

Accepted Manuscript

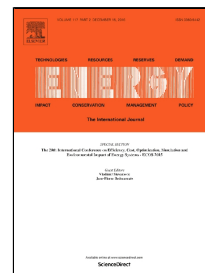
Role of trace elements in single and two-stage digestion of food waste at high organic loading rates

M.A. Voelklein, R. O'Shea, A. Jacob, J.D. Murphy

PII: S0360-5442(17)30009-9
DOI: 10.1016/j.energy.2017.01.009
Reference: EGY 10144
To appear in: *Energy*
Received Date: 27 January 2016
Revised Date: 25 November 2016
Accepted Date: 03 January 2017

Please cite this article as: M.A. Voelklein, R. O'Shea, A. Jacob, J.D. Murphy, Role of trace elements in single and two-stage digestion of food waste at high organic loading rates, *Energy* (2017), doi: 10.1016/j.energy.2017.01.009

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.



Highlights

- Food waste lacks essential trace elements (TE) for single and multi-stage digestion
- Two-stage digestion did not show any better resilience to TE deficiency
- Failure occurred at loading rates in excess of 2 g VS L⁻¹ d⁻¹ at 16 days retention
- Addition of Co, Fe, Mo, Ni and Se enabled stable digestion at increased loading
- No additional gain in SMY was noted with trace element addition

Download English Version:

<https://daneshyari.com/en/article/5476317>

Download Persian Version:

<https://daneshyari.com/article/5476317>

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