

WATER AND WASTE WATER INNOVATION WORKSHOP
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Production of Anaerobic Granulated Sludge and Biomass Growth Enhancement Formulations for Waste Management / Waste Water Treatment Along with Energy Recovery
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Abstract
Water, food and energy security have emerged as increasingly important & vital issues for the world. Present quest for energy security and sustainable development over a great deal on the ability to tap energy from renewable sources. Bio-methanation is known to be applicable for treating waste from number of sectors producing organic waste. NEVY has an expertise on selection of substrates and has collaborated of numerous industries producing organic waste materials.
Our patented "Biogas Bio-reactor" using 4th generation granular sludge (AGS) in form of "Anaerobic Granulated Sludge" containing 95% effective microbes of which 25-30% are methanogens and "Biomass Growth Enhancement Formulations (BGEF)" has can treat organic wastewater. For the first time, NEVY has also developed an App called "N-BlockAPP" which helps to monitor health of these Biogas Bio-culture inside anaerobic reactors, worldwide.

Introduction
Anaerobic Digestion (AGS) is one of the key technology for waste treatment & environmental cost. As this is generally said, its microbial activity is proper development and adaptation to an environment.
AGS is a 4th generation innovative technology that has all right varieties in right quantity for an effective and improved Anaerobic process in a shorter time.

Experimental Setup and Methodology
The technology employed in the formation of a process to increase efficiency of anaerobic granulation rate of activated sludge. It is a cost-effective technology by replacing anaerobic granules of bacteria in form granules, which subjected to a continuous "AGS" feed instead of an "Anaerobic Setup".

Client Validations

<p>Power Sewerage Manufacturing Unit</p> <ul style="list-style-type: none"> Capacity of 1.25 MLD (water 75) Upgrade to run Bio-gas Plant Upgrade of Sewerage Treatment 100% of Biomass & Biogas Sludge 100% load capacity from start Complete India from NEVY <p>NEVY Intervention & Support</p>	<p>CEFT Sludge Treatment (Dry - Clarifier)</p> <ul style="list-style-type: none"> Generation 50-60 T Sludge per day Upgrade of water-sludge clarity and final granular water production 100% and Transportation to 1000 Km region and market Increasing cost of Sludge <p>NEVY Intervention & Support</p>	<p>Private Chloro-Processing Unit</p> <ul style="list-style-type: none"> Capacity of 100 T of MSW per day Upgrade to run Bio-gas Plant Upgrade to produce treated sludge of Sludge Low methane in Biogas resulted in low electricity production <p>NEVY Intervention & Support</p>	<p>Biogas from CEFT/MSW</p> <ul style="list-style-type: none"> Upgrade to produce 100% Bio-Gas Capacity increase from 1000 to 10000 But also to produce good quality of Biogas Low cost of Biogas <p>NEVY Intervention & Support</p>
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Conclusion
The most noticeable population within Anaerobic Digestion is inherently variable, thereby requiring that the system must be kept under close supervision and control. The method of used sludge during AGS reactor start-up also remains a major concern. These concerns can be easily addressed by deployment of Anaerobic Granulated Sludge. The natural cultivation of Anaerobic Sludge on larger scale with low methane recovery rate is one of the major start-up considerations from operational of granules, improved stability, biomass retention and higher loading rates. With first Production of Anaerobic Granulated Sludge, we intend to reach the implementation of our patented Agitation system into an ever-growingly organic and environmentally friendlier network, helping bring the top priority on water full cycle of global action to mitigate human environmental impact.

Awards & Accolades
World Biogas Award, IMA NEVY Winner, Coverage by ET, BHEL Market Award, GreenTech Witness, SouthEast Starline, India Award for.

Acknowledgment
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