# The $CO_2$ capturing ability of cellulose dissolved in NaOH(aq) at low temperature

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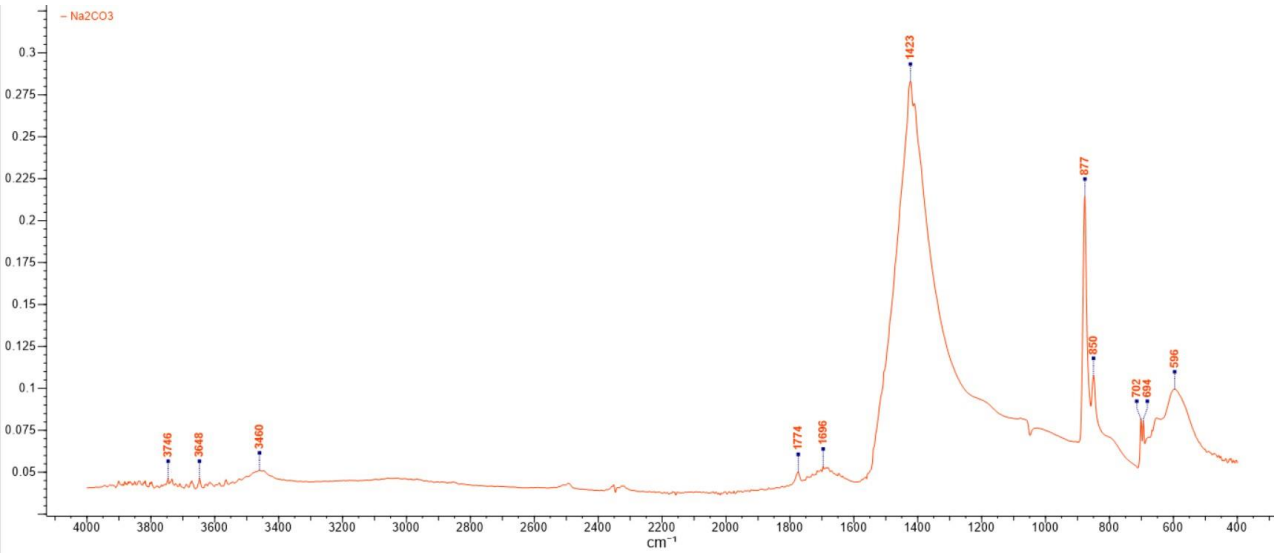


*Figure 1. ATR-IR spectrum of $Na_2CO_3$.*

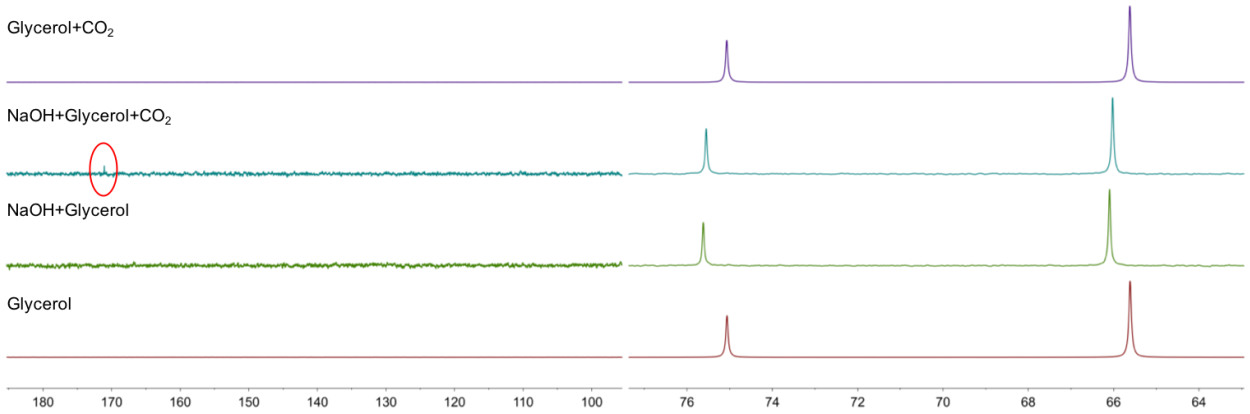


*Figure 2. $^{13}C$ NMR spectra of glycerol (red), glycerol in NaOH(aq) (green), glycerol in NaOH(aq) with post-dissolution addition of $CO_2$ (blue) and glycerol with addition of $CO_2$ (purple). The red circle indicates the presence of $Na_2CO_3$. All measurements were recorded at room temperature in $D_2O$.*

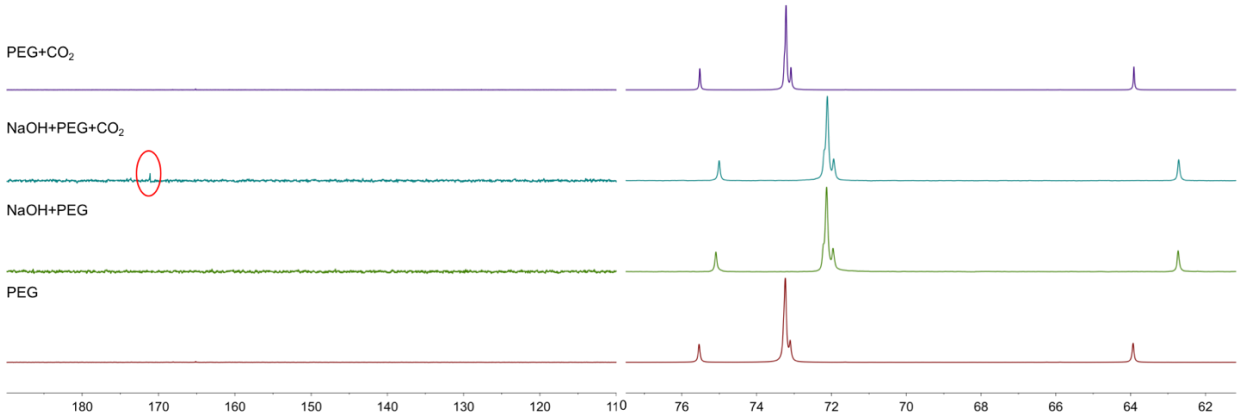


*Figure 3. $^{13}C$ NMR spectra of PEG400 (red), PEG400 in NaOH(aq) (green), PEG400 in NaOH(aq) with post-dissolution addition of $CO_2$ (blue) and PEG400 with addition of $CO_2$ (purple). The red circle indicates the presence of $Na_2CO_3$. All measurements were recorded at room temperature in $D_2O$.*