

Supplementary Material - Annex B: pH change of unbuffered solutions

During preliminary experiments in un-buffered solution, a significant drop of pH was observed, suggesting that test solution chemistry was not stable during the test. The addition of bicarbonate / carbonic acid buffer, used for the experiments presented in the article, a much better pH stability was observed (see Fig. 3(b) of the article)

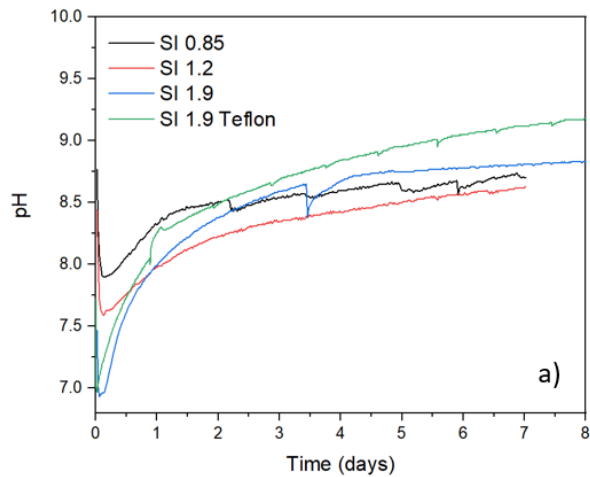


Figure B1: pH evolution in test solutions of various calcite saturation index with heat transfer promoted scaling on steel surface or Teflon(TM) surface (the latter was selected to check for the impact of cathodic reaction at the metal surface that could have played a role in pH increase).

Electrochemical impedance response of a thick and porous calcium carbonate layer deposited by thermal growth on a carbon steel electrode.

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