



REFERENCES

- Aslanzadeh, S.; Rajendran, K.; Jeihanipour, A.; Taherzadeh, M. The effect of effluent recirculation in a semi-continuous two-stage anaerobic digestion system. *Energies* 2013, 6, 2966–2981.
- Baader, W.; Braunschweig, F.R. Performance of completely filled vertical through flow anaerobic digester. In Alternative Sources of Energy for Agriculture; FFTC Book Series 28; FFTC: Taipei, Taiwan, 1985; pp. 51–65.
- Bories, A.; Raynal, J.; Bazile, F. Anaerobic digestion of high-strength distillery wastewater (cane molasses stillage) in a fixed-film reactor. *Biol. Wastes* 1988, 23, 251–267.
- Chaoran Li, Christoph Moertelmaier, Josef Winter, and Claudia Gallert. Microbial Community Shifts during Biogas Production from Biowaste and/or Propionate. *Bioengineering* 2015, 2, 35-53;
doi:10.3390/bioengineering2010035
- Hamidi, N. "Carbon Dioxide Effects on the Flammability Characteristics of Biogas", *Applied Mechanics and Materials*, Vol. 493, pp. 129-133, 2014
- Jarvis, S.; Nordberg, Å.; Mathisen, B.; Svensson, B.H. Stimulation of conversion rates and bacterial activity in a silage-fed two-phase biogas process by initiating liquid recirculation. *Antonie Van Leeuwenhoek* 1995, 68, 317–327.



Joubert, W.A.; Britz, T.J.; Lategan, P.M. The effect of effluent recirculation on the performance of a two stage anaerobic process. *Biotechnol. Lett.* **1985**, 7, 853-858.

Kasikara Pazarlioglu, Nurdan; Kaymaz, Yasin; Babaoglu, Anil. Biodegradation Kinetics of o-Cresol by Pseudomonas putida DSM 548 (pJP4) and o-Cresol removal in a Batch-recirculation Bioreactor System. 2011

Mata-Alvarez, J., Macé, S., Llabrés, P., 2000. Anaerobic digestion of solid wastes. An overview of research achievements and perspectives, *Bioresource Technology* 74, 3- 16.

Michele, P.; Giuliana, D.; Carlo, M.; Sergio, S.; Fabrizio, A. Optimization of solid state anaerobic digestion of the OFMSW by digestate recirculation: A new approach. *Waste Manag.* 2015, 35, 111–118.

Moller, H.B., Sommer, S.G. and Ahring, B.K. (2004) Methane Productivity of Manure Straw and Solid Fractions of Manure. *Biomass and Bioenergy*, 25, 485-495

Mosey, F.E.; Fernandes, X.A. Patterns of hydrogen in biogas from the anaerobic digestion of milk-sugars. *Water Sci. Technol.* 1989, 21, 187–196. 12.

Ripley, L.E., Boyle, W.C., Converse, J.C. (1986) Improved alkalimetric monitoring for anaerobic digestion of high-strength wastes. *Journal – Water Pollution Control Federation*, 58: 406-11.



Rosato, M.A. Redimensioning the importance of the VFA/TA (FOS/TAC) method. 2015

S. Borowski and L. Weatherley, "Co-digestion of solid poultry manure with municipal sewage sludge," Bioresource Technology, vol. 142, pp. 345–352, 2013.

S. Dwi, K. Hirata, Y. Asada, K. Miyamoto, World J. Of Microbiol Biotechnol. 17 2001. 259-264.

Sandberg, M.; Ahring, B.K. Anaerobic treatment of fish-meal process wastewater in a UASB reactor at high pH. Appl. Microbiol. Biotechnol. 1992, 36, 800–804.

Sastrohamidjojo, H. 2004. *Kimia Minyak Atsiri*, Universitas Gadjah Mada, Yogyakarta

Seadi, T.A.; Rutz, D.; Prassl H.; Kottner, M.; Finsterwalder, T.; Volk, S.; Janssen, R. Biogas Handbook. 2008. Denmark: University of Southern Denmark Esbjerg.

Shyam, J., Sharma, A., Borah, R., Talukdar, A., Kataky, J., Unni, B., Modi, M. & Deka, P. Utilization of the waste of commercially important plants. Bioprospecting of commercially important plants. Proceedings of the national symposium on “Biochemical approaches for utilization and exploitation of commercially important plants”., Jorhat, India, 12-14 Nov. 2003., 2004. Indian Society of Agricultural Biochemists, 290-293.



Stefan B. Towards Sustainable Production and Use of Resources: Assessing
Biofuels, United Nation Environmental Program (UNEP) Report, 2009,
Section 3.

Ward, A.J.; Hobbs, P.J.; Holliman, P.J.; Jones, D.L. Optimization of the anaerobic
digestion of agricultural resources. *Bioresour. Technol.* 2008, 99, 7928–
7940.

Wang Q, Peng L, Su H. The effect of a buffer function on the semicontinuous
anaerobic digestion. *Bioresour Technol.* 2013;139:43–9.

Y. Chen, J. J. Cheng and K. S. Creamer, *Bioresour. Technol.*, 2008, 99, 4044–
4064.

Zamanzadah Mirzaman, Kine Svensson, Live Heldal Hagen, Svein Jarle Horn.
Anaerobic digestion of food waste – Effect of recirculation and
temperature on performance and microbiology. *Water Research* 96 (2016)
246-254.

Zhang, T., Mao, C., Zhai, N., Wang, X., Yang, G.: Influence of initial pH on
thermophilic anaerobic co-digestion of swine manure and maize stalk.
Waste Management. 35, 119–126 (2015).

<https://doi.org/10.1016/j.wasman.2014.09.004>

Zhang Xuedong, Yu Tao, Jianmei Hu, Gang Liu , Henri Spanjers , Jules B. van
Lier. Biomethanation and microbial community changes in a digester
treating sludge from a brackish aquaculture recirculation system. 214
(2016) 338–347



**EFFECT OF EFFLUENT RECIRCULATION IN SEMI-CONTINUOUS ANAEROBIC DIGESTION OF
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Zhao Dongya, Quanmin Zhu, Johan Dubbeldam. Terminal sliding mode control
for continuous stirred tank reactor. Chemical engineering research and
design 94 (2015) 266–274.

Zuo, Z.; Wu, S.; Zhang, W.; Dong, R. Effects of organic loading rate and effluent
recirculation on the performance of two-stage anaerobic digestion of
vegetable waste. Bioresour. Technol. 2013, 146, 556–561.