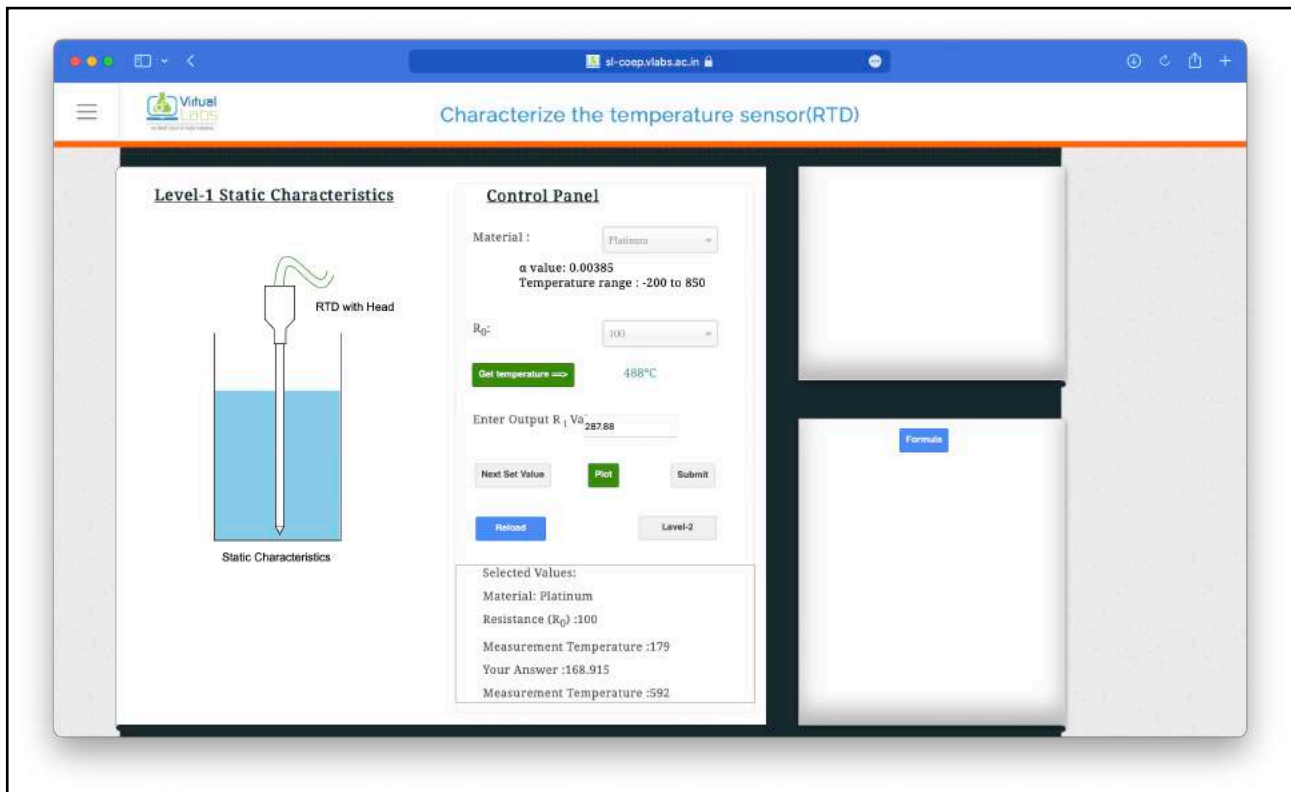


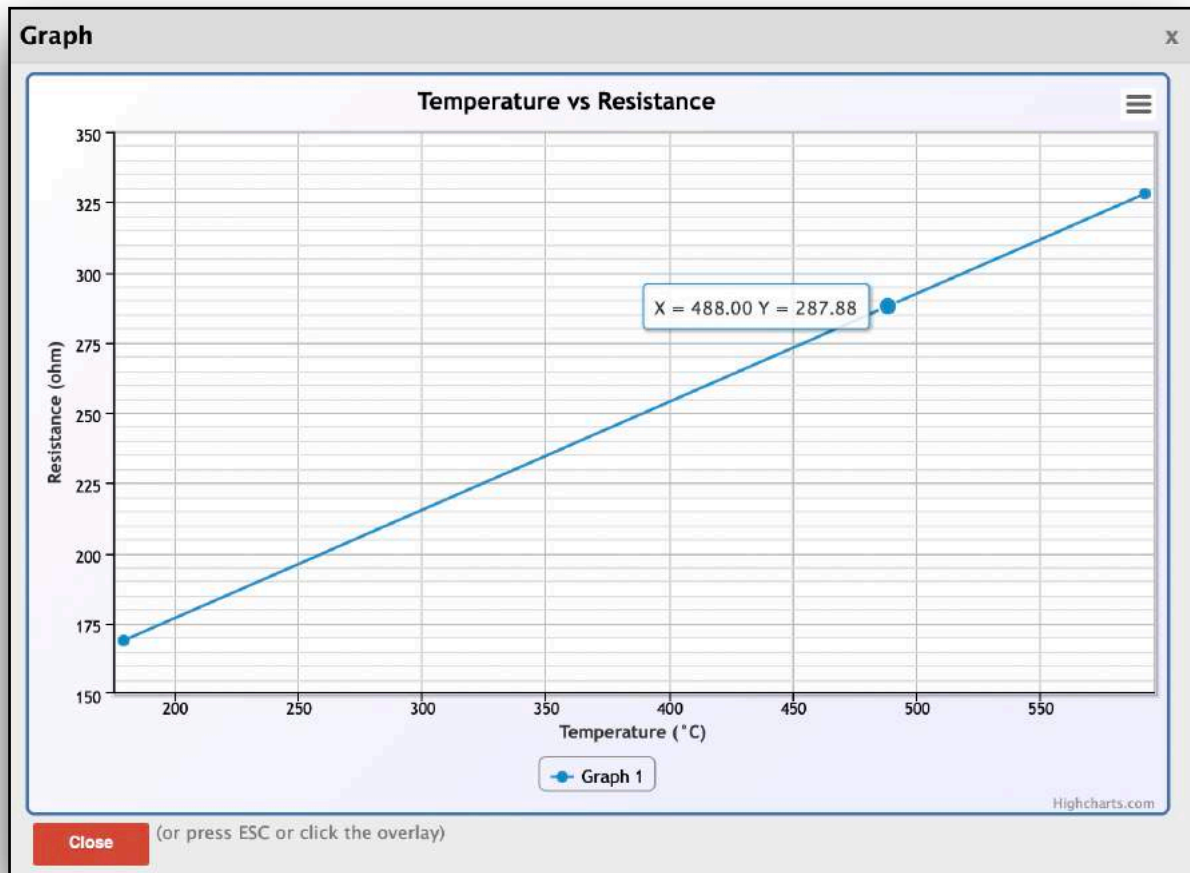
# Sensors and Automation Lab -1

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SY Comp Div - 2, Batch: S5



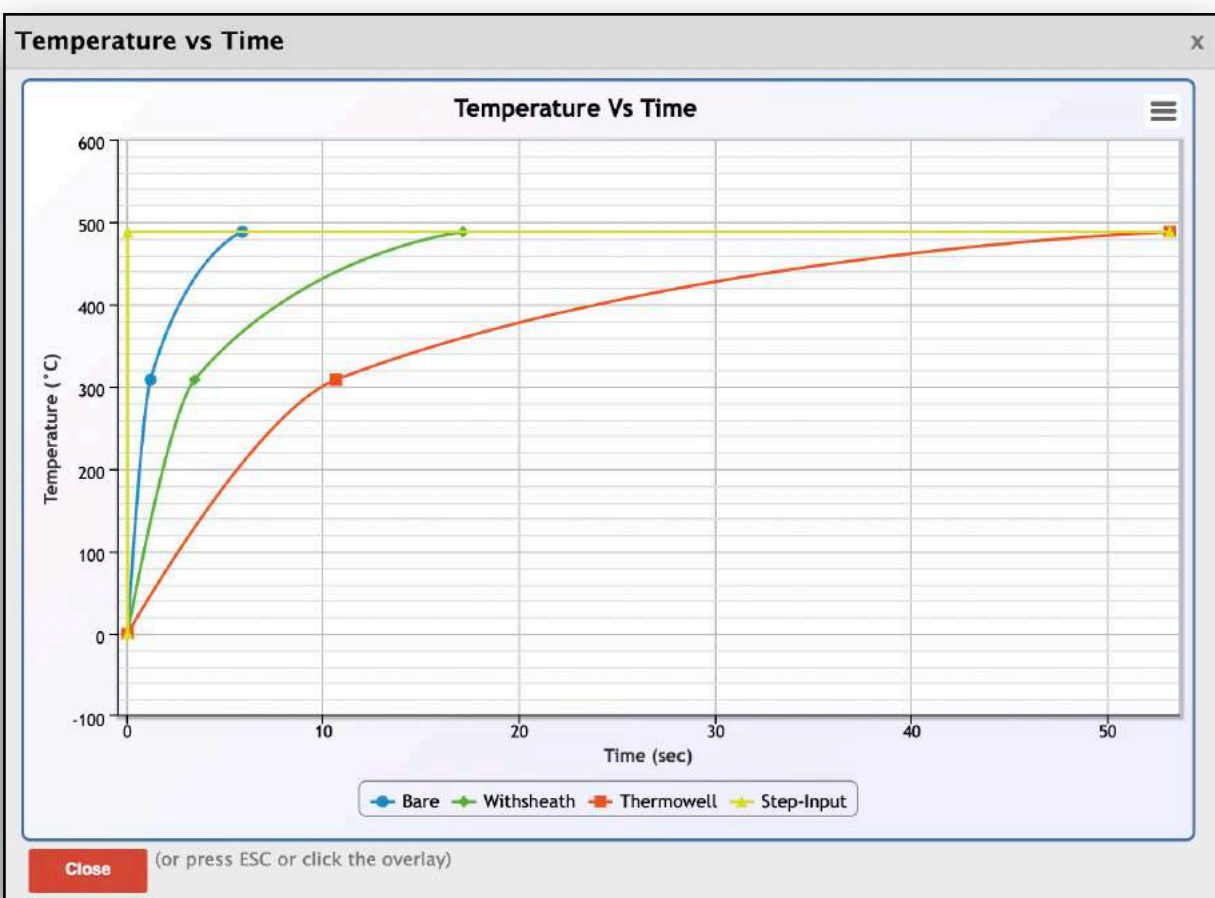
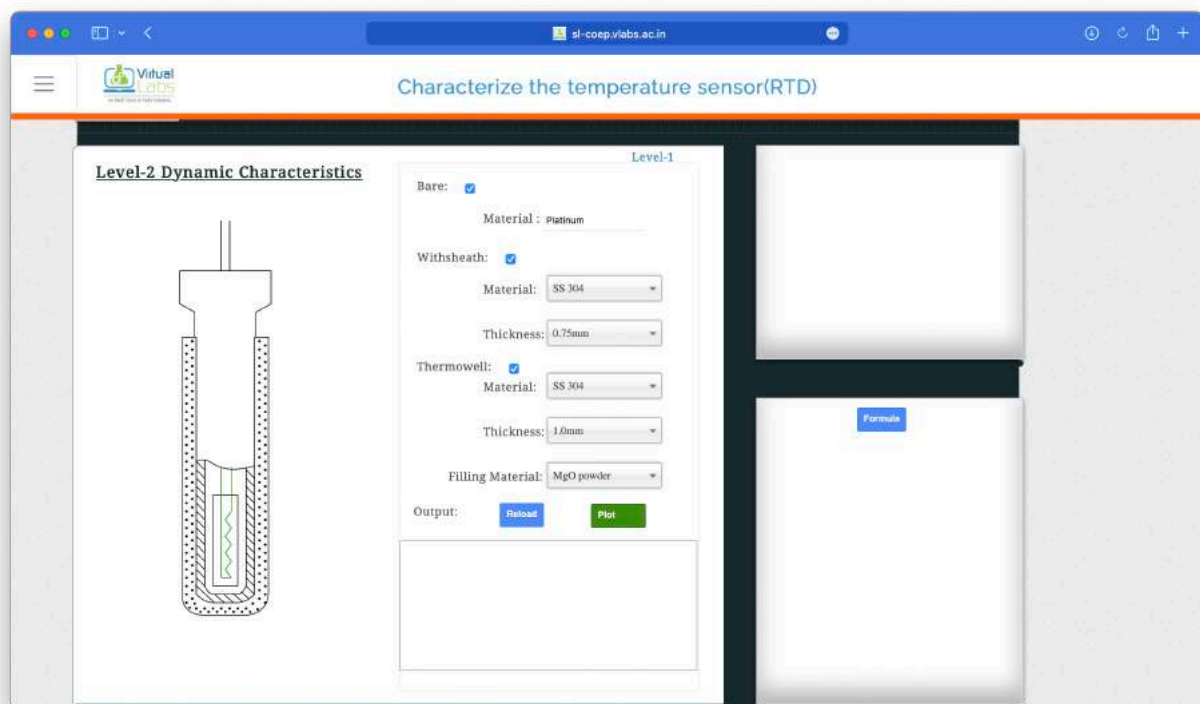


## Level -2

$$T_c = 1.17s$$

$$T_c = 3.42s$$

$$T_c = 10.63s$$



## SA LAB-1

A] Platinum

 $\alpha$  value : 0.00385

Temperature range : -200 to 850

$$R_0 = 100$$

$$\begin{aligned} 1] R_t &= R_0 (1 + \alpha * \Delta t) & (\Delta T = 179) \\ &= 100 (1 + 0.00385 * 179) \\ &= 168.915 \end{aligned}$$

$$\begin{aligned} 2] R_t &= R_0 (1 + \alpha * \Delta t) & (\Delta T = 592) \\ &= 100 (1 + 0.00385 * 592) \\ &= 327.92 \end{aligned}$$

$$\begin{aligned} 3] R_t &= R_0 (1 + \alpha * \Delta t) & (\Delta T = 488) \\ &= 100 (1 + 0.00385 * 488) \\ &= 287.88 \end{aligned}$$