

Frontiers of Environmental Science & Engineering

Volume 11 • Number 3 • June 2017
Special Issue—Livestock Waste Management and Resource Recovery
(Responsible Editors: Xinmin Zhan & Liwen Xiao)

PREFACE

- 16 *LivestockWaste 2016 - International
Conference on Recent Advances in Pollution
Control and Resource Recovery for the
Livestock Sector*
Xinmin Zhan & Liwen Xiao

REVIEW

- 11 Greenhouse gas emissions from different pig
manure management techniques: a critical
analysis
**Conor Dennehy, Peadar G. Lawlor,
Yan Jiang, Gillian E. Gardiner,
Sihuang Xie, Long D Nghiem,
Xinmin Zhan**

RESEARCH ARTICLE

1. Field scale measurement of greenhouse gas
emissions from land applied swine manure
**Devin L. Maurer, Jacek A. Koziel,
Kelsey Bruning**
2. Scientifically advanced woody media for
improved water quality from livestock woodchip
heavy-use areas
**Laura Christianson, David DeVallance,
Joshua Faulkner, Thomas Basden**

- 3 Is sodium percarbonate a good choice in situ remediation of deltamethrin pollution?
Xu Zhang, Baigang Ren, Shangge Li, Xiaodi Qu, Huanhuan Yang, Shiguo Xu, Zongming Ren, Qiang Kong, Cheng Wang
- 4 Process stability and microbial community composition in pig manure and food waste anaerobic co-digesters operated at low HRTs
Conor Dennehy, Peadar G. Lawlor, Gillian E. Gardiner, Yan Jiang, Paul Cormican, Matthew S. McCabe, Xinmin Zhan
- 5 The speciation, leachability and bioaccessibility of Cu and Zn in animal manure-derived biochar: effect of feedstock and pyrolysis temperature
Qi Lin, Xin Xu, Lihua, Wang, Qian Chen, Jing Fang, Xiaodong Shen, Liping Lou, Guangming Tian
- 6 Transformation of triclosan by a novel cold-adapted laccase from *Botrytis* sp. FQ
Yuanyuan Shi, Deyang Kong, Jiayang Liu, Junhe Lu, Xiaoming Yin, Quansuo Zhou
- 7 Odour reducing microbial-mineral additive for poultry manure treatment
Kajetan Kalus, Sebastian Opaliński, Devin Maurer, Somchai Rice, Jacek A. Koziel, Mariusz Korczyński, Zbigniew Dobrzański, Roman Kołacz, Beata Gutarowska
- 8 Comparative study on microbial community in intermittently aerated sequencing batch reactors (SBR) and a traditional SBR treating digested piggery wastewater
Xiaolin Sheng, Rui Liu, Xiaoyan Song, Lujun Chen, Kawagishi Tomoki

9 Hydrothermal carbonization of livestock mortality for the reduction of pathogens and microbially-derived DNA

**Thomas F. Ducey, Jessica C. Collins,
Kyoung S. Ro, Bryan L. Woodbury,
D. Dee Griffin**

10 Methane, Nitrous Oxide and Ammonia generation in full-scale swine wastewater purification facilities

**Takashi Osada, Makoto Shiraishi,
Teruaki Hasegawa, Hirofumi Kawahara**

12 Global warming potential associated with Irish milk powder production

**William Finnegan, Jamie Goggins,
Aksana Chyzheuskaya, Xinmin Zhan**

13 Advantages of intermittently aerated SBR over conventional SBR on nitrogen removal for the treatment of digested piggery wastewater

**Xiaoyan Song, Rui Liu, Lujun Chen,
Baogang Dong, Tomoki Kawagishi**

15 Greenhouse gas emissions during co-composting of cattle feedlot manure with construction and demolition (C&D) waste

Xiying Hao, Francis J. Larney

ANNOUNCEMENT

14 | FESE's Best Papers of 2016