

Cleaner Biogas by Sustainable H2S Removal

Technology Description: This technology is a regenerable scrubbing process to remove hydrogen sulfide (H2S) in biogas. Biogas generated from landfills, farm waste, and wastewater treatment facilities is a valuable and renewable energy resource. However, the presence of H2S in biogas needs to be removed to upgrade it to high-quality natural gas.

Inventors:

Chen Lu Yang

Applications:

- Natural Gas Processing
- Syngas Cleaning
- Coke-Oven Gas Cleaning

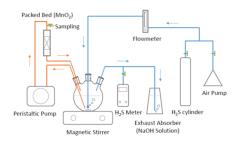
Benefits:

- Enhanced Biogas Quality: The primary benefit of this technology is the ability
 to upgrade biogas to high-quality natural gas. By effectively removing H2S,
 the regenerable scrubbing process improves the purity and energy content
 of biogas, making it suitable for direct use in natural gas pipelines and power
 generation.
- **Cost-Effective Solution**: This technology reduces operational costs compared to traditional methods by operating at low pH and eliminating the need for chelating agents and excessive caustics.
- **Environmental Benefits**: This technology contributes to environmental sustainability by minimizing the release of H2S into the atmosphere. The regenerable scrubbing process efficiently removes H2S, reducing its emission and potential negative impacts on air quality and surrounding ecosystems.

Patent Status:

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Gas Liquid 2-phase reaction system

For more information:

Catherine L. Ives, Ph.D.

Office of Technology Commercialization and Ventures

University of Massachusetts Dartmouth

cives@umassd.edu