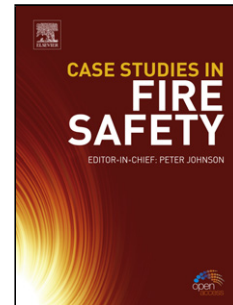


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# The Role of Corrosion Inhibition in the Mitigation of CaCO<sub>3</sub> Scaling on Steel Surface

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## Highlights

- Corrosion induced micro-cathodic effect on interfacial CaCO<sub>3</sub> scaling was studied.
- Steel/water interfacial corrosion behaviour was tuned by introducing NaNO<sub>2</sub>.
- Scaling at corrosion-inhibiting interfaces was shown at different temperatures.
- pH rise at micro cathodes dominates interfacial scaling via promoting nucleation.
- Heating cannot cause evident scaling once micro-cathodic process is suppressed.

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