

## Electronic Supporting Information for: Temperature-dependent phase behaviour of tetrahydrofuran-water alters solubilization of xylan to improve co-production of furfurals from lignocellulosic biomass

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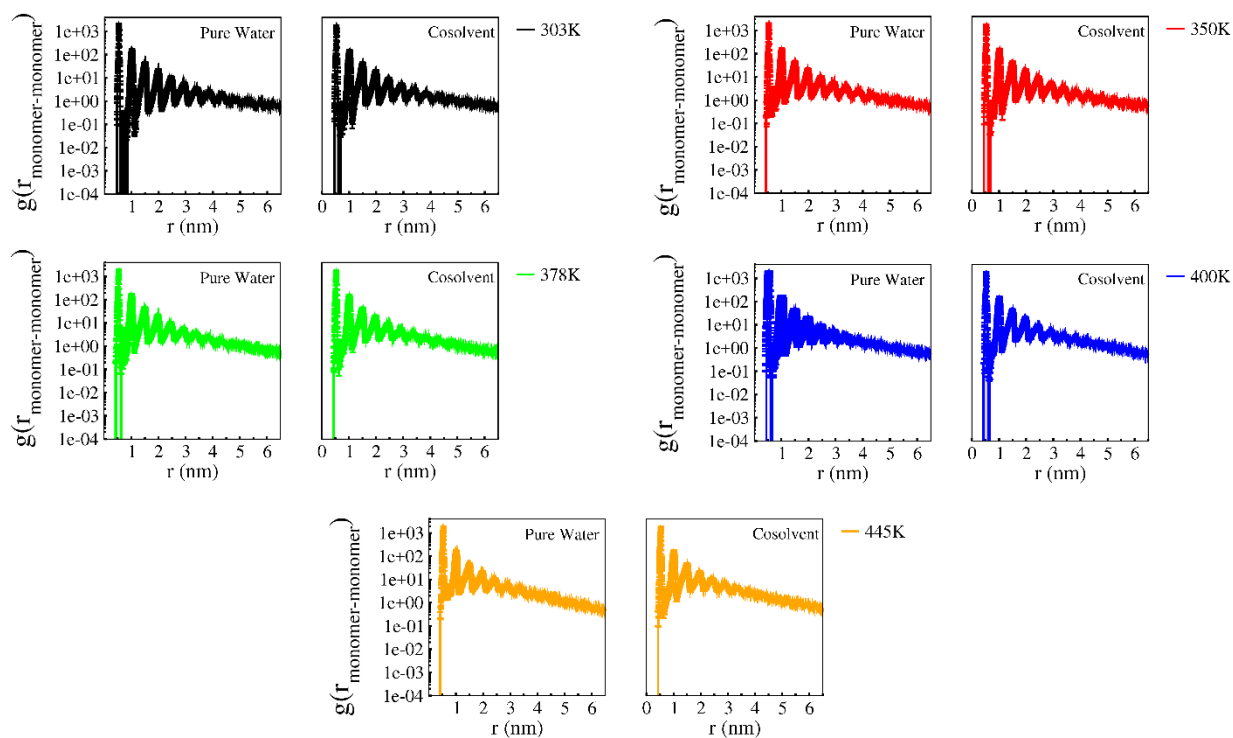
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### Organization and layout of this section

This section contains separated figures (Figures SI-V) of each plot from Figure 2 in the main text as well as the kinetics table (Table SI) referenced in the main text. The figure and table are provided here with no additional discussion.



**Figures SI-V.** Individual Plots of Xylan monomer-monomer radial distribution functions

**Table SI.** First-order rate constants for the disappearance of xylose in water and THF co-solvent environments

Rate Constant	1:1 THF:water (A/min)	Water (A/min)	Literature (A/min)
$k^b$	$0.109 \pm 0.015$	$0.0557 \pm 0.0018$	$0.0527^c$

<sup>a</sup> Reaction conditions: 10 g L<sup>-1</sup> D-xylose and 1 wt% H<sub>2</sub>SO<sub>4</sub> in batch reactions at 170 °C. THF co-solvent solution contained 1:1 THF and DI water. <sup>b</sup> Rate constant includes a 0.204 M hydrogen ion (A) term. <sup>c</sup> Calculated from equations described by K.J. Zeitsch (2000).

