAL ENGINEERING LABORATORIES ("A. Rozzi" Laboratory - FabE-lab)



SECTION
Environmental Engineering



DESCRIPTION

FabE-lab, one of the Environmental Engineering Section laboratories, is located in the Cremona Campus since 2010. It is focused on bioenergy production and resource recovery from waste, wastewaters and by-products, mainly from agroindustries. Competencies include monitoring, validation and optimization of processes/technologies based on anaerobic microorganisms and microalgae cultivation.

FabE-lab - Laboratory A. Rozzi is equipped with facilities and pilot-plants to support research activities and services for the public and private sectors.

Topics - The main subjects are anaerobic digestion and cultivation of microalgae for bioremediation and resource recovery.

Polo Microalgahe: polialgae@DICA



ACTIVITIES

Activities carried out by FabE-lab include the assessment of the anaerobic biodegradability and physico-chemical characterization of substrates and feedstocks (e.g. BMP tests), pilot-plant testing for the implementation of innovative solutions applied to bioenergy production, and to nutrient removal and recovery from agro-residues by using microalgae/bacteria consortia.



FabE-lab

Training events and technical activities



AGROINDUSTRIES

Consulting and monitoring plan



BIOENERGY

From biogas innovative technologies to microalgae cultivation.



INSTRUMENTATION & FACILITIES

“A. Rozzi” Laboratory – FabE-lab is equipped with lab-scale batch reactors (0.5-2 liters) and continuous pilot-plants (10-1000 liters) for the studying of anaerobic digestion and biological biogas upgrading. Lab and pilot-scale microalgae culturing systems are available to be used in wastewater bioremediation. For analytical activities, gas and ionic chromatographs are present, as well as various equipment for feedstocks pre-treatment, sample preparation characterization.

For further detailed information about our instruments and facilities, please check our website.



CONTACTS

Laboratory address:

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Lab website:

- [La Fabbrica della Bioenergia](#)



Services provided for:

Analytical support, research and development of bioprocesses, engineering consultancy for public authorities, water and energy utilities, and the private sector.



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