

Supporting information for:

**Effect of pH and type of stirring on the spontaneous precipitation of CaCO₃
at identical initial supersaturation, ionic strength
and $a(\text{Ca}^{2+}) / a(\text{CO}_3^{2-})$ ratio**

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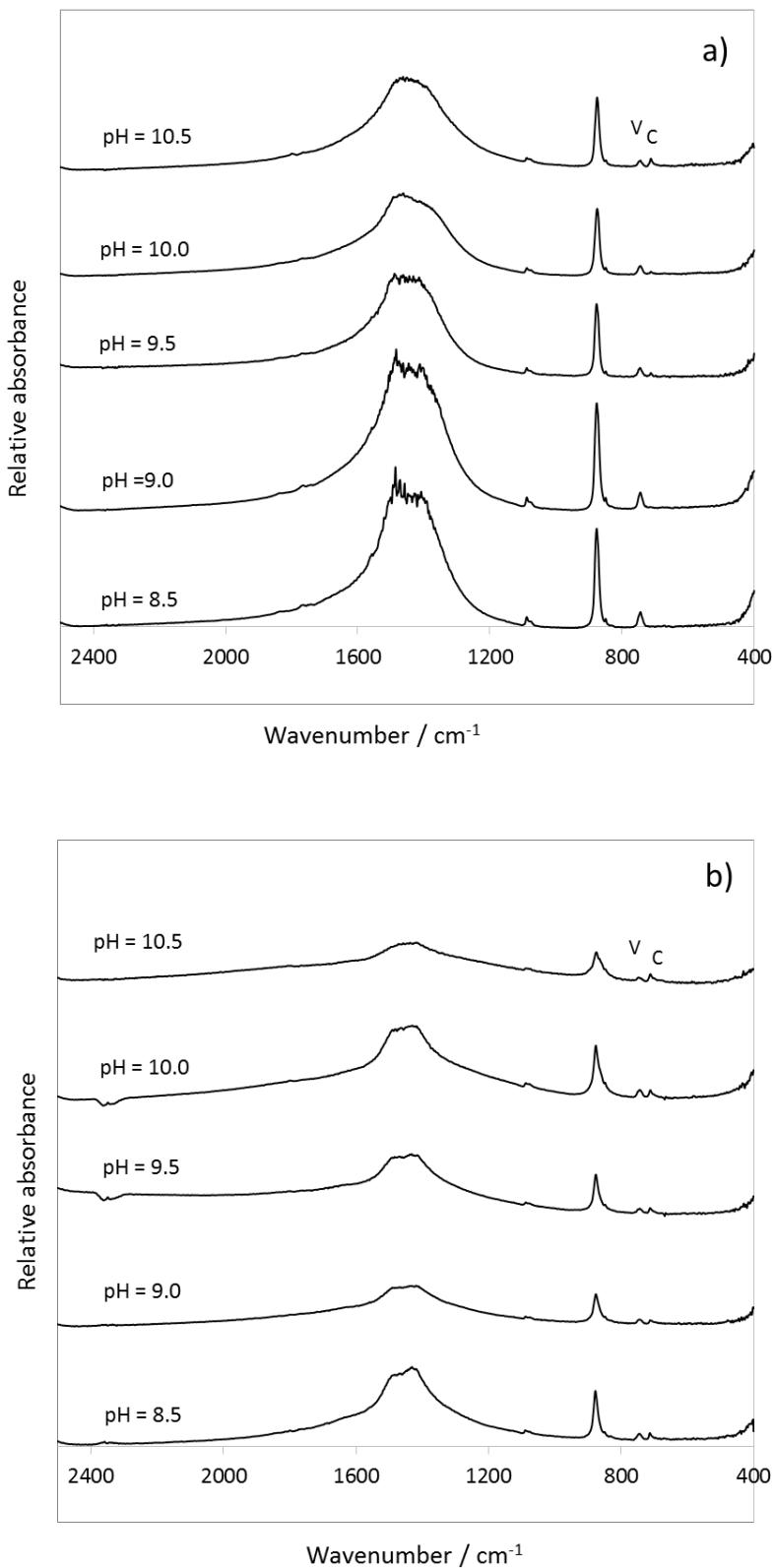


Fig. SI 1. FTIR spectra of calcium carbonate precipitated at different initial pH in the precipitation systems which were stirred: (a) magnetically and (b) mechanically during the spontaneous precipitation of CaCO_3 at identical initial saturation ratio ($S_c = 14.4 \pm 0.1$ and $S_v = 7.5 \pm 0.1$), ionic strength ($I_c = 0.1 \text{ mol dm}^{-3}$) and activity ratio of constituent ions ($a(\text{Ca}^{2+}) / a(\text{CO}_3^{2-}) = 1.00$). V-vaterite, C-calcite

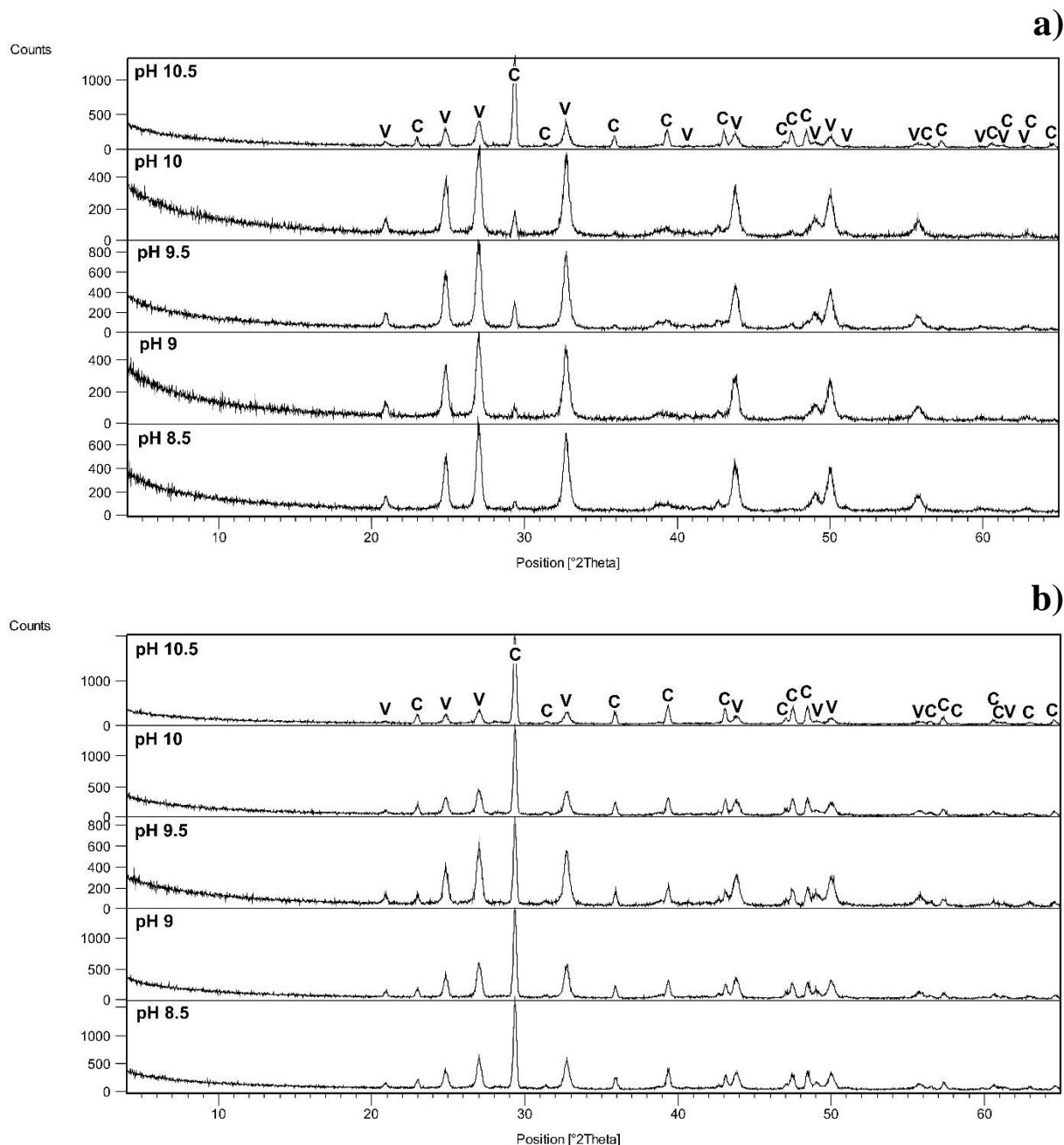


Fig. SI 2. PXRD patterns of calcium carbonate precipitated at different initial pH in the precipitation systems which were stirred: (a) magnetically and (b) mechanically during the spontaneous precipitation of CaCO_3 at identical initial saturation ratio ($S_c = 14.4 \pm 0.1$ and $S_v = 7.5 \pm 0.1$), ionic strength ($I_c = 0.1 \text{ mol dm}^{-3}$) and activity ratio of constituent ions ($a(\text{Ca}^{2+}) / a(\text{CO}_3^{2-}) = 1.00$). V-vaterite, C-calcite