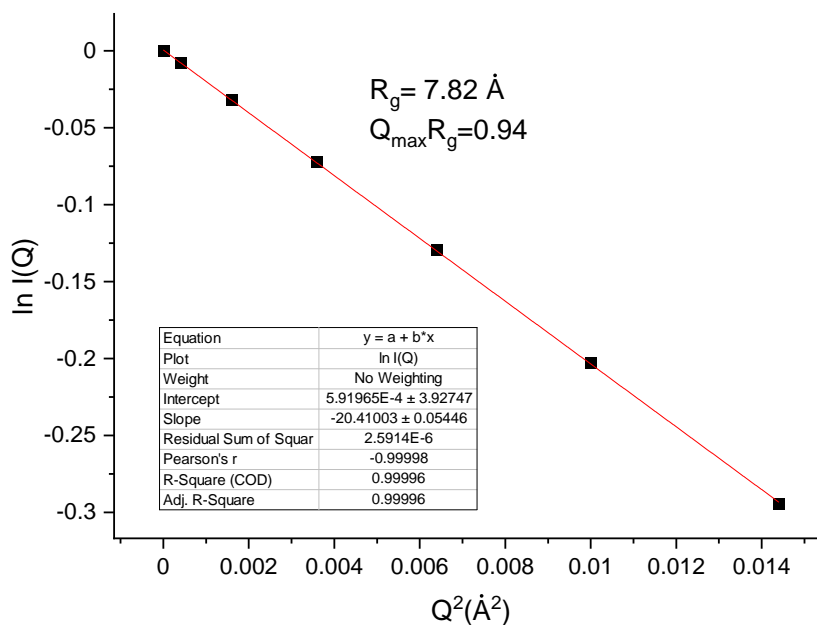
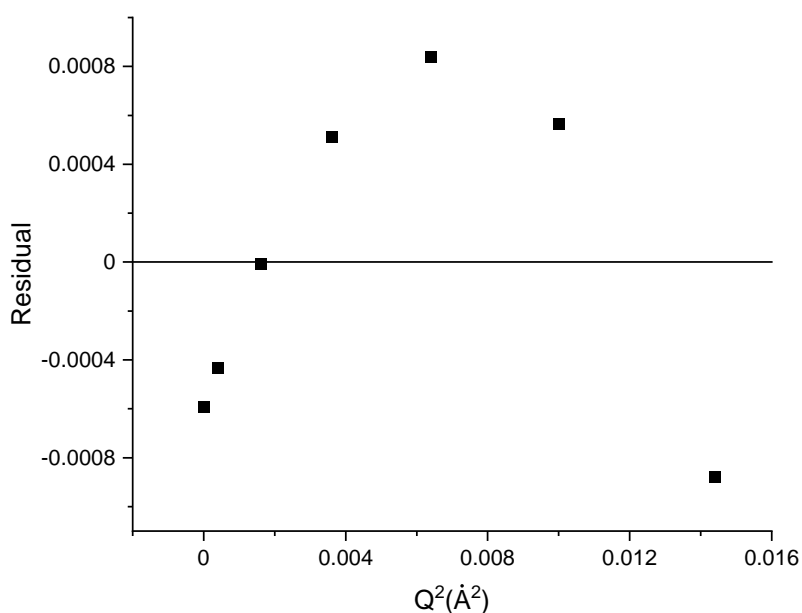


## Curve fit assignment

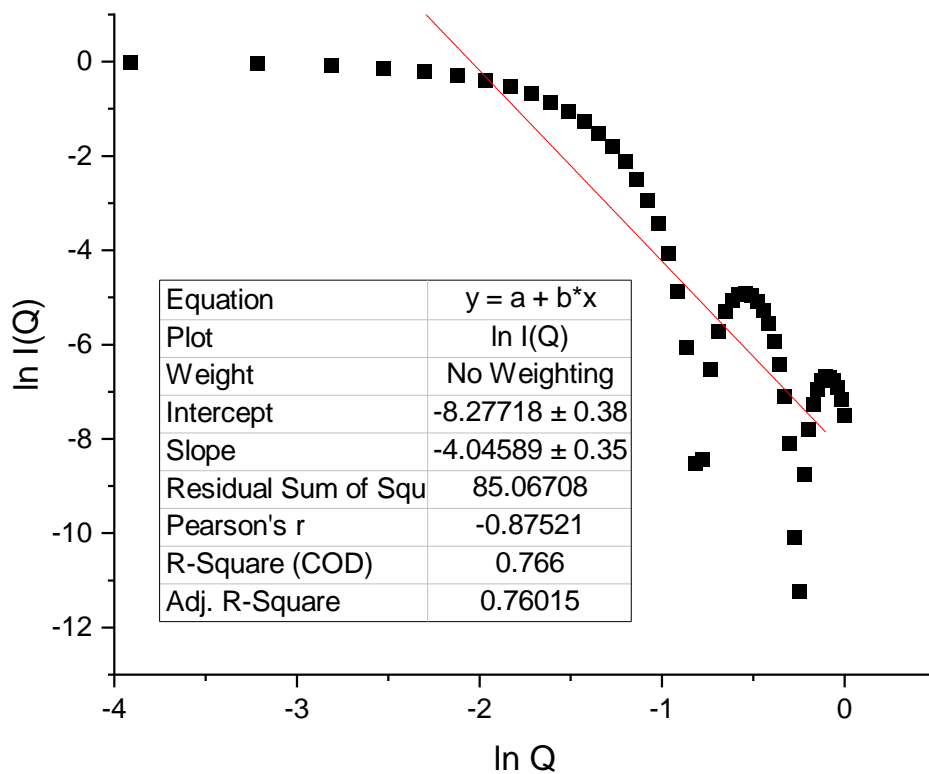
(A solution)



The constraint  $Q_{\text{max}} R_g \sim 1$  can be achieved if only the first 7 or 8  $Q$  values are considered.



Since the magnitude of the residuals is a fraction of a percent, and oscillates evenly about  $y=0$  line, we can conclude that the fit is good. Another way to quantify is to note the Pearson's  $r$  number (I encourage you to read about it). A negative Pearson's  $r$  signifies that as ' $x$ ' increases, ' $y$ ' decreases; and a magnitude close to 1 indicates a definite relationship between the variables.



The curve has been forcibly fitted to a straight line of slope close to -4. Residual fit below indicates a 'structure' similar to the original data and therefore the fit is not good. Pearson's r value indicates a poor fit compared to the fit that was performed to obtain the radius of gyration.

