

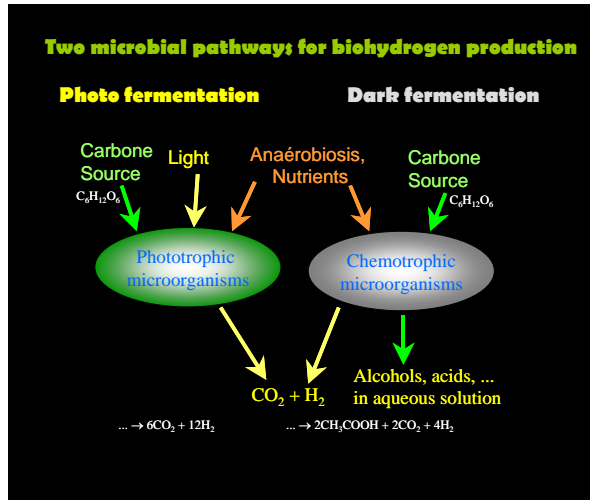
Biohydrogen production from anaerobic digestion of carbohydrate organic matter

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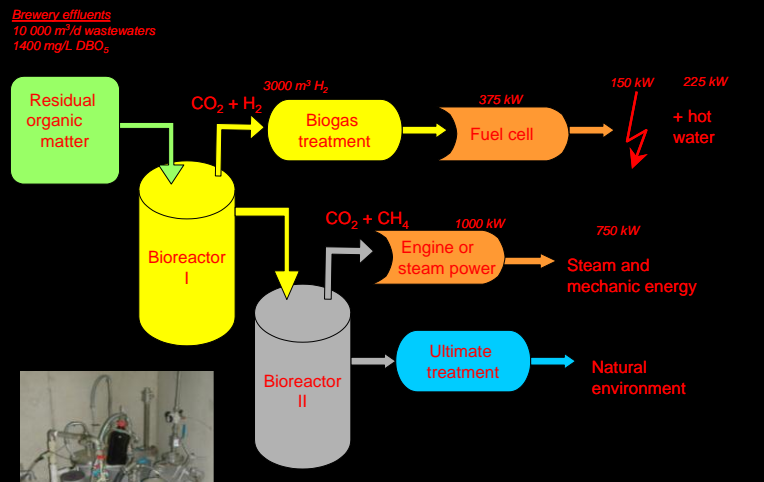
Dark fermentation is more adapted for industrial H₂ production from wastewater and biomass



Pollution reduction
Energy generation

<http://cwbi.fagx.ac.be>

Biotechnological process



Investigations carried out by CWBI

- Selection and characterization of bacteria strains
- Optimization of culture conditions for the most interesting bacteria strains i.e. *Clostridium* sp : influence of pH and H₂ partial pressure, ...
- Design of highly efficient bioreactors : biofilm formation, H₂ transfer, ...
- Scale-up of the biotechnological process : 20 L → 650 L, fuel cell operation, biomethanisation, ...