

Accepted Manuscript

Achieving ethanol-type fermentation for hydrogen production in a granular sludge system by aeration

Song Zhang, Min Liu, Ying Chen, Yu-Ting Pan

PII: S0960-8524(16)31617-0

DOI: <http://dx.doi.org/10.1016/j.biortech.2016.11.096>

Reference: BITE 17342

To appear in: *Bioresource Technology*

Received Date: 25 September 2016

Revised Date: 19 November 2016

Accepted Date: 23 November 2016

Please cite this article as: Zhang, S., Liu, M., Chen, Y., Pan, Y-T., Achieving ethanol-type fermentation for hydrogen production in a granular sludge system by aeration, *Bioresource Technology* (2016), doi: <http://dx.doi.org/10.1016/j.biortech.2016.11.096>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



1 **Achieving ethanol-type fermentation for hydrogen production in a granular sludge**
2 **system by aeration**

3 Song Zhang[§], Min Liu[§], Ying Chen*, Yu-Ting Pan

4 College of Architecture and Environment, Sichuan University, Chengdu, 610065,

5 China

Abbreviations: ETF, Ethanol-type fermentation; AICHP, anaerobic internal circulation hydrogen production; HPR, hydrogen production rate; COD, chemical oxygen demand; MLVSS, mixed liquor volatile suspended solid; MLSS, mixed liquid suspended solid; DO, dissolve oxygen; SAT, shunt aeration test; DAT, direct aeration test; HRT, hydraulic retention time; MPR, methane production rate; SMPs, soluble metabolic products; ORP, oxidation–reduction potential; S1, sludge sample 1; S2, sludge sample 2; VFA, volatile fatty acids.

[§] These authors contributed equally to this work.

* Corresponding author.

Tel.: +86 18628041280 (China)

E-mail address: cylm@163.com (Ying Chen)

Address: College of Architecture and Environment, Sichuan University, Chengdu, 610065, China

Download English Version:

<https://daneshyari.com/en/article/4997852>

Download Persian Version:

<https://daneshyari.com/article/4997852>

[Daneshyari.com](https://daneshyari.com)