

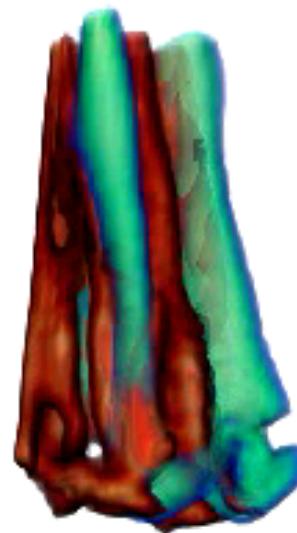
3D Chemical Tomography

Ref: M. C. Martin, C. Dabat-Blondeau, M. Unger, et al., 3D spectral imaging with synchrotron Fourier transform infrared spectro-microtomography, Nat Meth 10, 861 (2013).

Poplar wood fibers, opitical image



Infrared Tomography of Poplar wood fibers



40μm

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Infrared Tomography of Poplar wood fibers

2800 – 3000 cm⁻¹ C-H stretch



Hydrocarbons

1524 – 1628 cm⁻¹



Hemicellulose

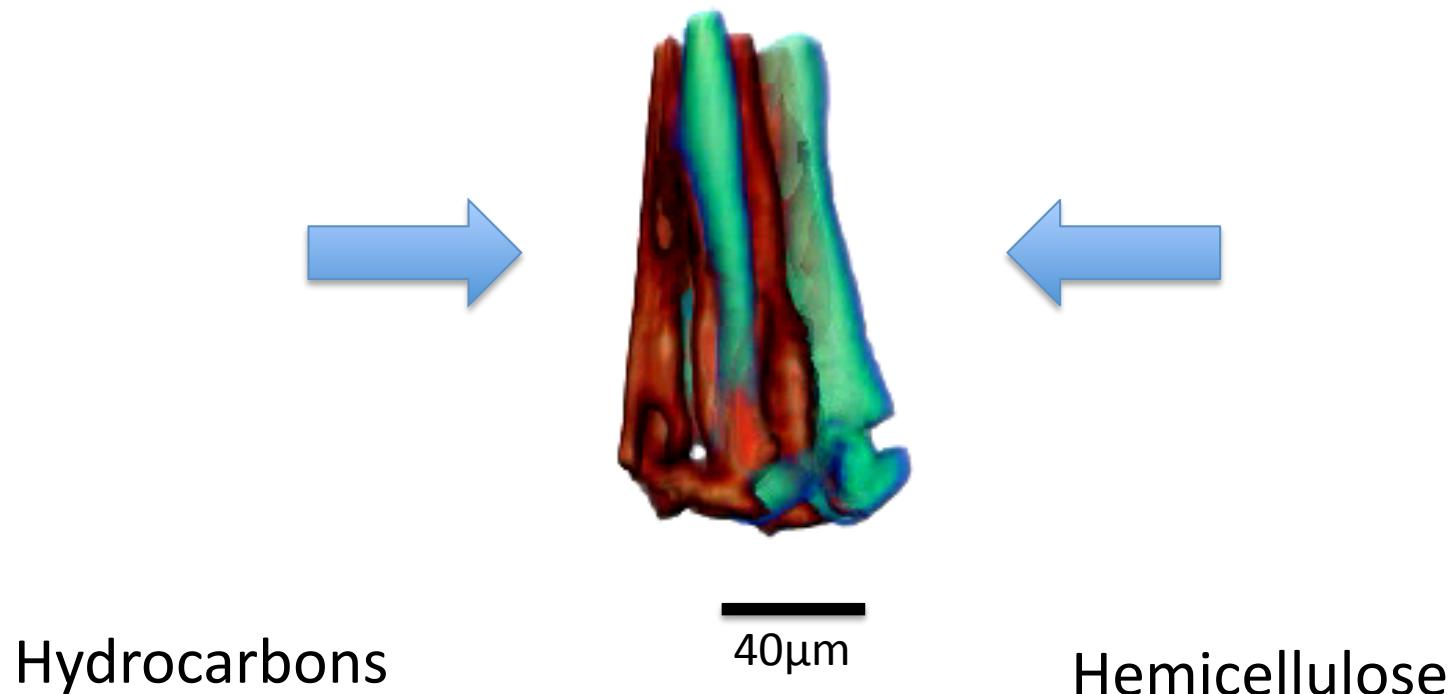


40μm

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1524 – 1628 cm⁻¹

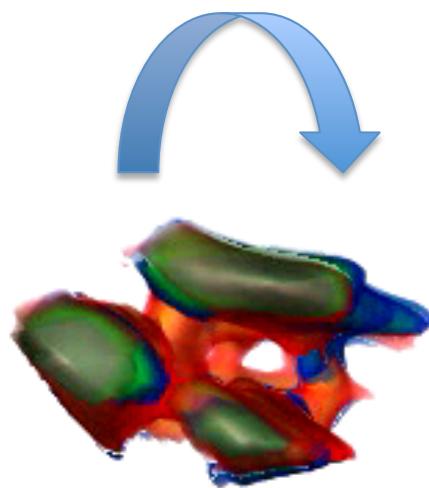


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Infrared Tomography of Poplar wood fibers

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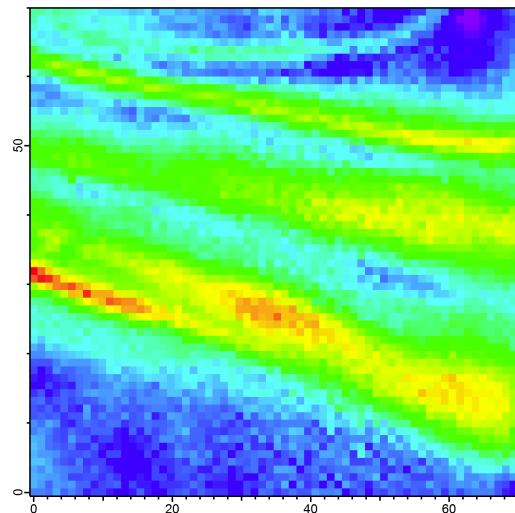
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Hemicellulose

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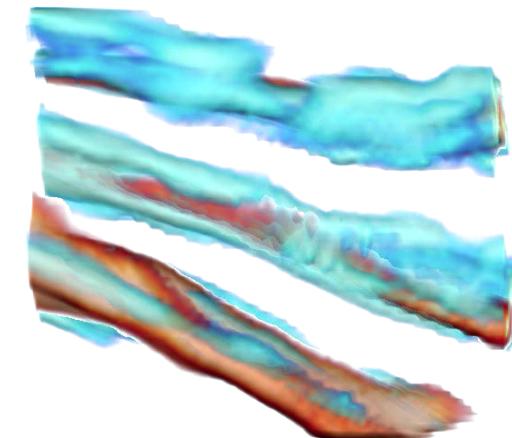
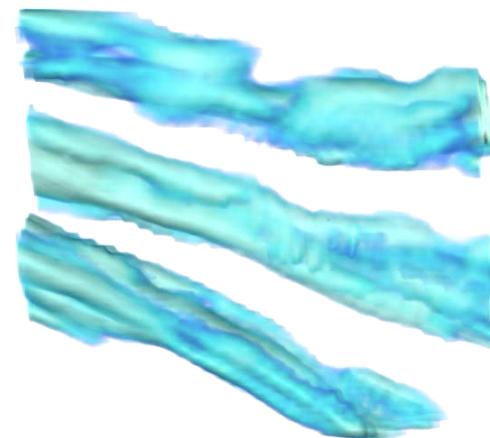
2D image



10 μm

Microtomography of Volcanic Glass

3D Chemical contrast image



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