

Accepted Manuscript

Synergistic Co-Digestion of Wastewater Grown Algae-Bacteria Polyculture Biomass and Cellulose to Optimize Carbon-to-Nitrogen Ratio and Application of Kinetic Models to Predict Anaerobic Digestion Energy Balance

Pavlo Bohutskyi, Duc Phan, Anatoliy M. Kopachevsky, Steven Chow, Edward J. Bouwer, Michael J. Betenbaugh

PII: S0960-8524(18)31189-1
DOI: <https://doi.org/10.1016/j.biortech.2018.08.085>
Reference: BITE 20368

To appear in: *Bioresource Technology*

Received Date: 19 June 2018
Revised Date: 17 August 2018
Accepted Date: 19 August 2018

Please cite this article as: Bohutskyi, P., Phan, D., Kopachevsky, A.M., Chow, S., Bouwer, E.J., Betenbaugh, M.J., Synergistic Co-Digestion of Wastewater Grown Algae-Bacteria Polyculture Biomass and Cellulose to Optimize Carbon-to-Nitrogen Ratio and Application of Kinetic Models to Predict Anaerobic Digestion Energy Balance, *Bioresource Technology* (2018), doi: <https://doi.org/10.1016/j.biortech.2018.08.085>

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.



Synergistic Co-Digestion of Wastewater Grown Algae-Bacteria Polyculture Biomass and Cellulose to Optimize Carbon-to-Nitrogen Ratio and Application of Kinetic Models to Predict Anaerobic Digestion Energy Balance

Authors: Pavlo Bohutskyi^{1*}, Duc Phan^{2,3}, Anatoliy M. Kopachevsky⁴, Steven Chow², Edward J. Bouwer², Michael J. Betenbaugh⁵

Affiliations:

¹ Biological Sciences Division, Pacific Northwest National Laboratory, 3300 Stevens Dr., Richland, WA 99354

² Department of Environmental Health and Engineering, Johns Hopkins University, 3400 North Charles Street, Baltimore, MD 21218-2686

³ Department of Civil and Environmental Engineering, The University of Texas at San Antonio, 1 UTSA Cir San Antonio, TX 78249

⁴ Department of Water Supply and Sanitary Engineering, Academy of Construction and Architecture of V.I. Vernadsky Crimean Federal University, 4 Prospekt Vernadskogo, Simferopol, Republic of Crimea, 295007

⁵ Department of Chemical & Biomolecular Engineering, Johns Hopkins University, 3400 North Charles Street, Baltimore, MD 21218-2686

E-mail: pavlo.bohutskyi@pnnl.gov; bohutskyi@gmail.com

Download English Version:

<https://daneshyari.com/en/article/10133423>

Download Persian Version:

<https://daneshyari.com/article/10133423>

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