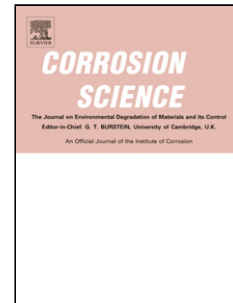


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Title: The role of bacterial communities and carbon dioxide on the corrosion of steel

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PII: S0010-938X(15)00238-3
DOI: <http://dx.doi.org/doi:10.1016/j.corsci.2015.05.043>
Reference: CS 6330

To appear in:

Received date: 19-12-2014
Revised date: 18-5-2015
Accepted date: 20-5-2015

Please cite this article as: K.M. Usher, A.H. Kaksonen, D. Bouquet, K.Y. Cheng, Y. Geste, P.G. Chapman, C.D. Johnston, The role of bacterial communities and carbon dioxide on the corrosion of steel., *Corrosion Science* (2015), <http://dx.doi.org/10.1016/j.corsci.2015.05.043>

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Highlights

1. Two natural bacterial communities grew with only water, CO₂ and steel.
2. One of these cultures increased corrosion rates by 45.5 % in two months.
3. The species may serve different roles as electron donor or acceptor and fixing CO₂.
4. Organic carbon was not required for growth. CO₂ was the final electron acceptor and carbon source.
5. Each species required the others to grow in our culture conditions.

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