Table 2.1: Statistical error functions used in determining the goodness of fit for the Kinetic models

**Error functions Definition/expressions**

The coefficient of determination

The sum of squares of the errors (ERRSQ/SSE)

The hybrid error functions (HYBRID)

Marquardt’s percent standard deviation (MPSD) 2

The average relative error (ARE) i

The sum of absolute errors (SAE) i

Mean square error (MSE)

Nonlinear chi square (ꭓ2)

Source: Oboh (2011)

Where, qe, cal is the theoretical concentration of adsorbate on the adsorbent, which have been

calculated from one of the isotherm models, qe, exp is the experimentally measured adsorbed

solid phase concentration of the adsorbate adsorbed on the adsorbent. (n) is the number of data

points, (p) is the number of parameters in the equation.