**Coordinate system:**

Diagram, schematic

Description automatically generated

**Quantities of interest:**

*T* (*t,x,y*) , *α* (*t,x,y*), i.e., *T* and *α* are functions of time t, and positions x and y of a point in the system as shown above.

**Constants:**

352.1 J/kg Total heat of reaction

2x105 1/s Frequency Factor

51100 J/mol Activation Energy

1.927 Order of reaction

980 kg/m³ Density

1440 J/(kg·K) Specific heat

1.8 W/(m·K) Thermal Conductivity

8.314 J\*mol ------ Universal Gas Constant

*T0* 25 degrees C

*α0* 0

*h* 1.8

**Parameters varied:**

*Heat source term Q*: See section on boundary conditions

**Variables:**

Temperature[ degC]

Curing[No Unit]

Time

X-coordinate

Y-coordinate

**Equations:**

Heat equation:

Curing Equation:

**Boundary conditions:**

**Initial conditions:**