



Measuring green wood thermal properties to simulate veneer production by ir-heating

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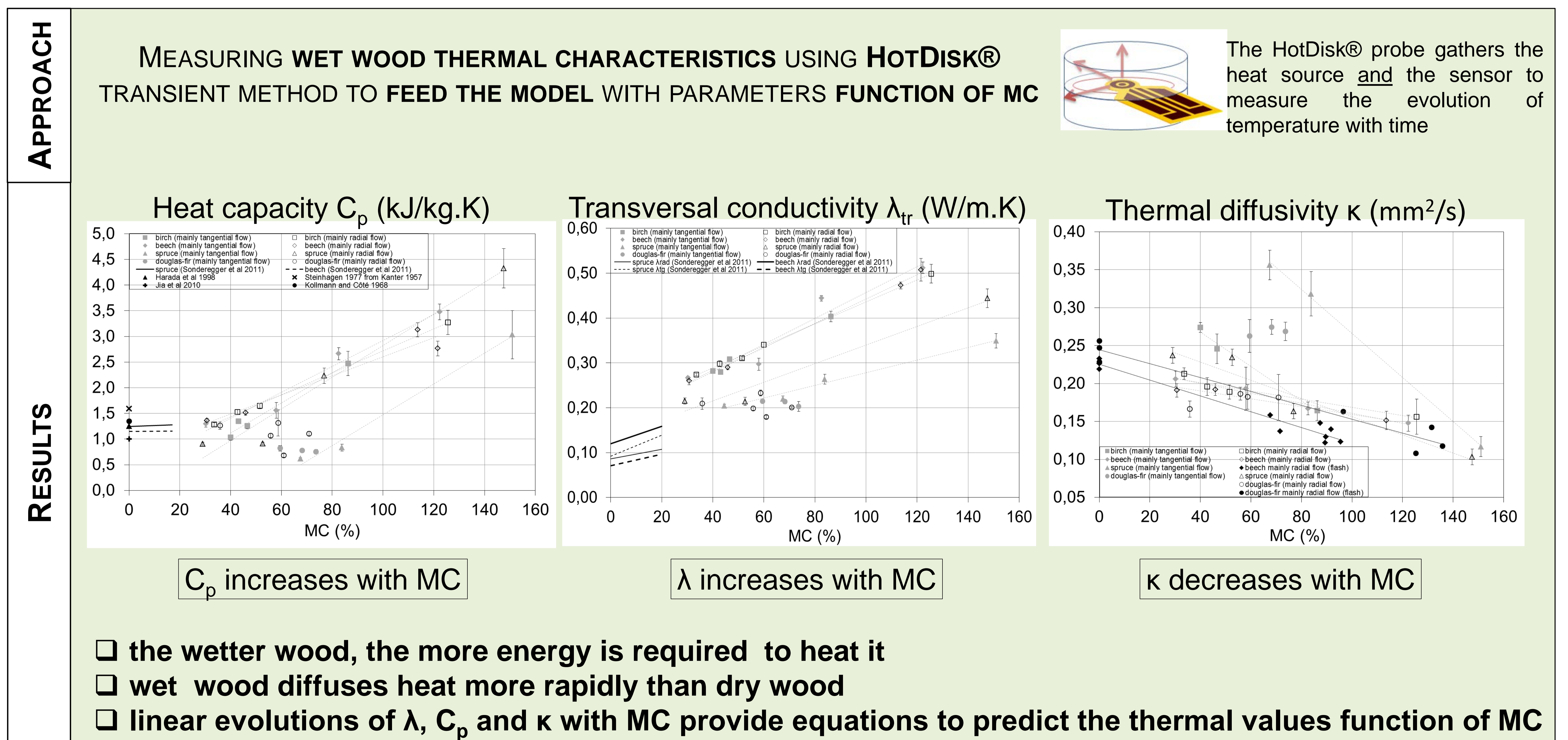
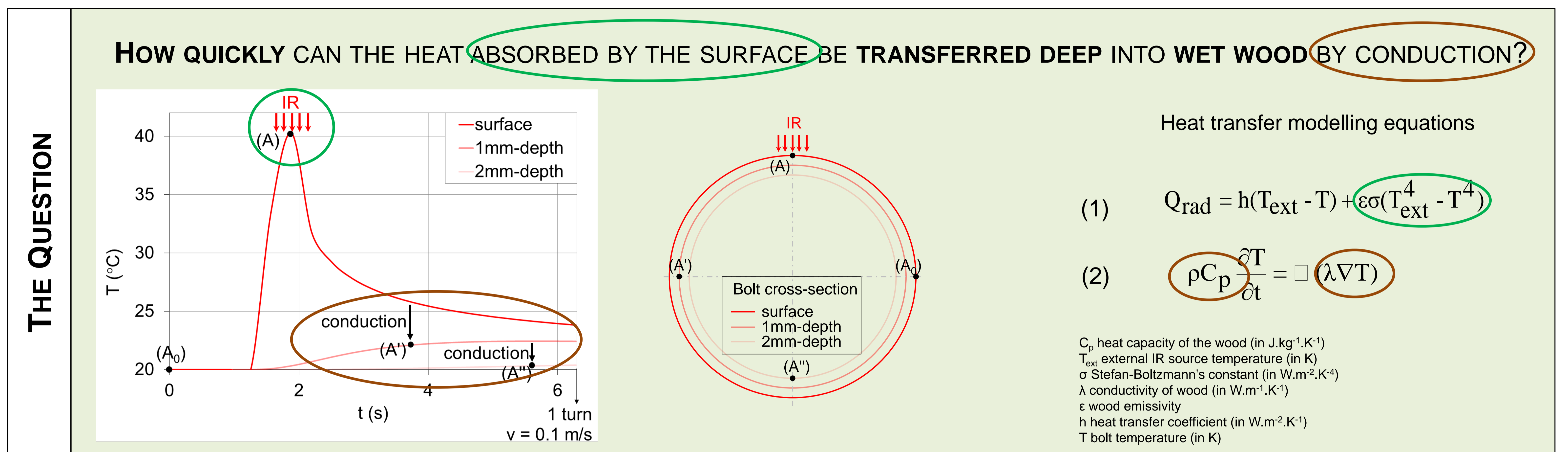
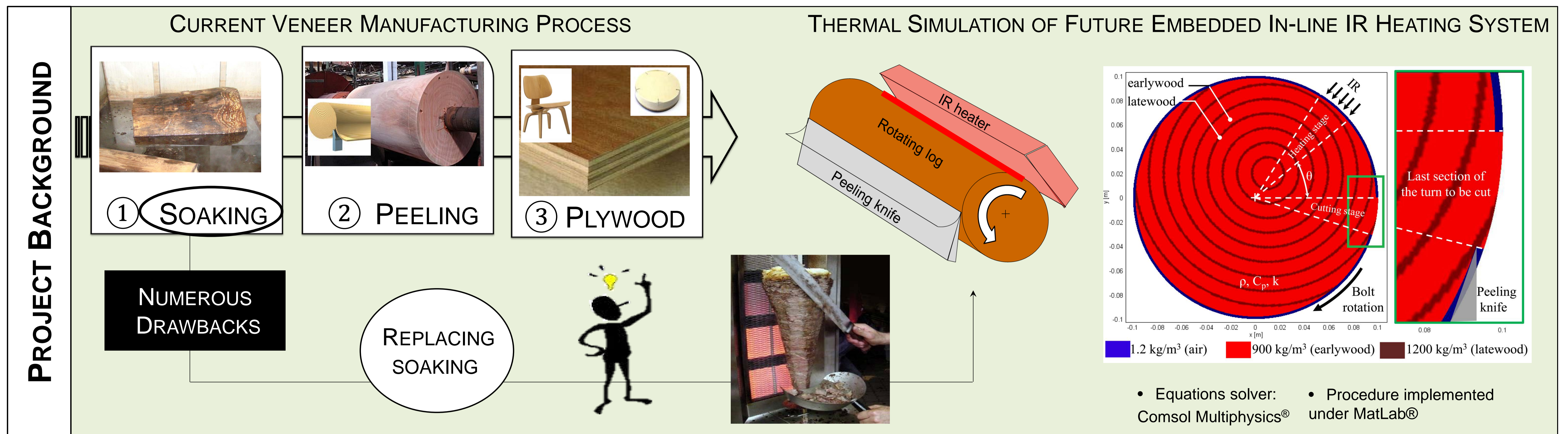
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MEASURING GREEN WOOD THERMAL PROPERTIES TO SIMULATE VENEER PRODUCTION BY IR-HEATING

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NEXT? To integrate green wood optical properties : emissivity, transmittivity, absorptivity = f(source wavelength) to account for any volumic IR penetration

$$(1) Q_{rad} = h(T_{ext} - T) - \epsilon\sigma T^4 \quad (2) \rho C_p \frac{\partial T}{\partial t} = \nabla \cdot (k \nabla T) + I_0 \sum_{\lambda} \beta(\lambda) e^{-\beta(\lambda)r}$$

with $I_0 = \sigma T_{ext}^4$ and β wood absorption coefficient