

## Loss of ignition

Loss of ignition is amount of compounds in the dry soil, which are burned at the temperature 550°C. Mineral compounds are resistant to this temperature, thus the organic compounds are lost. This method is used for determine content of organic compounds in the soil.

### Instruments:

1. Analytical weight
2. Electric oven with the adjustable temperature
3. Porcelain cup
4. Desiccator

### Method:

1. Weigh the porcelain cup and then add the dry soil sample
2. Weigh the cup with the sample
3. Put the cup to the oven
4. Leave the cup in the oven at least 120 min. at the temperature 550°C
5. Take the cup from the oven and put it immediately in to the desiccator
6. When the cup lose the heat, weigh it again.

### Calculation:

$$y = (m_1 - m_2)/m_1 \quad .100 (\%)$$

when  $m_1$  – weight of dry sample

$m_2$  – weight of sample after burning

- **Calculation of total carbon content in the soil – multiply the result by coefficient 0.55**