stages. In other words, having more theoretical plates increases the efficacy of the separation process be it either a distillation, absorption, chromatographic, adsorption or similar process.

## 1.6.13 Symmetry (tailing factor)

This is a system suitability parameter and it is a measure of peak symmetry; its value increases as tailing becomes more pronounced and it is computed by the formula:

$$T = \frac{W_{0.05}}{2 f}$$
 ......Eq (3).

Where:

 $W_{0.05}$ : Peak width at 5% height.

f: distance from the peak maximum to the leading edge of the peak, the distance being measured at a point 5% of the peak height from the base line.

## 1.6.14 Relative standard deviation

A statistical parameter used to verify the closeness between the test result and it is expressed by the following equation:

$$s = \sqrt{\frac{\sum_{i=1}^{N} (x_i - \bar{x})^2}{N - 1}}$$
 Eq (4).

$$RSD(\%) = \left(\frac{SD}{\overline{X}}\right) \times 100\%$$
 Eq (5).

Where:

S= Standard deviation.

RSD(%) = Relative standard deviation.

 $\overline{X}$  = Average of set of N measurements.