



Water sorption ability of acetylated wood assessed by mid infrared spectroscopy

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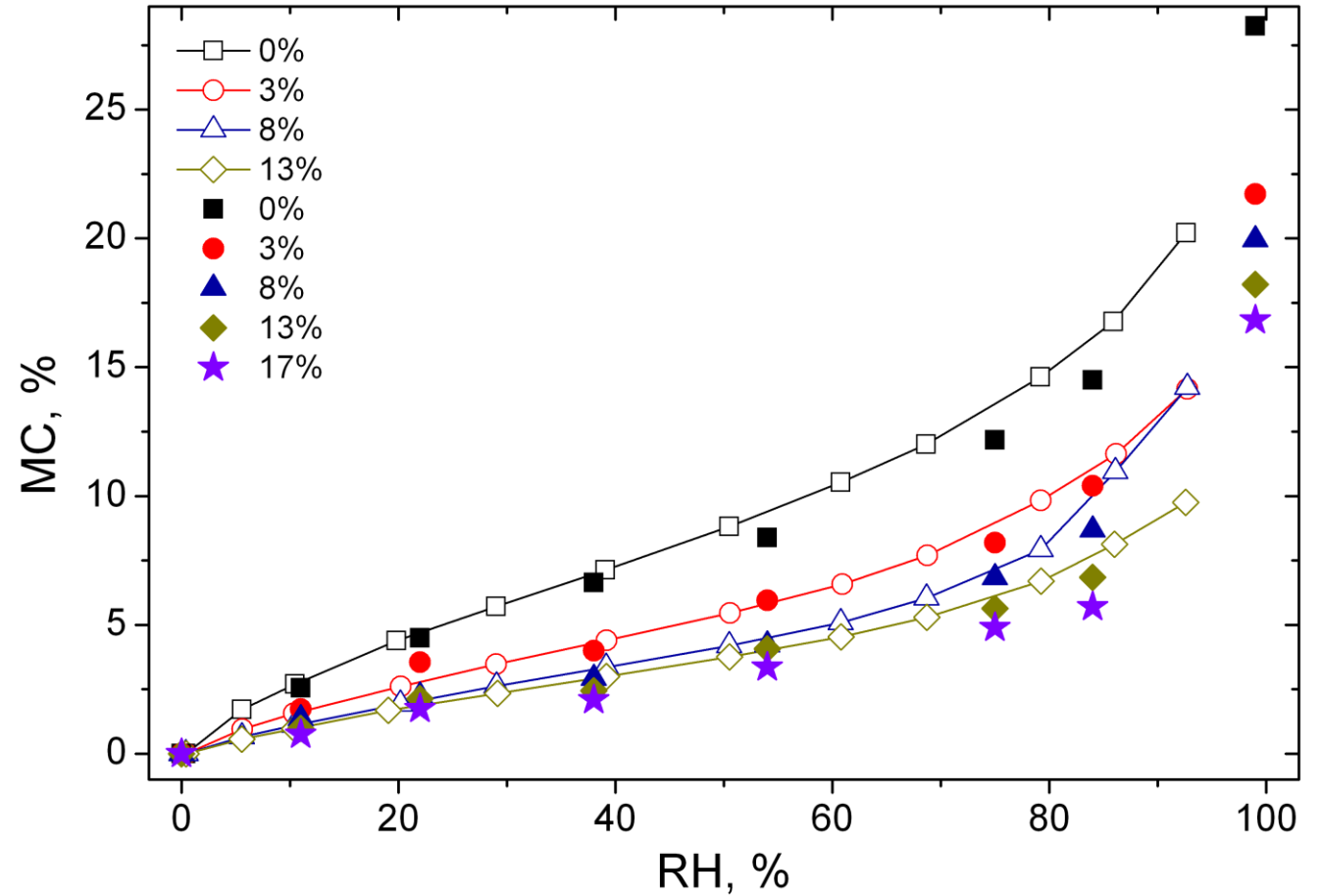
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The purpose of this study was the evaluation of the interactions that appear between water molecules and chemically modified wood structure and the mechanism of adsorption of water by mid infrared spectroscopy.

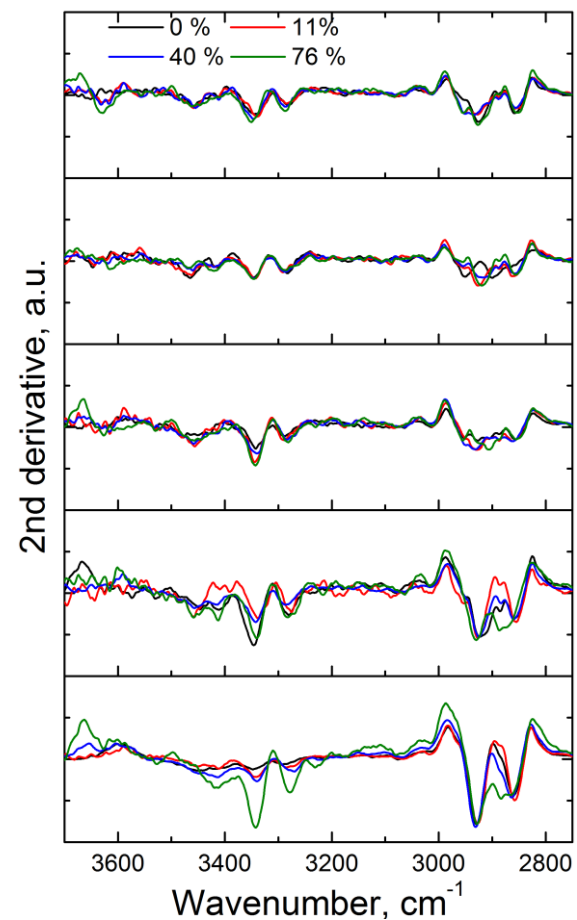
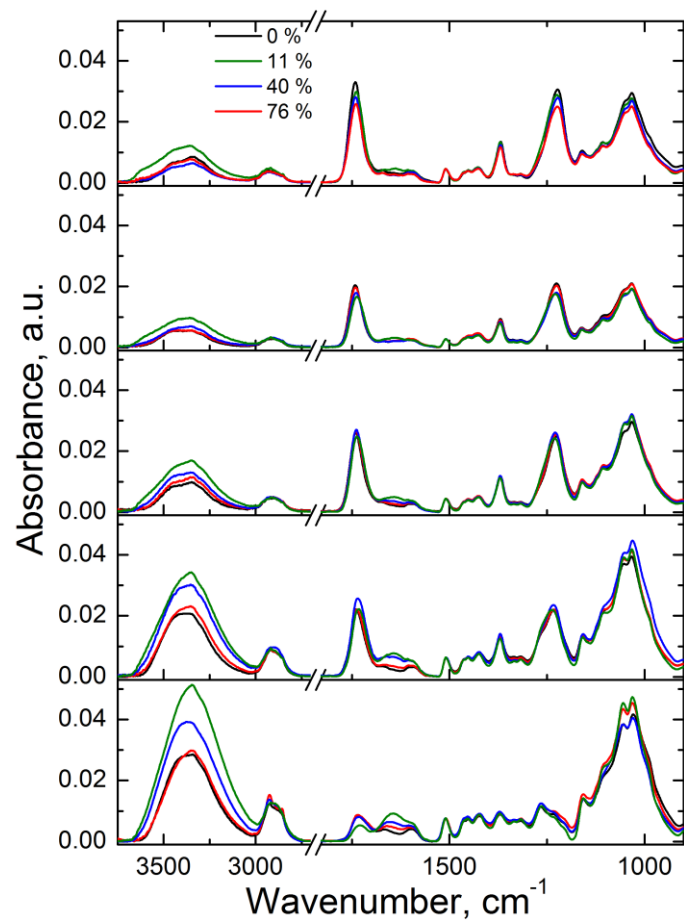
Samples	WPG %
Reference	0
Acetylated	4
	8
	13
	17

Pine wood samples of dimension 20x20x5 mm³ (radial x tangential x longitudinal) were used for the experiments.

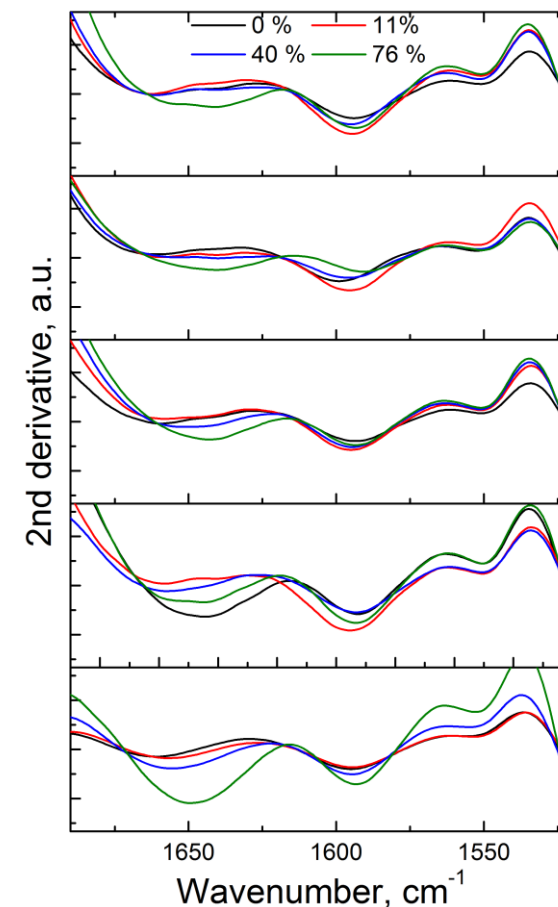
The samples were kept at different RH values for 48h.



FTIR spectroscopy



2nd derivative spectra in
3700-2750 cm^{-1} region



2nd derivative spectra in
1690-1520 cm^{-1} region