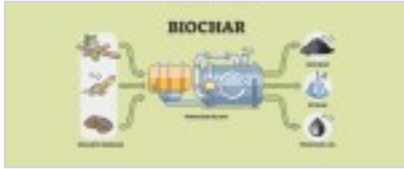


BioCAD: Study of BioChar derived from methanisation for biogas and air treatment by Adsorption



A scientific challenge invites teams of 3 to 4 scientists to propose innovative research, new or disruptive topics, to lift identified barriers, but also to promote interdisciplinarity and dissemination of information.

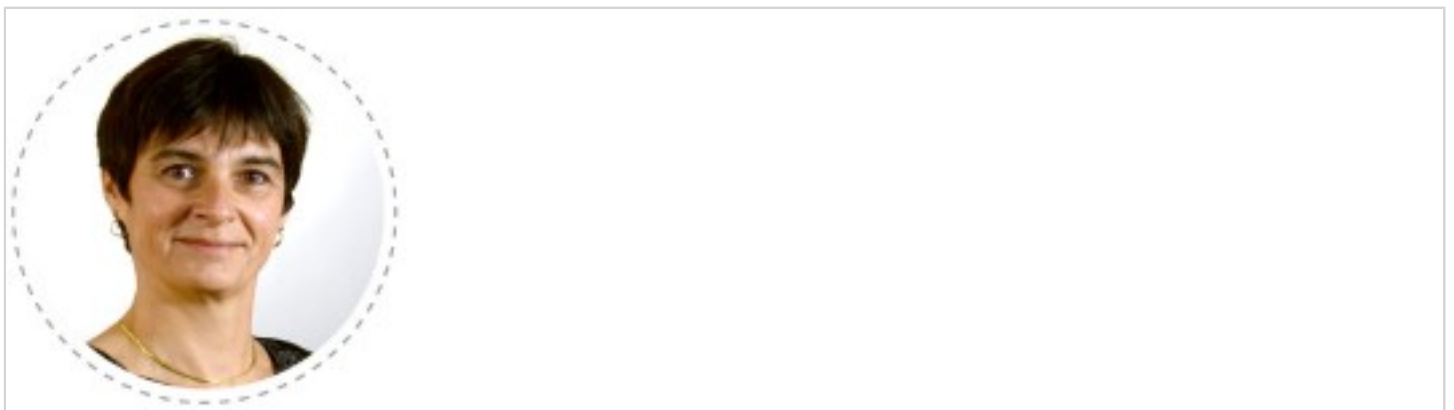
Biogas, derived from anaerobic digestion of organic matter, is a source of renewable energy with high energy and environmental potential. It is a complex mixture that contains different types of trace compounds, in varying amounts depending on the substrates, which can damage the storage and upgrading units (corrosion phenomena, toxic emissions).

From the processes of biogas generation by **pyrolysis**, BioCAD aims at demonstrating that the **carbon obtained can be used as a material of adsorption of biogas and odorous gas** associated with these processes of green energy generation, i.e. allowing to purify them.

The objective is to select new carbon profiles derived from biochars (bio-charcoal) and adsorbents for the treatment of biogas and odorous gas from anaerobic digestion, in order to **optimize the storage and treatment conditions** of these gases.

BioCAD will focus on the optimization of the pyrolysis process, by identifying the best operating parameters, in order to produce the most adapted biochars-derived carbon for the target applications (gas cleaning and storage).

BioCAD project leader



Cécile Hort, Associate Professor, University of Pau and Pays de l'Adour

In collaboration with the LFCR (D. Bessières) and Passages (S. Chailleux) of UPPA, IS2M at the University of Haute-Alsace (Mulhouse), the department of fisheries engineering of the Autonomous University of Baja California Sur in Mexico, as well as Veolia

