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Supporting Information

Biocomposite adhesion without added resin: understanding the chemistry of the direct conversion of wood into adhesives

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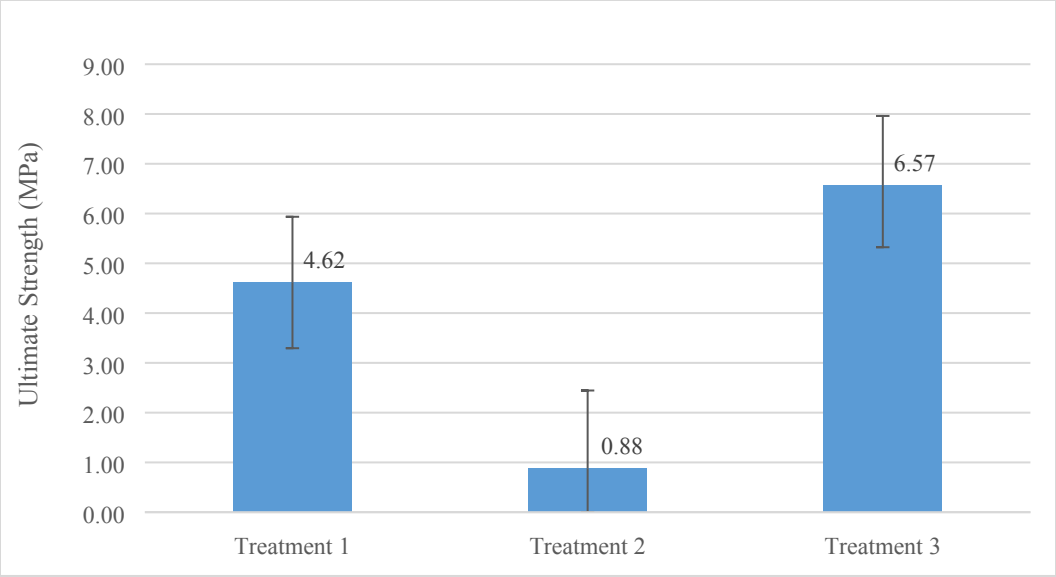

Figure S1. Ultimate strength of compression shear block tests of yeloow-poplar samples bonded using three different laser treatments (n=24).

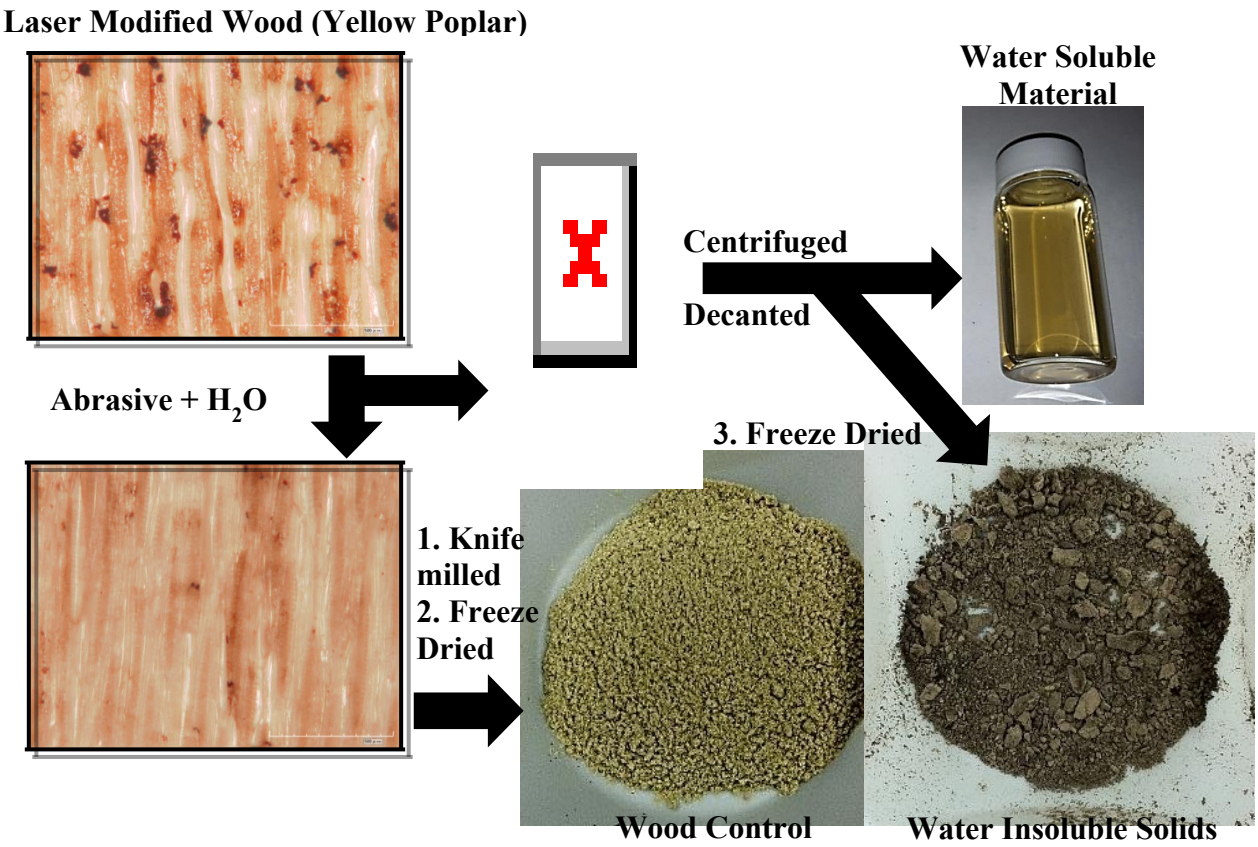

Figure S2. Extraction scheme of laser modified wood.

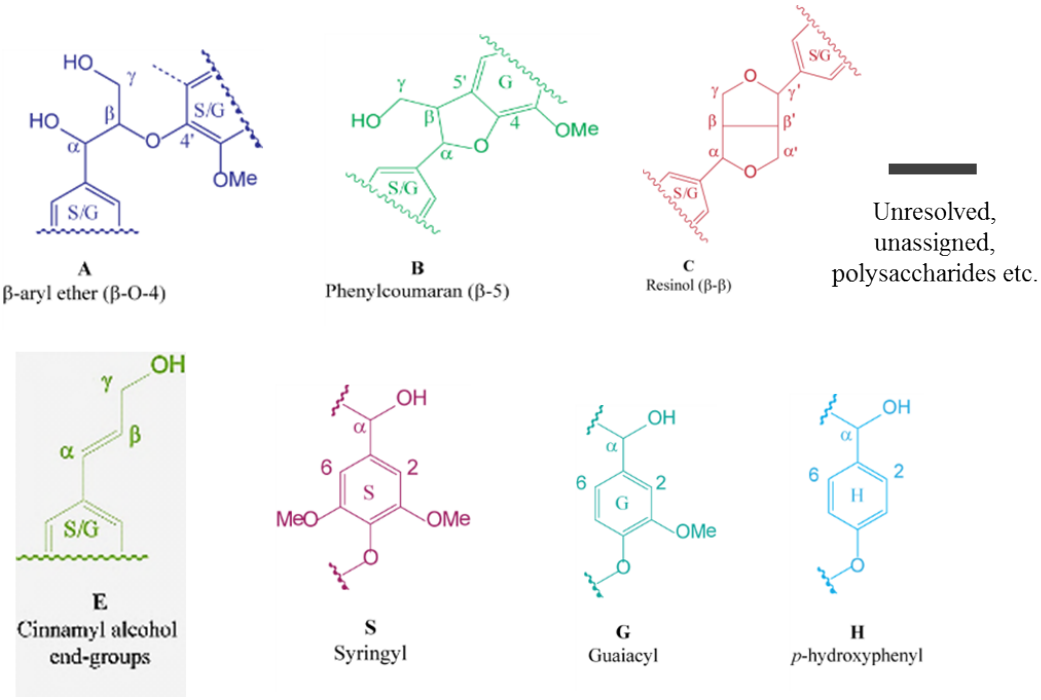

Figure S3. Common interunit linkages of lignin

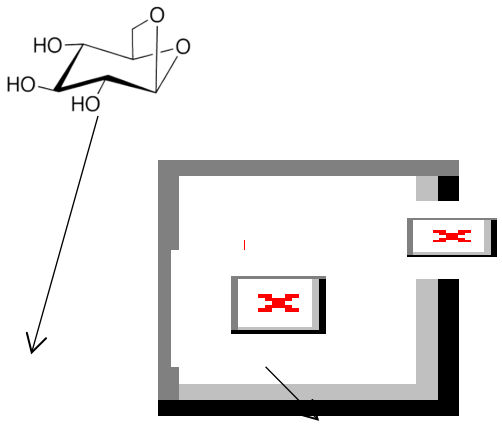

Figure S4. Compounds from water extract with high levels of xylan and levoglucosan.

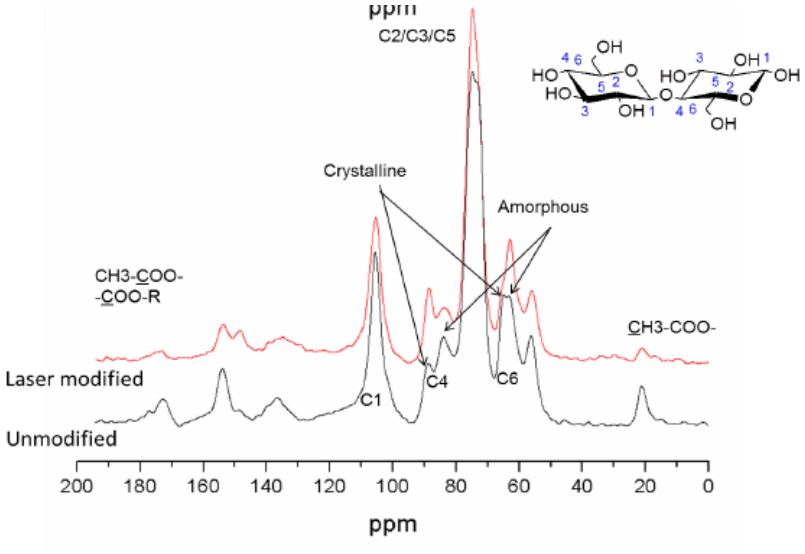

Figure S5. CP MAS solid state ^{13}C NMR of yellow poplar before and after laser modification.

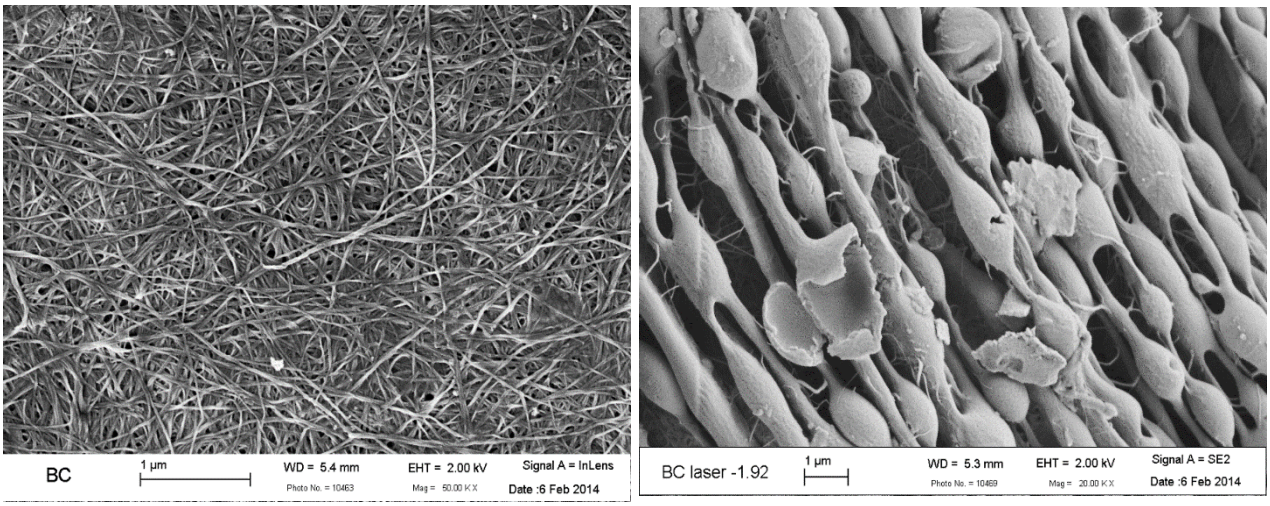

Figure S6. Bacterial cellulose before and after laser modification.

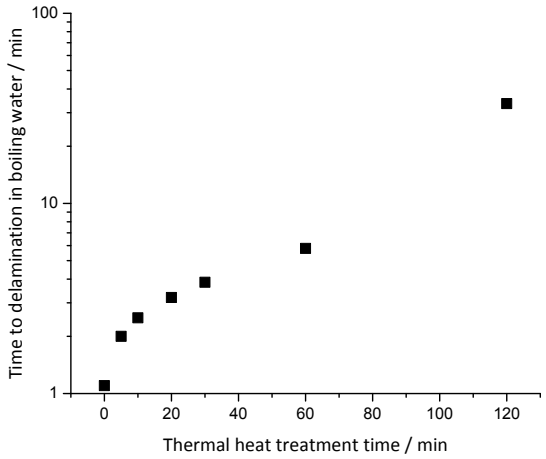

Figure S7. Post treatment of composite materials at 200°C exposed to boiling water. Note for samples heated for 180 minutes, sample did not delaminate within the three hour boiling test.