

Supplementary Materials: The Performance and Microbial Community Identification in Mesophilic and Atmospheric Anaerobic Membrane Bioreactor for Municipal Wastewater Treatment Associated with Different Hydraulic Retention Times

Yi Ding ¹, Zhenlin Liang ¹, Zhansheng Guo ¹, Zhipeng Li ^{2,3,*}, Xuguang Hou ^{1,*} and Chao Jin ⁴

¹ Marine College, Shandong University, Weihai 264209, China; dingyits@126.com (Y.D.); liangzhenlin@sdu.edu.cn (Z.L.L.); guozhansheng@sdu.edu.cn (Z.S.G.)

² State Key Laboratory of Urban Water Resources and Water Environment, Harbin Institute of Technology, Harbin 150090, China

³ School of Marine Science and Technology, Harbin Institute of Technology, Weihai 264200, China

⁴ School of Environmental Science and Engineering, Sun Yat-Sen University, Guangzhou 510275, China; jinchaos@mail.sysu.edu.cn

* Correspondence: lizhipengcn@hit.edu.cn (Z.P.L.); houxuguang@sdu.edu.cn (X.G.H.); Tel.: +(86)-631-5687-231(Z.P.L.); +(86)-631-5688-303 (X.G.H.); Fax: +(86)-631-5687-230 (Z.P.L.); +(86)-631-5688-303 (X.G.H.)

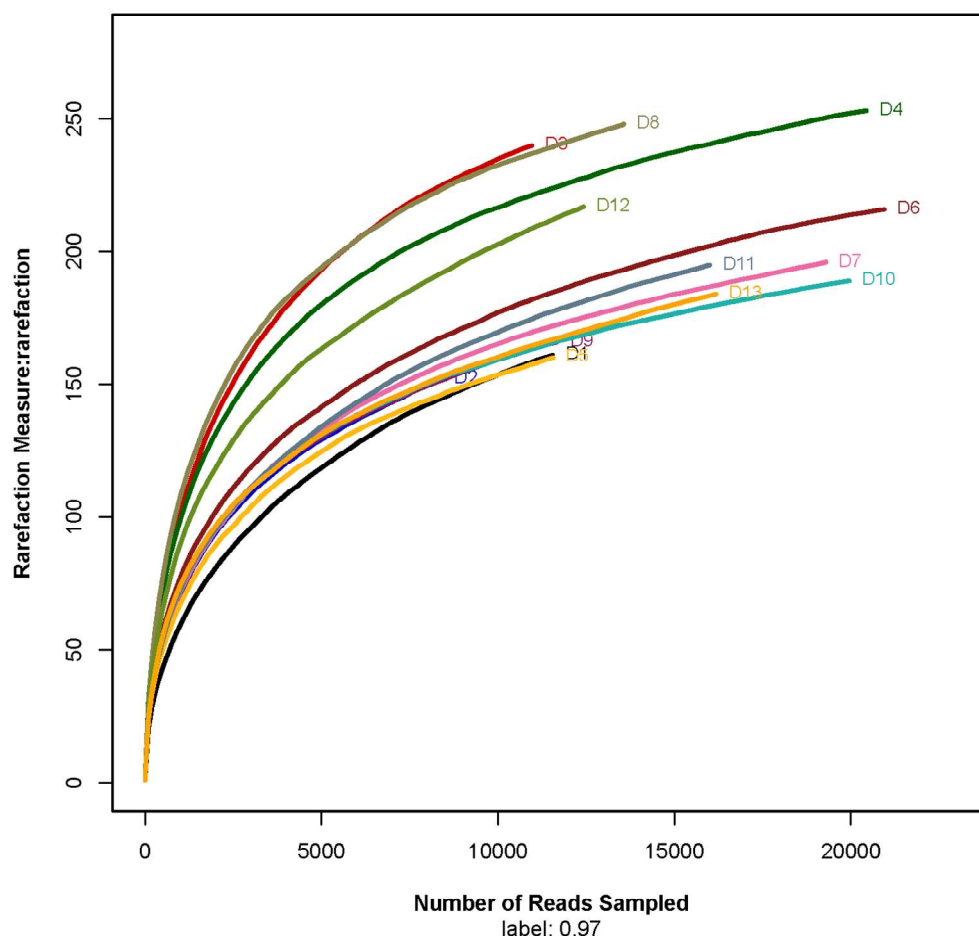


Figure S1. Rarefaction curves base on Illumina-MiSeq sequencing of bulk sludge and cake sludge bacterial communities in the M-AnMBR and A-AnMBR. The OTUs were defined by 3% distances.

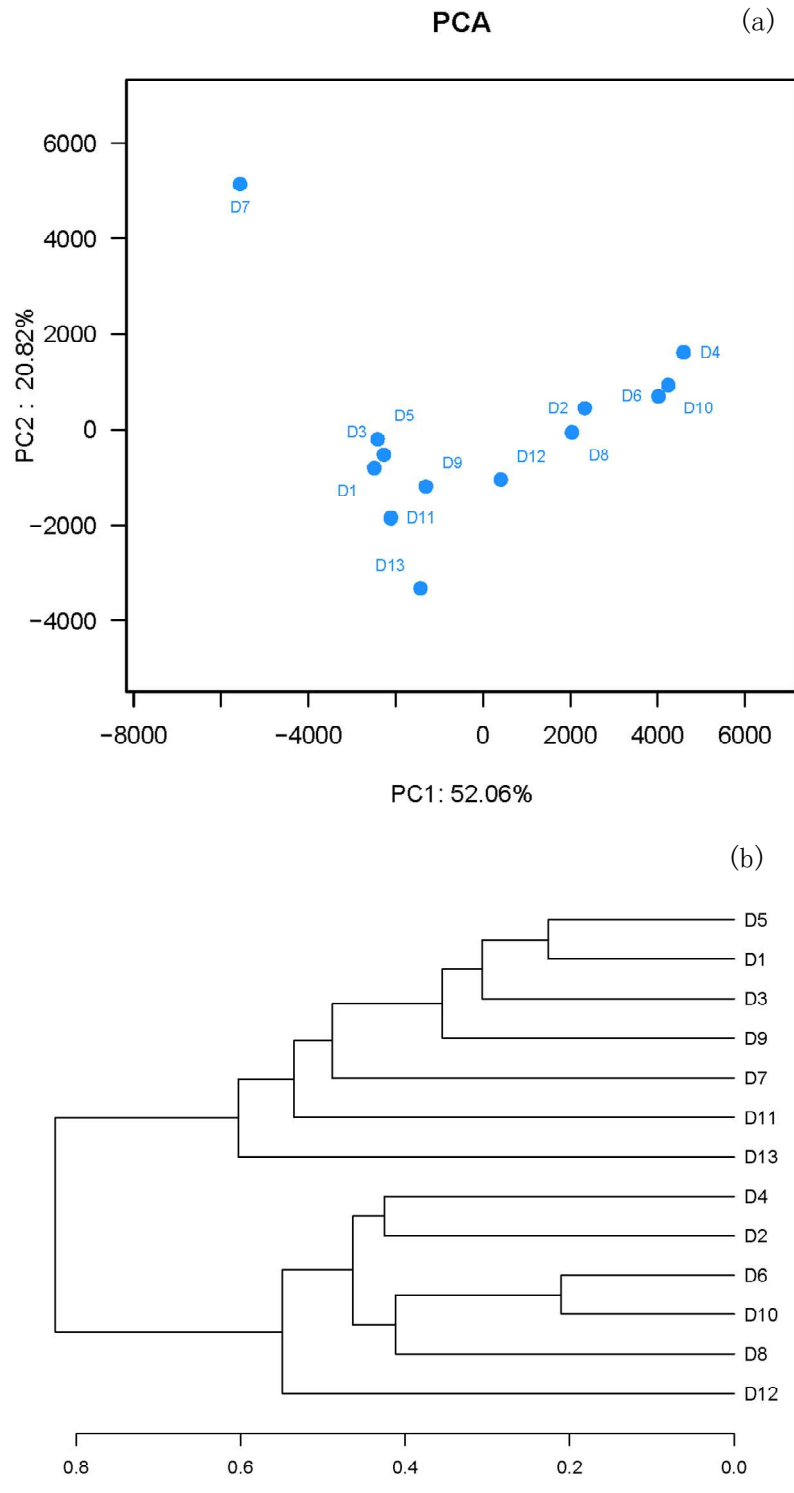


Figure S2. Principal component analysis (PCA) of bacterial communities from bulk sludge and cake sludge in the M-AnMBR and A-AnMBR based on Illumina-MiSeq sequencing of 16S rRNA gene (a) and unweighted pair group method with arithmetic mean (UPGMA) tree showing relationships between samples according to bacterial profile in the M-AnMBR and A-AnMBR (b). Operational taxonomic units (OTUs) were determined based on 97% similarity of reads.

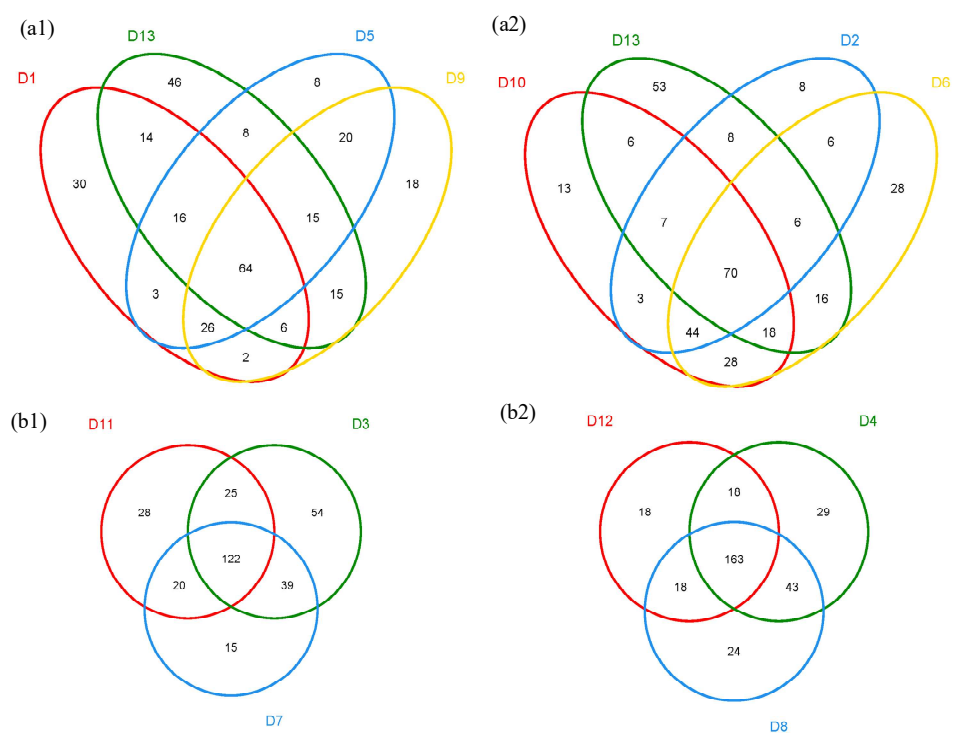


Figure S3. Venn diagram showing the overlap of OTUs from bulk sludge (a) and cake sludge (b) in the M-AnMBR (1) and A-AnMBR (2).