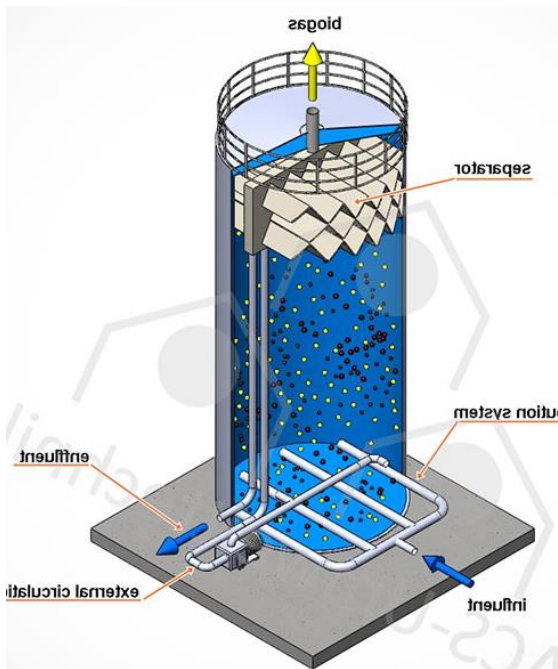


# UPFLOW ANAEROBIC SLUDGE BLANKET - UASB



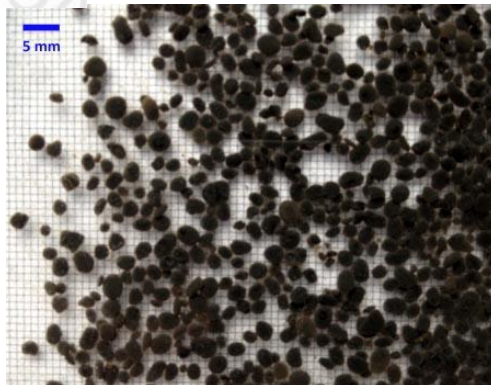
In the late 1970s, Lettinga and his partners developed an anaerobic treatment technique which lately became one of the classic technologies in wastewater treatment field – the UASB technology.

The key factor of UASB reactor is its ability to treat high COD concentration wastewater due to the granular sludge bed where sludge density can reach 40,000 – 100,000 mg/l. It is this granular sludge bed that allows UASB reactor operate with organic loading rate 10 - 20 times higher than other conventional activated sludge reactor.



## ADVANTAGES

- Low energy consumption
- Low sludge yield
- Small footprint
- High organic loading rate
- Quickly adapts to loading



Granular sludge inside UASB reactor

## WASTEWATER TYPES THAT CAN BE TREATED BY UASB REACTOR

Distillery wastewater

Brewery wastewater

Chemical factory wastewater

Milk and dairy wastewater

Domestic wastewater

Seafood processing wastewater

Landfill leachate wastewater

Pharmaceutical production wastewater

Paper mill wastewater

Slaughterhouse wastewater

Beverage and confectionary wastewater

Sugar factory wastewater