Bulking And Foaming Filamentous Bacteria Nucleic Acid Sequences For Multiple Simultaneously Identifications

Tech ID: 21987 / UC Case 2011-666-0

BRIEF DESCRIPTION

Researchers in UCI's Department of Environmental & Civil Engineering have developed a revolutionary solution to the problem bulking and foaming organisms found in wastewater treatment systems. Their kit provides a fast, accurate and extremely cost effective method of identifying these troublesome organisms to allow rapid treatment prior to the onset of costly post "bloom" remediation.

FULL DESCRIPTION

Certain organisms commonly found in wastewater are prone to rapid growth or "blooming." If these organisms are not detected early in the treatment process they tend to bulk up and foam thus developing into a very costly problem in terms of waste disposal as a function of increased solid separation difficulties as well as possible regulatory fines. Alternatively, if these organisms are detected at an early stage and treated promptly substantial cost savings can be realized.

Currently in the marketplace the techniques and equipment needed to make such an early detection of these problematic bacteria require a high level of scientific knowledge and expensive equipment.

UCI researchers have successfully addressed this problem by developing a simple, low cost and easy to use kit that provides a real time identification of the major organisms that cause these solid separation problems. In addition to being easy to use and very low in cost, these kits provide much higher performance and accuracy than the currently available methodologies.

The UCI developed kit provides a simple and cost effective solution for solid separation problems for waste water treatment plants allowing them to decrease energy costs, eliminate solid separation regulatory violation fines and avoid increased chemical additions.

SUGGESTED USES

Wastewater treatment

ADVANTAGES

Low cost

Easy to use

Rapid results

PATENT STATUS

Country	Type	Number	Dated	Case

CONTACT

Richard Y. Tun
tunr@uci.edu
tel: 949-824-3586.



OTHER INFORMATION

KEYWORDS

Waste water treatment, Solid separation, Filamentous bacteria, Foaming, Bulking, Sewage, Sludge, Cost savings, Bacteria diagnostics

CATEGORIZED AS

- **Environment**
  - Other
  - Remediation
- **Engineering**
  - Engineering
- **Materials & Chemicals**
  - Biological
  - Chemicals

United States Of America	Issued Patent	9,567,648	02/14/2017	2011-666
United States Of America	Issued Patent	9,290,796	03/22/2016	2011-666

RELATED CASES

2011-666-0

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5270 California Avenue / Irvine,CA
92697-7700 / Tel: 949.824.2683

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