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**EFFECT OF THE ELECTRIC SUPPLY INTERRUPTION ON A MICROBIAL
ELECTROSYNTHESIS SYSTEM CONVERTING INORGANIC CARBON
INTO ACETATE**

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ABSTRACT

Microbial electrosynthesis (MES) technology relies on the direct use of electrons to convert CO₂ into long chain organic chemicals. Therefore, MES has been proposed to be coupled to the renewable electricity supply, mainly from solar and wind sources.

However, those energies suffer fluctuations and interruptions of variable duration, which can have an adverse effect on MES performance. Such effects on MES has been evaluated for the first time under different interruptions time. H-cell-MES reactors were disconnected from power supply during 4, 6, 8, 16, 32 and 64 h. Interruptions affected the acetate production rate, causing a decrease of until 77% after 64 h off. However, after all the interruptions, the acetate production was restored, taking between 7 and 16

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