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:

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

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:

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

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

Where:

S= Standard deviation.

RSD (%) = Relative standard deviation.

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