

**Study of start-up of a continuous digester on a laboratory scale
treating the sludge issued from wastewater treatment plant
in Adrar city (south west of Algeria)**

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Abstract –

A continuous digester type was designed at the laboratory scale with an aim to studying and improving anaerobic digestion of organic wastes. The results obtained can be extrapolated at large scale pilot plant. To study the digester start-up we have chosen as a substrate the sludge issued from the wastewater treatment plant located in Adrar city (south west of Algeria). Different parameters have been considered such as pH, VFA, COD, and volume of biogas generated during the digestion process.

Résumé –

A continuous digester type was designed at the laboratory scale with an aim to studying and improving anaerobic digestion of organic wastes. The results obtained can be extrapolated at large scale pilot plant. To study the digester start-up we have chosen as a substrate the sludge issued from the wastewater treatment plant located in Adrar city (south west of Algeria). Different parameters have been considered such as pH, VFA, COD, and volume of biogas generated during the digestion process.

Keywords:

Sludge - Anaerobic digestion - Organic wastes – Digester.