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Bernadette K. McCabe

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Stephan Tait, Peter Harris, Craig Ballie

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Anaerobic digestion is a key process employed to produce biogas. Monitoring of the anaerobic process is becoming more crucial with the adoption of novel technologies. Poor process transparency accompanied with process instability are drivers to developing alternative monitoring techniques. A key indicator, volatile fatty acids can increase when the anaerobic process is stressed. Traditional monitoring methods require manual sampling and can lead to delays in obtaining measurements. Microbial electrochemical sensors show potential as an alternative and were investigated for rapid, accurate and cost-effective measurement of volatile fatty acids. The outcomes of this thesis provides further understanding of this technology.

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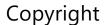
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