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## NOMENCLATURE

- k Thermal conductivity, W/ m.K
- T Temperature, K
- x Thikness, m A Surface area, m<sup>2</sup>
- t Time, s
- q Heat flux,  $W/m^2$
- a Thermal diffusivity,  $m^2/s$
- c Specific heat capacity, J/ kg.K
- $V_p$  Viod space, m<sup>3</sup>
- V<sub>b</sub> Bulk volume, m<sup>3</sup>

## **Greek symbols**

к	Thermal	conductivity	for
	anisotropic	materials, W/m.K	
ρ	Mass densit	ty, kg/ m <sup>3</sup>	
φ	Solid volun	ne fraction (%)	

## Subscripts

PTH	Hafsa petiole in transversal direction of fibers		
РТВ	Boufeggous petiole in transvesal direction of fibers		
PTS	Sair petiole in transvesal direction		
PLH	Hafsa petiole in longitudinal		
PLB	Boufeggous petiole in longitudinal direction of fibers		