

## **METTI5 Tutorial T3 on**

“Thermal characterization of materials through the hot wire/hot plate techniques”

### **Authors:**

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### **Duration:**

1h00

### **Type:**

Experimental

### **Content:**

The authors will present two very simple techniques for thermal characterization of bulk materials.

The first one, the hot wire method permits obtaining the thermal conductivity of solids and liquids. The second one, the hot plate, leads to the thermal effusivity of solids.

The common feature of the two techniques is the use of extremely simple devices for thermal excitation of the studied media. In the two cases, the heat source is based on electrical Joule dissipation in a wire or in a plane resistance.

The advantages and the drawbacks of the two methods will be discussed.