

Dynamic water vapour sorption properties of wood cell wall polymer constituents

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- Cell wall polymers of wood have a different behaviour in the face of moisture in terms of sorption, desorption and hysteresis
- The aim of this study was to determine the water sorption properties of wood cell wall polymers using dynamic vapour sorption (DVS) apparatus.

- Cellulose showed higher moisture sorption than lignin, however, considerably lower hysteresis.
- The moisture sorption of wood cell wall mainly depends on hemicelluloses.
- The moisture content and hysteresis of hemicelluloses was extremely higher than lignin and cellulose in the RH of above 60%.